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# ANTERIOR ABDOMINAL WALL LEIOMYOMA - A RARE SURGICAL CONUNDRUM

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## ABSTRACT

*The most frequent benign tumour of the female reproductive system is leiomyoma. Although found primarily in the uterus, it can also be found in unusual sites such as the ovary and broad ligament. In extremely rare circumstances, the anterior abdominal wall can form a nidus for these lesions. Females who have previously undergone laparoscopic uterine procedures are more likely to develop them. Given the rarity, they often provide diagnostic difficulties for operating surgeons and are frequently misdiagnosed as intra-abdominal cancer. We discuss the case of a 47-year-old woman who experienced cyclical abdominal pain and was diagnosed with an anterior abdominal wall leiomyoma, which was removed laparoscopically in its entirety, resulting in complete symptomatic resolution.*

**KEYWORDS:** *- leiomyoma, rectus abdominis, myomectomy, parasitic fibroids*

## INTRODUCTION

In reproductive-age females, leiomyomas are one of the most frequently found tumors in the genital tract. They are seen in almost 20% of the females in the reproductive age [1]. They are most often found in the uterus but less commonly can be seen in broad ligament, ovary, and very rarely in atypical places like the anterior abdominal wall. It is postulated that such atypical fibroids usually arise from the uterus primarily but later gain blood supply from these atypical sites and become parasitic fibroids. They are often a diagnostic clinical challenge and are confused for malignancies. They are resectable laparoscopically and are usually curable. It has been reported that the recurrence for such tumors are extremely uncommon [2].

## CASE PRESENTATION

A 47-year-old female with no comorbidities presented with complaints of pain abdomen for the last 7 months. The pain was predominantly in the left lower quadrant, was dull aching in nature and had a typical history of getting exacerbated at the onset of menstruation and reduced at the end of it. She had a history of undergoing laparoscopic myomectomy 4 years ago for uterine myoma. She has had 2 normal vaginal deliveries after which she has been sterilized laparoscopically. On examination, she was vitally stable with normal respiratory and cardiovascular examinations. Per abdominally no mass was palpable and was soft and non-tender on palpation.

Her routine investigations of complete blood counts and renal and liver functions were within normal limits Contrast-enhanced CT scan was done to identify the cause of the abdominal pain. The scan reported a well-defined homogenous solid lesion in the left iliac fossa arising from the anterior abdominal wall of size 2.9\*2.6\*1.3cm adjacent to small bowel loops suggestive of abdominal wall leiomyoma with no surrounding infiltration (Figure *1*).She was henceforth planned for and underwent laparoscopic excision of the lesion.
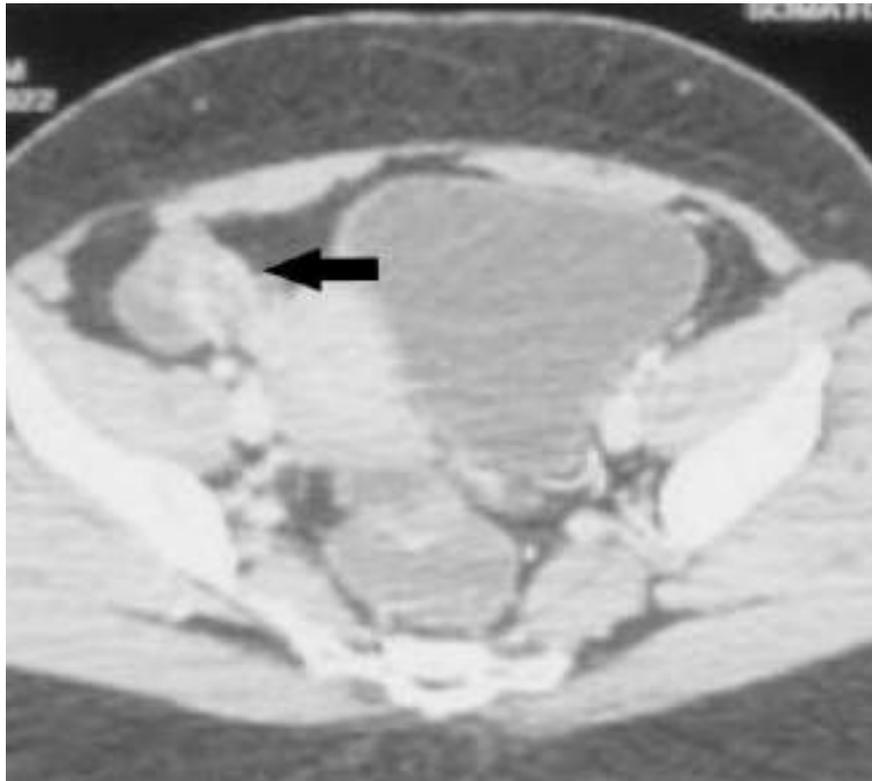
**Figure 1: CECT abdomen showing pedunculated anterior abdominal wall fibroid (black arrow)**

# DISCUSSION

The most common pathology of the rectus abdominis in the anterior abdominal wall are desmoid tumors and rectus sheath hematoma. Less commonly, abscesses secondary to diverticulitis and actinomycosis can be seen. However, leiomyoma of the anterior abdominal wall arising from the rectus sheath is extremely rare. Leiomyomas are most commonly seen in the female genital tract mostly from the uterus. Nevertheless, they can also be seen arising from the ovaries and broad ligament as well. As it originates from smooth muscle cells, it is postulated that it can evolve from any structure containing smooth muscles cells such as arteries, bowel, etc. It is also said that such smooth muscle cells transform into a myoma due to sporadic somatic mutations, unknown hormonal synergistic functions, growth factor actions, and lipid metabolism disturbances [2].

Uterine fibroids are usually asymptomatic and are found in approximately 20% of the general population and usually found as an incidental finding in abdominal scans which are done for different confounding ailments. However, when symptomatic they can cause abnormal uterine bleeding, tubal block causing infertility, pain, and urinary retention due to bladder compression. It is seen that abdominal wall myomas usually occur after uterine surgeries possibly due to implantation of myometrial tissues into the abdominal wall due to surgery and seen usually post uterine myomectomies. It has been reported to occur in cases of laparoscopic myomectomies more than open procedures [3]. Moon et al in 2008 reported a case of abdominal wall leiomyoma three years after laparoscopic myomectomy [4]. A primary anterior wall leiomyomas with no history of abdominal surgeries have also been reported forming a true de novo abdominal wall fibroid [5]. In our case patient had a history of undergoing laparoscopic myomectomy 4 years before.

It has been found that adipocyte enhances the multiplication of leiomyoma cells via TNF- alpha which is a pro-inflammatory cytokine. It is usually associated with initiation and progression of uterine leiomyoma cells [6]. Reports have shown that the parasitic fibroids initially originate from the uterus and later on gain their blood supply from atypical locations detaching themselves from the uterus. These types of parasitic fibroids are frequently seen in the retroperitoneum and pre-peritoneum [5]. On histopathological examination, leiomyomas are well-defined tumours with a pseudo capsule. They don't show any evidence of atypia, necrosis or mitoses. Care is to be taken when such tumours are resected to avoid tumour spillage intra-abdominally given the same can cause tumour site recurrences. Meshplasty can be done when the post resection abdominal wall defect is significantly large [7].

With the above diagnosis and proof of suspected abdominal wall leiomyoma patient was taken for diagnostic laparoscopy. Intraoperative she was found to have a globular well-encapsulated mass arising from the anterior abdominal wall with a stalk at the level of the rectus sheath (Figure 2).

Mass was excised and sent for histopathological examination which was reported to be a leiomyoma (Figure *3*).
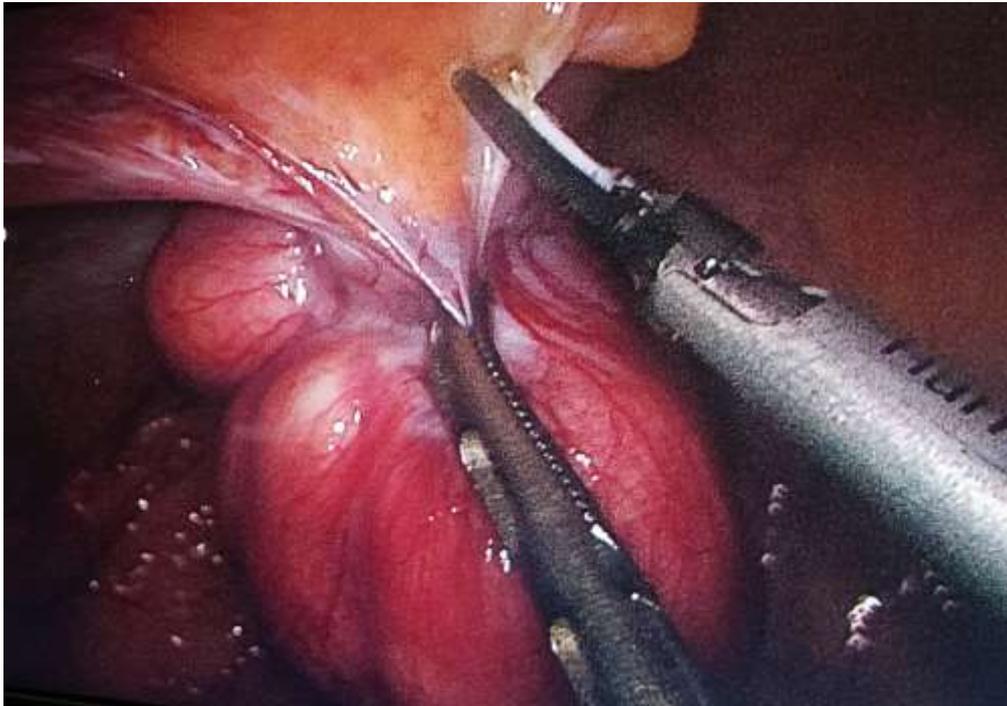


**Figure 2: Globular Well-Encapsulated Mass Arising From The Anterior Abdominal Wall With A Stalk At The Level Of The Rectus Sheath.**
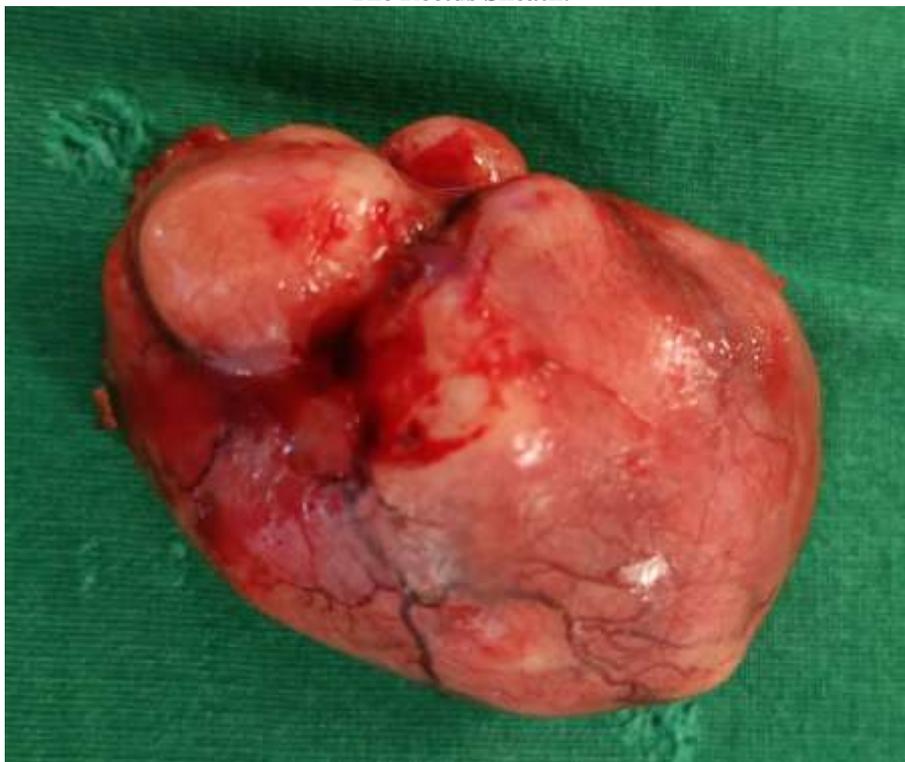


**Figure 3: Laparoscopically excised leiomyoma of the anterior abdominal wall.**

## CONCLUSION

Anterior abdominal wall fibroids are a very rare clinical entity almost invariably occurring in association with previous myomectomies. It is considered a diagnostic dilemma by many operating surgeons due to its rare occurrence and frequent asymptomatic presentation. However due to the rapid advent of high resolution imaging, these lesions are being diagnosed increasingly and are usually confused with malefic malignant lesions. Hence it is vital to have a sound clinical acumen while encountering such lesions in general practice to avoid unnecessary surgical exploration while also taking care not to lose out on definite malignant entities.

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# SILENT GUT GANGRENE- A SURGICAL RARITY

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## ABSTRACT

*Mesenteric Arterial Ischemia is an entity which is one of the most important causes for acute abdomen and resulting laparotomy and bowel resection and the associated morbidity. Definitive diagnosis of the same is done by Contrast enhanced CT although mostly laparotomy is indicated by clinical status of the patient and routine blood investigations with blood gas studies. There is also a recent surge in such cases due to COVID 19 pandemic. We present a 52-year-old male who presented with acute abdomen who was found to have Superior Mesenteric Artery Thrombosis with gangrene of near complete small bowel and ascending colon managed with resection of the same. Extensive bowel resection and the resulting short bowel syndrome and associated morbidities makes Mesenteric Ischemia a time sensitive emergency. Mortality is usually associated with increasing time taken for diagnosing the condition. Hence early diagnosis with prompt surgical treatment is key for patient management*

KEYWORDS: *Mesenteric Arterial Ischemia, gut gangrene, Mesenteric artery thrombosis, Resection and Anastomosis.*

## INTRODUCTION

Mesenteric ischemia is an entity involving the occlusion of either the arterial or venous supply of the small intestine and ascending colon. It accounts for 0.1% of all hospital admissions with an incidence of 12.9 per 100000 person years and is one of the potentially fatal abdominal surgical emergencies. This condition predominantly increases in incidence with age along with atherosclerosis, arrhythmias, cardiac disease, advanced age, intra-abdominal malignancies, being the other risk factors [1]. Recently the incidence of the same has seen a steep increase due to the COVID 19 pandemic and the associated development of thrombus due to hypercoagulable state usually seen associated with it [2]. Emergency Laparotomy is the standard of care where earlier exploration is associated with lesser bowel loss. However, studies have shown that survival in cases of mesenteric ischemia drops from 50 to 30% after 24 hrs of delay [1]. Here we present a case of 52-year-old male with no comorbidities or no history of COVID positivity who presented with acute abdomen and was taken for laparotomy after 60 hrs of presentation managed with extensive small bowel and large bowel resection.

## CASE PRESENTATION

A 52-year-old male with no known comorbidities presented with complaints of abdominal pain and distension and vomiting for the past 2 days along with obstipation for 2 days. Abdominal pain was predominantly upper abdominal with no radiation increasing on food intake and mild to moderate in intensity which relieved with analgesics. He also had vomiting which was non bilious non projectile and non-blood stained. He also had not passed flatus for the last 48 hrs. He otherwise had no per rectal bleed or breathlessness. He is a known alcohol consumer for the last 30 years with last binge of alcohol being 2 days before presentation. He otherwise had normal bowel and bladder habits prior to presentation and no history of SARS CoV2 positivity in the past. On examination he had mild tachycardia of 112 bpm with normal bp, had an insignificant respiratory system examination. Per abdominal examination showed distended abdomen with mild tenderness in the epigastrium and no guarding or rigidity.

He had normal haemoglobin with significant leucocytosis of 21840 which was neutrophil predominant with otherwise normal serum electrolytes. Renal and hepatic functions tests were normal. Serum amylase was 157. Arterial blood gas analysis was done which showed normal findings with a lactate level of 1.49 mmol/l. Abdominal radiograph showed colon cut-off with dilated small bowel loops with air fluid levels. Ultrasonography of the abdomen was done which showed mildly heterogeneous pancreas with peripancreatic inflammation but otherwise normal study. He was initially admitted as a case of acute pancreatitis and managed with maintaining nil per oral status and with intravenous fluids and analgesics. however, in view of persistent symptoms with tachycardia 24 hrs after admission, CECT abdomen was taken which showed filling defects in the superior mesenteric artery, one at its origin for a length of 2cm and the other 1.5cm distal to first one along with complete filling defect of distal SMA and its branches - s/o thrombosis. Except for the first 15-20 cm of jejunum, ileum, cecum and ascending colon showed no contrast enhancement which was suggestive of frank gangrene. There were also associated scattered atherosclerotic wall calcifications in descending thoracic aorta & abdominal aorta.

## DISCUSSION

Mesenteric Ischemia is a condition that affects the blood vessels of the small intestine which can be due to occlusive or non-occlusive obstruction of the mesenteric arteries or also can be due to obstruction to venous outflow [3]. The presentation in these cases can be acute or chronic. Acute mesenteric ischemia presents with sudden onset abdominal pain and distension and is usually a surgical emergency requiring extensive bowel resection. Chronic mesenteric ischemia presents with features suggestive of abdominal angina with post prandial abdominal pain and symptoms which are usually out of proportion of the signs. It usually is most commonly caused by embolism in almost 50% of the cases and least commonly by mesenteric venous thrombosis [<5%]. Mortality is considered almost 60-80% when not operated in the first 24 hrs. This is serious even though considering the fact that mesenteric ischemia only involves about 0.05-0.2% of all acute surgical admissions.

Reperfusion is considered the primary cause of tissue damage in alterations of mesenteric blood flow. The amount of damage depends on the duration of the alteration. Ischemia for short periods of time cause increase in micro vascular permeability whereas ischemia for longer periods can cause disruption of intestinal mucosal barrier due to polymorphonuclear leucocytes and reactive oxygen species [4].

Mesenteric arterial thrombosis especially emboli are usually associated with cardiac disorders like arrhythmias, infective endocarditis or recent MI or cardiac surgery. It is also associated with peripheral vascular disease. Mesenteric venous thrombosis is usually associated with inherited thrombophilias unlike arterial counterparts. Especially when patient has vague features with no outright evidence of gut gangrene, CT is considered diagnostic for any vascular or bowel wall abnormalities. It can also detect the exact area of the bowel which is gangrenous and which are pre gangrenous in nature [5].

Recanalization and stenting has become is a vital modality of treatment for both acute and chronic thrombotic superior mesenteric artery [SMA] occlusion. Embolectomy: either aspiration or open surgical removal, are usually considered for embolic SMA occlusion. Endovascular therapy is considered in venous thrombosis when anticoagulation fails [6].

Acute mesenteric ischemia has one of the highest rates of misdiagnosis owing to its nonspecific symptoms and inconclusive investigations. These delay and complicate the already present severe physiological dysfunction associated with gut gangrene. Therefore as a part of damage control surgery in the initial stage the gangrenous bowel is resected and ends are stapled off and abdomen is closed temporarily. After stabilising the patient again second stage surgery is done and attempt to restore bowel continuity and complete abdominal closure is done [7].

Complications of short bowel syndrome develop when more than 200cm of small bowel is resected. This can happen in the form of severe dehydration with life threatening electrolyte abnormalities in the initial phase and malnutrition caused by malabsorption of multiple vital macro and micronutrients [8]. Therefore prolonged parenteral nutrition till the patient's remnant intestine becomes adapted to the short length is usually recommended.

Due to the advent of prolonged TPN care along with home TPN care the survival in patients with short bowel syndrome has significantly improved. However the high cost of maintenance of such setups along with other complications like central venous catheter induced sepsis, TPN induced cholestasis and liver failure and remain the real therapeutic challenges. Hence it is said that the prognosis depends less on the length of the surviving bowel and more on the physiological homeostasis that the patient is able to achieve with the short bowel syndrome [9].

With a diagnosis of gut gangrene patient was taken up for emergency exploratory laparotomy. He was found to have approximately 1.5 L toxic fluid along with bilio-feculent contamination and frank gangrenous changes- 15cm from DJ flexure up until hepatic flexure with clear sharp demarcation. Resection of the affected segment with the two ends of the remaining bowel and was brought out as separate stomas in the form of an end-jejunostomy and transverse colostomy. Postoperatively patient was started on total parenteral nutrition with counter measures against high output stoma. Gradually the stoma output reduced and patient tolerated orals. He was planned for early restoration of continuity and underwent the same after 4 weeks with no post-operative complications.

## CONCLUSION

Gut gangrene is amongst the most fatal ailments in the spectrum of cases a general surgeon faces. With the usual malefic prognosis that it bears, the stormy presentation somehow helps in the early diagnosis and hence aids in the surgeon taking redressal steps. However with this case, we would like to confer upon the knowledge that this entity can

present silently with aggravated lethality and hence physicians should have a high risk of suspicion for the diagnosis in case of an atypical presentation. Early surgical ministration with adequate hemodynamic resuscitation is the key to an optimal treatment and favourable outcome.



**Figure 1:- Colon cut off with dilated small bowel loops and Air Fluid levels**
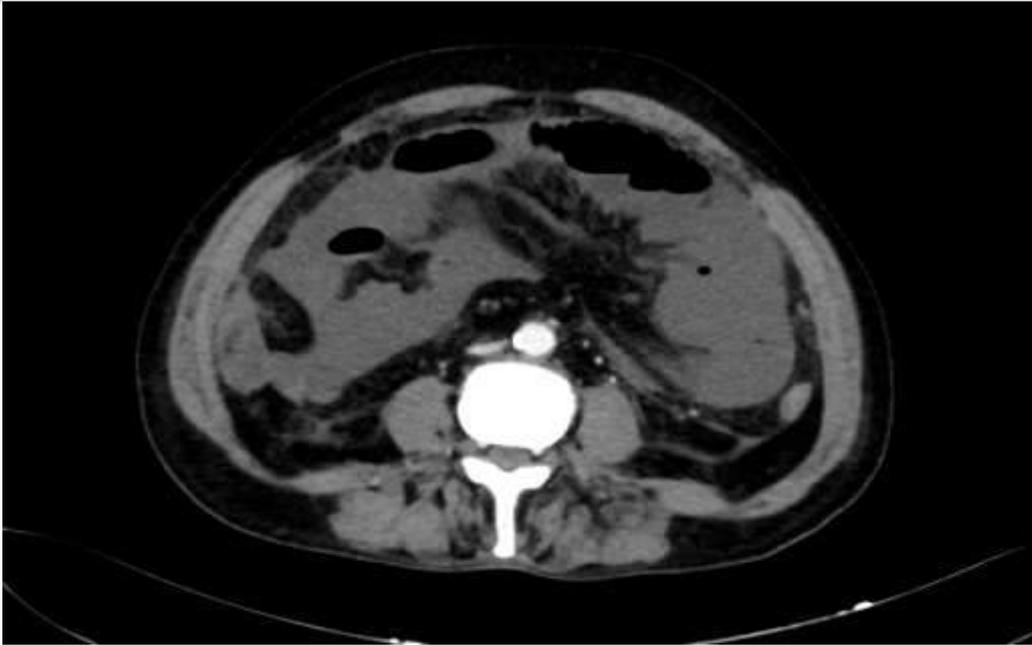
**Figure 2:- Non enhancing small bowel loops with moderate ascites**

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# NON-TOXIGENIC DIPTHERIA SEPTICEMIA IN DIABETIC FOOT: - THE RETURNING REAPER OF DEATH

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## ABSTRACT

*Corynebacterium diphtheria is an assassin of the past with near total eradication in view of extensive vaccination around the world. Usually presenting as a respiratory ailment, its pathogenesis is aided by the toxaemia instead of bacteraemia. Nevertheless, over the last 20-30 years, cutaneous forms of diphtheria have been increasing in trend affecting the immunocompromised in the form of an opportunistic infection. Although bacteraemia is a rare occurrence, it has been found to cause systemic sepsis with multi-organ involvement in the form of encephalitis, cardiomyopathy, endocarditis and osteoarthritis. Herein we present a rare case of right diabetic foot with uncontrolled glycaemic state in systemic sepsis presenting with Corynebacterium diphtheria as the causative organism with significant colony count.*
**KEYWORDS:** *Corynebacterium diphtheria, toxaemia, MODS, tellurite agar, jet black colony*

## INTRODUCTION

Corynebacterium diphtheria comes under the group of aerobic, gram-positive, non-motile, non-spore-forming, non–capsulated, non-fastidious, club-shaped, differentially staining bacteria with a majority of the genome in the commensals and contaminant type. The most common presentation of this pathogen is respiratory diphtheria which is an exotoxin mediated ailment with the pathognomonic formation of obstructing pseudomembranes in various respiratory domains. Since pancontinental vaccination programs were carried out for this deadly disease with apt success, the prevalence of non-toxigenic strains has increased over time as the major contributor to disease causation [1]. Although conventionally diphtheria is considered a disease of toxemia and not that of bacteremia, there has been an increased incidence of cutaneous forms of the ailment causing necrotic or punched-out ulcerations with aggravated local morbidity. Hereby we present one of the rare instances of right diabetic foot locally complicated by a Corynebacterium infection with possible systemic sepsis.

## CASEPRESENTATION

A 49-year-old man with uncontrolled non-compliant type 2 diabetes for 10 years developed a spontaneous onset bleb on the right foot plantar aspect for 5 days. The lesion ruptured and started outpouring the purulent material associated with severe pain and multiple fever spikes for 3 days. He also had extensive scaly lesions of skin all over his body including the scalp with poor oral hygiene. In addition, the patient had a sudden onset diminution of vision for 4 days with the development of occasional exertional dyspnoea and palpitations

On examination, he was febrile, pale, lethargic, and dehydrated with a significant tachycardia of 124 beats per min and blood pressure of 128/88 mm of Hg. He had extensive scaly skin lesions all over the body with utmost prominence on extensors of limbs, periumbilical, and groin regions. On oral examination, he had scattered white patches on the tongue with developing blackish pigmentation on the hard palate towards the uvula. On local examination, pus was actively pouring out from the right foot lesion with surrounding erythema, warmth, and induration with features of ascending cellulitis, all peripheral pulses were felt and no evidence of peripheral vascular disease was found. There is the presence of bilateral inguinal lymphadenopathy which was tender, firm, and non-suppurative.

Routine investigations revealed elevated counts of 26410 with normal liver function tests. Renal function tests

revealed acute kidney injury with a creatinine of 1.6. The chest X-ray of the patient didn't reveal any abnormalities. A local X-ray of the right foot was normal with no evidence of osteomyelitis.

Local venous USG revealed no evidence of deep venous thrombosis with any extension of pus collection into the right knee joint capsule. Colour Doppler of the right limb does. He was planned for surgical debridement where all the pus pockets were laid open and drained. The tissue bit and pus aspirate were sent for culture and sensitivity. Immediate microscopic examination of pus aspirate on gram stain revealed club-shaped gram-positive bacilli in a cuneiform arrangement. And the exudate culture grew Corynebacterium diphtheria in significant colony counts. On further investigation, Echocardiography was suggestive of diastolic failure with mild pericardial effusion and an ejection fraction of 25-30%. Ophthalmoscopic examination revealed severe compromised visual acuity with bilateral values of 1/60 and ocular studies revealed the presence of CSME. The patient was kept on strict glycemic control with an HbA1c of 14.3 with injectable and oral anti-hypoglycemics.

The patient was initially started on intravenous antibiotics with ceftriaxone and metronidazole and was later on started on clindamycin as the exudate grew Corynebacterium. The patient was taken up for serial debridement with the evacuation of multiple pus pockets which led to the amputation of the middle three toes. The ascending cellulitis responded to the clindamycin and there was a symptomatic improvement. Strict glycemic control was maintained as the patient was going into continuous hypoglycemia. Anti-fungals were started for a differential of visceral tinea corporis and showed improvement in the overall control. The patient symptomatically improved and was hence discharged.

## DISCUSSION
### INCIDENCE

Diphtheria is generally a non-invasive disease trademarked by toxic septicemia but not bacteremia. The global incidence of this disease has substantially dropped owing to the excellent vaccination drive done against this ailment. Nevertheless, the disease remains autochthonous in many countries as of now with subclinical presentations. WHO recorded a pulsating count of around 16600 cases in 2018 with multiple outbreaks in pancontinental domains. India also envisaged outbreaks of respiratory diphtheria from 2011-to 2016[2]. As a major causality of childhood mortality in the pre-vaccine era, the resurgence in the form of small cohorts has been deemed due to the failure of healthcare systems and vaccination programs.

Predominantly it affects children less than 15 years of age with the majority of them falling in the unimmunized and the immunocompromised category. Bearing a malefic case fatality of 5-17% in the unvaccinated population [3], the cutaneous form of this ailment has been seen to be cropping up one and again in different parts of the world. Usually, a part of the nasal commensals' bio genome, colonization of the Corynebacterium species has been seen in endemic and non-

endemic populations and the pretense of the vaccination reduces the potential lethality of the diphtheria invasiveness. Humans are the only known natural host for Diphtheria which is responsible for a spectrum of respiratory, cutaneous, and invasive infections. The majority are the non-toxigenic strains inoculation resulting in ocular diphtheria, 21-day cardiomyopathy, infective endocarditis, septic arthritis, and septic shock [1]. For over a century, only 58 documented cases have been seen in India from 1893 to 2003 due to apt vaccination coverage of around 78% [4].

## PATHOPHYSIOLOGY

Pathophysiology of this ailment is centered on the diphtheria toxin [DT] being encoded by the DT [tox] gene with a lysogenic integration of the beta-prophage into the genome which confers the lethality to the organism. The regulation is controlled by siderophore-mediated iron uptake and the expression of the Haem oxygenase which causes the toxin to have divalent ion activators causing iron levels in the patient-a major confluent factor. However, in the near-century, most of the reported invasive infections have been caused by the non-toxigenic strains which connote adaptive lethality in the molecular structuring in the form of adhesins, hemagglutinins, and surface-exposed non-fimbrial proteins. The vaccination made against the organism was aspired to reduce the toxin mediating organisms with a coverage of around 78% has created a pressured natural requisition of secondary virulent factors in the forms of transposons or plasmids [5].

## CLINICAL FEATURES

The invasive spectrum of causality usually includes myocarditis which has been associated with the major mortality with this ailment [60-70%]. In addition, it also affects the peripheral nervous system and results in irreversible neuropathy manifesting as palatal palsy, limb weakness, and requirement for mechanical ventilation. Ophthalmic diphtheria may result in direct corneal penetration with sudden onset blindness. Cutaneous form results in punched-out ulcerations, and dermal ichthyosis, and in rare instances it might mimic eczemas which make the diagnosis even more difficult. Multiple in vitro studies in ongoing research has postulated a zipper-like mechanism for this invasiveness trend for this systemic syndrome but the exact pathomechanism at the cellular levels remains ambiguous [6].

As in our case, the possible hypothesis would be the entry of the organism through the breach of the epithelial integrity at the site of a diabetic foot ulcer-causing local dermal lesion. This was followed by septicemia causing ocular and cardiac ailments in the form of blindness and cardio topographic abnormalities.

## DIAGNOSIS

The window period between the infection and the symptom development can typically range from 1-10 days with a mean duration of 2-5 days. In the case of asymptomatic clinical status, the patients are still infective for around 4 weeks [7]. Pragmatic risk factors for the ailment would include

lack of vaccination, a compromised immune system, a history of atopic dermatitis [eczema], congested and/or unsanitary living conditions, and travel to endemic areas. Prompt diagnosis in the case of diphtheria can be made clinically by the presence of pathognomonic pseudomembranous disease or evidence of systemic septicemia in the form of multi-organ involvement and lymphadenopathy.

In the past, recognition of the organism was solely based on slide appearance, Albert stain findings, selective growth medium, and biochemical properties which have been expedited now because of automated methods like MALDI-TOF MS[5] with an accuracy of around 97-100% [6]. Toxin detection can be done with the aid of the Elek's gel precipitation test or PCR [5] for the detection of genomic identities like tox, dtxR, 16S ribosomal RNA [16S rRNA] RNA polymerase β subunit [rpoB], etc. In addition to this panel, bio typing can be done for speciation and MIC can be assessed using the VITEK-2 automated AST system. In our case, the patient's exudate culture grew a high count of diphtheria colony which was confirmed based on gram stain (Figure 1) and differential Albert stain (Figure 2). In addition, sub-culturation with potassium tellurite agar bore the characteristics of Jet black colonies that are diagnostic of Diphtheria (Figure 3). Moreover, the throat swab taken was negative for the same and hence the patient was ruled out as a perpetual carrier.
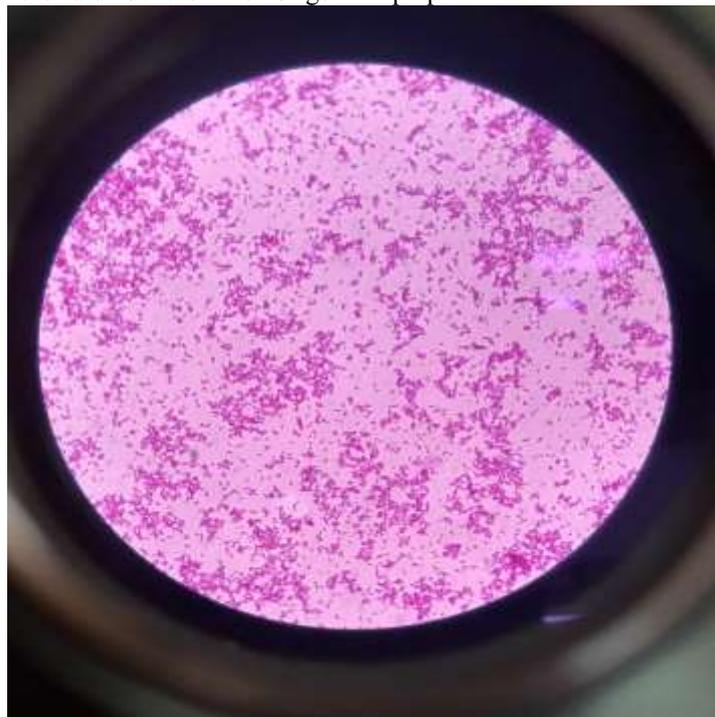


**Figure 1: Gram stain showing gram positive bacilli arranged in V-in Y arrangements that resemble Chinese letters.**
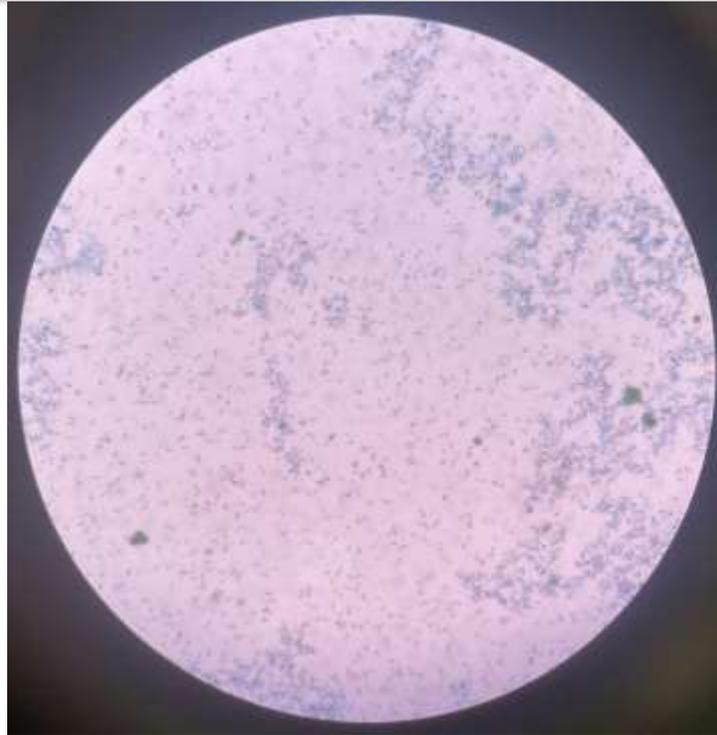
**Figure 2: Albert stain showing metachromatic granules**.
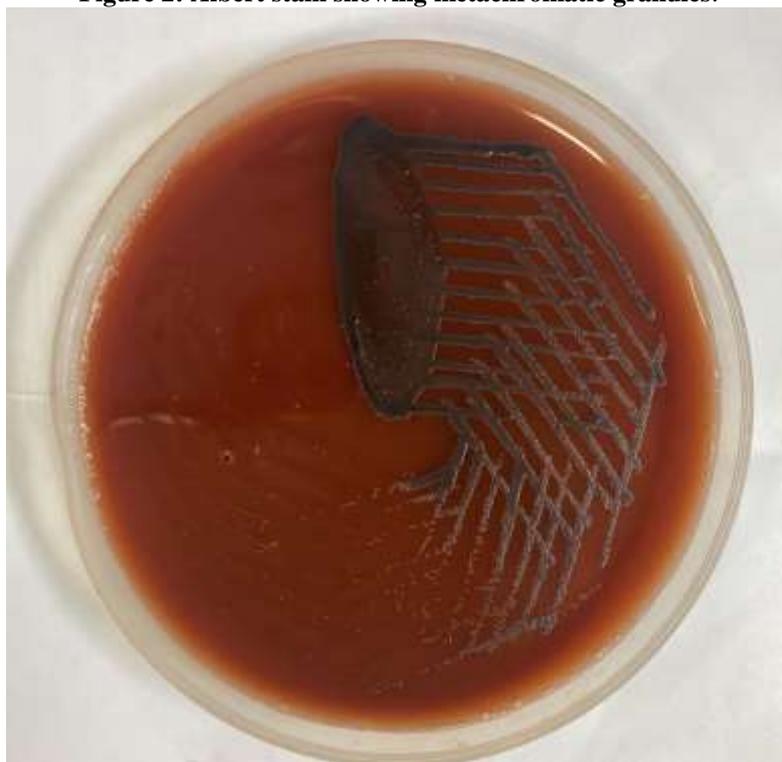


**Figure 3: Potassium Tellurite agar showing Jet black colonies suggestive of Corynebacterium Diptheriaea.**

## TREATMENT

In general, the mainstay of treatment is the prompt administration of DAT which contains the equine antibodies against diphtheria toxin and therefore neutralizes the vapid progression. As per clinical guidelines, recommended antibiotics include oral penicillin V or erythromycin, parenteral benzyl penicillin, or erythromycin if the patient is unable to swallow. Azithromycin can be used as an alternative or even clindamycin has been seen to be preferred as it has been speculated to have anti-toxin activity in the form of a production blocker and antidote [8]. The patient should be isolated and a minimum duration of 2 weeks should be served

to ensure complete eradication. In case of systemic complications, myocarditis can be dealt with carnitine supplementation or prophylaxis of erythromycin with streptomycin combination has been reported [9]. In case of the irreversible neuropathy, treatment is just conservative. In rare instances, the patient may encounter cardiorespiratory collapse and might require extraordinary measures in the form of intubation and mechanical ventilation, and nasogastric feeding for heightened survival [10]. All in all, increasing the vaccination coverage from the reported 78% to a complete 100% would confer total protection to the whole Indian population reducing the tenacity of carriers and any possible patients in the future.

In our case, the patient was started immediately on clindamycin with other adjunct high-end intravenous antibiotics to give broad-spectrum coverage. The patient was kept on strict input-output monitoring as he had initial features of systemic involvement. Systemic antifungals were also started because of extensive tinea involvement. Nutrition up-gradation and strict glycaemic control were done to maintain anabolic homeostasis with adequate fluid management. The patient gradually improved and was hence discharged with no further complications in the next 2 months of follow-up.

## CONCLUSION

In a nutshell, although lethal, diphtheria is a preventable disease that can be mitigated in the form of vaccinations. Moreover, being a life-threatening ailment, it requires prompt detection, rapid treatment, and intensive care as and when required. With adequate coverage also, the disease still lurks in both the developed and the developing world, and increasing awareness about its intermittent resurgence needs to be addressed urgently. Clinicians must maintain a high degree of suspicion for rapid detection and affirmative assessment of non-toxigenic strains dominating the causality spectrum.

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# ROLE OF WOMEN IN THE DOMAIN OF TEMPLE PATRONAGE IN EARLY MEDIEVAL ODISHA

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## ABSTRACT

*Studying the role of women in the domain of temple patronage in early medieval Odisha is a fresh trend of analysis in Odishan art history. In that male-dominated early medieval society, less number of epigraphs gives an account of the role of women in the religious sphere managing certain ecclesiastic matters. However, handful of donative epigraphs entails about their role as a temple builder, donor, temple staffs etc., who patronised those temples. Some queens were patronised to construct numerous remarkable temples in Odisha. Some inscriptional records refer about donation to brahmanic deities by several women belonged from various social and geographical background of the then society being an integral part of temple life. So many royal ladies built various brahmanical shrines and donated cash and kind to support in maintaining those temples. Temples were associated with music, dance, marriage and festivals etc. Therefore the role of women was very vital to study to understand the socio-cultural history. We have got references of different types of devadasis or temple girls in Madala Panji, who was associated with various kinds of ritual performance inside the temple premises. Likewise, other women temple staffs were there to perform their temple assignments, they were lady garland maker or kaula maluni, sweeper and milkmaid etc. Worthy and wealthy women donated various necessary items such as perpetual lamp, gold, land, milch animals e.g., cow, buffalo, goat and sheep etc for oil and other milk products. Along with temples, the female patrons established local markets or hattas, mandapas, stepped wells or vapi, additional shrines, roads and gardens for the smoother function of temples. In the domain of gift giving to gods and goddess, we have seen a sense hierarchy among patrons of various class and caste. Hence, this paper is aiming to analysis the less highlighted part of temple patronage that is the role of women as patron in the process of maintain and upkeep those temples of early medieval Odisha.*

**KEYWORDS:** *women, patron, devadasi, kaula malani, queen, temple, music, dance, donation*

## INTRODUCTION

Early medieval period of Indian history saw various regional developments especially in the field of patronage to brahmanical religious institutions. Odisha also experienced the same trend of horizontal spread of brahmanical religious institutions, or else what we called 'temples' across all parts of India in general and Odisha in particular. Since, that was a male dominated-patriarchal society; a particular group of gender were the decision makes for all. The tally of Epigraphic records of temple patronage shows that most of the temple builders or temple patrons were male. They were kings, members of the royal family, elites of the lay society, officials etc. Most of them were male donors and temple caretakers. However, women played a vital role in patronizing the temples of early medieval Odisha. On the contribution of women Gerda Lerner[1] says, "Like men, women are and always have been actors and agents in history. Since women are half and sometimes more than half of humankind, they always have shared the world and its work equally with men. Women are and have been central, not marginal, to the making of society end to the building of civilization." Ironically, in the sphere of ecclesiastic matters, there were very small numbers of donative records which refers the role of various women as

temple builders, temple donor and associated with temples in up keeping temples in early medieval Odisha. Through inscriptional records, we can see that so many women were engaged in maintaining those temples, but, because of handful of sources we can only assume their key role as an actor behind the curtain.

In the light of donative records, we came to know that women also acted in all field of life like their male counterparts during early medieval period. They played vital roles in the domain of social, cultural, political and economic life. They participated in art, education, occupational and religious arena during this period. In early medieval Odisha, women were associated in managing various ecclesiastic matters e.g., building of brahmanical religious institutions or temple, donation to it, availing necessary things for its upkeep and maintenance, recruiting temple staffs, running certain temple rituals and establishing other additional set ups for the longevity of temple's life. During the Bhaumakara period, Odisha experienced the development of Saktism and Sakta art under its female patrons. Sakta temples built across the costal belt of the then Odisha by the Bhaumakara queens. Subsequently, under the Somavasi rule a number of Saiva temples built by both the male and female patrons of the royal

family. Saivism reached its pinnacle under the Somavamsi Royal Patronage. Temple like the Lingaraja temple, Mukteswar, and Brahmeswar were the most decorated and flourished Saiva shrines developed under the Somavamsis. Followed to this, under the Imperial Gangas, Vashnavism flourished and reached in its apex during Narasimhadeva I (1238-1264 AD). The Jagannath temple of Puri, the Sun temple of Konarka and Ananta-Vasudeva temple etc., like grandeur shrines were the best example of Vaishnav art and architecture during this period. Women contributed actively in supporting those brahmanical temples through financial and material aid.

## ROYAL WOMEN AS TEMPLE PATRON
 In this context, we see that Royal ladies played an important role in patronising those early medieval brahmanic temples of Odisha. Wives of kings, queens, mother or daughters of the ruling king also donated to support those brahmanical religious institutions. Royal ladies, elite women had their possession on tangible property i.e., land, gold etc. Hence, they had the choice or right to gift to anybody; religious institutions. In this context, the Hamsesvara temple inscription[2] records that the temple of the god Bhava or lord Siva was built on behalf of the queen named Madhava devi, the queen of the illustrious King Subhakaradeva (*circa* 780-800 CE) of the Bhauma family. The deity installed in the temple was named after her as Madhavesvara. It further records the appointment of pontiff (*acarya*) for conducting the worship of the deity, the excavation of a *vapi* or stepped well near the temple and establishment of a market or *hatta* in the vicinity of the temple. Here the queen wanted to ensure the proper maintenance of the temple after its establishment. Therefore, all sorts of availability of water, food and other necessary things for the god had been arranged by the patron. Likewise, under the patronage of another Bhauma queen named Hira Mahadevi the 64 yogini temple was built at Hirapur, which is situated 10 kilometres away from the heart of Bhubaneswar.[3] Likewise, the Chamunda image inscription[3] of Jajpur refers that object of the inscription is to record the works of the installations of the image of Chamunda by queen Vatsadevi of the Bhaumakara family. The Terundia plate[5] of the king Subhakaradeva II records that Mohini devi built the Mohini temple at Bhubaneswar in 687 CE. Even the temple is named after her. It was a sakta temple built in the heart of Bhubaneswar, north side of the Lingaraja Temple. The identity of Mohinidevi can be traced as a queen of the Bhaumakara dynasty. Probably, the the Vaitala temple of Bhubaneswar was built by Tribhuban Mahadevi in 775 CE.[6] Tribhubhan mahadevi was also known as Katayani. It is believed that in order to worship katayani or durga she had ordered to build that sakta temple. She was the queen of the Bhaumakara dynasty who ruled Tosali. Goddess Chamunda is the main deity worshipped in Vaitala temple. The Bhaumakaras were the chief patron of Shaktism. It shows that most of the the Bhauma queens supported saktism. They exclusively patronised sakta art and architecture during this period.

The period of the Somavamsis had been experienced the growth of saivism under its male and female royal patrons from 9$^{th}$ century onwards. In this regards, the Brahmesvara temple inscription[7] refers that Kolavati, the mother of Udyotakesari, erected a lofty shrine of god Brahmesvara along with four miniature shrines at *Siddhatirtha* of *Ekamra*, which is the ancient name of Bhubaneswar. The temple was adorned with golden pinnacles. Queen Kolavatidevi also made over to the temple some beautiful maids. The eulogy was composed by Bhatta Purusottama who was well-versed in the Vedas, Grammar, Arthasastra, Poetry, Logic and other disciplines. The inscription further refers that the queen dedicated to lord Brahmesvara (Siva) three beautiful women, who were to sing and perform dance before the deity. The record of the donation made on the Regnal year 18, the third day of the bright fortnight of the month of *Falguna* probably 1058 or 1060 CE. From the donative record, it seems that Kolavatidevi was very much concerned about the decoration and attractive design of the Brahmasevara temple. She also availed all sorts of scopes and platforms for learning, education and knowledge. All sorts of happiness of the god siva was taken care of by providing *devadasis* to the temple, and making dance and music as a vital part of temple's ritual.

Imperial Ganga period experienced the horizontal spread of vaishnava art and architecture across Odisha. Royal ladies and non royal played significant role in nurturing vaishnavism. Kasturi Kamodini was the chief queen of the Ganga king Chodagangadeva (1078-1147 CE). After Chodagangadeva's death, she built a temple of lord Jagannatha at Tekkalli, in Khordha District.[8] Similarly, the 12$^{th}$ century Mukteswar temple inscription[9] records that in the reign of Chodagangadeva of the Ganga family, his queen named Pracarimahadevi dedicated a perpetual lamp in favour of the god installed in the temple for accruing religious merit. The donation was made in *saka* year 1064 or 1132 AD, on the tenth day on Thursday, when the sun was in the *Tula-rasi*. This Mukteswar temple is traced at present Danpur, near Kodala, Ganjam district which co existed with a complex of other temple. Likewise, the Ananta-Vasudeva temple inscription[10] records that Chandrikadevi daughter of Anangabhimadev III who married the Haihaya prince Paramadri or Paramadrin, cause to built the temple of Visnu at *Ekamra-siddha-tirtha*, in the Utkala *visaya*, where flows the vicinity, the stream called *Gandhasindhu* and the *Bindu-saras* or the Bindu Sagar pond. She offered with great magnificence to Baladeva, Krsna with Subhadra in the said temple. The record of the donation is made on *Saka era* 1200 that is 1278 CE.

## NON-ROYAL FEMALE DONORS
 There were references about women from lay society donated to temples during this period of study. They were elite women rich in class. Stray cases of local civilian or donation of a lady devotee found mentioned in those donative records of this period. Pertaining to this, an Inscription[11] found from the Nrsimha temple of Puri district refers about the gift of a perpetual lamp in favour of the god Purusottama by a lady named Klingamma, the wife of Narayana. She is also stated to

have donated to the temple treasury an amount of five *niskas* gold (*mada* in Telegu) and to have entrusted to a family of florist for the maintenance of the gift lamp and for supply of garlands of flowers daily to the temple for the worship of the god *Purushottama*. The record of the donation is made on *Mahadvadasi* day of the *Saka era* 1035 or 1113 CE.

Another 12th century Narsimha temple inscription[12] records the gift of a perpetual lamp in the shrine of the god *Krsna* to be burnt before the god *Cakrin* by a certain Mankani, daughter of Ammani, during the 61 regnal year of Chodagangadeva at the time of his presence in the holy place of god Purushottama. An amount of five *madhas* of gold was deposited in the temple for the maintenance and continuation of the burning of the said lamp. The gift was entrusted with one Sivadasa for supervision. The record of the donation is made on *Saka era* 1058 or 1136 CE. Likewise, the Lingaraja temple inscription[13] records the grant of a perpetual lamp in favour of god *Krttivasa*, by a lady named Madamadevi daughter of Kominayaka apparently for the merit of her parents and self during the victorious reign of Raghavadeva to cover the expense of the perpetual lamp, the lady purchased jointly with a leading merchant named Jayadeva who was the resident of a locality attached to Kurmapataka from the hands of a *sresthin* of Dasapura, a piece of land called Vahida-Khandakshetra situated at Devadhara-grama and granted it in favour of the said deity. The record of the donation is made on Wednesday the tenth day of a particular month during the time of the Ganga king Raghavadeva (1156-1170 CE). Here, Madamadevi can be identified as an elite woman, who had the capability to purchase land and donate it to god. Probably, she has done it for her parent's (father) salvation. So, keeping this instance in mind, we can presume that the elite women in early medieval Odisha were enjoying their rights on the possession on movable and immovable property *viz*, land, gold, jewellery, milch animals, etc. likewise, the Jagannatha temple fragmentary inscription[14] records the gift of a lamp by the daughter of a person whose name ends with Vira. The record of the donation is made on *saka* year 1156 that is 1227 AD, during the time of Anangabhimadeva III on the name of Anangabhimadeva II.

We are getting the evidence of the social background of another lady temple caretaker that was recorded in the Patalesvara temple inscription[15] during the reign of the Ganga king Anangabhimadeva III. The inscription records the grant of two pieces of land by the *Sri-Karana* Suru- Senapati in favour of the god Purushottama for making provision of the supply of 1 *mana* to the deity with cognizance of Mahadeva-Pathin. One of the two plots of land was situated at Alisana in Ravanga division. The other piece of land measured 10 *manas* (½ *vati*) was apparently situated in the same locality and was granted for making provision for the supply of 10 *hala* that can be equated with 10 pairs of bundles of fragrant flowers apparently per day. This grant was made with the cognizance of one *Kalua-malani* or lady garland maker. So, here the lady garland maker as the supervisor of the grant made to the temple as the second person to maintain it other than her male counterpart. The record of the donation was made on *saka era* 1158 that was 1236 CE, on Friday, on the first fortnight of the

month of *Falguna*, in the thirty-first *srahi* or *anka* year of the reigning king Anangabhimadeva III.

The references of couple donation are also found from those early medieval donative records, from which we can estyablesh the importance and impact of a 'husband-wife' joint donation to god. In this context, the Narsimha temple inscription[16] refers that the gift of a perpetual lamp to the deity *Krsna* by one *Rayana* along with his wife Ratnama along a village called Manda-grama of Vengi *desa*, during the reign of Chodagangadeva for the increase of religious merit. According to S.N. Rajaguru, the location of the village Manda-grama can be traced with the present Mandapeta in the Srikakulam district. In this donative record, Ratnama is stated to have donated five *madas* of gold to the temple treasury for the maintenance of the gift lamp. This record of the donation made during the reign of Chodagangadeva(1078-1147 CE). So here the couple can be placed in the category of elite people from the lay society. Likewise, The another 13th century inscription[17] records an endowment of three *madas* of gold and 32 *manas* of land, situated in the village of perpetual lamp donated in favour of the god Purushottama by a certain Surapota of the Bharadavaja *gotra* along with his wife, during the fifth regnal year of Kamarnavadeva of the Ganga family. The record of the donation is made on regnal year 5 probably c. 1151-1152 CE, on the first day of the dark fortnight of the month of *Asadha* of the *Mithuna lagna*. Here one thing is clear from the donation of the Brahmin couple that they were wealthy.

The religious scriptures of hindu civilization describes about the virtue and importance of couple donation. It refers that any religious donation made with wife is considered as more virtuous than the donation of single man or women. For example, in Ramayana we see that lord Rama has to do the *dana* along with Sita, without which it would not be fruitful. Therefore Ravana brought Sita back to Rama for sometimes to perform *dana* and *dakhina* to the priest during the *yagnya*. The story is related to the *setubandha pratistha* of the *Yuddha Kaanda* or *Lanka Kaanda* part. Likewise, when Rama was performing *Rajasuya yangya*, he was advised to do all the *dana* and *dakhsina* with his wife Sita. So a golden icon of his wife Sita made to perform the rest of the donation work described in the *Uttara Kaanda* of the Epic. Wife and husband are reciprocal to each other, and in Hinduism they are seen as complete with their partner, that is husband and wife. In Vedic ages also all the religious donations at *yagas* and *yagnyas* had been done with the collaboration of wife in order to get more *punya*. Now a days, if you go to the Jagannatha temple with your wife to donate the temple, then there is an account in where they accountant mentions both the couple names. Even, pilgrim to various sacred places in India with wife is also considered as virtuous and fruitful.

## FEMALE TEMPLE STAFFS
So many lady temple staffs were associated with brahmanical temples in early medieval Odisha. They were undertaking various professions which can be corroborate from the modern day temple activities. Grandeur shrines like Lingaraja, Jagannatha temple of Puri and Konakra etc temples were

associated with a set of lady staffs to perform temple's daily and special rituals. *Madala Panji*, the chronicle of Puri Jagannatha temple also mentions some of the lady temple staffs associated with the temple's life. They were *devadasis* or temple girls, dancers and musicians etc. in this context, the Meghesvara temple inscription[18] and the Brahmesvara temple inscription[19] refer about the donation of *devadasis* or maiden girls to the temple. Similarly, Karpura-sri named a temple dancing girl has mentioned by historian K.C. Panigrahi.[20] He states that Karnadeva (1100-1110 AD) the last Somavamsi ruler had granted a rent free village to Karpura-sri to increase his religious merit. There is was no reference in the grant that she was a *devadasi*. In the charter, her mother and grandmother's name find mention instead of her father and grandfather. This makes the scholars believe that she might be a temple dancing girl.

Similarly, we have found references of donation made by maids or temple maids to temples during early medieval period. These temple girls or temple maids were clearly having independent access to financial resources so that always there had been a choice that they can disburse them to whomsoever they wish. There was no competition or segregation between the royal ladies and non royal ladies for gifting temples. So it is interesting to see that these non royal female temple donors had a desire to find a place in that donative recodes along with their royal ladies counterpart during the time of Chodagangadeva, so that their future generation people could know about their religious adherence. In this regards, the 12th century Mukhalingam inscription[21] records that Ekkama, daughter of Cuttandi had gifted a perpetual lamp to the god Madhukesvara. She donated 5 *madas* of gold for the maintenance of the said lamp. The identity of lady Ekkama has been traced as a *sani* means she was a *devadasi* or temple girl of the god Vishnudeva. The above referred Madhukasvar temple is located in present Mukhalingam of Andhra Pradesh State.

Likewise, another maid named Siriya-Muduseli or Sriya-mudusuli from Varanasi Katak had offered a fan for waving during the daily offering of food at both times of worship of the deity Narasimhanatha found mention in the 12th century Laxmi Narayanaswami temple inscription.[22] Here the odia word *Mudusuli* means a maid of female servant in the royal household. The same inscription further entails that, a lady named Polama, who was the daughter of the maid tara *sani* was entrusted with waving the fan in front of the deity. Again, for this service she was granted *prasadam* that was consisting of baked cakes and betel from the said temple. She also deposited some amount of money known as *malla-mada* (in telegu) into the temple treasury for the provision of offering food to the deity. During the reign of Chodagangadeva, these temple maids and female servants of royal houses had been enjoyed the gift giving rights as well as keeping them as record for encoding their religious achievements for the upcoming generations.

The *Madala Panji* refers about five types of temple girls in the Jagannatha temple Puri. They were performing on the verses of *Geetagovinda* written by Jayadev.[23] The five types of *Devadasis* were 1. *Bhitara Gauni;* they sing in front of the main deity, the inside the *Garvagriha* or Sanctum Sanctorum, 2. *Bahara Gauni;* they sing outside the inner sanctuary, in the *Natamandapa* or dancing hall, 3. *Nachuni*; she is a regular Dancer, 4. *Gaudasani*; they Dance during ceremonial procession of lord Jagannath, 5. *Patuari*; they negotiated in fanning the main deity. In other hand, generally *devadasis* of early medieval Odisha can be divided into two categories i.e., *Gani Mahari* or singer temple girls and *Nachuni Mahari* or dancing temple girls. They were integral part of temples' daily ritual as well as special occasions i.e., Ratha yatra, snana yatra, chandana yatra, hera panchami and badasimhara besa.[24] Dance and music became an inseparable part during the period of Imperial Gangas followed by Gajapatis in medieval Odisha. These *devadasis* had played a significant role in supporting those temples through timely donation and endowment.

## CONCLUSION

To conclude, I must assemble my arguments precisely to draw a larger picture to understand the key role played by women in supporting those brahmanical religious shrines in early medieval Odisha. Women, are majority half of human society and civilization. Generally we see that women associate with various activities in household and professional matters. Women have been participated and contributed in nurturing and nourishing every civilization in the past. In the context of early medieval Odisha, their activities in public domain were been limited. However, some of the elite class women were played key role in patronising various brahmnical religious institutions with various gifts and donation. Ironically, the sources are not recorded enough to analyse all the donations, and identify all the builders or patrons of those temples. Keeping in view of some handful of donative inscription, we can presume that lots of women from various class and occupation were associated with temple's life directly or indirectly, inside and outside of those temples during this period of study. For the anonymous women patrons, we can say that, the so called male society might not want to give credits or record them widely in any of the contemporary sources. However, some of the powerful and rich women of society made endowments to the temples. Women from various occupational communities were associated in supplying necessary diary and agricultural products to those temples. Some of them are rarely mentioned among those contemporary sources. Therefore, it is comparatively less conducive and challenging to reconstruct the history of lower class and caste women pertaining to temple patronage for a comprehensive study. On the other hand, the modern day temples are been largely donating by women donors, women worshippers and visible male and women temple staffs and workers. We can take a look to the Jagannatha temple of Puri to understand the role of women in temple's life. Therefore, because of that we can't simply exclude ourselves to see the role of women who played key role in making those temples that has been survived through ages.

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# GIRISH KARNAD: A TRUE CHAMPION OF TRADITION AND CULTURE

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## ABSTRACT

*Girish Karnad, a multi-faceted genius, attained an early interest in drama and dramatized contemporary socio-political and cultural issues in his plays through the use of myth, legend and folk-lore. While dealing with history and culture he has tried to relate them with contemporary issues. He carefully uses the substance to reshape our society. Though studied at foreign universities, his deep sense of Indian tradition and culture is very much reflected in all his plays. In that sense he is versatile genius. To literature point of view, it is someone or something that encourages progress and change. Unlike poetry and fiction, Indian drama has been unable to grow and bear rich fruit but Karnad being a playwright feels comfortable and at his best. Girish karnad is truly a lover of indian tradition and culture because he brings out all the aspects of tradition and culture of indian society through his plays.*

**KEYWORDS:** *multi-faceted, excavates, renaissance, delve, myth, legend, folk-lore*

## INTRODUCTION

Girish Karnad is one of the towering figures in the world of Indian theatre. The present paper is an attempt to reinforce the paramount role of the dramatist as a reformer of the society. . To literature point of view, it is someone or something that encourages progress or change. Karnad is the real performer behind the theatre though not actively participates as a character in each and every play. Basically Indian drama in English has not registered very notable gains during the post-independence period. If Indian English Literature is the Cinderella of literature in English, Indian drama in English is the Cinderella of Indian English Literature. Unlike poetry and fiction, Indian drama has been unable to grow and bear rich fruit but, Karnad being a playwright, feels comfortable and at his best. He confessess: "I have been fairly lucky in having a multi-pronged career. You know, I have been an actor, a publisher, a film maker. But in none of these fields have I felt quite as much at home as in playwriting."

Karnad`s construction of a new idea of drama that digs up from the immensely rich, unexplored holdings of Indian myths and history, re-reads their communicative practices and cultural contexts and invites a new mode of reception. Unlike, Badal Sircar and Vijay Tendulkar who delve into the problems of the middle class man, Karnad goes back to myths and legends and has made them a vehicle of a new vision. This shows indianness and contains the element of post colonical attitude. By using these myths, he tried to show the absurdity of life with all its elemental passions and conflicts and man"s eternal struggle to achieve perfection. Karnad is an existential playwright. He concerns himself with the problems of existence, the quest for equality, search for identity and the problems of isolation and frustration. Existentialism asserts

humanism or the dignity of man. This philosophy is exemplified in all his plays.

He dramatizes contemporary socio - political and cultural issues in his plays through the use of myth, legend and folk-lore. Problems like caste, heredity, religion and gender are discussed in his plays. He performs as a reformer that takes help of myth, legend and folk-lore like a jar and keeps heterogeneous elements rendering the  effect to the audience. He meticulously uses these devices to project the situations in our society. The play *Tughlaq* dramatizes the political disillusionment of the post - Nehruvian regime. Gender is an important issue in *Hayavadana.* Yayati is about king"s passion for immortality and the picture of a power hungry politician. *Naga-Mandala* deals with the ironic predicament of a woman who becomes a victim of her husband"s indifference. The play questions the very institution of marriage and the sense of isolation and loneliness resulting from post- marriage pressures. *The Fire and the Rain* takes up complex issues situations like revenge, futility of knowledge, jealousy and ego. *Wedding Album* reinvents with introducing a new visual tool – that of technology and its new found issues in traditional situations. *Tale- Danda*, an excellent tragedy, deals with the failure of Basavanna"s effort to reform society, sunk in the mire of caste divisions, discrimination between the sexes and exploitation of the marginalized sections. *Bali: The Sacrifice* explores the existential dilemmas of passion and violence posed by an ancient Jain myth.

Post colonialism rejects the claim to universalism made on behalf of the western thought and literature. It examines the representation of the non- western cultures with and within the texts. It develops a perspective in which the conditions of marginality, plurality and otherness are seen as the sources of cultural valorization and potential changes. It celebrates

hybridity and cultural polyvalency. The Indian writer can never get rid of Indian culture, philosophy, as a result of which that writing has a strong element of Indianness.

Karnad is truly a traditionalist while dealing with *Naga-Mandala*. The play is supported by the oral tales from Karnataka.In his play Nagamandala Karnad offers an insight into the private lives of women.The flames gather at midnight to tell tales about the private lives of couples and rejoice in their findings." The latter word Mandala is a magic square that has a charming power to control, guide and direct human lives. Here in the play, Naga makes the mandala and plays with human lives. Karnad makes use of myths and folk forms in his plays to exercise socio - cultural evils. In *Naga-Mandala*, he exposes male chauvinism, the oppression of women, the great injustice done to them and stealthily deflates the concept of chastity. There is a significance of shape shifting in the play. *Hayavadana* is based upon one such folktale. Karnads Hayavadana is a play of cultural symbol.Through the folk tales Karnad deals with the problems of human identity in a world of confused relationship ,with the theme of incompleteness and mans desire for perfection He creates a strange world. It is a world of incomplete individuals, indifferent gods and dolls that speak. It is a world different to the desires and frustrations, joys and sorrows of human.

The source of the play, *Bali:The Sacrifice*, is an ancient Kannada epic, *Yashodhara Charite,* which itself draws on several other sources. The play is one that has multiple ideological issues. Though based on an ancient Kannada epic, the story, characters and incidents are often overshadowed by overt ideological concerns as relevant today as they were many centuries ago. Here the playwright skillfully handles the issue and keeps in front of the audience for further improvement. *The Fire and The Rain* is based on a popular myth from the *Mahabharat,* the myth of Yavakri. Karnads cultural practice is continued in the play The fire and the rain .it is structured around ideas and excess of strangled relationship,which unfolds with a rare economy and intensity of emotions. In *Tale-Danda* he uses the history of medieval India to depict the social ethos in contemporary India. Through the play it is revealed that caste system is a great threat to the unity and integrity of Indian society. *Yayati* is an existential play on the theme of responsibility and human relationship. It is also a reflection on the condition of modern man, whose mind, disturbed by many worldly and sensuous passions, has turned into a veritable zoo inhabited by wild desires, sensual pleasures, irresponsible exercise of power and utter forgetfulness of the imperishable values of life. The modern man is in no way better than Yayati.

The myth of Yavakri attracted Karnad and he decided to turn it into a play. He adroitly reshapes the myth in order to make it dramatically effective and to interpret it in contemporary contexts. Karnad skillfully revises the *Mahabharata* myth and alters it to suit his dramatic requirements. He adds several characters and situations and deletes some unnecessary incidents and situations. He contemporaries the original myth and reinterprets it in the light of modern ideas and contexts. In *The Fire and The Rain* the basic character of the myth has been changed. What remains unchanged is the basic nature and atmosphere of the myth. One of the fascinating aspects of dealing with myths is their self reflectivity. A myth seems complete in itself and yet when examined in detail, contains subconscious signal which lead you on to another myth which in turnwill act as a conduct to a third one while illuminating the one you started with. Myths are fascinating to the playwright. He skillfully uses and innovates them to suit his dramatic purpose. He knows that the folk theatre derives its energy from traditional values; it also has the capacity to question them. As a folk play *Naga-Mandala* has all the paraphernalia required for the genre. The very idea of a Naga or Cobra impersonating the identity of Appanna, Rani"s husband, is unbelievable but the playwright portrays the metamorphosed Naga as a real human character. It has been used to render the inner landscape of the mind or the passion, agitation and ecstasies of the heart and soul of characters. The play opens with the bringing of the mask of Lord Ganesha, the presiding deity of traditional theatre on the stage and his worship like a typical Yakshagana play. The Bhagvata, accompanied by musicians, sings verses in praise of Ganesha. At the outset, the theme of the play is introduced as Ganesha processing the head of an elephant and human body symbolizes incompleteness.

Karnad as a play wright is pre-occupied with the retelling of indian myths , legends ,folklores and history.Of his eleven plays ,seven are based on myths and legends and three on history and only one on contemporary experience.The reason why Karnad chooses myths and legends is they embody themselves in the form of motifs and symbols, certain collective human behavior and human experiences. Karnad links the past and present the archetype and the real.The issues of the present world find their parallels in the myths ,folklore and tradition. While dealing with all such occasions the playwright is a social reformer.

Karnad deftly weaves multiple threads-sub-plots such as 13-year-old Vivians" passionate and pornographic notes to Hema who is old enough to be his mother and Radhabai the domestic"s pathos-filled story. Karnad also introduces various contemporary concerns and issues. When the television producer Pratibha, a Hindu married to a muslim says "There"s nothing I don"t know about harassment" or when Vidula"s secret life as an anonymous cybersex kitten at the sleazy neighborhood internet café is exposed and shushed just as quickly can account of her Saraswat status by the Saraswat moral brigade, the playwright opens a Pandora"s Box of new age crises. Karnad has borrowed the myth of *Yayati* from the "Adiarva" of the *Mahabharata. Yayati* re-tells the age-old story of the king who in his longing for eternal youth does not hesitate to usurp the youth and vitality of his son. He takes liberty with the myth and weaves complex dimensions into the plot borrowed from the *Mahabharata.* He invests new meaning and significance for contemporary life and reality by exploring the king"s motivations. Karnad makes Yayati confront the horrifying consequences of not being able to relinquish desire.

Karnad turns to traditions and history in order to seek an answer there for the failures of present.Karnad revives the ancient traditions by the powerful use of archetypal myths that are resonant with meaning for the contemporary world.Karnad

in his plays does not take myths in their entirely.He takes only part of them that are useful to him and the rest, he supplements with his imagination to make his plots original and imaginative.

## CONCLUSIONS

The present paper throws light on the aspects of Girish Karnad as a social reformer. There are innumerable instances stated in the paper to show that how the playwright very potentially has woven the threads of myth, legend, folk-lore and history to display the contemporary status of our Indian society especially keeping himself aloof and entangled in one situation. He very honestly creates different situations and pushes the characters to perform their duties

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# IMPACTS OF GAME SPECIFIC EXERCISE ON SKILL PERFORMANCE VARIABLES AMONG HANDBALL PLAYERS

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## ABSTRACT

*The point of the present study was to find out the impacts of game specific exercise on skill performance variables among handball players. To achieve the purpose of the study male handball players were selected from Government Arts and Science College, (Affiliated to Bharathiar University, Coimbatore) Modakkurichi, Erode, Tamilnadu, India. The subject's age ranges from 19 to 24 years. The selected subjects were divided into two equal groups consists of 15 male handball players each namely experimental group and control group. The experimental group underwent a game specific exercise package programme for twelve weeks. The control group was not taking part in any training during the course of the study. Dribbling and shooting was taken as criterion variable in this study. The selected subjects were tested on dribbling and shooting was measured through coaches rating. Pre-test was taken before the training period and post- test was measured immediately after the twelve-week training period. Statistical technique 't' ratio was used to analyze the means of the pre-test and post test data of experimental group and control group. The results revealed that there was a significant difference found on the criterion variable. The difference is found due to game specific exercise package given to the experimental group on dribbling and shooting when compared to control group.*

**KEYWORDS:** *Game Specific Exercise, Handball Players, Dribbling and Shooting.*

## 1. INTRODUCTION

The program that involves fitness and performance aimed specifically exclusively for athletic performance enhancement is known as game specific exercise. Dribbling, passing, shooting, and other areas other than developing strength, speed, power, endurance, flexibility, mobility, agility, mental preparedness (including goal setting), sleep, recovery/regeneration techniques and strategies, nutrition, rehabilitation, and injury risk reduction could all be included in training programs for game performance enhancement. Depending on the athlete's individual needs (based on strengths, weaknesses, and/or imbalances) and the demands of the sport they participate in, a general programme should include all of these components, while a more specialized programme may just include a few. Sport specific training is when you exercise with the purpose of increasing your performance as an athlete in your chosen sport. The classic look of fitness training could involve cardio, weight training, and flexibility stretching. Game-specific exercise training and visualisation training may help a player become in better shape and improve as an athlete. In sports, team training refers to a set of physical exercises designed to improve a player's physical or motor fitness. When training players at a higher level or above the basic level, they must be trained with specific sport objectives in mind, and the training programme should be tailored to the components required for the specific skill or technique in consideration. Thus such type of Specific game exercise training program is a need for the player to excellent in sport. Thus the present study has been carried out to study the impacts of game specific exercise on skill performance variables among handball players.

## 2. METHODOLOGY
### 2.1 Selection of Subjects

The point of the present study was to find out the impacts of game specific exercise on skill performance variables among handball players. To achieve the purpose of the study male handball players were selected from Government Arts and Science College, (Affiliated to Bharathiar University, Coimbatore) Modakkurichi, Erode, Tamilnadu, India.

### 2.2 Selection of Variables
**Independent Variable**
➢ Game Specific Exercise
**Dependent Variables**
  ➢ Dribbling
  ➢ Shooting

## 3. EXPERIMENTAL DESIGN AND IMPLEMENTATION

The selected subjects were divided into two equal groups consists of 15 male handball players each namely experimental group and control group. The experimental group underwent a game specific exercise package programme for twelve weeks. The control group was not

taking part in any training during the course of the study. Dribbling and shooting was taken as criterion variable in this study. The selected subjects were tested on dribbling and shooting was measured through coaches rating. Pre-test was taken before the training period and post- test was measured immediately after the twelve-week training period.

## 4. STATISTICAL TECHNIQUE

The dependent 't' test was used to analysis the significant differences, if any, difference between the correspondingly.

### 4.1 Level of Significance
The 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

### 4.2 Analysis of the Data
The significance of the difference among the means of the experimental group was found out by pre-test. The data were analyzed and dependent 't' test was used with 0.05 levels as confidence

**Table-I**
**Comparison of Mean, and 't'-Values of Skill Performance Variables between Pre & Post Test among Experimental and Control Groups**

| S. No | Skill Performance Variables | Groups | Test | Mean | 't' Values |
|-------|------------------------------|--------|------|------|------------|
| 1. | Dribbling | Experimental group | Pre Test | 15.10 | 7.31* |
| | | | Post Test | 18.10 | |
| | | Control group | Pre Test | 14.90 | 0.86 |
| | | | Post Test | 15.10 | |
| 2. | Shooting | Experimental group | Pre Test | 18.05 | 14.05* |
| | | | Post Test | 21.90 | |
| | | Control group | Pre Test | 17.95 | 0.45 |
| | | | Post Test | 18.15 | |

*Significant at 0.05 level of confidence

Table-I reveals that the obtained mean values of per test and post test of experimental group for dribbling and shooting were 15.10 and 18.10, 18.05 and 21.90 respectively; the obtained 't' ratio were 7.31* and 14.05* respectively. The tabulated 't' value is 2.14 at 0.05 level of confidence for the degree of freedom 14. The calculated 't' ratio was greater than the table value. It is found to be significant change in dribbling and shooting of the handball players. The obtained mean values of pre test and post test scores of control group were 14.90 and 15.10, 17.95 and 18.15 respectively, the obtained 't' ratio was 0.86 and 0.45. The required table value is 2.14 at 0.05 level of confidence for the degree of freedom 14. The calculated 't' ratio was lesser than the table value. It is found to be insignificant changes in dribbling and shooting of the handball players. The mean values of dribbling and shooting among experimental group and control group are graphically represented in figure-1
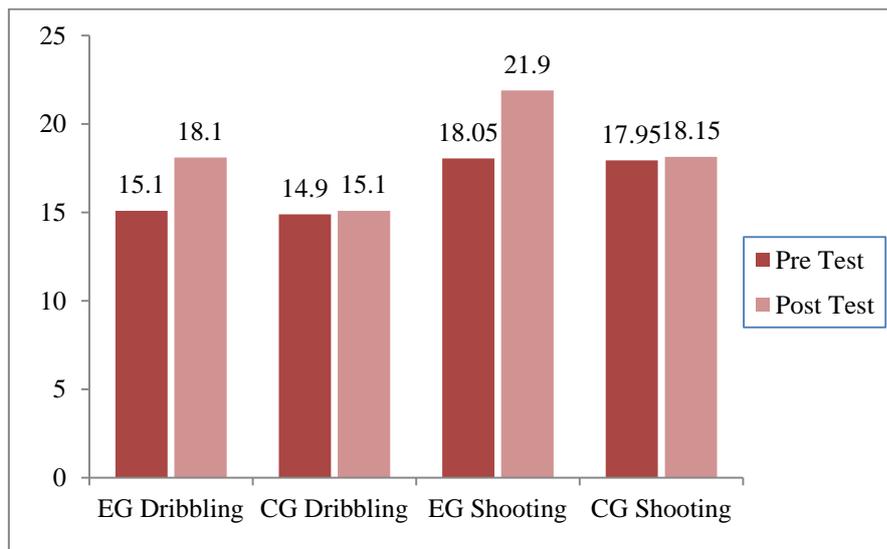


**Figure-1: Bar Diagram Showing the Pre Test and Post Test on Dribbling and Shooting of Experimental and Control Groups.**

## 5. DISCUSSION ON FINDINGS

The effects of the study indicates that the experimental group, namely impacts of game specific exercise group had significantly improved the selected dependent variable, namely dribbling and shooting, when compared to the control group. It is also found that the progress caused by game specific exercise when compared to the control group.

It is inferred from the literature and from the result of the present study. That systematically designed training develops dependent variables are very importance quilts for better performance in almost all sports and games. Hence it is concluded that systematically designed training may be programmes of all the discipline in order to achieve maximum given due recognition and implemented properly in the training performance. These findings are in accordance with the findings of **Senthil Kumaran (2021)[4], Senthil kumaran & mahaboobjan (2018)[14], Senthil Kumaran, Jenith, Abdul Halik & Kodeeswaran (2021)[9], Ooraniyan & Senthil Kumaran (2018)[16] and Muniyappan & Vallimurugan (2017)[17].**

## 6. CONCLUSIONS

On the basis of the results obtained the following conclusions are drawn,

- There was a significant variation between experimental and control group on dribbling and shooting after the training period.
- There was a significant improvement in dribbling and shooting. However, the improvement was in favor of experimental group due to twelve weeks of game specific exercise.

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# TOURISM POTENTIAL IN AKOLE TEHSIL, AHMEDNAGAR DISTRICT OF MAHARASHTRA STATE, INDIA

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## ABSTRACT

*The development of tourism is influenced by historical, cultural, technological, religious, economic and environmental factors. In order to develop tourism in any place, it is necessary to first study the potential of tourism development in those areas and then it is very important to develop tourism. In short, Akola tehsil has a large amount of natural diversity. Among these tehsil, Kalsubai is the highest peak in the state of Maharashtra. Due to the natural diversity of the area, it has a lot of potential. In Adventure, Natural, Historical, Religious, Agro-based etc. tourism activity has been developing in Akole. For e.g. scope for Trekking, bird watching, safaris, facing, boating and wild life safari in the forest region etc. These things are focusing the regions and some tourism activities of Akole.*

**KEY WORDS:** *Resources, Tourism, Potential, Human Resources, Akole.*

## INTRODUCTION

Tourism is renowned as the largest industry in the world. It contributes about 10 per cent Gross Domestic Product out of total in the world .Tourism is a service sector, which has a great potential for increasing economy, employment, infrastructural facilities and eliminate the regional disparity. Tourism has comprehensive nature therefore, it known as the fourth dimension of contemporary economics .In many developing countries like India tourism become a major source of regional development, which is backward due to the lack of natural resources. Especially, rural and tribal area of the country has great potential of tourism because of pleasant environment, diversity in physical features, distinctive culture and different socio-economic status [1]. As tourists always get attracted towards the mountain destinations, tourism as a sociocultural and economic phenomenon can be develop a lot in the mountainous region, if planned properly. In this context, the Akole tehsil of Ahmednagar district has a great potential for tourism development. The western mountainous region of the tehsil offers many tourism products of nature with a wide ecological range and biodiversity. In addition, the socio-cultural dimension of tribes of this region is one of the major tourist attractions [12]. Ahmednagar district is famous for various geographical, historical, religious and cultural Aspects. Akole large amount share to geographical resources and Tourism. The good Potentiality of geographical resources so large amount development of Tourism activities. The main aspect is there are hilly off shoots of the Sahyadris in Western part of the district. They have called Kalsubai, Adula, Baleshwar and Harishchandragad hill ranges. Kalsubai, the highest peak (1646M) in the sahyadris, lies in Ahmednagar district. Another peak is, Ratangad, Kulang and Ajuba Dogar etc. we see the Vitha-Ghat on the way of Randha falls etc. Akole tehsil of Ahmednagar district is well known tribal area of Maharashtra. It is east towards part of the Western Ghat, Abundant natural scenery, diver's physical features, pleasing climate, specific tribal culture, reservoir and biodiversity are the main tourism characteristics of Akole tehsil. However, government infidelity is responsible for under development of tourism potential in this region.

## STUDY AREA

Geographically, Ahmednagar district is the largest district in the state of Maharashtra. It is divide into 14 tehsil. It is divide into 191 villages and coverage area about 1, 50,508 hectares. There are total population of this tehsil is 2, 71,719 (2001) one of which 1, 01,966 (ST) tribal people in this area. Akole is a tehsil place in Ahmednagar district, Maharashtra state, well surrounded with the mountains of Sahyadri. Akole tehsil is located in $19^0$ 15' 14" N to $19^0$ 44' 59" N latitude and $73^0$ 37' 00" E to $74^0$ 07' 24" E longitudes. Total geographical area of 150508 hectors. Area under the forest in 41698 hectors. The total agriculture lands have about 98712 hectors and average of rainfall is 508.9 mm.

**Map No: (01) LOCATION MAP**
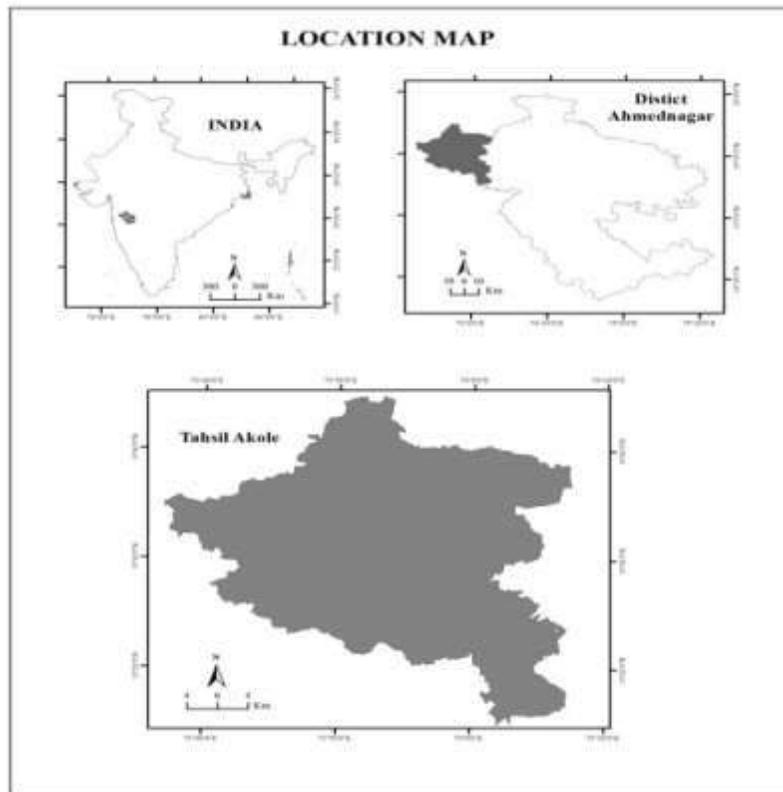


## AIMS AND OBJECTIVES

For this research paper, two main objectives have been taken into consideration for the potential of tourism development in Akole tehsil.

1. To study of tourism Classification in the Akole tehsil.
2. To study Geographical Resources and Tourism potential in Akole tehsil.

## DATABASE AND METHODOLOGY

The present research paper is based on the primary and secondary data sources. Primary data were collected through people participating rural evaluation method, spot observation. The Secondary data were achieved through various reference books, research papers, and newspaper article .Tourism atlas, maps, reports on district tourism plan for Ahmednagar district were used as a secondary source of information**.** GIS software has also been used to create tourism maps and location amp.

## GEOGRAPHICAL RESOURCES FOR TOURISM

According to Robinson, have great Geographical components of tourism Developments and Tourist Attractions. Which have been termed as geographical components of tourism. There are seven geographical components are Accessibility and Location, Space, Scenery, Climate, Animal life, Settlement features and last Culture. There are certain Geographical features of the world that that attract travelers to them/ types of climate are most suitable for different types of tourist activity .there are five main Geographical Features, which attract travelers to them.

a) Climatic Resources for Tourism b)Coastal Resources and the sea c) Landscape and wildlife Resources d) Historic Resources for Tourism e) Cultural, entertainment, manmade resources for tourism. The large Amount Geographical Resources available in the Akole tehsil for e.g. Forest, Wild life's and Animals, Climate, Mountain, Good of History, Culture etc. So very large amount Scope of tourism and good of capable tourism Development the Akole Tehsil.

**CLASSIFICATION OF TOURISM (TABLE NO. 01)**

| Sr. No. | Types of Tourism and Geographical Resources. | Places/ Area |
|---|---|---|
| 1 | Natural | Kokan-kada, Kalsubai Peak, Bhandardara Dam, Umbrella Falls, Randha Falls, Tawa Water Falls |
| 2 | Historical Forts | Patta fort or Vishramgad (1396 meters), Harischandragad, Ratangad |
| 3 | Religious | Amriteshwar, Agasti Rishi Ashram, Ratangad, Taaked |
| 4 | Cultural | Tribal Cultural |
| 5 | Forest and Wild Life | Kalsubai and Harischandragad Forest area Wild life (Flora and Fauna) KajavaFestival(during September To November). |
| 6 | Agro &Forest based ( Eco-Tourism) | Agricultural & Forest Area. |
| 7 | **Adventurous Tourism** | |
| | **A) Mountains Play** | |
| | Rock Climbing | Kokankada, Alang, Malg, Kulang etc. |
| | Trekking Routes | Kalsubai, Harischandragad, BalubhiDongar, Kandaka, Kothale, Chanchakar, Muda, AjubaKridaDongar etc. |
| | Mountaineering | Kalsubai, Harischandragad, BalubhiDongar, Kandaka, Kothale, Chanchakar, Muda, AjubaKridaDongar etc. |
| | **B) Forest Play** | |
| | Jungle Cap and Safari | Kalsubai, Harischandragad, Ratangad Forest area |
| | Wild life | Kalsubai, Harischandragad, Ratangad Forest area |
| | Angling and Fishing | River – Pravara, Mula river and Bhandardara Dam, Ghatghar Dam |
| | Boating | Bhandardara Dam, GhatgharDam,Nilwande Dam etc. |

Kalsubai and Harischandragad wild life sanctuary is situated at Akole Tehsil, in the district of Ahmednagar. The kalsubai peak has an altitude of 1646 m and is the highest peak in Western Ghats. It is an ideal place for people who want to enjoy the beauty of nature far away from the city life. The sanctuary has various temples, peaks and forts that make it a place of rich past. Some of monuments located here are Alnag, Kalsubai, Kulanggad, Bahiroba, Harischandragad, Madangad, Ratangad and many more. All this makes the sanctuary an ideal place for trekkers. The place is very rich in natural vegetation cover and abounds in various species of plants and trees. Mostly the vegetation is southern moist mixed deciduous and in places that are near to the western coast the vegetation is semi deciduous semi evergreen type. Some of the common species of trees found here are Aashing, Gulchavi, Parjambhual, Hirda, Bahava, Beheda, Kudal, Avali, Jambhul, Siras, Chandawa, Lokhandi, Kharvel etc. There are various bushes around like Dhaiti, Mandar, Chilhar, Ber, Rametha, Kapipatta etc. In some areas of the sanctuary large patches of different species of grass occurs. Some of the grasses found here are Pawanya, Harali, Marvel, Surad, Dongari etc. The sanctuary is a dwelling place of various species of animals that include reptiles, mammals as well as the birds. Some of the common mammals found here are Palm civet, Wolf, Jackal, Barking Deer, Leopard, Mongoose, Jungle cat, Wild Boar, Hyena, Bats, Sambhar, Porcupine, Indian Giant Squirrel etc. The reptile group includes Fan-throated Lizard, Monitor Lizard, Turtles, Snakes and many more. One can also see around both land birds as well as the water birds. Some of the common birds seen around are Egrets, White Necked Storks, Water hen, Herons, Black Ibis etc.

## AGASTI RISHI ASHRAM AND AMRITESHWAR

Situated on the bank of the Pravara River, this legendary dwelling finds a place in the scripts of the Ramayan. It is said that Lord Ram, Laxman and Sita visited Agasti Rishi. The Rishi had then given Lord Rama a miraculous arrow, which was used to kill the devil, Ravana, in order to rescue Sita. Amriteshwar temple dates back to 1100 AD. Built in a distinct Hemadpanti style, the intricately carved temple still stands proud. Other places worth visiting are KonkanKada (another trekker's delight), a small garden and a swimming tank.

### Patta / Vishramgad

Fort is located in Kalsubai range a mountain range that emerges from Sahyadris at Alng-Kuloang and Madangad forts near Igatpuri and run east-west direction till Sinnar in Nashik district.

## MOUNTAINS PLAY AND ADVENTURE TOURISM

A host of mountains sport in also part of western Akole tehsil. There are various trekking routes; climbing, Mountaineering etc. enjoy the Adventure tourisms in the Akole tehsil. The Western Part of Akole tehsil good potential Area for Adventure tourism.

"**Rock climbing:** The rocky cliffs of Kokankada challenge to the take great risks. And other challenge area is Alnag, Malg and Kulang Mountain etc." Trekking routes and Mountaineering, Kalsubai the highest peak (1646 m) in the Sahyadri range. It is an ideal place for these who enjoy trekking, as are the surrounding hills. Kalsubai and other places were good condition and opportunities of trekking, mountaineering because the western part of Akole in nearest all mountains (Forts) height is above sea level 1250 m. the western side a great for trekking, climbing, mountaineering rock climbing etc.

## FOREST PLAY AND ADVENTURE TOURISM

"Jungle Cap and Safari: The Night and Day time good condition of living forest area in western part forest area." As well as forest safari and discovering of medical plants and wild life large opportunities. This area to maximum cover by mountain range.

## WATER PLAY AND ADVENTURE TOURISM

Angling and Fishing: The Pravara River on the eastern slopes of the Sahyadris between Kulang and Ratangad. Peninsular of Pravara, Mula River and Bhandardara dam, Ghatghar dam. Offer some great opportunities for fishing and boating in Bhandardara dam, Ghatghar dam. Offer some great opportunities for boating.

**Map No: 02 (Tourism Places in Akole Tehsil)**
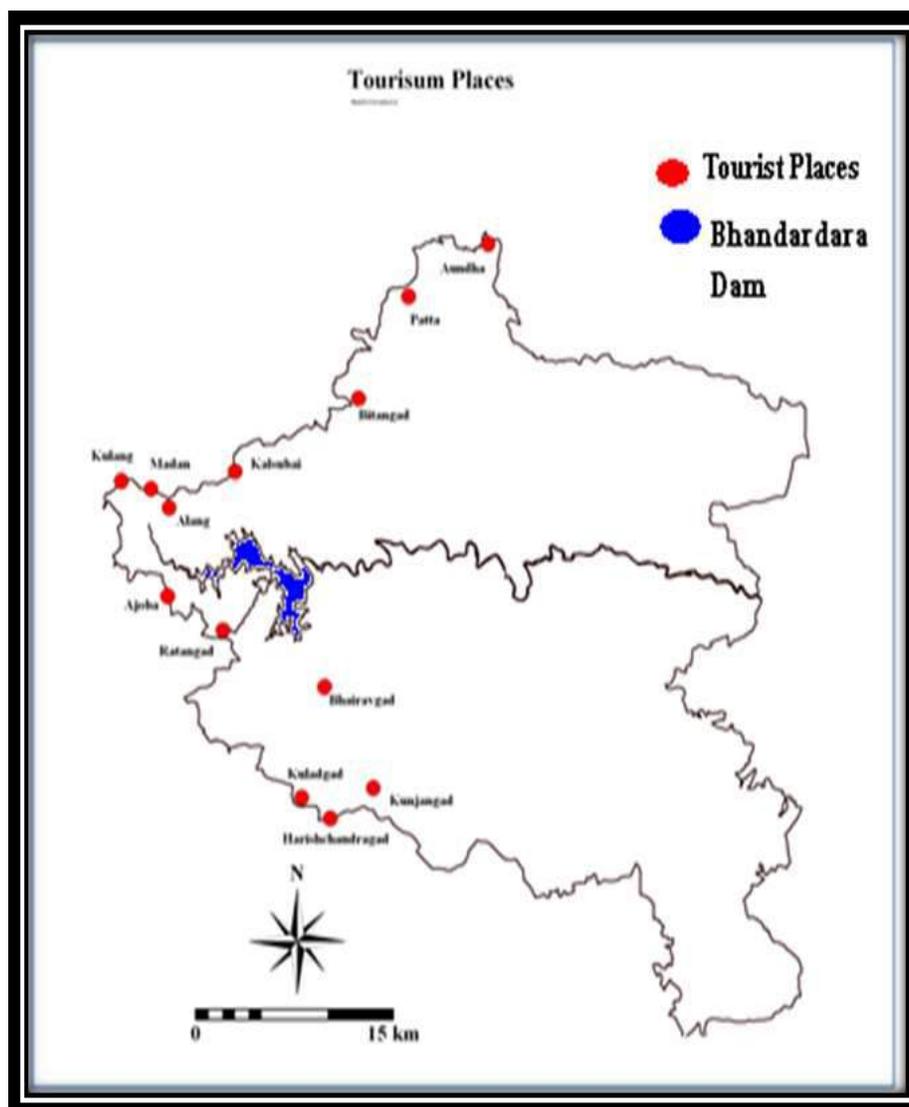
## CONCLUSION

Geographical Resources condition is suitable for the development of tourism but for this development, government should need for the care of that tourist places. People should essential know about this tourist places. Mentioned above tourist places have been essential doing advertisement and to develop in road networks to all tourism places. At that, time there should be develop of Eco-tourism. So large amount scope of all types' tourisms Activates in the Akole tehsil. Akole tehsil of Ahmednagar district have full of potential of tourism on the basis of pleasant environment, natural beauty, wildlife, pilgrim's centers and historical tourism sites. But still the area is lacking behind to attract tourists at the national and international level. There are some causes were we want to pay attention. Lack of promotion and publicity about the tourism sites is the major obscurity. Low levels of awareness among stakeholders regarding the potential. Infrastructural facilities like public convenience facilities, medical facility, accommodation facilities, absence of integrated efforts to promote the many facets, electricity, seating resting, street light, parking, guard railing, toilet block, drinking water, street lighting direction signage's etc. are require for tourism development.

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# VENTURE CAPITAL FINANCING ENVIRONMENT IN INDIA DURING COVID-19

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## ABSTRACT

*Venture capital financing plays a significant role in fostering the start-up ecosystem. In India, the venture capital industry has been evolving continuously over the years. It has played a huge role in the promotion and development of entrepreneurial environment. However, the advent of covid-19 pandemic has disrupted not only the start-up ecosystem, but also the venture capital financing environment in India. This paper is an attempt to understand the transformations caused by covid-19 pandemic within the Indian venture capital industry. Using a cross-sectional descriptive research design, the focus of this paper has been to study the venture capital investment landscape and the major sectors receiving venture capital finance in India during the pandemic.*

## INTRODUCTION

Entrepreneurship is the backbone of an economy. Strong entrepreneurial environment facilitates creation of jobs, thereby bringing a rigorous growth in the economy. To accelerate and facilitate this entrepreneurial activity in the economy, government plays a pivotal role in the upliftment and development of start-up ecosystem. However, start-ups are often faced with challenges related to finance and know-how (Đalić *et al.,* 2017) in order to sustain themselves within the ecosystem in the long run. To curb this problem, various sources of finance are now available to start-ups. The recent years have witnessed a development in several alternative sources of entrepreneurial finance which are transforming the entrepreneurial ecosystem (Bonini and Capizzi, 2019).

Among these different sources of finance, venture capital (VC) financing plays an important role in the promotion and development of start-ups (Hellmann and Puri, 2002). It acts as a vital source of finance for early-stage companies with a faster growth rate (Baeyens and Manigart, 2003). Venture capitalists (VCs) are interested in investing their money in risky enterprises managed by entrepreneurs (Barry, 1994). They not only provide financial resources, but also play a role in managing their portfolio companies (Fried and Hisrich, 1995) and providing value-added services to them (Hellmann and Puri, 2002), thereby taking an entrepreneurial firm to a professionally managed condition (Meglio *et al.,* 2017). Thus, VC financing plays an important role in supporting business continuity (Rosa *et al.,* 2019).

In India, the VC industry was formalised in 1988 by the Indian government (Kaushik, 2014), however, compared to other countries like the US, UK, Israel and Europe, the Indian VC industry is relatively young (Shah, 2020). The Indian VC industry entered its growth stage from 2016 onwards (Shah, 2020) and has been thriving ever since by fostering entrepreneurship and paving the way for economic growth and development. VC finance has accelerated the growth rate in start-ups, which has further led to creation of more than 3 million jobs in the past 8 years (Sheth *et al.,* 2021, p. 38). According to a report published by the Indian Private Equity & Venture Capital Association (IVCA) and Ernst & Young (EY) (IVCA-EY, 2021), the period 2011–2020 is regarded as a significant decade for Indian VC industry, which witnessed the growth of the industry from a state of infancy to a state of maturity. In particular, the year 2019 was considered as a milestone year for the Indian VC industry with US $10B capital deployed—approximately 55% higher than 2018 (Sheth *et al.,* 2020, p. 5). Approximately 80% of all the VC investments in 2019 was associated with sectors like consumer tech, software as a service (SaaS), fintech and business to business (B2B), with consumer tech getting the most investment (Sheth *et al.,* 2020, p. 5).

Right when the Indian VC industry hit its milestone year in 2019, the end of that year also marked the advent of covid-19, which spread rapidly to all parts of the world, rendering it a global pandemic. The onset of covid-19 caused many disturbances within the economy. Each industry suffered tremendously during the pandemic phase. Continuous

lockdowns and other measures to curb the covid situation caused huge impact on different sectors. There was an uncertainty and negative impact on sales of many businesses (IVCA-EY, 2021). Further, the start-up ecosystem also suffered negatively with many start-ups compelled to shut down their operations (Sheth *et al.,* 2021). The VC industry has not been an exception to this impact. There was some decline in the VC investments in the year 2020 relative to the milestone year 2019 (Sheth *et al.,* 2021). Although there was a slight decrease in the VC fundraising in the previous year, but that year also witnessed some favourable fundraisings (Mint, 2021).

In the light of the above discussion, it is interesting to understand how the Indian VC industry has performed during the pandemic. Therefore, this paper is an attempt to fulfil the following objectives:

(i)     to study the landscape of VC investment in India during the pandemic
(ii)    to identify the major sectors receiving VC investment in India during the pandemic.

## METHODOLOGY

This study follows a cross-sectional descriptive research design by utilising secondary data sources. Statistical data available in various reports published by Indian Private Equity & Venture Capital Association (IVCA), Ernst & Young (EY) and Bain & Company have been used in the study. Further, data available from other research studies and newspaper articles have also been considered for this study.

## RESULTS AND DISCUSSION
### The landscape of VC investment in India during the pandemic

An overview of the total VC investments (deal value) in India is shown in Figure 4.1. The IVCA report (Sheth *et al.,* 2021, p. 10) highlighted the years 2012–2015 as the years of growth. The start-up environment was continuously growing during this period and new VC investments were growing in India (Figure 4.1). There was a slight decline in the years 2016–2017 (Figure 4.1). Investing remained cautious due to less clarity on exits (Sheth *et al.,* 2021, p. 10). These years have been characterised as the years of maturity, where the investments are few but of high-quality (Sheth *et al.,* 2021, p. 10). Further, investments started increasing again in the years 2018–2019 (Figure 4.1)—period marked as the period of optimism. Investors also started showing interest in sectors like fintech and SaaS (Sheth *et al.,* 2021, p. 10). The year 2019 showed the highest level of VC investments of $11.1B (Figure 4.1). The investments in the year 2020 highlight the impact of covid-19. There was a slight decline in investments from $11.1B to $10.0B, however it continues to remain the second highest value in the decade (Figure 4.1).
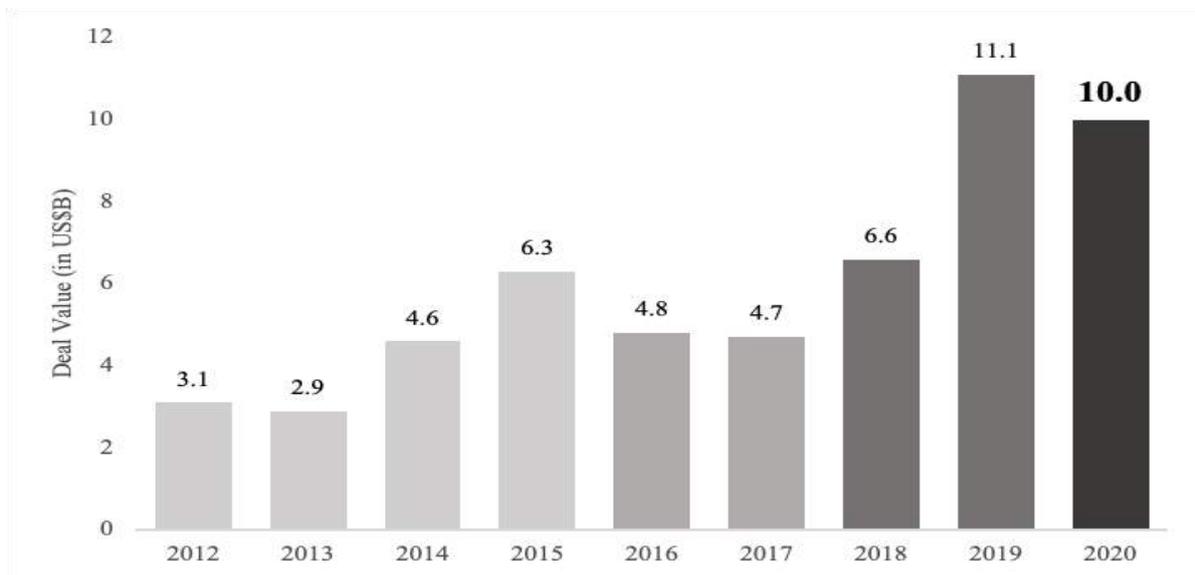


**Figure 4.1 Total VC investments (deal value) in India ($B)**
*Source: India Venture Capital Report 2021, IVCA | Bain & Company*

The deal volume, i.e., the number of VC investments in India is depicted in Figure 4.2. The years 2012–2015 (the years of growth) showed a continuous increase in the number of VC investments (Figure 4.2). During this period, the prime attention of VCs was directed towards building more portfolios (Sheth *et al.,* 2021, p. 10). Beyond 2015, the number of deals declined till the year 2018, post which they continued to rise again (Figure 4.2). The year 2019 showed a tremendous growth in deals by approximately 1.324 times (Figure 4.2). The year 2020 depicts the impact of covid on the deal volume. Although the deals have increased by only approximately 1.07 times since 2019 (Figure 4.2), but the momentum is accelerated (Sheth *et al.,* 2021, p. 10).
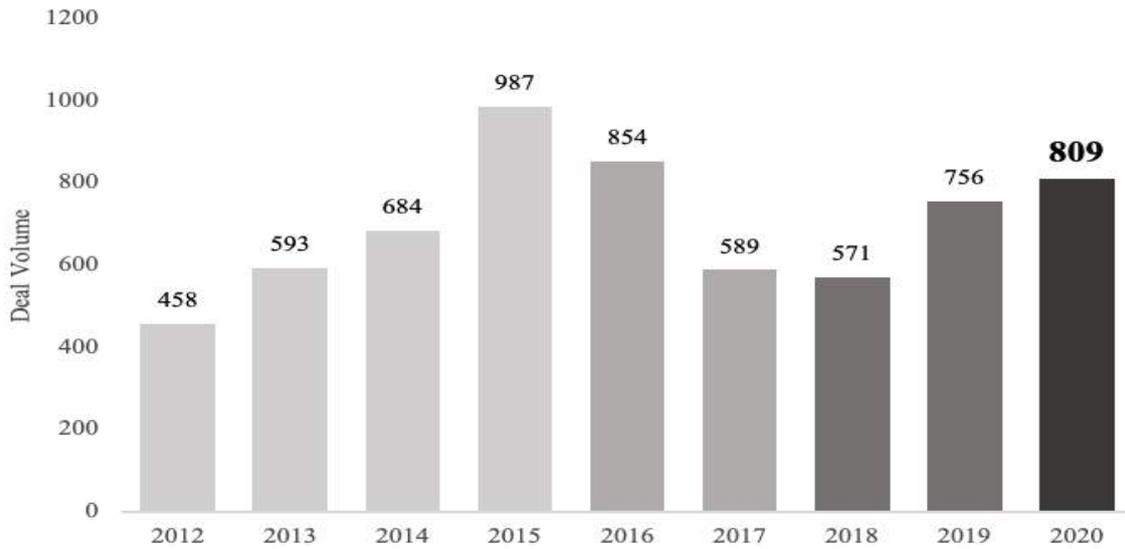
**Figure 4.2 Number of VC investments (deal volume) in India**
*Source: India Venture Capital Report 2021, IVCA | Bain & Company*

Besides the deal value and deal volume, it is also interesting to look at the number of active VC funds in India. Since 2017, this number has increased unceasingly, with a high of 516 in the year 2020 (Figure 4.3). The new top VC investors in 2020 were Inflection Point Ventures, Avataar Venture Partners, Coatue Management, Beyond Next Ventures, Titan Capital and Arkam Ventures (Sheth *et al.,* 2021, p. 24).
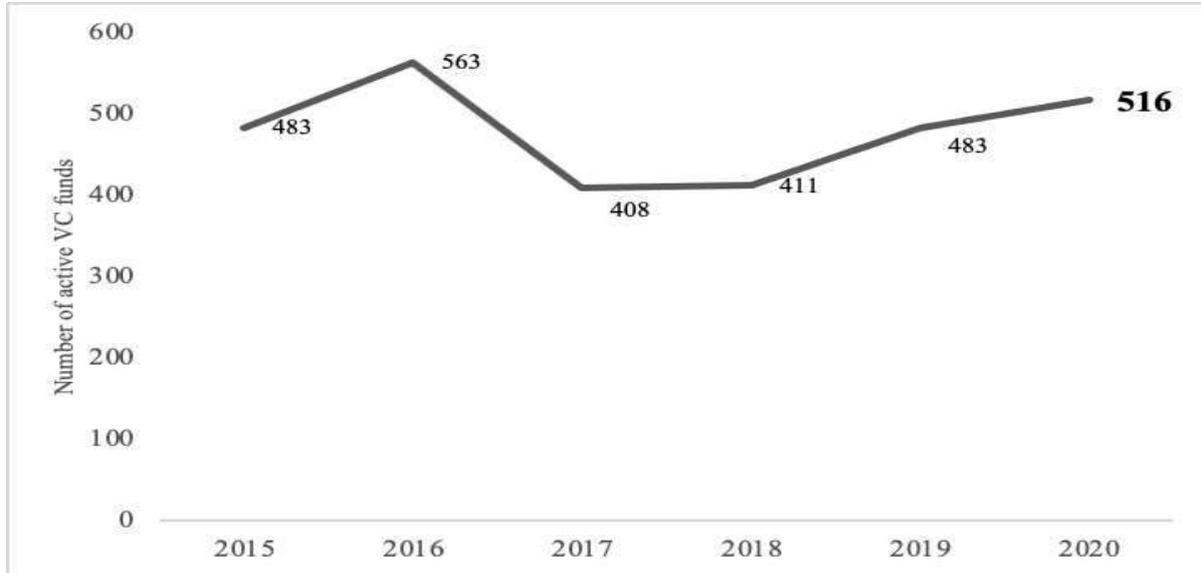


**Figure 4.3 Number of active VC funds in India**
*Source: India Venture Capital Report 2021, IVCA | Bain & Company*

A detailed analysis of the year 2020—the pandemic year—is shown in Figure 4.4. It revealed that the pandemic and other lockdown conditions had a severe impact on the deal value as well as volume—causing a decline in both during the months Apr–Jun (Figure 4.4). Although the hit was quite severe, but the momentum picked up again in the second half of the year with an increase in both deal value and volume (Figure 4.4). Despite the setbacks due to the pandemic, the year 2020 also witnessed the rise of several new unicorns and a shift in investments towards SaaS, fintech and different subsegments of consumer tech as well (Sheth *et al.,* 2021, p. 13). In VC industry, a unicorn is a privately held start-up that reaches $1B valuation (The Economic Times, 2021; Sahni, 2019).
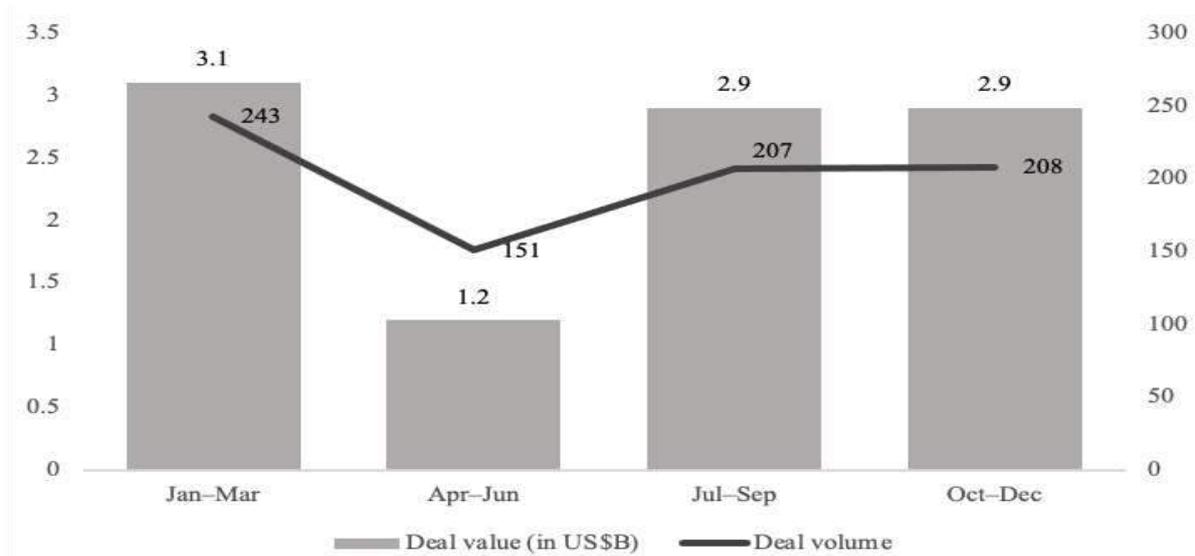
**Figure 4.4 The pandemic year at a glance**
*Source: India Venture Capital Report 2021, IVCA | Bain & Company*

***Major sectors receiving VC investment in India during the pandemic***

The year 2020 saw maximum amount of investment being made in three sectors—SaaS, fintech and consumer tech—consumer tech getting the highest amounts of funding (Sheth *et al.,* 2021, p. 15). Within the consumer tech sector, the subsegments like edtech, gaming and foodtech witnessed an upsurge in investments (Sheth *et al.,* 2021, p. 16). The VC investments in SaaS sector have grown by approximately 10% in 2020 (Sheth *et al.,* 2021, p. 19). Further, VC investments within the fintech sector have also shown an increase in 2020 with UPI payments subsegment being the most attractive (Sheth *et al.,* 2021, p. 20).

However, the rise in VC investments within the consumer tech sector is worth discussing in detail since it has received the highest amounts of funding. An analysis of deal volume within consumer tech subsegments over the years 2018–2020 is shown in Figure 4.5. A continuous rise in deal volume in the edtech segment can be observed over the three years (Figure 4.5). The year 2020 witnessed an approximately 1.72 times higher deal volume in the edtech sector (Figure 4.5). This can be understood as an impact of covid. The constant lockdowns as one of the measures to curb the pandemic impacted the education industry heavily leading to shutting down of in-room classes at the institutes, colleges, and schools. In order to adapt to the changing times, these educational institutions have shifted the teaching-learning environment online leading to a rise in demand for digital learning, testing and tutoring platforms (Sheth *et al.,* 2021, p. 17). Furthermore, foodtech segment showed an increase of approximately 1.28 times in the number of deals in 2020 (Figure 4.5). The pandemic affected the food industry negatively by causing many restaurants to shut down their operations completely shifting the trend more towards online food ordering. This has led to a boost in VC investments in such start-ups along with businesses in cloud kitchen segment (Sheth *et al.,* 2021, p. 17). Verticalised e-commerce witnessed a decline in deal volume in the year 2020 (Figure 4.5), however, the areas that attracted the maximum investments were baby merchandise, home decor and furniture, used cars and beauty brands (Sheth *et al.,* 2021, p. 17). The gaming segment observed a hike in the deal volume by approximately 1.2 times in 2020 (Figure 4.5). The pandemic resulted lockdowns caused a change in the gaming industry as well since more people resorted to games as a means of entertainment during the lockdown. Deal volume in the healthtech segment showed an incessant growth over the three years with approximately 1.09 times growth in 2020 (Figure 4.5). The major segments within healthtech that attracted substantial investments were wellness, online consultation and digital therapeutics (Sheth *et al.,* 2021, p. 17). Lastly, the deal volume within media & entertainment segment has depicted a rising trend with 1.25 times increase in 2020. There have been several investments in short-video social networking apps (Sheth *et al.,* 2021, p. 17).
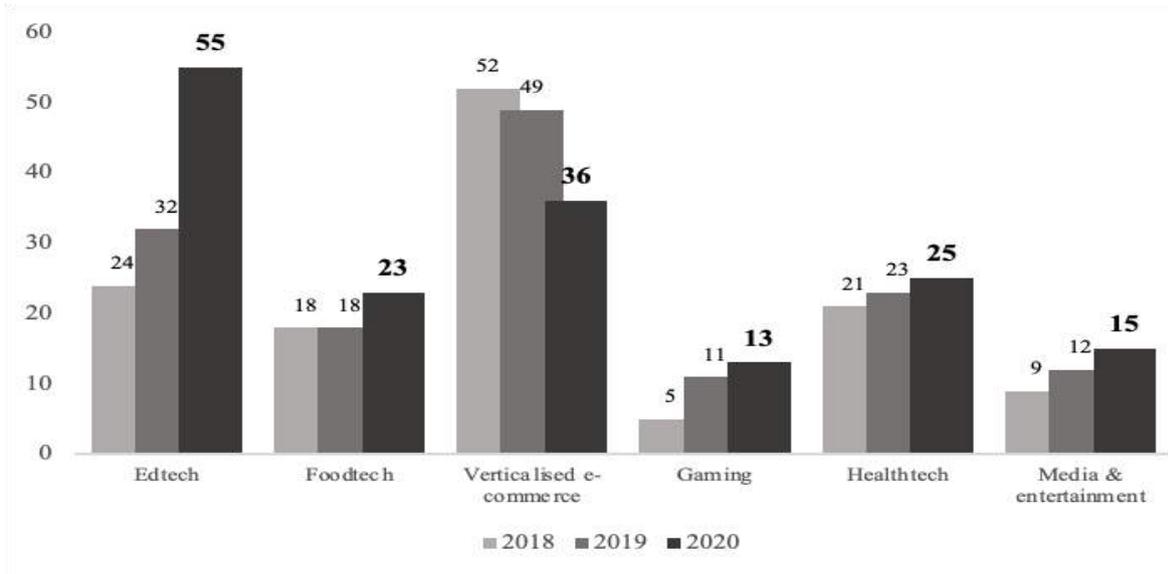
**Figure 4.5 Deal volume of consumer tech subsegments**
*Source: India Venture Capital Report 2021, IVCA | Bain & Company*

## CONCLUSION

The VC industry in India has been growing and evolving incessantly over the recent years, with 2019 being the milestone year for the industry with highest ever capital deployed. However, the advent of covid in the later part of 2019 disrupted the whole economy causing negative impacts on several industries and sectors. Many start-ups were forced to shut down their operations leading to disturbance in the start-up ecosystem. The VC industry was also impacted by the pandemic leading to a slight decline in the investments in 2020 relative to 2019. In spite of this decline in the investments, the VC industry still witnessed some favourable fundraisings. Therefore, the present study was an attempt to understand the transformations caused by the pandemic in the Indian VC industry. For this purpose, secondary data sources like journals, newspapers and reports were examined. It was revealed that VC investments were the highest in the year 2019. The pandemic situation caused the investments to drop by a small amount, but the momentum of investment activity picked up in the second half of the year. Besides, the year 2020 witnessed an increase in the number of active VC funds as well. Three sectors—SaaS, fintech and consumer tech—received major VC attention for funding. Among these three sectors, consumer tech sector attracted the maximum investment. Within consumer tech sector, edtech, gaming and foodtech subsectors witnessed an increase in investments. It is evident from the discussion that despite the disruptions caused by covid, the Indian VC industry continues to grow. With sustained recovery of the Indian economy post covid, the prospects for Indian VC industry seem highly optimistic.

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# CUSTOMERS ADOPTION OF DIGITAL BANKING

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## ABSTRACT

*Digital Banking is a general term for massive banking services and providing enormous products through electronic narrows. Customers are still waiting for new speedy banking services. However, India is developing a technology-enabled banking service in a revolutionary transformation that will bring many new attributes, including anytime, anywhere, ultra-fast response times in banking transactions. The study's comprehensive is to find out the factors influencing digital banking on customer adoption. The study suggests that there is need by banks to invest more on robust dependable systems to decrease incidents of failed transactions. Questionnaire method has used for data collection. The paper elaborates the relevant few reviews of literature, research methodology, research analysis, findings, and conclusion.*

## 1.1 INTRODUCTION

Digital banking refers to the digitization of banking services, thus removing the need for consumers to visit a bank branch. In a global pandemic, traditional banking systems have become outdated. Consumers want efficiency, accessibility, and demand essential banking services physically secure. Visibly or not, Covid-19 has disrupted almost every industry globally and transformed enterprises' existing ways of doing business. The banking industry is no exception to this shift. Banks are making a digital transformation by transferring to new business models and initiating fully digital banking services to keep up with the digital banking trends of 2022. Digital banking or the Digitalization of a bank has progressively altered the banking landscape in the last few years. Digital technologies initially limited to banking channels now encompass the entire banking spectrum, whether back-end operations or customer-facing channels, digital banking delivered through new-age technologies is the way further for all participants in the financial service industry.

## 1.2 RESEARCH OBJECTIVES

 ➢ To study the demographic characteristic profile of digital platform users.
 ➢ To analyze the factors affecting while implementing Digital Banking Services.

## 1.3 SAMPLING AND TOOLS USED

An online survey was conducted to collect the opinion from respondents, a 35 respondents were selected on convenience and employed through Chi-Square Test, ANOVA

## 1.4 REVIEW OF LITERATURE

1.  Dr. Rajeshwari M. Shettar (2021) has given the role of digitization in Indian banking, factors that affect the scope of digital banking, trends has been affected the customers and technological ballpark in Indian banks. The study also evaporated that easy use of digital banking can speed up the assimilation of the unbanked economy into the mainstream.
2.  Ms. Jasdeep Kaur (2020) 110 states that E-Banking is a unrecoverable marvel to advantage more force in the coming years. With the Digitalization of the Indian economy and course to transform India into a cashless society, E-banking goes to be equipped. Virtual exchanges and web based banking were genuinely parade. The more youthful time has effectively adjusted to this change and this changing financial gadget more as a comfort mode than a predict.

## 1.5 ANALYSIS AND INTERPRETATION

**Table 1: Gender of the Respondents (Percentage Analysis)**

| Gender | No of the respondents | Percentage |
|---|---|---|
| Male | 19 | 54 |
| Female | 16 | 46 |
| **Total** | **35** | **100** |

From the above table manipulated that 54 per cent of the respondents belong to the category of male segment and 46 per cent of the respondents belong to the category of female segment.

**It is concluded that most of the respondents (54%) belongs to male segment.**

**Table 2: Age and Usage of Digital Banking (Chi-Square Test)**

| Factor | Calculated chi square value | Table value | D.F | Remarks |
|---|---|---|---|---|
| Age | 4.049 | 0.908 | 9 | Significant at 5% level |

It is manipulated from the above table that the calculated chi-square value is more than the table value, and the result is significant at a 5 percent level. It is concluded that t**here is a significant relationship between Age and Usage of digital banking.**

**Table 3: Gender and Usage of Digital Banking (Chi-Square Test)**

| Factor | Calculated chi square value | Table value | D.F | Remarks |
|---|---|---|---|---|
| Gender | 5.865 | 0.118 | 3 | Significant at 5% level |

It is revealed from the above table that the calculated chi-square value is more than the table value, and the result is significant at a 5 percent level. It is concluded that t**here is a significant relationship between Gender and the Usage of digital banking.**

**Table 4: Digital Banking services and demographic factors – ANOVA**

| Demographic factors | Groups | Sum of Squares | DF | Mean Square | F | Sig |
|---|---|---|---|---|---|---|
| Gender | Between group | 0.362 | 2 | 0.181 | 0.699 | 0.505 |
| | Within group | 8.020 | 31 | 0.259 | | |
| | Total | 8.382 | 33 | | | |
| Age | Between group | 1.377 | 2 | 0.689 | 0.962 | 0.393 |
| | Within group | 22.182 | 31 | 0.716 | | |
| | Total | 23.559 | 33 | | | |
| Occupation | Between group | 0.047 | 2 | 0.023 | 0.026 | 0.484 |
| | Within group | 28.336 | 31 | 0.914 | | |
| | Total | 28.382 | 33 | | | |
| Income | Between group | 2.941 | 2 | 1.471 | 0.742 | 0.484 |
| | Within group | 63.459 | 32 | 1.983 | | |
| | Total | 66.400 | 34 | | | |

The above table manipulated that the p-value is more than 0.05, the null hypothesis is accepted at a 5 percent significance level. There is no significant relationship between frequently availed digital banking services and demographic factors.

## 1.6 RECOMMENDATIONS

- **Cyber Crime and Security:** Digital banking has brought banking services comfort, convenience, and flexibility. The converse is that it has increased the hazard of cybercrimes. A Few banking and financial applications are substance to cyber-attacks. Some hackers employ innovative techniques to siphon funds, either as large amounts in a single shot or minuscule amounts from hundreds and thousands of accounts, over a long period. Also, there is always the threat of valuable personal data being imperiled. Banks need to ensure that their system is well nourished and enhanced to counter any threats from cybercrimes.

- **Inadequate Infrastructure:** India has the highest number of bank branches globally, but people in rural areas still have to travel miles to explosion of the banking interface.

- **Network Availability:** Our country is marching towards Digital India. Network connectivity is still moderate to poor in most rural areas. There should be reveal accessible superfast broadband and free Wi-Fi connectivity to develop a digital platform. Digital Banking solutions should consider the connectivity

barriers and their solutions should function on minimum network availability.

## 1.7 CONCLUSION

As bank users get younger and younger, the banking industry has had to build digital platforms to adapt, and fuller cater to their requirements. The digital banking avenues listed above provide insight into the current circumstances modern banking. Digital banking is a customary thing. The financial industry has once again changed because of the development of technologies and new customer service standards. A contemporary person wants elasticity, so they are looking for a chance to handle their finances and make transactions without needing to visit a bank. The Banking sector has been projected as a radiant prospect for the banking industries because several factors like the regulatory climate are favorable, an economic fundamental are rigid and alteration technologies are more readily accessible, dominant, and economical than any other time.

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# ASSESSEMENT OF ANXIETY AND LOCOMOTIVE ACTIVITY USING ELEVATED PLUS MAZE AND OPEN FIELD TESTS IN A KONZO INDUCED RAT MODEL

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## ABSTRACT

*The aim of this study was to assess the anxiety and locomotive activity using elevated plus maze and open field tests in a konzo induced rat model. An experimental research method was used in this study. 20 male Wistar rats were used for this study. The twenty (20) albino Wistar rats were randomly selected into four groups of five rats each. Animal feeding was by oral ingestion. Animals were weighed with an electric weighing scale and the weights were recorded. Animals were closely observed for physical manifestations and clinical signs. Group 1 was the control group and the rats were fed with water and feed, group 2 was fed bitter cassava, group 3 was fed with bitter cassava and complain milk, while group 4 was fed with bitter cassava and bambara nut. The study lasted for 4 weeks and during this period, the weight and neurobehavioral assessment was done using weighing balance for weight determination, elevated plus maze and open field test for neurobehavioral assessment. Data was analyzed using Statistical Package for the Social Sciences (SPSS IBM version 23.0) and Microsoft excel 2019 edition. Values were expressed as mean±SD in descriptive statistics. One-way analysis of variance (ANOVA) was used to analyze the difference between the groups followed by least significant difference (LSD) post-hoc test. Confidence interval was set at 95%, and therefore $p<0.05$ was considered significant. The result shows weekly body weight differences in experimental animals. There was significant weight reduction in the body weight of the Konzo induced group experimental Wistar rats from week 1 to week 4 compared to the significant weight increase observed in the Konzo induced and complan milk fed group Wistar rats. The result from elevated plus maze showed that there was an improvement in anxiety level of Wistar rats fed with complan and bambara nut in terms of the time spent in the sections of the elevated plus maze in week 2 when compared to the week 1. In evaluating the locomotion impairment and anxiety level of wistar rats using Open Field Test, cassava-induced Konzo Wistar rat group, cassava-induced Konzo and complan milk fed group Wistar rats group and cassava-induced Konzo and Bambara nut (Okpa) fed Wistar rats group spent significantly more time in the open field apparatus in week 2 when compared to week 1. The improvement in anxiety and locomotor activity indicates the ameliorative effect of complan milk and Bambara nut (Okpa) and this is due to the protein content of complan milk and bambara nut. Hence a balance diet/protein containing food should be eaten along cassava processed foods.*
**KEY WORDS:** *Bitter cassava, Konzo, Elevated Plus Maze, Open Field Test, Anxiety, Locomotive Activity*

## INTRODUCTION

Konzo is a distinct neurological entity with selective upper motor neuron damage, characterized by an abrupt onset of an irreversible, non-progressive, and symmetrical spastic para/tetraparesis [1]-[8]. The disease is associated with prolonged high dietary cyanogen consumption from insufficiently processed roots of bitter cassava combined with a protein-deficient diet low in sulphur amino acids (SAAs) [1]-[8].

Since its first description by the Italian doctor Trolli eight decades ago in the former Belgian Congo (now the Democratic Republic of Congo [DRC]), epidemics have been reported from many cassava-consuming areas in rural Africa. Up to 1993, the total of reported cases was approximately 3,700 to 4,000 [9]-[11]. Konzo remains a health problem in Africa. Since 1993, the disease has extended beyond its first reported boundaries [12], and the reported number of konzo cases has almost doubled,

reaching a total of 6,788. Cassava is linked to a variety of neurological illnesses, including myeloneuropathy and konzo. Cassava use, for example, has been linked to epilepsy in Africa [13], as well as behavioral and emotional difficulties in Kenyan youngsters [14]. The paralytic disease konzo, which is little known in the West, has caused polio-like symptoms in thousands of the poorest individuals in the Democratic Republic of Congo (DRC) and other African countries [2]-[6]. Inadequately handled cassava, which naturally contains cyanide, can result in irreversible leg paralysis. Konzo forces its victims to rely on others for a living and causes them to crawl in the ground or use homemade crutches [1]. Due to a spinal cord condition, Konzo is an epidemic paralytic disease that inhibits movement. Several studies have been conducted in order to find a treatment for this disability; however, while no treatment has been discovered, it has been demonstrated that affected individuals gain greatly from rehabilitation and the use of appropriate walking aids [11]. Further research on locomotive assessment utilizing an elevated plus maze and open field test in a konzo induced rat is being conducted in light of this.

## METHODOLOGY
**Research Design:** 20 male Wistar rats weighing between 200g to 250g used for this research work were acquired from the animal house of the Department of Anatomy. The twenty (20) albino Wistar rats were randomly selected into four (4) groups of five (5) rats each. The animals were kept in two separate cages (5 in a cage). Animals were allowed to acclimatize for 3 weeks in their cages, with pellet animal feed and water. After the three weeks of acclimatization, the rats where feed with bitter cassava (cassava induced Konzo group). Animal feeding was by oral ingestion. Animals were weighed with an electric weighing scale and the weights were recorded. Animals were closely observed for physical manifestations and clinical signs. Group 1 was the control group and the rats were fed with water and feed, group 2 was fed bitter cassava, group 3 was fed with bitter cassava and complain milk, while group 4 was fed with bitter cassava and bambara nut. The study lasted for 4 weeks and during this period, the weight and neurobehavioral assessment was done using weighing balance for weight determination, elevated plus maze and open field test for neurobehavioral assessment.

**Plant Collection and Identification:** The bitter cassava roots were collected from the Ministry of Agriculture, Agricultural Development Programme and were identified in the Faculty of Agricultural Science, University of Port Harcourt, Rivers State.

**Inducing the rats with Konzo Disease:** After two weeks of acclimatization, 15 Wistar rats were allowed to feed freely on inappropriately processed bitter cassava for the period of 4 weeks

**Rehabilitation Group:** After period of Konzo disease induction, the rehabilitation group (group 3 and group 4) were completely stopped from consuming the bitter cassava and replaced by feed + Complan for group 3 and Bambara nut (Okpa) for group 4. Mode of feeding was by oral ingestion.

## PROCESSING OF BITTER CASSAVA
**Procedure**
1. Roots were cleaned in water to remove any soil clinging to them
2. Peel off the cassava roots were removed using a clean knife
3. The roots were cut into smaller pieces of chips (2-5cm thickness) to enhance the drying process and also to reduce the cyanide content of the cassava roots. Chopping of cassava roots was done in an open area with good ventilation so as to avoid sickness caused by the release of chemical from cassava.
4. Drying cassava chips: the pieces of cassava were placed on a metal tray and dried under direct sunlight for 1-2 days, by being placed on the concrete floor or rocky surfaces as rocks becomes very hot and will enable the chips to dry quickly. During drying, the cassava chips were turned over within every few hours to enable uniform drying. Drying was dependent on the weather; on a very sunny day drying will take up to ten hours (10hrs). minimal period of drying was used to ensure the cassava chips retain cyanide content and prevent mould growth
5. Grinding of dried cassava chips were done using a grinding machine, the chips were grounded smoothly until the powdered form was attained. This was done to ease digestion of the cassava by the rats.
6. Cassava induction: dried powdered cassava was weighed to measure 86g per 1kg of rats following the food restriction strategy by the IACUC and PA, USA. The normal rat chow in the food dishes of the rat cages was then replaced with the powdered cassava. The cassava powder was consumed adequately by the rats.

## OPEN FIELD ACTIVITY TEST
**Before testing**
1. Acclimation: subjects in home cage were placed in testing room for at least 1hr before testing to minimize effects of stress on behavior during testing.
2. Subject training: none required.

**Testing procedures**
- Animal was placed in corner of arena and allowed to move freely for 10min while being monitored by automated tracking system. Trial will begin once animal is placed at the center of the arena and is able to touch the four corners of the arena and will end when defined duration has elapsed. The defined duration is 5 minutes
- Animal was returned to home cage and number of fecal pellets was recorded.
- Arena was cleaned between each trial.

Figure 1: (a) Open Field Apparatus (before testing); (b) Open Field Apparatus (During Testing)

## Elevated Plus Maze

The elevated plus maze test is one of the most widely used behavioral assays to evaluate anxiety related behavior in rodent. The elevated maze plus is made of four arms to enclosed and two open arms. This was used to test the anxiety of the mouse. The rodent was placed at the intercession of the four arms of the elevated plus maze and their behavior is typically recorded for 5mins. This was based upon the early studies by montgomory that revealed that rats demonstrated the most robust avoidance response in the first five minutes after placement in the elevated open alleys. The behavior that was typically recorded was the time the rodent spent in the open and closed arms. Behavior in this task (i.e. activity in the open arm reflects a conflict between the rodents preference for protected areas (closed arms) and their innate motivation to explore novel environment.



Figure 2: Elevated Plus Maze

## Method of Data Analysis

Data was analyzed using Statistical Package for the Social Sciences (SPSS IBM version 23.0) and Microsoft excel 2019 edition. Values were expressed as mean ± SD in descriptive statistics. One-way analysis of variance (ANOVA) was used to analyze the difference between the groups followed by least significant difference (LSD) post-hoc test. Confidence interval was set at 95%, and therefore $p < 0.05$ was considered significant.

## RESULTS
The results are presented in tables and bar charts as shown below;
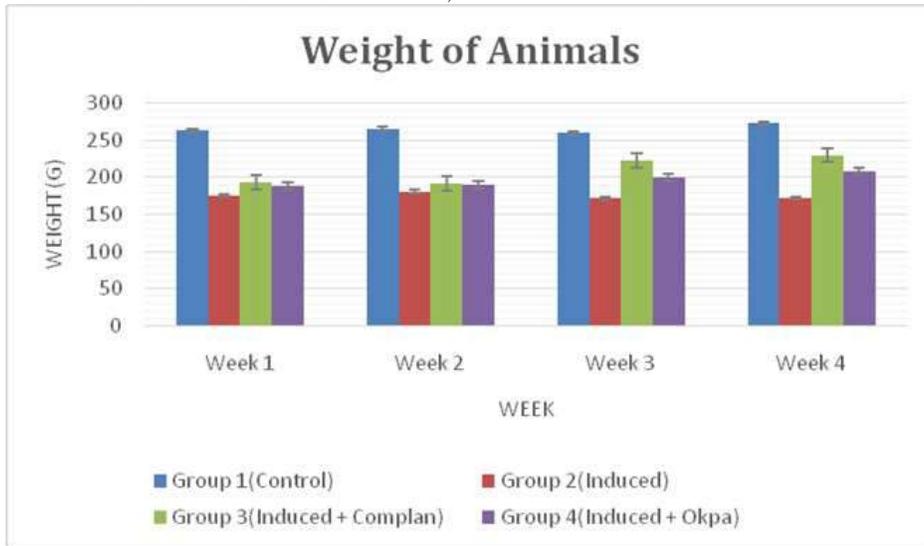


**Figure 3: Weight of Animals**

**Table 1: Evaluation of anxiety using elevated plus maze test in Konzo induced disease in Wistar rats**

| Group | Week 1 | | | | Week 2 | | | |
|---|---|---|---|---|---|---|---|---|
| | R (Sec) | L (Sec) | SC (Sec) | C (Sec) | R (Sec) | L (Sec) | SC (Sec) | C (Sec) |
| Group 1 | 28.80±7.51 | 28.87±11.11 | 160.73±30.51 | 23.73±10.85 | 30.60±7.50 | 36.40±7.42 | 91.67±16.76 | 106.27±20.89 |
| Group 2 | 16.53±4.26 | 18.07±8.59 | 29.13±8.52 | 107.00±31.69 | 3.53±1.68 | 10.93±3.20 | 139.73±33.03 | 67.73±24.04 |
| Group 3 | 2.47±1.38 | 1.53±1.53 | 143.00±38.20 | 134.40±37.61 | 7.07±2.81 | 11.00±4.66 | 163.47±32.32 | 91.27±31.20 |
| Group 4 | 10.33±4.23 | 3.40±1.82 | 62.20±26.20 | 189.60±32.64 | 2.87±1.80 | 15.33±8.52 | 190.33±29.85 | 86.53±31.93 |

**Note:** Group 1: Control, Group 2: Induced, Group 3: Induced + Complan, Group 4: Induced + Bambara Nut (Okpa), R = Right Corner; L = Left; SC = Semi Closed; C = Closed
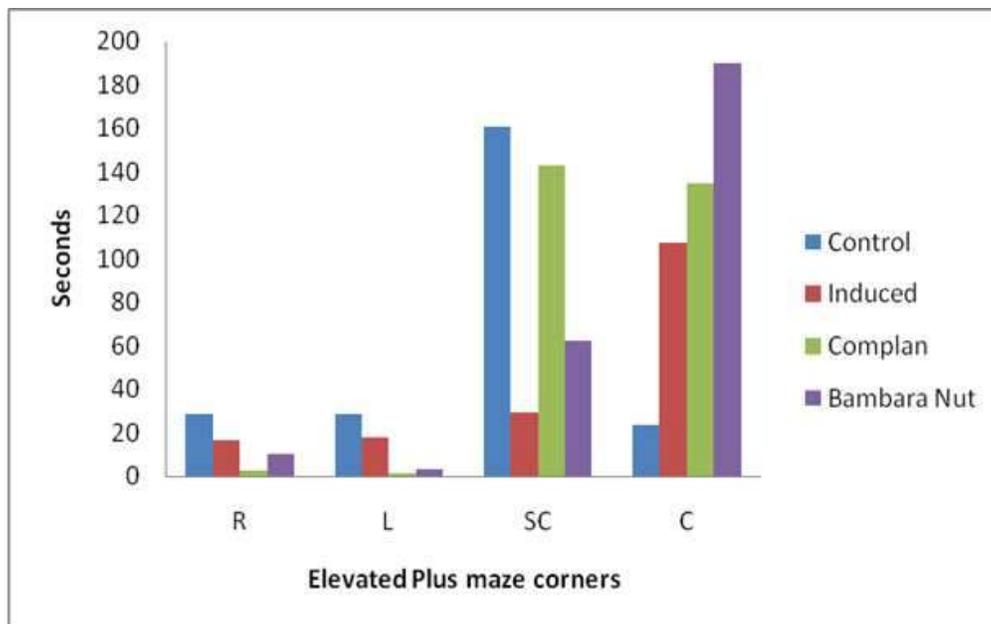
**Figure 4: Comparison chart of anxiety level in test rats in Week 1 from Elevated Plus Maze test**
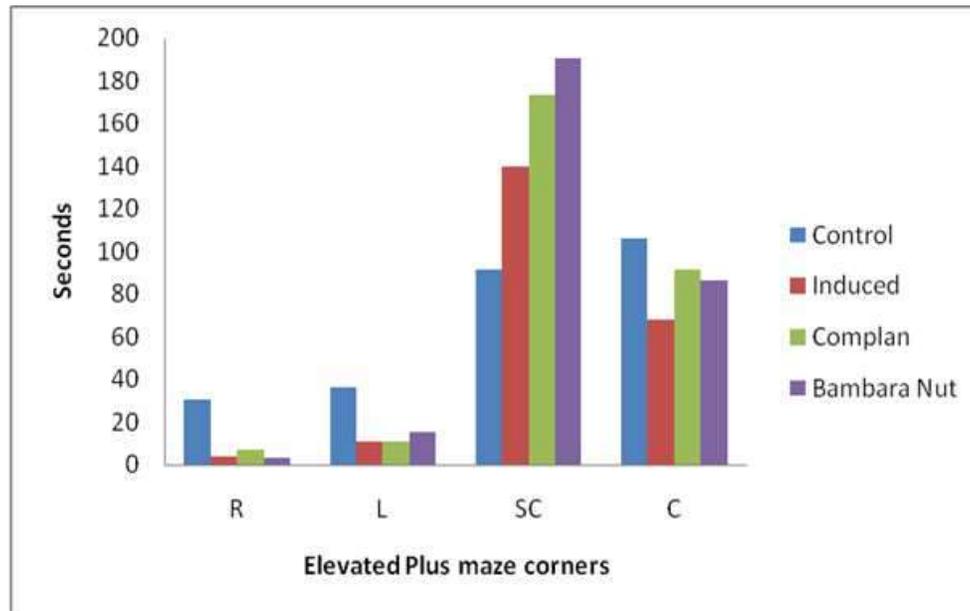


**Figure 5: Comparison chart of anxiety level in test rats in Week 2 from Elevated Plus Maze test**

**Table 2: Result of Locomotion Activity level/impairment, anxiety and willingness to explore in Wistar rats using Open Field Test**

| Group | Week 1 | Week 2 | Week 3 | Mean (Sec) |
|---|---|---|---|---|
| Group 1 (Control) | 208.33±20.46 | 177.00±17.95 | 165.33±18.93 | 183.55±12.84 |
| Group 2 (Induced) | 173.20±27.36 | 247.80±16.92 | 239.07±22.18 | 220.02±23.55* |
| Group 3 (Induced + Complan) | 270.33±12.17 | 277.87±12.72 | 248.93±16.58 | 265.71±8.67* |
| Group 4 (Induced + Bambara Nut) | 234.67±20.22 | 269.73±12.74 | 278.20±9.48 | 260.87±13.33* |

*Significant at $p < 0.05$. The results are expressed as mean ± SEM per group and the respective control group. Level of significance values are $P < 0.05$.

## DISCUSSION
### Weight Assessment in Konzo induced rats
The result shows weekly body weight differences in experimental animals. There was significant weight reduction in the body weight of the Konzo induced group experimental Wistar rats from week 1 to week 4 compared to the significant weight increase observed in the Konzo induced and complan milk fed group Wistar rats with a mean weight as shown in figure 3. There was also a significant weight increase observed in the Konzo induced and Bambara nut (Okpa) fed group Wistar rats when compared with the konzo induced group. There was a mean weight loss observed from the cassava-induced Konzo Wistar rats compared to the mean weight loss in cassava-induced Konzo and complan milk fed group Wistar rats and cassava-induced Konzo and Bambara nut (Okpa) fed group Wistar rats. A weight gain was observed in the cassava-induced Konzo and complan milk fed group Wistar rats and cassava-induced Konzo and Bambara nut (Okpa) fed group Wistar rats when compared with the cassava-induced Konzo group Wistar

rats which indicated the ameliorative effect of complan milk and bambara nut (nut). This is in line with the observation made by Enefa *et al*. [15] and David *et al*. [16] that did a neurobiohavioral and ameliorative study on the effect of complan milk and bamabara nut on bitter cassava induced toxicity on Wistar rat and obtained a similar significant difference in the weight of induced rats compared to the control group. Weight gain was observed in the bitter cassava-induced and complan milk fed group Wistar rats and bitter cassava-induced and Bambara nut (Okpa) fed group when compared with the bitter cassava-induced group indicating a possible ameliorative effect of complan milk and bambara nut (okpa) on the weight of the Wistar rats fed with complan milk and bambara nut. This weight gain observed could be due to the high protein contained in complan milk and bambara nut. This finding agrees with the study by David *et al.* [16] who established in his study that complan milk and bambara nut has ameliorative effect in Wistar rats induced with konzo disease.

**Evaluation of anxiety using elevated plus maze test in Konzo induced disease in Wistar rats**

The result from elevated plus maze as presented in table 1 shows that there was no positive improvement in anxiety level of Wistar rats in the time spent in the R and L sections of the elevated plus maze in the experimental groups when compared to the control group in week 1 (Fig. 4.2 and 4.3). Although, there was a slight improvement in the SC and C section (in terms of time spent) when compared to the control group in week 1. The result from elevated plus maze as presented in table 1 shows that there was positive improvement in anxiety level of Wistar rats in terms of the time spent in the R, L, SC and C sections of the elevated plus maze in the experimental groups when compared to group 2 and control group in week 2. This indicates a positive reduction in anxiety level in week 2 compared to week 1 as observed with the elevated plus maze apparatus. This positive improvement in anxiety level in week 2 is due to the ameliorative effect of protein nature of complan milk and bambara nut which is not keenly expressed in the group induced with bitter cassava only. This finding conforms to the study of David *et al.* [16].

**Locomotion Activity level/impairment, anxiety and willingness to explore in Wistar rats using Open Field Test**

In evaluating the locomotion impairment and anxiety level of wistar rats using Open Field Test, cassava-induced Konzo Wistar rat group, cassava-induced Konzo and complan milk fed group Wistar rats group and cassava-induced Konzo and Bambara nut (Okpa) fed Wistar rats group spent significantly more time with a mean time of 220.02±23.55, 265.71±8.67 and 260.87±13.33 respectively when compared to the control group mean time of 183.55±12.84. Also, a significant improvement in locomotive activity and anxiety level was observed in cassava-induced Konzo and complan milk fed group Wistar rats group and cassava-induced Konzo and Bambara nut (Okpa) fed Wistar rats group when compared with cassava-induced Konzo Wistar rat group indicating the ameliorative effect of complan milk and Bambara nut (Okpa). The improved locomotive activity observed in this study also conforms to the study by Enefa *et al.* [15].

## CONCLUSION

The anxiety level and locomotor impairment in the experimental group caused by bitter cassava showed that improperly processed bitter cassava is toxic and has neurotoxic effects on the brain (particularly the central nervous system and higher motor neurons). According to this study, the harmful effect of bitter cassava can be reduced by eating proteins or eating a well-balanced diet that includes milk and bambara nuts (Okpa). Following the findings of this study can help to lessen the toxicity of bitter cassava consumption, while nutritional deficiency can likely increase the toxicity of various processed bitter cassava roots.

## RECOMMENDATION

It is recommended that the findings from this study be used to enlighten rural dwellers who consume different variety of bitter cassava processed roots on the need to also balance their diet while consuming varieties of processed cassava roots. Also, further studies to corroborate the findings of this study are recommended.

## ACKNOWLEDGEMENTS

## ETHICAL CLEARANCE

The experimental animals were obtained from the animal house of the department of Anatomy in the Faculty of Basic Medical Sciences. All procedures carried out during this research were done in accordance with the guiding principles of research involving animals as recommended by the Research Ethics Committee of the University of Port Harcourt. Animals were kept in standard cages and at normal room temperature.

## CONFLICT OF INTEREST

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*https://doi.org/10.9734/indj/2022/v17i130190*

# POSTMODERN INDIAN ENGLISH POETRY AND NISSIM EZEKIEL'S CONTRIBUTION: A CRITICAL STUDY

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## ABSTRACT

*Nissim Ezekiel heralded the postmodern era in the history of Indian English poetry. He occupied a prominent place among Indian English poets for his excellent creative skill and memorable poems which can move any first-time reader with simplicity, authenticity and lucidity of presentation. Designated as the 'harbinger of postmodernism' Ezekiel got to fame with his poem collection like Hymns of Darkness, Latter-Day Psalms, Collected Poems etc. He was also the recipient of the prestigious Sahitya Akademi award in 1983. His poems basically portray typical Indian characters and culture. Although Ezekiel's writing phase collides with modernism and postmodernism both, traits of postmodernism are effortlessly evident in his poems. This research paper intends to shed light on Ezekiel's contribution to the development of postmodern Indian English poetry.*

**KEYWORDS:** *Postmodernism, Provinciality, Urbanity, Disorientation, Inconclusiveness, Globalization, Social Realism*

## INTRODUCTION

Evaluating the vast arena of Postmodern Indian English literature requires an arduous research and minute observation on the behalf of the evaluator. The date and nature of the subject under discussion raise a lot of question to be debated and clarified. The Indian literary scenario after 1980 is generally considered postmodern. There are a number of books written by literary stalwarts like M. K. Naik, C.D. Narasimhiah, Srinivasa Iyengar etc. explaining the beginning and development of Indian English literature up to 1980s. The nomenclature Indian English literature specifically points to the literature originally written in English by Indian writers including the Indian expatriates. Now the question that naturally comes to one's mind is what does the term postmodernism mean in literature. Postmodernism is a term used to define the late 20th century style and concepts in arts, architecture, criticism and culture. Postmodernism broadly refers to a socio-cultural and literary theory and a shift in perspective that has manifested in a variety of disciplines including the social sciences, art, architecture, literature, fashion, communications, and technology. It is generally agreed that the postmodern shift in perception began sometime back in the late 1950s, and is probably still continuing. Postmodernism can be associated with the power shifts and dehumanization of the post-Second World War era and the onslaught of consumer capitalism. The very term Postmodernism implies a relation to Modernism. Modernism was an earlier aesthetic movement which was in vogue in the early decades of the twentieth century. It has often been said that Postmodernism is at once a continuation of and a break away from the Modernist stance. But Postmodernism is a cultural movement in its own right. Considering it solely as a successor of modernism, thus putting it as a hyphenated word,

i.e., post-modernism, would be reductive and misleading, and would do gross injustice to its unique richness and complexity. Postmodernism shares many of the features of Modernism. Both schools reject the rigid boundaries between high and low art. Postmodernism even goes a step further and deliberately mixes low art with high art, the past with the future, or one genre with another. Such mixing of different, incongruous elements illustrates Postmodernism's use of light-hearted parody. Postmodernism also means the celebration of fragmentation, the negation of any specific meaning or absolute meaning, the blurring of high culture and low culture etc. The Concise Oxford Dictionary of Literary Terms (1990) explains the term postmodernism and its features in the following way:

> Post modernity is said to be a culture of fragmentary sensations, eclectic nostalgia, disposable simulacra, and promiscuous superficiality, in which the traditionally valued qualities of depth, coherence, meaning, originality, and authenticity are evacuated or dissolved amid the random swirl of empty signals…. Postmodernism may be seen as a continuation of modernism's alienated mood and disorienting techniques and at the same time as an abandonment of its determined quest for artistic coherence in a fragmented world: in very crude terms, where a modernist artist or writer would try to wrest a meaning from the world through myth, symbol, or formal complexity, the postmodernist greets the absurd or meaningless confusion of contemporary existence with a certain numbed or flippant indifference, favouring self-consciously 'depthless'

works of fabulation, pastiche, bricolage, or aleatory disconnections described above …(174-175)

Though both Modernism and Postmodernism employ fragmentation, discontinuity and de-centredness in theme and technique, the basic dissimilarity between the two schools is hidden in this very aspect. Modernism projects the fragmentation and de-centredness of contemporary world as tragic. It laments the loss of the unity and centre of life and suggests that works of art can provide the unity, coherence, continuity and meaning that is lost in modern life. T. S. Eliot laments that the modern world is an infertile wasteland, and the fragmentation, incoherence of this world is reflected in the structure of the poem. However, The Waste Land tries to recapture the lost meaning and organic unity by turning to Eastern cultures, and in the use of Tiresias as protagonist. In Postmodernism, fragmentation and disorientation is no longer tragic. Postmodernism on the other hand celebrates fragmentation. It considers fragmentation and de-centredness as the only possible way of existence, and does not try to escape from these conditions. Inconclusiveness is the hallmark of postmodernism. The postmodern narrative not only problematizes the Aristotelian formula of a chronological and tripartite division of a plot (beginning, middle, and end); more fundamentally, it subverts the idea of "narrative closure" by evoking the possibility of multiple endings. Postmodernism questions the notion of a singular "centre." For instance, there is no central meaning to a text; a text is always already open to multiple readings. Since the notion of an "authorial intention" promotes the idea of central meaning, the institution of the Author, with an upper-case "A," is declared dead. Postmodernist characteristics in literature include irony, black humour, intertextuality, pastiche, playfulness, metafiction, fabulation, temporal distortion, magic realism, hyperreality, fragmentation, paranoia, minimalism as well as maximalism. For instance, a postmodern literary work highlights in a celebratory mood the idea of incoherence of meaning, fragmentation, inconsistency and rejects any staunch belief and norms. Postmodernism considers human condition as essentially unstable, internally contradictory, ambiguous, indecisive, inconclusive, fragmented and open ended with multiple possible meanings. Reader, as opposed to Author, becomes a crucial site for meaning production in postmodernism. The reader is not just a theoretical discourse for a Roland Barthes or a Stanley Fish but, both in personal and impersonal terms, he/she/it remains a constant point of reference in postmodern texts. In his Reflections on 'The Name of the Rose', the novelist and theorist Umberto Eco explains his idea of postmodernism as a kind of double-coding, and as a transhistorical phenomenon:

> [P]ostmodernism ... [is] not a trend to be chronologically defined, but, rather, an ideal category – or better still a Kunstwollen, a way of operating. ... I think of the postmodern attitude as that of a man who loves a very cultivated woman and knows that he cannot say to her "I love you madly", because he knows that she knows (and that she knows he

knows) that these words have already been written by Barbara Cartland. Still there is a solution. He can say "As Barbara Cartland would put it, I love you madly". At this point, having avoided false innocence, having said clearly it is no longer possible to talk innocently, he will nevertheless say what he wanted to say to the woman: that he loves her in an age of lost innocence. (64)

Apropos of what is said as of now, it may be derived that Postmodern literature is literature which seeks to deconstruct commonly held views of humanity, the world, or theory while integrating ideas of tradition and modernity in the same space to create a new understanding of the times. After the modernist movement which sought a complete break with tradition, postmodernism seeks to examine past modes of thought and expression in order to gain understanding so that history does not get caught in an inevitable cycle of blind repetition (Lyotard 1466). What has been historically accepted as a norm is called into question under postmodernism.

## GENESIS AND DEVELOPMENT OF INDIAN ENGLISH POETRY

Henry Louis Vivian Derozio is considered to be the first poet in the lineage of Indian English poetry but the pioneering figure of postmodern Indian English poetry is Nissim Ezekiel with the publication of his poem A Time to Change in 1952. In between Derozio and Ezekiel there are a few Indian English poets such as Rabindranath Tagore, Kasi Prasad Ghosh, Michael Madhusudan Dutta, Aru Dutta, Toru Dutta, Sri Aurobindo, Harindranath Chattopadhyay and Sarojini Naidu. The early Indian English poetry, though imitative of the manner and method of English romantic and Victorian poetry, mainly dealt with the Indian or oriental themes. Derozio, Michael Madhusudan Dutt, Soshee Chundur Dutt, Ram Sharma, R. C. Dutt, Kashi Prasad Ghose, Manmohan Ghose and B. M. Mlabari were the trend setters in Indian English poetry of nineteenth century. Derozio's poetry was basically constituted of "Indian nationalist thought besides revealing the high source of patriotism". His finest work "The Fakir of Jungheera" is full of Byronic echoes but expresses Derozio's ardour for social reformation. Kashi Prasad Ghose's memorable work The Shair and Other Poems (1830) shows the influence of Scott's The Lady of the Last Minstrel. Michael Madhusudan Dutt's The Captive Lady, a long metrical romance, presents the love story of Prithviraj and Sanyukta. Manmohan Ghose's "Love Songs and Elegies", replete with melancholy, is a collection of lyrics on love, nature and death. Again his "Songs of Life and Death" and "Selected Poems" are imbued with classical spirit and abound in classical allusions. Swami Vivekananda was endowed with a sharp aesthetic sense which found a meticulous expression in the flawless craftsmanship of his poetry. His command over English imparts simplicity, clarity, gracefulness, picturesqueness and suggestiveness to his poetic style. Some of his memorable mystical and vedantic lyrics are 'An Interesting Correspondence', 'The Blessed Dream', 'The

Living God', 'To An Early Violet', 'Kali: The Mother', 'To the Awakened India' and 'The Song of the Sanyasin'. Toru Dutt portrayed the glorious vision of her motherland in Ancient Legends and Ballads of Hindustan, published posthumously in 1882. In A Sheaf Gleaned in French Fields, she translated about the hundred fifty-seven poems of about seventy-five French poets. Tagore was the first Indian writer who gained for modern India a permanent place on the world literary map. He wrote mainly in Bengali but translated many of his Bengali poems and plays into English. His English renderings, also called transcreations, consisted of The Crescent Moon, The Gardener, Fruit Gathering, Lover's Gift, Crossing, The Fugitive and Other Poems, and The Gitanjali. Being a poet par excellence, Tagore's poetry reveals a high personal quest for the Divine, characterized by a great variety of moods and approaches, ranging from the height of ecstasy to the depths despair. His Gitanjali is mainly a collection of lyrics of devotion in the great Indian tradition. Sri Aurobindo is a poet-philosopher-prophet and visionary par excellence in Indian English poetry. His early poems show the influence of English decadent poets and have little mystical and spiritual appeal but they are remarkable for chaste diction, vivid image and spontaneity of expression. Poems composed by him between 1900 and 1910 have streaks of mysticism and spirituality. 'Urvasie' and 'Love and Death' are mystical love poems of a high order. Ahna, Rose of God and Savitri have been composed in an entirely new world of poetic inspiration and fulfilment with the aim of stirring the human soul with the deepest delight. Sarojini Naidu, "a dreamer, born in a dreamless age" and "an ardent, versatile and dynamic genius," is unsurpassable for her sweet and melodious songs, which are superb in the entire range of Indian English poetry. Her poetry is a magnificent and colourful portrayal of Indian life. 'Ode to H. H. The Nizam of Hyderbad', 'The Pardh Nashin', 'Wandering Beggars', 'The Prayers of Islam', 'The Old Woman and Imam Bara' etc. testify to this fact. She began composing poems at the age of twelve. Before leaving for England in 1895 she had composed many poems, including Lady of the Lake of 1300 lines. At Cambridge, she came in contact with Sir Edmund Gosse, who recognized her poetic talent and advised her to seek inspiration from India and not from England. Her first volume of poems The Golden Threshold (1905) was dedicated to her mentor, Sir Edmund Gosse. Her other volumes of poetry are The Bird of Time (1912), The Broken Wing (1917) and The Feather of Dawn (posthumously) published in 1961. Her poetry is suffused with Indian atmosphere and sensibility. Her poems always remind us of the India of palanquin bearer, corn-grinders, wandering beggars, pardah nashin, of meditation, love and solitude. Sensuousness and picturesqueness, profusion of colourful imagery and radiant diction, love of nature and humanity, mysticism and vivid recreations of Indian ethos are some distinctive romantic characteristics of her poetry. Her vision of life, which is romantic and imaginative, is neither pessimistic nor optimistic. Her poetry is embellished with various figures of speech, especially simile and metaphor, which are highly imaginative, picturesque and suggestive.

The new Indian poetry began with the attainment of independence in 1947. The new poets got rid of the stigma of writing under English influence. In this post-independent India, poetry is not imaginative and romantic as was the poetry of previous generation. It is remarkable for fecundity, originality, experimentation and the vivid presentation of contemporary reality. Indianness is permeated in modern poetry. The poets have evolved a distinct idiom to express their voice. They have succeeded to nativize or Indianize English in order to reveal typical Indian ethos, sensibility and situations. Post-independence poetry is no longer imitative. It is no more an echo but a voice worth listening to. It has emerged as a distinct reality and has acquired an identity of its own.

## NISSIM EZEKIEL: THE PIONEER OF POSTMODERN INDIAN ENGLISH POETRY

Let's now start with Nissim Ezekiel who heralded a new era in the genre of Indian English poetry with his publications like Hymns in Darkness (1976), Latter-Day Psalms (1982) and Collected Poems 1952-88 (1989). The writers like Rilke and W.B. Yeats influenced Ezekiel. Like Yeats, he considered poetry as the reservoir of human feelings and emotions. But Ezekiel gave post-independent and postmodern Indian poetry a direction, a name and made it popular at home and in abroad. Ezekiel is one of those poets who have used Indianized English for which R. Parthasarathy said: "The poems of Ezekiel imitate the idiolect features of English used by Gujarati speakers. Some of these features are also present in other Indian languages: the use of the present progressive tense for the simple present tense, un-English collocation of lexical items, and literal translation of phrases and idioms" (R. Parthasarathy, 1976). Ezekiel's poetry indicates his growth as a poet-critic and shows his personal importance. He was awarded the prestigious Sahitya Akademi Award in 1983 for his collection of poems titled 'Latter-Day Psalms'. Ezekiel has been applauded for his subtle, restrained and well-crafted diction, dealing with common and mundane themes in a manner that demonstrates both intellectual perception and an unsentimental, realistic sensibility, that has become the hallmark of succeeding Indian English poetry. Ezekiel enriched and established Indian English language poetry through his modernist innovations and techniques, which enlarged Indian English literature, moving it beyond purely spiritual and orientalist themes, to include a wider range of concerns and interests, including familial events, individual angst and skeptical societal introspection. Nissim Ezekiel's poetic oeuvre is mainly centred on three elements-erotic, realistic, and humanistic. Being a conscious artist, Ezekiel deals with love and sex directly without any inhibition. Like Yeats, Ezekiel writes in such a way in which sense and spirit merge harmoniously and are exploited to the full:

> This longing is for nakedness
> Soul naked, body naked…
> And let him understand, that in the working
> Of his mind, the body takes a hand. (Nakedness)

Again, he emphasizes the fulfilment of love can only be materialized through marriage:

> Life can be kept alive
> By contact with the unknown and the strange
> A feeling for the mystery
> Of man and woman joined, exhaustion
> At the act, desire for it again.  (To a Certain Lady)

Ezekiel's poems like 'Healers', 'Hangover' and 'Very Indian Poems in Indian English' are superb in expression, highly eloquent and enjoyable no doubt. Ezekiel in some poems emerges as a poet of province par excellence. The way he connects and expresses his global thoughts in local context induces critics to relate him with postmodernism. John Press sheds light on a poet's provincial status in the following words: ". . . who is primarily concerned with the values of his own cultural society, and who is largely indifferent to what lies beyond the world that he knows first-hand. Thus, he cares very little for the poetry and the civilization of the other ages and other countries. . ." (Day,1987: 85). Nissim Ezekiel's anti-modernist attitude finds expression in a poem composed long back titled "The Double Horror". In it he finds his life alongside other modern fellows reduced to

> Newspapers, cinemas, radio features, speeches
> Demanding peace by men with grim warlike faces,
> Posters selling health and happiness in bottles,
> Holidays in Rome for writing praise of toothpastes, (CP 7)

In his urban poems like 'Background Casually' he expresses his commitment towards the city, unlike Naipaul:

> I have made my commitments now.
> This is one: to say where I am,
> …My backward place is where I am. (CP 181)

'The Indian Landscape Seers My Eyes' is a poem where the poet like a detached observer describes things happening surrounding him. Indian lifestyle, rituals and everyday reality have become a common subject in Ezekiel's poems. Sometimes in mock serious tone he asks: "Friends, Romans, Countrymen, I am saying/ to myself/ Lend me ears/ Everything is coming/ Regeneration, Remuneration, Contraception/ Be patiently, brothers and sisters" while at times, he chides us for our folly:

> These are the days of our family planning
> I am not against. We have to change with times
> Whole world is changing. In India also
> We are keeping up. Our progress is progressing
> Old values are going, new values are coming
> Everything is happening with leaps and bounds.

'In India' published in the volume The Exact Name (1965) presents several pictures of disgust and revulsion adding "up to a haunting urban picture of societal doom and individual depravity" (Nair, 123). Ezekiel becomes brutally honest while focusing his poetic lens on poverty, misery, squalor and the wretchedness suffered by the economically weaker section of people in a city like Bombay where money and power go hand in hand:

> Here among the beggars,
> Hawkers, pavement sleepers,
> Hutment dwellers, slums,
> Dead souls of men and gods,
> Burnt-out mothers, frightened
> Virgins, wasted child
> And tortured animal,
> All in noisy silence
> Suffering the place and time.   (CP, 131)

In "Island" Ezekiel describes the city as an island of slums and skyscrapers and he envisions India through eyes of Bombay. People living in here cannot escape and are bound to stay here alongside all mishaps of life. Ezekiel writes:

> Unsuitable for song as well as sense,
> the island flowers into slums
> and skyscrapers reflecting
> precisely the growth of my mind
> I am here to find my way in it (CP 182)

John Thieme justifiably comments: "Ezekiel's deployment of the trope of the city in later volumes remains textualized, but in more complex and less derivative ways, and by the time he wrote The Unfinished Man (1960), in which Urban appeared, he had moved beyond a Modernist, London-centred version of the city toward a more local, if equally metaphorical representation" (CP xxiv). Despite the disheartening condition and the sickening ambience of the cities, the poet doesn't want to leave the city, rather wants adjustment. He knows very well that "home is where we have to earn our grace" (CP 118). His non-condemnatory tone anticipates postmodernism. As in the poem "Urban", the poet juxtaposes besmirched city and pure nature:

> The hills are always far away.
> He knows the broken roads, and moves
> In circles tracked within his head.
> Before he walks and has his say,
> The river which he claims he loves
> Is dry, and all the winds lie dead.
> … … … …
> The city like a passion burns.
> He dreams of morning walks, alone,
> And floating on a wave of sand.
> But still his mind its traffic turns
> A way from beach and tree and stone
> To kindred clamour close at hand

"A Morning Walk" published in the volume The Unfinished Man (1960) deals with Bombay city and its corrupt and filthy atmosphere. It is one of Ezekiel's typical realistic poems. In the very first stanza, the city is described as "cold and dim/ where only human hands sell cheap". In the third stanza the poet sees the city as a living pandemonium:

> Barbaric city sick with slums,
> Deprived of seasons, blessed with rains,
> Its hawkers, beggars, iron-lunged,
> Processions led by frantic drums,

A million purgatorial lanes,
And child-like masses, many tongued,
Whose wages are in words and crumbs. (C119)

The above passage gives an authentic picture of utter gloom and poverty prevalent in the city. The dreadful atmosphere compels the poet to ruminate whether he has done anything of worth and value, or just passed his time and life. With a despondent undertone, the entire poem is a thorough reflection of the poet's sense of utmost frustration on behalf of the whole generation.

Parody, pastiche, irony and satire are abundantly used by postmodernists writers in their works. Ezekiel is no doubt a mastercraftsman in projecting irony in his poems. He used it to highlight shams and hollowness, lie and artificiality of human beings. For instance, Nissim Ezekiel in poems like 'Very Indian Poems in Indian English', 'Goodbye Party for Miss Pushpa T.S.' etc. becomes a parodist and ironist. In "Goodbye Party for Miss Pushpa T.S.", Ezekiel uses rambling pointless monologue to acclimatize with Indians speaking English. The farewell address begins in eulogy, but in middle lapses into a detail about the speaker's tour to Surat:

Her father was renowned advocate
in Bulsar or Surat,
I am not remembering now which place.
Surat? Ah, yes,
Once only I stayed in Surat
with family members ....         (CP 190)

Such speech rhythm and tempo are typically Indian. Ezekiel dexterously employed Hindi and Urdu words like 'burkha' (How the English Lessons Ended), 'Chapati', 'paan' (Ganga), 'mantra', 'kundalini', 'shakti', 'bhikshuks' (Rural Suite) etc. to nurture his pidgin English or Babu English. Such deviations from the Standard English are decisive points to be called Indian English. Ezekiel's poetry is a veritable symbol and dramatization of various personalities through passion and affirmation. His characters like Miss Pushpa T.S., the Railway Clerk, the Professor, Ganga, the maid-servant and a host of others symbolize the individual as well as the types with a specific characteristic of their own. The world of Ezekiel is not only dynamic and palpable but his characters are also relatable, vibrant and authentic. Like Eliot, Ezekiel has brought everyday conversational language into the realms of poetry. He acts as a liberating force and encourages his fellow poets to popularize free verse in Indian English writings.

## CONCLUSION

In conclusion, it may be said that Nissim Ezekiel successfully portrayed the ambience and characteristics of post-Independence and postmodern era in India. His poems, reflective in nature and authentic in tone, present a genuine picture of human condition in the then society. His poems adroitly employed the postmodernist traits like provinciality, mini-narratives, reader consciousness, irony, parody, satire etc. and also lend an informal touch to standard pattern of English. The uniqueness and conviction with which he has used Indian English or provincial English contributes to enhance the readership of Ezekiel beyond the Indian subcontinent.

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# METHODOLOGY OF ELECTRONIC EDUCATIONAL ENVIRONMENT IN HIGHER EDUCATION INSTITUTIONS (ON THE EXAMPLE OF ANALYTICAL CHEMISTRY IN TECHNICAL DIRECTION)

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## ANNOTATION

*The article describes the methodology of using the database of e-learning resources in the educational process to create an e-learning environment in higher education.*

*The article also provides conclusions based on suggestions and recommendations on the creation of a database of e-learning resources in the field of analytical chemistry for students of technical education, the use of virtual learning technologies.*

**KEYWORDS:** *information technology, animation, programming, virtuality, e-textbook, module system, e-learning environment, on-line consultation, audio file, video file, text materials, animations, virtual laboratory.*

## INTRODUCTION

In the world education system, the issues of improving the methodological support of disciplines using e-learning resources, the formation and development of professional competence of students, the widespread and widespread use of multimedia, and information, and communication technologies in the classroom are being studied.

Technology Development of creative thinking skills of students in higher education, improvement of professional competencies, introduction of information technology in the teaching of analytical chemistry, ensuring the harmony of theory and practice in teaching, introduction of new information technologies, innovative knowledge of students, continuous improvement of professional skills identified as a priority.

E-learning environment is a system-organizational set of software, information, interaction accounts, software and organizational-methodological software aimed at supporting higher education, meeting the needs of students for independent learning.

## METHODS

The e-learning environment is formed on the basis of the principles of transparency of education:

- Openness of admission of students;
- Open planning of education, the freedom to create an individual trajectory of education within the direction of education and the corresponding curriculum;
- Free choice of time and pace of training, ie on the basis of teaching students in an e-learning environment throughout the school year, and the lack of strict deadlines for training;

- Free choice of place of study, that is, for the main part of the study period, students are not directly in the classrooms and independently determine where to study.
- Seeks to improve the quality of education based on the professional and scientific potential of leading professors and teachers;
- Students will have the opportunity to receive continuing education.

In the e-learning environment, it is proposed to consist of the following blocks:

I. Requirements to the student.
II. Sign up to log in.
III. Educational science modules.
IV. Assimilation monitoring.
V. Final certification.
VI. Requirements to the specialist.

E-learning environment is a new direction in the study, description and prediction of learning processes, revealing the methods and forms of education and upbringing in a high-tech information learning environment.

**The following requirements are set when creating an e-learning platform for the e-learning environment:**

**Didactic requirements-** Unlike paper copies, audio files, animation, emotional impact, and flexibility to the learner's level of knowledge, which work depending on his or her level of preparation, make it easier for the learner to learn the course material. Take into account their capabilities;

**Methodical requirements-**analysis by solving a large number of problems or changing the primary data, the use of graphical interpretations, creating conditions for the teacher to conduct the lesson in the form of an independent lesson, in which case the teacher participates as a consultant,

o 'to allow the teacher to control the level of knowledge acquired by students using tests of different complexity (the level of complexity is formed);

**Psychological requirements** -The understanding of the presentation of educational material in the e-learning environment should correspond to the level of verbal-logical, sensory-perceptual (feeling, perception) and expression of the process. Also, psychological processes related to cognition include the reception of information (mainly seeing and hearing, feeling), attention (its stability, concentration, transition from one to another, distribution and level of attention), thinking (theoretical perception, practical demonstration and practical action), imagination, memory (the phenomenon of placing data in instantaneous, short-term and long-term memory), etc;

**Technical requirements** - technical requirements for the creation of an e-learning environment, the rules of its preparation and use, methods of control, conditions of transportation, use and storage.

**Aesthetic requirements -** It is not always necessary to take into account and comply with aesthetic requirements. They have a description of recommendations for creating an electronic manual.

**Ergonomic requirements -** Inextricably linked with ergonomic requirements, the electronic manual corresponds to the functional function of aesthetic formation, the order and expressiveness of the graphic and pictorial elements of the learning environment, the color scheme corresponds to the electronic manual function.

**Conclusion.** An e-learning environment is an interactive tool designed to partially or fully automate the learning process using computer technology. They are one of the promising forms of increasing the efficiency of the higher education process and are used as a teaching tool of modern technologies. The structure of pedagogical software includes: software product (set of programs), technical and methodological support, additional aids aimed at achieving specific didactic goals in the subject.

**Teaching programs -** to acquire new knowledge based on the level of knowledge and interests of students directs;

**test programs -** used to test or evaluate the knowledge, skills and abilities acquired; Non-standard tests created using programs such as Hot Potato, Ispring, My Test are convenient for students to assess their knowledge

**Training programs -** serve to repeat and strengthen previously learned training material;

**Programs that organize video lessons with the participation of teachers -** Movavi, Bandi Cam, Camtasia Studio.

**Programs that create virtual laboratories** - programs that create a virtual learning environment (Virtual reality systems). The concept of virtual reality (Virtual reality) was proposed by Jaron Lanier (Lane). Virtual being is associated with the concepts of immersion and interactivity.

**Immersiveness** -means that a person assumes himself in a virtual being.

**Interactivity**- allows the user to interact with and interact with objects in a virtual entity in real time.

There are a number of positive factors that confirm their superiority over traditional means in order to implement the technology of creating an e-learning environment. These factors were divided into didactic, psychological, economic, physiological groups.

## DISCUSSION

Methodological requirements for the creation of an e-learning environment in analytical chemistry include: taking into account the specifics of a particular subject, taking into account the specifics of a particular subject, the interdependence, interdependence, diversity, implementation of modern methods of information.

**Introduction of e-learning environment in analytical chemistry into educational processes:**

The student's knowledge, skills and abilities in analytical chemistry;

Deep mastery of knowledge, skills and abilities in the field of science through modeling of analytical chemical processes;

Expansion of the student's field of independent activity due to the diversity of educational activities;

To individualize and differentiate the learning process based on the introduction of interactive communication capabilities;

To master the strategy of the student's mastering of educational materials through the use of artificial intelligence systems;

The presentation of chemical processes and events in the field of analytical chemistry through computer technology is important as it leads to increased interest and activity in the basics of science in students.

An e-learning portal is a node in a telecommunications network that combines various resources to deliver a database of science to the user through a simple navigation and a wide user-friendly interface:

- service to a large number of users;
- the breadth of the database scale;
- use basic network formats;
- introduction of an easy and efficient search engine;
- database resource integration;
- ensure database security;
- database stratification;
- Characterized by knowledge management-analysis.

**Formation of reserves of e-learning environment in analytical chemistry:**

- textual materials;
- computer training programs;
- mathematical models;
- organizational and structural models;
- conceptual models;
- educational multimedia products;
- experimental research materials;

- directory information;
- results of sociological research;
- materials representing the scientific and pedagogical activity of educational institutions.

**Among the many sources of e-learning are:**
- Authoring tools;
- Virtual Learning Management Systems (LMS);
- Internal Content Management Systems CMS (Content Management Systems).

### The structure of the software used in the organization of the e-learning environment

**Maintenance**

**Software**

| Pedagogical software that allows you to create e-learning resources (Authoring tools) | Virtual learning process management systems (LMS-Learning Management System) | Systems that allow you to create dynamic sites (content management) (CMC-Content Management System) |
|---|---|---|
| Articulate | | ABO, CMC |
| Stroyline | Atutor | Amiro, CMC |
| Lectora | Moodle | DotNetNuke |
| Ispring | Blackboard | Drupal |
| PowerPoint | Chamilo | Joomla |
| CourseBulider | eFront | KenticoCMC |
| EActivity | ILIAS | NetCatCMC |
| Engage | OLAT | OpenCMC |
| Learn eXact | SakiProject | SharePoint |

### Problems arising in the process of teaching analytical chemistry in an e-learning environment and their solutions

| № | Problems that arise | Solutions |
|---|---|---|
| 1 | Because subjects are not fully placed on a full-time distance learning platform, students often turn to the teacher | Through the e-learning environment created in the field of analytical chemistry, all databases will be placed on the educational platform and will be subject to regular changes. |
| 2 | In difficult topics, students do not understand the essence of the topic. | Special attention is paid to topics that are difficult to master in the e-learning environment, and video lessons, demonstration experiments are given |
| 3 | Students make mistakes when performing problems and exercises in their self-assessments | In the e-learning environment, the exchange of theoretical information, standard assignments, if necessary, online information will be established. |
| 4 | There are logical flaws in students 'oral speech | In the e-learning environment, the teacher conducts oral interviews with students in classes organized through the program ZOOM |
| 5 | Low results in the initial intermediate controls | In the assessment of students in the e-learning environment, tests in each topic in the program Ispring |

| | | form intermediate controls on crossword puzzles and assimilations in the program HotPotato |
|---|---|---|
| 6 | Students master the subject in Analytical Chemistry long before the deadline | In the e-learning environment created by analytical chemistry, topics are secretly protected by a special code, and after mastering, the next topic is opened. |
| 7 | Cases of low or no data entry in student notebooks | In the e-learning environment, students can use the e-textbook created in Analytical Chemistry at any time |
| 8 | Low overall results | In an e-learning environment created from analytical chemistry, results can change on a daily basis |

In conclusion, it should be noted that today the creation of an e-learning environment in the higher education system is an important task for all participants in its effective use in the educational process. The e-learning platform in the field of analytical chemistry is bearing fruit today.

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# THE SIGNIFICANCE OF ROLE GAMES IN IMPROVING THE EFFICIENCY OF GERMAN LESSONS IN A TECHNOLOGICAL UNIVERSITY

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## ANNOTATION

*The article discusses the motivations for learning, which are of great importance in the organization of the educational process. Games are an effective tool for learning foreign languages. It contributes to the activation of thinking, arouses interest in a particular type of activity, in the performance of a particular exercise. They allow you to diversify the types of learning activities and make the process of learning a language more dynamic and interesting.*

**KEY WORDS:** *group activity, educational process activation, learning efficiency, role-playing game, means of communication, verbal means, role cards.*

## DIE BEDEUTUNG VON ROLLENSPIELEN ZUR STEIGERUNG DER EFFEKTIVITÄT DES DEUTSCHUNTERRICHTS

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## Anmerkung

*Der Artikel diskutiert die Lernmotivationen, die für die Organisation des Bildungsprozesses von großer Bedeutung sind. Spiele sind ein effektives Werkzeug zum Erlernen von Fremdsprachen. Es trägt zur Aktivierung des Denkens bei, weckt das Interesse an einer bestimmten Art von Aktivität, an der Durchführung einer bestimmten Übung. Sie ermöglichen es Ihnen, die Arten von Lernaktivitäten zu diversifizieren und den Prozess des Sprachenlernens dynamischer und interessanter zu gestalten.*
***Schlüsselwörter:*** *Gruppenaktivität, Bildungsprozessaktivierung, Lerneffizienz, Rollenspiel, Kommunikationsmittel, verbale Mittel, Rollenkarten.*

Gegenwärtig ist die Idee der Notwendigkeit, eine Fremdsprache als Kommunikation zu unterrichten, in einer kollektiven Aktivität unter Berücksichtigung persönlicher und zwischenmenschlicher Beziehungen offensichtlich geworden. Gruppenaktivitäten wirken sich positiv auf die Persönlichkeit des Schülers aus. Und Lernerfolg ist das Ergebnis der gemeinsamen Nutzung aller Lernmöglichkeiten. Der Einsatz von Rollenspielen bietet vielfältige Möglichkeiten, den Bildungsprozess zu aktivieren. Ein Rollenspiel ist eine bedingte Reproduktion der realen praktischen Aktivitäten von Menschen durch seine Teilnehmer und schafft Bedingungen für eine echte Kommunikation. Die Effektivität des Trainings ist hier in erster Linie auf eine Motivationsexplosion, eine Steigerung des Interesses an dem Thema zurückzuführen. Rollenspiele erfreuen sich bei Fremdsprachenlehrern immer größerer Beliebtheit. Die Idee, Rollenverhalten zu verwenden, wurde durch die Rollentheorie verstärkt. Bei der Beherrschung einer Fremdsprache als Kommunikationsmittel ist es notwendig, ähnliche Bedingungen wie bei der Beherrschung einer Muttersprache nachzubilden. Der Grad der Konventionalität kann unterschiedlich sein: Reinkarnation in echte Menschen, literarische Figuren, Märchenhelden usw.

Das Element der Konventionalität und Reinkarnation ist allen Arten von Rollenspielen inhärent.

Das Rollenspiel hat tolle Lernmöglichkeiten:

1) Rollenspiele können als das genaueste Kommunikationsmodell angesehen werden. Sie setzt doch die Nachahmung der Wirklichkeit in ihren wesentlichsten Zügen voraus. In einem Rollenspiel ist, wie im Leben selbst, das verbale und nonverbale Verhalten der Partner eng miteinander verflochten.

2) Das Rollenspiel hat großes Potenzial für einen Motivations- und Anreizplan. Kommunikation ist bekanntlich ohne Motiv undenkbar. Unter pädagogischen Bedingungen ist es jedoch nicht einfach, ein Motiv für eine Äußerung hervorzurufen. Die Schwierigkeit liegt in folgender Vermittlung: Der Lehrer muss die Situation so beschreiben, dass eine Atmosphäre der Kommunikation entsteht, die wiederum bei den Schülern ein inneres Bedürfnis hervorruft, ihre Gedanken zu äußern. Unter den Bedingungen der fremdsprachlichen Kommunikation ist es jedoch wichtig, dass die Schüler ausdrücken können, was sie sagen wollen. Sprachliche Unterstützung (Wortschatz und grammatikalisches Material, Fähigkeiten zu ihrer Anwendung) verdecken oft das eigentliche Ziel – die Kommunikation von Schülern und Lehrern. Der Unterricht wird dominiert von Aussagen, die durch Direktiven zum Leben erweckt werden: „Erzähl mir von deinem Freund", „Erzähl mir von deiner Familie", wenn der Lehrer prüfen will, wie die Schüler den passenden Sprachstoff kombinieren können. Das Motiv, das die Schüler leitet, liegt außerhalb der Sprache: Es ist ihnen wichtig, dem Lehrer zu antworten. Die Situation ändert sich, wenn die Schüler in das Rollenspiel einbezogen werden. Präzise bezeichnete „suggestive Umstände" schaffen einen allgemeinen motivierenden Hintergrund, und die spezifische Rolle, die der Schüler erhält, engt ihn auf ein subjektives Motiv ein.

3) Das Rollenspiel beinhaltet die Stärkung der persönlichen Beteiligung an allem, was passiert. Der Schüler tritt in die Situation ein, allerdings nicht durch sein „Ich", sondern durch das „Ich" der entsprechenden Rolle.

4) Das Rollenspiel trägt zur Erweiterung der assoziativen Basis bei der Aufnahme von Sprachmaterialien bei.

5) Rollenspiele fördern die Bildung von pädagogischer Zusammenarbeit und Partnerschaft. Schließlich handelt es sich bei der Aufführung einer Etüde um die Abdeckung einer Gruppe von Schülern (das Rollenspiel basiert nicht nur auf der Grundlage eines Dialogs, sondern auch auf der Grundlage eines Polylogs), die reibungslos interagieren und sich genau darauf einlassen müssen berücksichtigen die Reaktionen des anderen und helfen sich gegenseitig. Bei der Rollenverteilung sollte man sowohl die sprachlichen als auch die „schauspielerischen" Fähigkeiten der Schüler berücksichtigen, einigen eher verbale, anderen pantomimische Rollen anvertrauen, während man anderen die Rolle von „Promptern" zuweist und ihnen so das Recht auf Prompt einräumt der Text.

6) Das Rollenspiel ist lehrreich. Die Studierenden werden, wenn auch auf elementare Weise, an die Technik des Theaters herangeführt. Der Lehrer sollte sie ermutigen, sich um einfache Requisiten zu kümmern. Jede Fiktion ist erwünscht, da die diesbezüglichen Möglichkeiten unter pädagogischen Bedingungen begrenzt sind. Die Reinkarnation selbst trägt zur Erweiterung des psychologischen Spektrums, des Verständnisses anderer Menschen bei. Somit hat das Rollenspiel ein großes Potenzial in praktischer, pädagogischer und pädagogischer Hinsicht. Fast die gesamte Lernzeit im Rollenspiel ist der Sprechübung gewidmet, wobei nicht nur der Sprecher, sondern auch der Zuhörer so aktiv wie möglich ist, da er die Bemerkung des Partners verstehen und sich merken muss, sie mit der Situation in Verbindung bringen, bestimmen wie relevant für die Situation und die Kommunikationsaufgabe ist und auf Rückmeldungen richtig reagiert. Spiele wirken sich positiv auf die Bildung kognitiver Interessen aus und tragen zur bewussten Entwicklung einer Fremdsprache bei. Die Schüler arbeiten aktiv, enthusiastisch, helfen sich gegenseitig, hören ihren Kameraden aufmerksam zu; Der Lehrer verwaltet nur die Lernaktivitäten. Das Rollenspiel muss jedoch bestimmte Anforderungen erfüllen: - Das Spiel muss die Lernmotivation anregen, das Interesse und den Wunsch der Schüler wecken, die Aufgabe gut zu erfüllen, es sollte auf der Grundlage einer der realen Situation angemessenen Situation durchgeführt werden Kommunikation;

- Das Rollenspiel sollte inhaltlich und formal gut vorbereitet und übersichtlich gestaltet sein;

- Das Rollenspiel sollte von der ganzen Gruppe angenommen werden;

- Es wird sicherlich in einer wohlwollenden, kreativen Atmosphäre abgehalten, weckt bei Schulkindern ein Gefühl der Zufriedenheit und Freude;

- Das Spiel ist so organisiert, dass die Studierenden das erarbeitete Sprachmaterial möglichst effizient in der aktiven Sprachkommunikation einsetzen können;

- Der Lehrer selbst glaubt sicher an das Rollenspiel, an seine Wirksamkeit. Nur unter dieser Bedingung wird er gute Ergebnisse erzielen können. Die Rolle des Lehrers bei der Vorbereitung und Durchführung des Spiels ändert sich ständig. In der Anfangsphase der Arbeit kontrolliert der Lehrer aktiv die Aktivitäten der Schüler, wird aber allmählich nur noch zum Beobachter.

Dabei ist der Kontakt zwischen Erzieherin und Kind von großer Bedeutung. Im Laufe des Spiels kann der Lehrer manchmal eine Rolle übernehmen, jedoch nicht die Hauptrolle, damit das Spiel unter seiner Anleitung nicht zu einer traditionellen Arbeitsform wird. Üblicherweise übernimmt der Lehrer Rollen nur am Anfang, wenn die Schüler diese Art der Arbeit noch nicht beherrschen. Künftig wird dies nicht mehr nötig sein.

Während des Spiels helfen starke Schüler den schwachen. Der Lehrer hingegen verwaltet den Kommunikationsprozess: Er geht auf den einen oder anderen Schüler zu, der Hilfe benötigt, nimmt die notwendigen Anpassungen an der Arbeit vor. Während des Spiels korrigiert der Lehrer die Fehler nicht, sondern schreibt sie nur unbemerkt von den Schülern auf, um die typischsten in der nächsten Stunde zu besprechen.

In einem Rollenspiel wird immer eine Situation dargestellt, die sowohl verbal als auch nonverbal erzeugt wird: visuell, grafisch, monolog (dialogischer Text) usw. Die

Situation gibt die Bedingungen für die Ausführung einer Handlung an, beschreibt die Handlungen zu durchgeführt werden, und die Aufgabe, die entschieden werden sollte. In einer Situation ist es notwendig, Informationen über die sozialen Beziehungen von Partnern bereitzustellen, beispielsweise offiziell (informell). Der Rollenabschnitt enthält eine Liste von Rollen. Die Beschreibung der Rolle wird in der Rollenkarte gegeben, während die Informationen detailliert präsentiert werden können: Es werden Informationen über die Person (freundlich, ehrlich, faul usw.), über ihre Lebens- und Spracherfahrung, über Gewohnheiten, Hobbys, etc. Allerdings sollten die Informationen nicht zu sehr ins Detail gehen, da in diesem Fall dem Spielteilnehmer die Möglichkeit genommen wird, seine Kreativität zu zeigen. Die Beschreibung kann kurz sein, damit sich der Schüler ein Bild von der Figur machen kann, deren Rolle er spielen wird. Den Schülern muss Zeit gegeben werden, sich in die Rolle hineinzuversetzen. Die Rollen werden vom Lehrer zugewiesen, sie können von den Schülern selbst gewählt werden. Sie hängt von den Merkmalen der Gruppe und den persönlichen Merkmalen der Schüler sowie vom Grad ihrer Fremdsprachenkenntnisse ab.

Bei der Diskussion des Spiels und der Bewertung der Teilnahme von Schulkindern sollte der Lehrer Takt zeigen, insbesondere bei der Bewertung der Ergebnisse des ersten Rollenspiels. Eine negative Bewertung der Aktivitäten seiner Teilnehmer führt unweigerlich zu einem Aktivitätsrückgang. Es ist ratsam, mit guten Momenten über die Ergebnisse des Spiels zu diskutieren und erst dann zu Nachteilen überzugehen. Im Prozess des Rollenspiels erfolgt eine gleichzeitige Verbesserung und Entwicklung von Fähigkeiten im Umgang mit Sprachmaterial, aber in diesem Stadium ist dies eine Randaufgabe, die Hauptsache ist eine situations- und rollenmotivierte Kommunikation. Daher sollte ein Rollenspiel in der letzten Phase der Arbeit an dem Thema einen Platz erhalten.

Rollenspiele können mit beiden Sprechformen korreliert werden: vorbereitet und unvorbereitet, wodurch die Voraussetzungen für einen natürlichen Übergang von der ersten zur zweiten geschaffen werden. Um eine vorbereitete Rede in eine unvorbereitete zu übersetzen, eignen sich am besten Rollenspiele, die wir bedingt als „Multi-Act" bezeichnen. Der erste Akt sollte unterstützt werden, die Schüler können die nachfolgenden Akte selbstständig spielen, das Sprachmaterial so umwandeln, dass es die gewünschte Bedeutung ausdrückt, und improvisieren.

So verleiht Rollenspiel der pädagogischen Kommunikation einen kommunikativen Fokus, stärkt die Motivation zum Erlernen einer Fremdsprache und verbessert die Qualität der Beherrschung deutlich.Es gibt unterschiedliche Formen des Rollenspiels im Deutschunterricht mit Schülerinnen und Schülern unterschiedlicher Sprachniveaus.

Features von Sprachschülern ermöglichen die Nutzung verschiedener Versionen des Rollenspiels. Eine Möglichkeit ist das Rollenspiel mit einem Objekt. Den Schülern wird das folgende Diagramm angeboten. „Dein jüngerer Bruder (Schwester, Kind von nebenan) ist ein Vorschulkind, das sich auf die Schule freut. Besonders mag er deine Tasche, in der so

viele interessante Dinge sind. Zeig ihm deine Tasche, mach ihn mit Schulsachen bekannt." In Plot-Rollenspielen mit einem Objekt werden Fotoalben, Bücher und Zeitschriften, Illustrationen, Haushaltsgegenstände, eine Puppe mit Kleidung und Spielzeug verwendet.

Es gibt auch Spielgespräche, die die Einstellung der Schüler zu ihrem zukünftigen Beruf und zu verschiedenen Bereichen in Literatur, Bildender Kunst, Kino (Beitrag zur Bildung eines Weltbildes) offenbaren. Die Teilnahme an einer Spieldiskussion gilt als wichtiges Mittel zur Vorbereitung auf eine kreative und eigenständige Auseinandersetzung mit dem Problem, unabhängig von Handlung und Rolle, Gedanken- und Urteilsaustausch, aktive und proaktive fremdsprachliche Kommunikation. Unter Berücksichtigung der ermittelten beruflichen Interessen der Studierenden lassen sich Planspiele organisieren, die den sprachlichen Besonderheiten der Studierenden entsprechen und ein wichtiges Instrument nicht nur für die Vermittlung der deutschen Sprache, sondern auch für die berufliche Orientierung der Studierenden darstellen Erziehung und umfassende Entwicklung. Neben den Formen der spielerischen Kommunikation in einer bestimmten Altersstufe werden im Deutschunterricht mit den Schülern Rollenspiele mit alltagsbezogenen Inhalten organisiert, die darauf abzielen, die Normen der Sprachetikette zu bilden und eine Verhaltenskultur zu erziehen.

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# ACTIVITIES OF FOREIGN LANGUAGE TEACHERS AS A CURATOR IN THE EDUCATIONAL PROCESS OF THE HIGHER EDUCATIONAL PROCESS

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**ANNOTATION**
*This article deals with issues related to the curatorial activities of teachers of foreign languages of the university.*
**KEY WORDS:** *foreign languages, education, training, teachers, professional development, educational process, curator.*

# ДЕЯТЕЛЬНОСТЬ ПРЕПОДАВАТЕЛЕЙ ИНОСТРАННЫХ ЯЗЫКОВ В КАЧЕСТВЕ КУРАТОРА В ВОСПИТАТЕЛЬНОМ ПРОЦЕССЕ ВУЗА

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**Аннотация**
В данной статье рассматриваются вопросы, связанные с кураторскими деятельностями преподавателей иностранных языков вуза.
**Ключевые слова:** иностранные языки, воспитание, обучение, преподаватели, профессиональное развитие, учебный процесс, куратор.

Teachers of foreign languages have always been advanced in the educational process of the university. Educational work is multifaceted, complex, integrative and can be considered from various angles. Within the framework of this article, it is planned to highlight the main roles of a university teacher in relation to students and the problems of the educational process.

In the changed conditions of the development of higher education in Uzbekistan, the activities of a teacher in a modern university are filled with new content, new roles appear, such as an academic consultant (a person from among the most qualified teachers who organizes the educational process of a particular student, assists the student in choosing and implementing an individual educational trajectory and provides optimal effectiveness of the learning process), tutor (teacher-consultant, mentor, curator of the student, helping him in organizing his education), curator of the educational program.

The functions of an academic consultant are related to advising students on the use of the educational environment of the university in terms of professional development and educational activities and the regulatory support of the educational process, as well as the choice of an individual educational route. The tutor should help students orient themselves in the content of the subject area included in their area of interest, monitor their performance of educational tasks, and, if necessary, consult with students. The tutor also helps students organize work in groups, gives recommendations on the use of information and communication technologies in teaching, etc.

The curator of the educational program ensures the continuity of training courses and orients teachers and students so that the development of academic subjects and practical

activities "works" for the preparation of a student's term paper or final qualifying work [1].

Thus, the work of an academic consultant, tutor, curator of an educational program is more focused on improving the quality of education.

The emergence of new roles of teachers in modern conditions requires a rethinking of the goals, content and forms of activity of curators of student communities. In connection with the changes that are taking place in education, the institution of curatorship is becoming different. It is necessary to move away from the rather common understanding of the curator as a class teacher of 1-2 year students, since problems arise not only for junior students, but also for senior ones. If first-year students have difficulties associated with adaptation at a university, choosing an individual educational route, then senior students have problems associated with internships and employment. Therefore, pedagogical assistance to students in solving problems is necessary not only for junior students.

The position of the curator in relation to students of different courses will change. With the development and revitalization of student self-government bodies and other student communities, the role of the curator will be, first of all, to support student initiatives. Also, due to the fact that the content of students' problems is different, the form of work of the curator with the community is changing. The question arises of the advisability of introducing a multivariate institution of curatorship. The requirements for those who directly interact with students, form the atmosphere of university life, create a socio-cultural educational space, in which modern problems of education are solved, are also changing.

Modern problems of the educational process in the university can, in our opinion, be divided into several groups, based on the classification of the main reasons that give rise to them. These are difficulties of a socio-pedagogical, scientific-pedagogical, organizational-pedagogical and psychological-pedagogical nature [2].

Difficulties of a socio-pedagogical nature are due to numerous problems of both financial, economic and socio-pedagogical nature, which are faced by the subjects of the educational process in specific conditions of life.

Student youth is a special social group with distinctive characteristics, and today's students are very different from those with whom we dealt a dozen years ago. Underestimation of this factor often gives rise to problems in the educational process.

We often judge modern students by fragmentary, external facts. Meanwhile, we are dealing with a generation of post-Soviet youth that was formed in the first decade of the 21st century, and our current understanding of this generation is very approximate. Obviously, many factors influence the consciousness and behavior of a modern student, including: the emergence of a new system of society's requirements for an individual, due to new social realities; insufficient consistency of ideological guidelines in society and the state; social stratification of society, giving rise to a sense of inferiority, disbelief in social justice, or, conversely, a sense of superiority, impunity; strengthening of information flows, etc. All this causes in some part of the students uncertainty about the future, in their perspective, spiritual emptiness.

Thus, the changes in society associated with the transition to new socio-economic relations have led to the emergence of a complex knot of contradictions that must be taken into account in the educational process of the university. But, unfortunately, teachers of higher education are not always ready to resolve these contradictions both in scientific and methodological terms and morally.

We must admit that we often complain that students are "not the same as before", that "it has become more difficult to work with students", we complain that the choice of a certain part of the students of their future specialty is not due to professional interests, but to material well-being or other motives, but " before…" But at the same time, we do not want to admit that this is the reality, that other students, such as we would like, or such as we remember, no longer exist and will not be in the foreseeable future, that today's young people must be accepted as they are , and recognize that students are subjects of the educational process, and not objects, if, of course, we operate within the framework of a humanistic pedagogical paradigm.

In Uzbekistan, the national idea is defined in the Development Strategy Program as a systematized generalization of national identity, "Uzbekistan is our common home", "Uzbekistan is my Motherland", where guidelines are given for educating young people of Kazakhstani patriotism and civic responsibility, respect, as well as cooperation , openness, education throughout life. Difficulties of a scientific and pedagogical nature are due, first of all, to the fact that ideological guidelines are excellent, this allows curators to plan thematic plans for educational work together with students. But it is precisely when identifying the goals and priority areas of education that it turns out that young people discuss and enter into polemics about the discrepancy between words and deeds in the highest echelons of power and give numerous examples from society: how can you build a life strategy if there are no agashkas at the top (the one who helps get a prestigious job), etc. That the educational process is a process of interaction between teachers and students

everyone knows, but not always every curator understands that his role is to create psychological and pedagogical conditions for self-realization of students. And accordingly, the purpose of the educational process at the university is the orientation of students towards self-education, self-development, self-realization. Curatorial activity differs from curatorial work in that activity involves not only setting a goal and achieving it, but also managing actions through a control system (operational, final, predictive) and a feedback system.

The curator of the academic group conducts organizational and educational work, which is aimed at helping to manage the student life of the group entrusted to him; formation of a positive attitude to learning, attracting

students to scientific and social work; promoting the creation of an atmosphere of psychological comfort in the group.

To achieve the quality of results, it is necessary to have curators of the student community, curators of the academic group, curators of the educational program in higher education. The curator may be appointed from among the most authoritative and experienced teachers with at least one year of teaching experience.[3]

There is no need for such requirements, since refresher courses should be held for newly appointed curators, and with all curators, a school of curators.

The priority in the activities of the curator should be the solution of personal and socially significant problems that arise in the course of the educational process at the university.

The criteria for evaluating the activities of the curator can be: the dynamics of the formation and development of the team of the student group, the community, the place of the academic group in the rating of the faculty, university, the dynamics of students' participation in public life, students' opinions about the educational activities of the curator through questioning.

When evaluating the work of the curator, the following may be taken into account:

1. Place of the group in the ranking of academic groups (performance and attendance);

2. Participation of the curator in the implementation of the concept of educational work of the university (faculty programs);

3. Assistance in organizing the group's student activists (headman, trade union organizer, etc.);

4. Organization of the participation of students of the group in scientific, cultural and sports events;

5. Participation of group students in socially useful work;

6. Intra-group activities;

7. Information work with students;

8. Work with parents of students;

9. Assistance in solving housing and household issues of students living in a hostel;

10. Carrying out activities to prevent negative phenomena in the student environment (participation of the group in planned thematic events, organization of thematic lectures, meetings, trainings with the participation of specialists),

11. Regular logging curator, availability of plans and reports;

12. Introduction of new forms or use of new methods in curatorial work.

13. Organization of cultural and leisure activities in the main areas of educational

works (intellectual-cognitive, recreational, etc.);

14. Assistance in organizing student self-government of students;

15. Work with first-year students;

16. Work in student hostels.

The study of the activities of curators shows that in order to successfully interact with students, they need legal, information and methodological materials on the organization of educational work at the university and social support for students, generalizing the experience of the best university curators.

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# TOPICAL ISSUES TRAINING STUDENTS OF CHEMICAL AND TECHNOLOGICAL HIGHER EDUCATION INSTITUTIONS IN PROFESSIONAL VOCABULARY AT THE ENGLISH LESSON

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**ANNOTATION**
*The article deals with the main groups of professional vocabulary in English, students of chemical engineering specialties, as well as various exercises that help students learn specific vocabulary.*
 **KEY WORDS:** *professional vocabulary, chemistry, teaching English.*

**Аннотация**

*В статье рассматриваются основные группы профессиональной лексики на английском языке, слушатели химико-технологических специальностей, а также различные упражнения, помогающие студентам усвоить конкретную лексику.*

*Ключевые слова: профессиональная лексика, химия, обучение английскому языку.*

At a special level of development of higher education, one of the urgent problems is the priority of the qualitative study of professional vocabulary in a foreign language among students of various specialties. Successful ownership of an operation is a prerequisite for getting interesting jobs, the likely presence of different countries, for continuing development outside the country and professional growth in the chosen field of specialization.

Lexical knowledge has a successful mastery of the basics of all types of river activities. Lexical research is understood not only as a set of linguistic data about a foreign word, but also as knowledge of the operation of programs with a word, i.e. cases of special need with a foreign word.

In our work, we divide the professional vocabulary studied by chemistry students into several groups: general scientific terms (property - property, detect - communicate, development - development, undergo - transfer, etc.), basic chemical concepts (substance - substance, substance - substance, matter, chemical element - chemical element, etc.), the name of the scale, follows, etc. (Periodic table - periodic system of elements, Celsius scale - Celsius scale, etc.), names of chemical elements (hydrogen - hydrogen, oxygen - oxygen, helium - helium, etc.), name of chemical compounds (hydrochloric acid - hydrochloric acid, sodium chloride - sodium chloride, sulfuric acid - sulfuric acid, etc.), the names of instruments and instruments in the laboratory (test tube - test tube, flask - flask, beaker - beaker, Bunsen burner - Bunsen burner, etc. .),

Lexical exercises aimed at the study of professional vocabulary by students of chemical and technological specialties can be divided into two categories:

1) memorization of a word, its semantics in unity with background and grammatical dispersion;

2) the formation of phrases and sentences.

Here are sports games of the first category.

Name the chemical devices that you see in the picture (Name the images in the picture of chemical devices).

Match the following English words and their Russian equivalents (Sop mira is an English word and its Russian equivalent).

Find pairs of synonyms (Find pairs of synonyms): matter, various, basic, quantity, often, different, use, quantity, application, often, substance, basic.

Find pairs of antonyms (Find pairs of antonyms): simple, constant, diluted, early, involving, unifying,

dependent, individual, complex, concentrated, independent, general, late, alternative, developing, separate.

Open the brackets by choosing the appropriate word (Open brackets by choosing the appropriate word):

1. (Scales, calorimeter, thermometer) - a device that determines the quantity, not the quality, of heat in the body.

2. If the chemist determines the mass, he must use (flask, thermometer, scales).

3. (calorimeter, flask, microscope) are used if a chemist must examine small samples of a substance.

4. To measure the volume of gases, the chemist uses (burettes, pipettes, gas burettes).

Open the brackets by choosing the appropriate form of the adjective (closing the bracket by choosing the one that appears under the manifestation):

1. Atoms are not (smaller, smallest) particles, but they are very small.

2. This discovery (more important, more important) than the previous one.

3. It is much (easier, easiest) to make parts out of plastic than out of metal or wood.

4. This is the (better, best) laboratory in our institute.

5. Aluminum (lighter, lightest) known metal.

6. Hydrogen (lighter, lightest) of the elements.

Specify the parts of speech of the following words.

(Indicate parts of the pronunciation of the following words): extremely, means, in essence, constituting, regular, relative, definition, association, proof, type.

Find words with similar sound forms and the same meanings in both Russian and English (There are words marked with significant sound and meaning in Russian and English): various, change, thermometer, cylinder, gas, sample, microscope, explore, centimeter, meter, gram, distance, volume, liter, heat, calorie, temperature, millimeter, often.

Read and translate the following root words (Read and translate root words): observe, observe; peace, restlessness, restlessness; suspend, suspension; to collide, to collide; hard, hardly, hardness; power, powerful; attract, attractive, attraction; squeeze, squeeze.

Translate the following groups of words (Translate the possibility of a group of words): consider - significant - consideration; form - form - form - formal; contain - container; public - publicity - publish - publisher.

The second stage of application in the construction of phrases and sentences, in accordance with the nature of the decision in each individual case of the statement of the future students. Phrases and sentences are built according to the laws of semantic integration in a tight space with grammatical norms. We give examples of such games.

Make sentences using the following model (Using a phrase using this model): Furnace operation data. - Data on the operation of the furnace. Temperature control, aluminum production, distillation process.

Write a continuation of the sentences (Finish the sentences):

1. The scientist worked hard on ...

2. It was very important to solve this...

3. They couldn't finish their work without...

4. When Dmitry Mendeleev went to the gymnasium, he was interested in ...

Answer the question using the following words and phrases: What are the main characteristics of solids? (Answer the question using possible words and phrases: What are the main characteristics of solids?) Solid, defined shape, heap of powder, grains, tiny cubes, fixed shape, crystalline substance, millions of ions held together, regular pattern.

In order to learn vocabulary that has not remained in the passive vocabulary, it is necessary not only to read and translate texts in the specialty, but also to use various terms in colloquial speech in accordance with a given need. Here are some examples of questions and tasks for advanced students who are able to freely

use professional vocabulary in oral speech.

Name the average room temperature in Celsius and Fahrenheit (Name the positive room temperature in Celsius and Fahrenheit).

Describe the laboratory in which you usually work. What is it equipped with? (Describe the laboratory in which you usually work. What is it equipped with?)

Name the outstanding chemical properties ... (oxygen, hydrogen, etc.) (Name the chemical properties of any element - oxygen, particles, etc.).

Agree or disagree (Agree or disagree):

1. Nitrogen is one of the most common elements on Earth.

2. The composition of the atmosphere is constant.

3. Air usually contains only gases.

4. Inert gases make up approximately 1% of the atmosphere.

5. Inert gases include oxygen.

Think about the possible reasons for these mysterious events, and then compare your ideas to history.

Assimilation requires professional vocabulary in the course of group discussions below the standard of living, the development of students' skills and abilities of independent reading of Russian-language literature in their specialty, the study of scientific conversations, as well as writing diploma and term papers; reports meeting their interests.

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# LEXICO-SEMANGIC FEATURES OF THE STUDY OF IRRIGATION TERMINOLOGY OF THE UZBEK LANGUAGE

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## ANNOTATION
*This article is devoted to the lexical-semantic aspect of the study of irrigation terminology in the Uzbek language. It attempts to systematize and select irrigation vocabulary in order to further streamline the terminology of the Uzbek language.*
**KEY WORDS:** *Turkology, Uzbek language, lexicology, formation of the terminology of the irrigation system.*

## ЛЕКСИКО-СЕМАНГИЧЕСКИЕ ОСОБЕННОСТИ ИССЛЕДОВАНИЯ ИРРИГАЦИОННОЙ ТЕРМИНОЛОГИИ УЗБЕКСКОГО ЯЗЫКА

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### Аннотация:

*Данная статья посвящена лексико-семантическому аспекту изучения ирригационной терминологии узбекского языка. В ней предпринята попытка систематизации и отбора ирригационной лексики в целях дальнейшего упорядочения терминологии узбекского языка.*

**Ключевые слова:** *тюркология, узбекский язык, лексикология, формирование терминологии ирригационной системы.*

Проблема лексико-семантической классификации слов тюркских языков требует широких развернутых теоретических исследований как в общетюркском плане, так и на материале конкретных тюркских языков. «Это имеет важное методологическое значение, поскольку дальнейшее планомерное описание, классификация и исследование лексических групп или лексико-семантических групп или лексикосемантических полей словаря тюркских языков во многом определяется методическим подходом и теоретическими предпосылками»[1].

Изучение ирригационной терминологии в лексико-семантическом аспекте представляется нам наиболее верным методом изучения терминологии конкретных тюркских языков, в том числе и узбекского. Следуя этому методу, можно получить представление о природных условиях, в которых проходила жизнь узбекского народа, об особенностях жилища, сельского хозяйства, ирригации, земледелия дехкан, мирабов, что находит отражение в наименованиях предметов, понятий, явлений.

Терминологическая подсистема узбекского языка формировалась в течение многих столетий в разных исторических условиях. Она берет своё начало в IV-V веках, задолго до прибытия огузских племен на территорию Средней Азии, до образования узбекского народа.

В развитии и совершенствовании земледелия в течение тысячелетий использовались многочисленные способы орошения и обработки земли. В настоящее время внедрение передового опыта обработки земли и полива в практику земледелия нашло отражение в новых названиях, носящих терминологический характер: "egatlatib sug'orish' – «поливать делянками», "vegetatsion sug'orish" - 'полив вегетационный', "yomg'irlatib sug'orish" (tomchilatib).

- полив шлангами - " shlanglab  sug'orish"

Большим своеобразием отличаются традиции в использовании водных ресурсов Узбекистана, особенно южного региона. Так, во время полевых работ в верховьях реки Сурхандарьи выявился целый ряд интересных сведений, терминов и слов, относящихся к земледелию и характеризующих коллективные ирригационные работы и трудовые повинности этой области.

Термины, связанные со способами полива и видами ирригационных сооружений, являются самой богатой и многообразной частью земледельческой лексики. Особое место в ней занимают наименования воды. Suv - 'вода.

- Общетюркское слово. В словаре М. Кашгарского это слово дано в форме "Suv"  «В туркменском языке, - пишет профессор М. Пенжиев, - слово "suv" - "вода" - участвует в образовании ста слов-терминов как основная часть производного слова или компонент сложного слова или словосочетания»[2]. По нашим сведениям, и в узбекском языке слово "suv" участвует в образовании более 700 слов-терминов как основная часть производного слова либо как компонент слова и словосочетания [3].

В ирригационной терминологии много терминов, обозначающих искусственные сооружения, оросительные объекты. Эти терминологические системы можно разделить на следующие микрогруппы, образующие ряд лексикосемантических групп:

• названия путей проточной воды и сооружений для хранения стоячей воды;

• названия искусственных путей проточной воды;

• названия естественных путей пресной воды;

• названия отдельных участков гидроо-бьектов на пути проточной воды;

• названия водохранилищ; термины, относящиеся к очистке оросительных сетей; лексика, связанная со строительством плотин;

• названия должностей, относящихся к ирригации, и прочее.

В статье сделана попытка исследовать взаимосвязи элементов некоторых лексикосемантических групп (ЛСГ) ирригационной терминологии современного узбекского языка. Их можно разделить на пять ЛСГ.

1. ЛСГ - названия отдельных участков гидрообъектов на пути проточной воды.

"Bosh buloq" -начало родника, "Daryo boshi" - название реки в Сурхандарьи, берущей свое начало из рек. В диалектах в Кумкурганском и Джаркурганском районах сохранилось слово "kunda", "darak", происходившие от арабского "saksiya"- "исток реки". Это слово употребляется в Иране, Афганистане и Египте в значении водовоз, поливальщик. Синонимично с этими словами в одном из своих значений выступает также слово "og'iz". Оно также означает начало, истоки проточной воды. В Байсунском, Денауском,Узунском районах жители в разговоре употребляют его персидско-таджикский синоним 'дах,на' // 'дахна' // 'дах,ана' - 'рот', в азербайджанском языке - 'дайна // дахна'.

"Quloq" - место пуска воды из канав в делянки. Это слово образует такие словосочетания, как "Quloqni ochmoq" - 'пустить воду (в делянки)', "Quloqni bog'lamoq – "Bir quloq suv ". У М. Кашгарского это слово "qulxaq", некоторые произносят его как "Qilxa" [4]. В узбекских диалектах употребляется "qulog", "qilog'" в узбекских говорах Южного Казахстана[5]

Интересно исследовать этимологию "Buloq", привлекая словосочетания "suvni buloqlash" - 'запруживать воду. Ср. у М. Кашгарского "suvni bektek" [6]. В «Этимологическом словаре тюркских языков» Э. В. Севортяна это слово возводится к "bug'moq(в составе: "bog-se-mek"-запруживать воду, быть препятствием, а также в составе боги и. т. п.; 'бук' (в составе: "bukilmoq" - быть согнутым); "bek" (в составе: "beklemesh"-перегораживать, перекрывать, а также: "beket" - канал, "bug'ot qurmoq" - строить канал). Напрашивается вывод о формальной близости или совпадении тюрк. "bug' ", монг. тюрк. "bug' " и о идентичности глагольного значения препятствовать, загораживать (путь), т. е. нет единого доказательного объяснения данному явлению: «Либо тюрко-монгольские параллели имеют общий источник, либо монгольские формы восходят к тюркскому источнику, поскольку тюркские основы много богаче монгольских в лексическом и семантическом отношении»[7].

Как видно из приведенных примеров, большинство гидротерминов в узбекском языке является словами, известными в других тюркских языках или в их диалектах.

2. ЛСГ названия водохранилищ.

Жаркий климат Узбекистана обусловил создание сооружений для накопления дождевых, больших и маленьких горных речевых вод. Для гидрообьектов со стоячей водой образованы специальные названия: "ko'l"- озеро, "hovuz" - пруд, искусственный водоем, водохранилище. "Sardoba", "obxona"- место скопления дождевых вод в такырах, :quduq" - колодец' и другие. Другой тип головных сооружений –"dam" , связан с более крупными водотоками. В окрестностях Южного Узбекистана подобные головные сооружения назывались в прошлом "dargat", что, возможно, генетически связано с таджикским – "darvoza" (ворота), "дар"- (дверь).[8]

Термин "dargot" известен на обширной территории почти всего Южного Узбекистана. В начале XX века на Зарафшане существовало 83 самостоятельных канала. В Бухарской части долины реки Зарафшан было 32 канала, выведенных с правой стороны, и 20 каналов с левой. Из одного места иногда выводится до 7 голов меньших каналов, расходящихся веером, начала их отделены друг от друга высокими насыпями8. Это нашло отражение в лексике узбекского языка. Рассмотрим термины данной ЛСГ.

"Ko'l" - (его варианты в тюркских языках: «кул», «холл», «куле», «куал») означает в узбекском языке большие или малые низины с сольной или пресной водой. Это слово входит в состав таких лексических единиц, как "kullamoq', "ko'lcha", "ko'llar".

Сардоба - водохранилище, вырытое в низких местах такыров, пустынях; чтобы вода из него не испарялась, его накрывают. Дно его выложено кирпичом, чтобы вода меньше впитывалась в землю. Это слово состоит из перс. «сард» -холодно (сову^') и 'аб' - вода ("Suv"). Сардобы обычно строились вблизи древних караванных путей. Это сооружение - плод инженерной мысли жителей пустыни. Эти сооружения до сих пор сохранились в Майманаке, Касби, Мубареке Кашкадарьинской области и во многих районах Южного Узбекистана.

"Quduq' "- колодец, имеет в тюркских языках и их диалектах разные фонетические варианты: монг. «худук», азерб. 'гьдудуке', турк. «куйу», «укирг», тув. «кое», каз. «кудук//кулик», башк. «козок». Во всех языках оно означает сооружение для добывания воды из почвы. В узбекских диалектах колодцы бывают различными: "toshquduq'" 'каменный колодец', "yerquduq' " букв.- земельный колодец.

3. ЛСГ, относящаяся к очистке оросительных сетей и традиции водопользования.

До 20-х годов XIX века очистка оросительных сетей требовала тяжелого физического труда, так как работы производились только вручную. Например, узбекский дехканин, имевший 10 танапов земли, ежегодно 53 дня трудился на хашарных работах. В зоне предгорий издавна практиковалось использование небольших оросительных систем, базирующихся на ручьях и саях.

4. ЛСГ, связанная со строительством плотин.

Жаркий климат Южного Узбекистана вынуждал наших предков рационально использовать воды немногочисленных рек. На этой территории издавна известны такие искусственные сооружения, как "bant", "dam", "damba", "charpaya", которые означают -запруда, водораздел, водоем и др.

"band/бент - (перс. «бенд») гидротехническое сооружение, служащее для поднятия уровня воды в реках, каналах и позволяющее распределять воду.

"Taraz" - водораздел - сооружение, позволяющее распределять воду большого арыка по маленьким, примыкающим к нему.

"Sepoya" - (перс. «си», «три», «пай», нога-треножник) приспособление, используемое при строительстве дамб, плотин.

"Nugala" (диал. «ногала») - связка хвороста, камыша, специально приготовленная для запруды между кольями. Длина связок равна ширине русла.[9]

5. ЛСГ - названия должностей, относящихся к ирригации.

В условиях орошаемого земледелия самой высокой должностью является обязанность мираба. Возглавляла коллективные ирригационные работы выборная администрация - мирабы. В состав мирабства входили мирабча, мираб, старший мираб, и арык-аксакалы, отвечающие за эксплуатационные работы на крупных каналах. Им подчинялись кок-баши, которые ведали распределением воды и поддержанием арыков второго и третьего порядков, между тем как аксакал арыков (мираб-баши) ведал периодической очисткой с поддержанием магистральных каналов и распределением воды по различным крупным каналам второго порядка.

"Mirob" - человек, руководящий работами по благоустройству арыков, регулированию воды, ответственный за водоснабжение и водопользование. Это слово образовалась из араб. «амир», перс. «аб», что буквально обозначает «амир» (эмир) воды.

"Katta mirob" - в районах Южного Узбекистана - ведающий землей трех арчинов, водой всей реки.

"Mirob bosh" - мираб, регулирующий распределение воды большого канала по сельским арыкам.

"Ptli mirob" - владелец всей воды в речке (otli//otliq -на коне, букв. -мираб на коне).

Ирригационная терминология в этой ЛСГ характеризуется изменением видов ирригационных работ, их механизацией, которые осуществлялись в послевоенные годы. Они пополнялись за счет внутренних и внешних ресурсов. Например, "bosh suvchi- главный поливальщик', "usta suvchi"- 'мастер поливальщик', "xizmat ko'rsatgan suvchi"- заслуженный поливальщик, гидротехник, мелиоратор, ирригатор и др.

Ирригационная терминология узбекского языка - один из основных разделов земледельческой лексики. Анализ данной лексики в лексико-семантическом аспекте и её систематизация помогут в дальнейшем упорядочении научной терминологии узбекского языка.

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# BASIC METHODS OF TEACHING CHEMISTRY IN SECONDARY EDUCATIONAL INSTITUTIONS

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**ANNOTATION**
*In this article, the author considers issues related to the teaching of the discipline of chemistry in secondary educational institutions.*
**KEYWORDS**: *chemical education, educational process, methods, actions, accustoming, exercises, criticism, warning, censure, teaching.*

## ОСНОВНЫЕ МЕТОДЫ ПРЕПОДАВАНИЯ ХИМИИ В СРЕДНЕСПЕЦИАЛЬНЫХ УЧЕБНЫХ ЗАВЕДЕНИЯХ

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**Аннотация**
*В данной статье автор рассматривает вопросы, связанные с преподаванием дисциплины химии в среднеобразовательных учебных заведениях.*
***Ключевые слова:*** *химическое образование, воспитательный процесс, методы, поступки, приучение, упражнения, критика, предупреждение, порицание, поучение.*

Методы воспитания в педагогике рассматриваются как сложнейший компонент воспитательного процесса, как пути, с помощью которых реализуются как общие цели воспитания, которые ставит общество, так и конкретные задачи, решаемые воспитательным процессом (Г. И. Щукина), как "инструмент прикосновения к личности" (А. С. Макаренко).

В процессе химического образования используются 4 группы методов воспитания, предложенные в педагогике (Г. И. Щукина):

1) методы формирования положительного опыта поведения (педагогическое требование, общественное мнение, побуждающие учащихся к положительным действиям и поступкам; приучение, упражнения, содействующие формированию определенных способов предметных действий и поведения, выработке привычек; специальные педагогические ситуации в форме соревнования, организованного дежурства, длительного общественного поручения, служащих накоплению и закреплению опыта поведения, опыта общения и деятельности);

2) методы формирования сознания суждений, убеждений (разъяснение этических и других понятий; эстетические, экологические, политические беседы, рассказы, диспуты; наглядное представление и конкретизация сложных моральных, нравственных и других понятий);

3) методы поощрения (одобрение, похвала, благодарность, награда);

4) методы наказания (замечание, выговор, обсуждение, удаление с занятия, перевод в другую группу, школу).

Химическое образование в современном техникуме осуществляется в постоянно меняющихся социально-экономических условиях. В этих условиях наряду с указанными выше методами воспитания должны быть использовать и другие.

*Метод социально-ориентированного воздействия.* Заметим, что в процессе применения данного метода учитель химии выступает как ретранслятор социально-культурного опыта, а учащийся как реципиент (воспринимающий) его. Метод предполагает усвоение учащимся ценностей, норм, установок, образцов поведения, присущих социальной группе, обществу, мировому сообществу. Роль учителя химии в процессе применения социально-ориентированных методов воспитания – официальная в рамках отношений "учитель-ученик", "субъектобъект", а его позиция характеризуется преимущественно не вероятностными, а нормативными ожиданиями, требованиями, которым должен соответствовать ученик. Социально-ориентированная цель воспитания – это подготовка учащихся к усвоению общечеловеческих ценностей и к выполнению установленных общественных норм. Поэтому оправданно использование таких методов воспитания, как приказ, критика, предупреждение, порицание, поучение, наставление, нравоучение, уход от решения (проблем и трудностей ученика), гиперопека, акцент на личный успех (Н. Е. Щуркова). Однако, учитель химии, используя эти методы воспитания, должен помнить о том, что он оказывает прессинг на "Я" ученика, угнетает его инициативу и может вызвать у своего ученика тревожность, агрессию, пассивность, безразличие, инертность, замкнутость и другие нежелательные результаты.

*Методы педагогического воздействия.* Педагогическое воздействие качественно отличается от воздействий, оказываемых звуком, цветом, светом, химическим опытом, реактивом. Это объясняется тем, что характер педагогического воздействия определяется его воспитательной целесообразностью, а также характером решаемых воспитательных задач (гуманистических, мировоззренческих, культурологических, эстетических, экономических, этических, экологических, валеологических, акмеологических, аксиологических и др.). Методы педагогического воздействия применяются учителем химии при выполнении почти всех его функций (информационной, ориентирующей, мобилизационной, организационно-управленческой, контролирующе-оценочной и других).

*Метод прямого педагогического воздействия.* Прямое педагогическое воздействие учителя выражается в его использовании своего психофизического аппарата: голоса, мимики, жестов, пластики, действия, ритма движений, поступка, оценки.

*Метод опосредованного педагогического воздействия.* Опосредованное педагогическое воздействие выражается в его использовании разнообразных образовательных средств (натуральных предметов, изобразительных и символико-графических пособий). Своими действиями учитель находит скрытый смысл, необходимый для решения и воспитательных задач.

*Метод компромисса.* В процессе химического образования учителю химии часто приходится разрешать противоречия во взаимоотношениях субъектов на основе взаимоприемлемых уступок. Метод компромисса – это самый разумный метод разрешения противоречий, возникающих во взаимоотношениях субъектов: учитель-ученик, учитель-группа учащихся, учитель-родитель, ученик-ученик, когда каждая из сторон идет на уступки другой. Компромисс – это обоюдная взаимоприемлемая уступка. Прежде чем идти на уступки учитель химии должен принять (в желаниях, действиях, мотивах ученика) тот безусловно приемлемый вариант, что не является нарушением социально-ценностных отношений. Учитель, кроме того, должен выдвинуть условия, которые бы не нанесли ущерб его авторитету. Этот метод не реализуется в ущерб интересам субъектов образовательного процесса.

*Методы формирования привлекательного образа учителя в сознании учащихся.* Образ – это чувственная форма психического явления, формирующееся путем его многократного восприятия (или воображения) и сопровождающееся осмыслением его сути, содержания и ценности. В этой связи методы формирования привлекательного образа учителя химии в сознании его учеников достойно самого

пристального внимания. Учителю химии следует постоянно наблюдать за собой со стороны, оценивая свой образ вербальный, образ мимический, образ пластический, образ цветовой. Методы формирования привлекательного образа представляют собой форму самодвижения содержания разных форм образов.

*Методы формирования вербального образа* непосредственно связаны с его содержанием, поэтому представляют собой ключ к формированию портрета духовного плана, который складывается из лексики, стилистики, мелодики, художественной выразительности, общего строя речи. Речь учителя химии должна отличаться точностью, логической последовательностью и компактностью изложения учебного материала, богатством интонаций. Учитель химии постоянно должен работать над своей языковой и речевой культурой, умело используя языковые средства и совершенствуя речевые способности. Только тогда уже с первых уроков в сознании учащихся сложится привлекательный, не отталкивающий образ учителя, благотворно влияющий на образовательный процесс своих учеников.

*Методы формирования мимического образа* непосредственно связаны с его содержанием, поэтому представляют собой способы формирования внешнего портрета учителя, создаваемого посредством взгляда, лицевых мышц, линии рта, движения бровей, поворотом головы и манерой держать голову. Природные данные играют важную роль в формировании мимического образа учителя, однако они (пропорциональность и овал лица, разрез и цвет глаз, конфигурация носа и т.п.) при общении отодвигаются на второй план. Фиксируются при общении во внешнем портрете личности улыбка, блеск глаз, доброжелательный кивок, оптимистично вздернутый подбородок, подвижный изгиб бровей. Мимический образ учителя химии как один из самых сильных образовательных средств не должен включать "сердитое лицо", "злое лицо", "сердитый взгляд", "сжатые губы", "насупленные брови", а должен включать "веселое лицо", "светлый взгляд", "теплую улыбку", "ласковое выражение".

*Методы формирования пластического образа* непосредственно связаны с его содержанием и представляют собой способы формирования учителем химии своего внешнего облика, складывающегося из его жестов, осанки, мелодики, темпоритма движений, сменяющихся поз, воспринимаемых учащимися и другими людьми. Хотя пластика – одна из непроизвольных форм выражения отношений субъектом, но по ней можно "вычислить другого человека", в частности учителя химии. Зная содержание пластического образа, учитель должен работать над его привлекательностью, что важно для достижения гарантированных результатов в воспитании и образовании.

*Методы формирования цветового образа* непосредственно связаны с его содержанием и представляют собой способы достижения цветовой гаммы, сочетания красок в костюме учителя, цвета его волос, глаз, различных аксессуар костюма и обуви, могущих создать гармоничное или контрастное впечатление. Повседневные учебные занятия требуют спокойной цветовой гаммы, праздничные мероприятия – яркой контрастной гаммы.

*Метод педагогического паллиатива.* Педагогический паллиатив как временная уступка давно применяется педагогами (А. С. Макаренко делал вид, что не замечал воровства, Я. Корчак подростку разрешал драку или ругань ограниченное число раз). Учителя химии достаточно широко применяют в процессе химического образования данный метод. Учитель "не видит", "не замечает" нарушений социальных норм, либо допускает их частично, подготавливая условия, чтобы в будущем нарушения не допускались. Отодвигая на задний план свое профессиональное самолюбие, учитель должен находить даже в самых малых результатах деятельности ученика положительное, быть максимально терпеливым и в центр внимания ставить личность ученика.

*Методы этической защиты.* Этическая защита – одна из разновидностей защиты личности (наряду с физической, правовой, политической, административной, экономической) от посягательств на ее достоинство. Актуальность методов этической защиты связана с тем, что учителю нередко приходится встречаться с неосознанной со стороны детей грубостью и с оскорблениями в свой адрес. При выборе методов защиты учитель должен помнить, что этическая защита выполняет триединую функцию: 1) ограждение личности учителя от оскорблений, 2) предложение ученику иного образа поведения в состоявшейся ситуации, 3) предоставление ученику шанса на позитив, возвышая его в трудный для него момент, укрепить взаимоотношение с учителем, проигнорировавшем оскорбление.

*Метод санкционирования* (ограниченного временем). Метод, предполагающий разрешение и право на проявление данного неблагоприятного состояния (возбужденности, апатии, грусти, скуки,

раздражительности), не оправдывающего ожиданий окружающих и отклоняющегося от социальных норм и ценностей. Метод используется при создании состояния сильного переживания, которое в своем течении достигло высокой фазы развития. Ученики пришли очень возбужденные после трудной контрольной работы. Возможны со стороны учителя как невербальные действия (учитель ждет, когда ученики успокоятся), так и вербальные действия ("Пожалуйста, завершите обмен мнениями в течение минуты"), Действия учителя направлены на исчерпание сильного переживания и его угасания. Он осознанно выходит на изменение своих действий, и ученики включаются в деятельность ("пар выпущен").

*Метод игнорирования*. Сущность метода в "незамечании" учителем неблагоприятного состояния ученика. Применяется учителем с целью постепенного угасания накала неблагоприятного состояния ученика, который учитель зафиксировал. Иногда ученику, находящемуся в неблагоприятном состоянии обиды, печали, стресса, не следует показывать, что это состояние заметно. Не следует привлекать к такому ученику внимания. Кажущееся невнимание к отрицательному его состоянию ведет к тому, что он, самостоятельно подавив свои переживания, включается в учебную деятельность.

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# TEACHING RUSSIAN AS A FOREIGN LANGUAGE IN THE CONDITIONS OF A POLYCULTURAL SOCIETY OF THE REPUBLIC OF UZBEKISTAN

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## ANNOTATION

*The peculiarities of teaching Russian as a foreign language, which are determined by the national and cultural specifics of the region, are analyzed. The issues under consideration are based on empirical observations, can be applied in the practical activities of Russian language teachers, and contribute to the development of national students' communication skills and competencies. Methodological developments can be useful not only in the practice of teaching Russian as a foreign language in Uzbekistan, but also abroad, where the process of popularizing the Russian language is also currently underway.*

**KEY WORDS:** *Russian as a foreign language, multicultural society, linguocultural approach in education, intercultural communication.*

# ПРЕПОДАВАНИЕ РУССКОГО ЯЗЫКА КАК ИНОСТРАННОГО В УСЛОВИЯХ ПОЛИКУЛЬТУРНОГО ОБЩЕСТВА РЕСПУБЛИКИ УЗБЕКИСТАН

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## Аннотация

*Анализируются особенности преподавания русского языка как иностранного, обусловленные национально-культурной спецификой региона. Рассматриваемые вопросы основаны на эмпирических наблюдениях, могут применяться в практической деятельности преподавателей русского языка, способствуют развитию у национальных студентов коммуникативных навыков и компетенций. Методологические наработки могут быть полезны не только в практике преподавания русского языка как иностранного в Узбекистане, а также за границей, где в настоящее время также осуществляется процесс популяризации русского языка.*

**Ключевые слова:** *Русский язык как иностранный, поликультурное общество, лингвокультурологический подход в образовании, межкультурная коммуникация.*

В настоящее время в рамках государственной политики Республики Узбекистан реализуется государственная целевая программа «Развитие обучение иностранных языков», целью которой является развитие всестороннего применения, распространения и продвижения иностранных языков, в том числе и русский язык как фундаментальной основы гражданской самоидентичности, культурного и образовательного единства многонациональной России, эффективного международного диалога. Речь идет в том числе об обеспечении эффективности и доступности системы изучения русского языка как иностранного, совершенствовании условий для продвижения русского языка, образования на русском языке в России. Однако в многонациональном регионе, таком, как Узбекистан, преподавание русского языка у национальных студентов вузов приобретает свои уникальные особенности, которые продиктованы многообразием культурных ценностей, проблемами межнационального общения, что затрудняет формирование у студентов единой лингвистической и социокультурной картины России.

Узбекистан привлекает студентов большим спектром образовательных услуг, где местные и иностранные граждане могут реализовать свой потенциал.

Интерес к русскому языку как иностранному в Узбекистане продиктован также выгодным геополитическим положением, поскольку в соседних для России странах, таких как Казахстан, Туркменистан,Киргизия, Таджикистан в школах и университетах русский язык изучается на базе родного или в качестве иностранного.

Пребывание в любую страну с незнакомыми культурой и языком всегда сопряжено с трудностями адаптивного и психологического характера. Культурный шок для иностранца в Узбекистане связан не только с географической отдаленностью от дома, но и с психологической неготовностью к местной действительности. У иностранца всегда есть определенный набор представлений и стереотипов о стране, в которую он направляется. В случае с Узбекистаном это могут быть как народные ремесла, так и что-то особенное, индивидуальное, но едва ли многоцветье языков, таких не похожих на русский и друг на друга, кодексов чести, обычаев, праздников, нетрадиционных для типичной русской культуры. Таким образом, у студентов возникают биполярные взгляды, растерянность, неоднозначность окружающих их ценностей, поэтому преподаватель должен выстроить курс занятий по русскому языку как иностранному с учетом национально-культурной специфики региона. Нельзя позиционировать ни одну из культур как враждебную, противопоставлять, превозносить значение одной культуры над другой, но зачастую в глазах иностранца именно русская культура выглядит как колыбель всех культур России.

Языковая карта республики богата и многообразна, на ней представлены области, объединенные по признаку фонетического и лексического единообразия. Языковой эталон, к которому стоит стремиться носителю и который является предметом изучения у студентов, это нормированный литературный язык. Он характеризуется правилами, принятыми на конкретном этапе развития языка и затрагивает вопросы произношения, словообразования, словоупотребления, словоизменения, построения минимальной коммуникативной единицы – предложения. Находясь вне образовательного процесса, студенты усваивают не только русский, но и другие иностранные языки, который помимо литературного языка включает в себя и ненормативные явления. Задача преподавателя в данном случае сводится не только к обучению нормированному языку, но и объяснению узуальности понятия. Таким образом, уже на начальном этапе может возникнуть необходимость введения синонимических рядов и разграничения стилистических оттенков.

Накопление лексического запаса не ограничивается рамками учебного процесса, а происходит в немалой мере посредством социально-бытового общения. Проблема состоит в том, что зачастую население региона не соблюдает и не владеет в достаточной степени языковой нормой. Во время коммуникации с местными носителями русского языка узбеки невольно усваивают стилистически окрашенную лексику, слова-паразиты, междометия с национальным колоритом, отклоняющиеся от нормы грамматические и синтаксические конструкции. Решением вопроса может стать игровой метод. Например, можно поиграть в игру «правильное-неправильное» или поменяться ролями студента и преподавателя, что усилит интерес к

изучаемой теме. Эффективными могут стать также дополнительные меры поощрения. Преподавателю стоит акцентировать внимание на наиболее частотных ошибках, подчеркивая, что при овладении нормой студент будет восприниматься как образованный человек, а соответственно коммуникация будет складываться более успешно.

Лексический материал хорошо усваивается при чтении текстов, поскольку, как правило, они объединены по тематическому принципу, сопровождаются предтекстовыми и послетекстовыми заданиями, что помогает закрепить вводимые лексические единицы, использовать их в практике общения, проследить их трансформацию в речи. Подбирая материал для чтения, преподаватель должен ориентироваться на лингвокультурный подход в обучении языку. Так, например, изучая тему «Праздники Россси» можно включать тексты, содержащие региональный компонент, то есть наряду с текстами «Кухни России», «Традиции России », рассматривать материалы о традиционных праздниках народов Узбекистана, таких как Ураза Байрам, Курбан Байрам и т.д. Кроме того, в рамках такого синтеза можно ввести дополнительный лексический минимум, например, по теме «Религия и общество».

Такая стратегия должна прослеживаться при составлении всех типов заданий на разных уровнях освоения русского языка и касаться как чтения, так и письма, и аудирования, и говорения. Имеется в виду упоминание национально-культурных реалий в упражнениях, текстах для прослушивания и, в первую очередь, в речи преподавателя. Сюда же можно отнести употребление в речи типичных для региона имен собственных: названий городов, человеческих имен. Что касается Узбекистана, то здесь очень богатая природа, от степей до гор, от озера до рек, поэтому на наглядном примере преподавателю будет очень удобно обратиться к таким темам как «Окружающая среда», «Времена года», «Природа», подключая соответствующую лексику. Студентами лучше усваивается то, что они видят своими глазами.

В рамках этой методики можно прибегнуть к организации пешеходных экскурсий и видеоэкскурсий. Такая практика широко применяется на подготовительных отделениях для иностранных учащихся и может быть также полезна для студентов высшего профессионального образования. Такой способ стимулирует познавательный интерес обучающихся к стране изучаемого языка, ее культурному наследию и природным богатствам.

На продвинутом этапе изучения языка проведение экскурсий можно выделить в отдельный блок занятий, где студентам будет предлагаться почувствовать себя в роли экскурсовода. В качестве домашнего задания может быть предложена разработка маршрута по достопримечательностям города. В ходе внеаудиторной подготовки студент будет вынужден прибегнуть к поиску необходимого материала, а, соответственно, его словарный запас будет пополняться новой лексикой, грамматическими конструкциями и речевыми клише. Метод мозгового штурма также будет полезен для формирования речевого и произносительного навыков. В контексте преподавания русского языка важны не идеи, предлагаемые участниками, а коммуникативный акт. Студенты активизируют творческий потенциал, расслабляются, поэтому процесс общения происходит непроизвольно. Чтобы тематический спектр был обширнее, преподаватель может модулировать проблему с помощью приёмов инверсии, аналогии, фантазии и эмпатии.

Для того чтобы студент ощущал себя комфортно в поликультурной среде, он должен чувствовать себя частью единого культурного и социального потока. Решением такой проблемы может стать организация праздников и фестивалей, таких так «Праздник Навруз», где студенты представляют национальную кухню своего народа, подготавливают творческие номера в национальных костюмах, например, исполняют народные песни и танцы. Студенты обязательно должны иметь возможность выступать не только в роли зрителя на мероприятиях такого рода, но и непосредственного участника, должны видеть интерес и к их родной культуре, понимать, что никто не настроен враждебно по отношению к ним. В плане языка такие мероприятия полезны тем, что, рассказывая о традициях и обычаях своего народа и своей страны, студенты закрепляют и отрабатывают навыки говорения на иностранном языке. В неформальной обстановке студенты чувствуют себя более раскованно, а поэтому им легко вступать в коммуникацию.

Такие мероприятия открывают для студентов совершенно новую картину понимания языка. Они видят, что в России множество народов, которые говорят на своих национальных языках, но при этом чувствуют себя единым социальным организмом, и помогает им в этом русский язык. К иностранцам приходит осознание, что владение русским языком открывает для них совершенно новые возможности как в плане профессионального развития, так и духовно-нравственного роста. Все это повышает мотивацию к изучению языка.

Таким образом, при обучении русскому языку как иностранному в поликультурном регионе необходимо ориентироваться не только на стандартные подходы в методике преподавания, но и организовать учебный процесс таким образом, чтобы не только научить иностранца пользоваться разнообразными языковыми средствами в различных условиях языковой коммуникации, но и готовить к эффективному установлению и поддержанию необходимых социальных контактов.

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# DESIGN AND IMPLEMENTATION OF AUTO (LIGHT) INTENSITY CONTROLLINGSYSTEM USING IoT AND WITHOUT IoT

# S. Kamilya[1], Y.P Singh[2], Y.V Tyagi[3], Y. Singh[4], Nidhi Sharma[5]

## ABSTRACT

*The decrease in energy utilization has turned into a genuine worry for budding nations in order to acknowledge supportable sustainable development. This paper presents a minimal expense plan of a programmed lighting framework with the point of energy saving and independent activity, utilizing an inserted framework. As per Central Electrical Authority report in 2015, 61% of the power in India is created utilizing normal assets like coal, consequently imperiling the climate. The per capita power age in India during the year 2014-2015 was 1010 kWh. Hence, a programmed streetlamp framework is fostered that detects the encompassing daylight and reacts as needs be. A LDR sensor was utilized to manage the force of LEDs through voltage divider idea. Simultaneously, an IR sensor was executed to switch the LEDs between their base and greatest power. AT89C51microcontroller is utilized to control and arrange the working of this framework.*
**KEYWORDS:** *NodeMCU, LDR, IR sensor, LED, Streetlamps, Arduino.*

## I.INTRODUCTION

Road lighting gives a significant capacity, protecting people on foot and drivers. All urban and rural communities in India have a structure of road lighting framework which relies upon the accessibility of power just as the necessity. To decrease how much power utilized, a few methods have been created. Studies have shown that appropriate road lighting can significantly lessen vehicle fatalities and accidents with people on foot. Lit convergences and roadways are known to have less crashes than their dark partners. Streetlamps are huge purchasers of energy in light of high long periods of-utilization. In the current situation, the streetlamps are to such an extent that as the ambient light falling on a sensor on the streetlamp passes a boundary level, the light naturally turns on or off. The proposed system intends to robotize the streetlamps by utilizing the concept of pulse width modulation (PWM) with Arduino. This strategy has been investigated further in this paper and uses the LDR sensor's light reliant property. Toward the start, streetlights were equipped with a manual control switch that is set in every one of the streetlights. And that is the turning point from where, one more technique that has been utilized for optical control involves high tension sodium light in their framework [2]. These days, it is seen that the technique is broadly utilized in the country. and have various applications not just in transport industries but also in various fields like health care, automation and artificial intelligence, home automation, corporate sector for cost cutting and efficiency.

## LITERATURE SURVEY

HengyuWu, MinliTang, tells basic methodology that has been backbone of the optical monitoring device and that goes to ATMEGA328P single chip ic . It consists of a fuel regulator , an error detection unit, a light detector unit, an infrared detect circuit for vehicle motion detection, an LCD display circuit of showing the basic information, an optical control circuit, an alarm and beep sensor circuit, and so on. This set-up can robotically control the switching of light according to traffic density. It covers the fundamentals of the mistake detection circuit and the corresponding alarm circuit. It additionally has a without problems and freely to be had button to manipulate the circuit to replace on and rancid operations stated above. Main drawback of this system is that they are unable to mention about the working principle of the proposed system. they however also suggested to use error detection circuit while it is damaged, the supply voltage is zero, hence it will create an unavoidable error. This paper is successful in giving theoretic proof and depict only simulation result but failed as a real time set up experiments. The main lime light of this paper is to initiate a method for setting up the framework which may leads to many follow up research activities in cheaper price and also plans to study the availability of this proposal to enhance performance. GongSiliang explained a streetlight control system that is

based on wireless technology. The system is developed to operate in automatic mode, which is able to operate streetlight on the bases Sunrise and Sunset. This control can make a reasonable adjustment according to the geographical variations that include (latitude, longitude, etc.) Also, the proposed setup is capable to run in manual mode. In this mode, we can control streetlights through computer monitor controller. In addition, the system also consists of a digital temperature – humidity sensor. The setup is compiled with the high – power relay output and can be widely applied in all places which need timely control such as streets, stations, schools, and electricity sectors etc. But in this work a wireless technology for street light remote control is discussed. In particular, the novelty of the proposed system relies in the availability and awareness of nodes, which is incapable of self - localizing themselves. For demonstration a prototype has been developed using costly and less effective hardware. The capacity of the measuring the values on the basis for localization, is not accurate and showing some problems in one of the meters. In coming future, geographic awareness routing algorithms will develop that will improve the efficiency of the network and improve the working environment.

## II.METHODOLOGY

Implementation of the auto light intensity controller is the general objective of our research however, we have depicted it with the help of an automatic street light circuit, but this does not limit our range, we are proposing the system that can be implemented everywhere whether it may be home automation or other official places like a corporate office, etc.

Since the customary streetlamp framework isn't energy viable, savvy streetlamp framework has been overwhelmed by supplanting conventional CFL lights with LED. To accomplish energy effectiveness, it is important for a light to shine with power as per brightening required. Thus, these LEDs will be constrained by Light Dependent Resistor. Utilizing LDR, contingent upon the climate conditions the power of light can be controlled. This will assist with the programmed exchanging of light in differing power, hence accomplishing energy effectiveness. A streetlamp isn't just implied for lighting reasons, yet additionally, it very well may be used for different purposes like detecting the fire nearby and reporting it to the control station, adjusting the intensity of the light on the basis of the size of the passing vehicle. Object motion can be divided into three categories based on its speed. The first is the low mode, which is for walkers with a speed range of 0-5 km/h, the second is the medium mode, which is for bicyclists with a speed range of 7-15 km/h, and the third is the high mode, which is for motorized vehicles with a speed ranging above 16 km/h. For various objectives, different light intensities will be used. When the sensor detects a motor vehicle traveling at 30 km/h in situation A, the lighting level rises to 80%, whereas when the sensor detects a slow-moving object in condition B, the illumination level drops to 20%. If no movement is detected, the luminaires operate at a 20 percent brightness level. There are different equipment that we are using for the implementation of the project: i) ESP8266 NodeMCU Wi-Fi Devkit ii) Light-dependent resistor (LDR) iii) IR proximity sensor iv) MQ-7 Gas sensor.
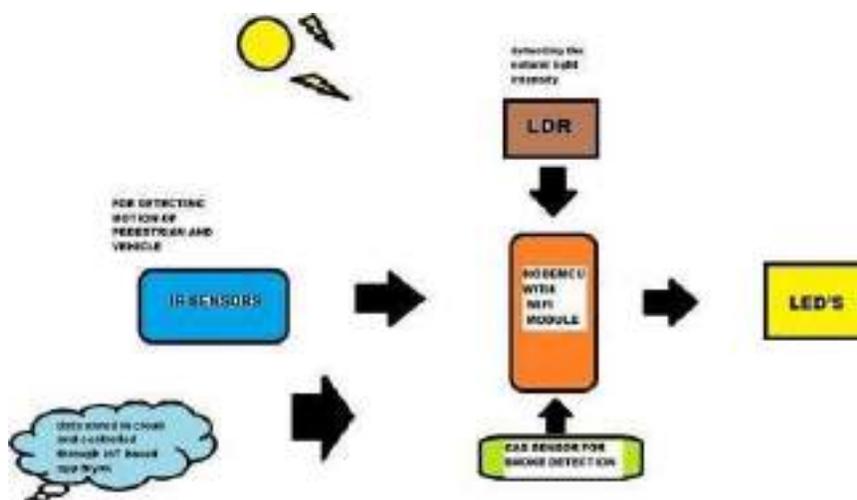


**ESP8266 NodeMCU Wi-Fi Devkit:** The ESP8266 is the name of a miniature regulator planned by Espressif Systems. The ESP8266 is in itself is a self-dependent Wi-Fi establishing arrangement presenting as a death place from

where the current integrated regulator to Wi-Fi and similar gadgets were equipped for running self-dependent operations. This chip compiles a heap covered universal serial bus attachment setup and a very enormous types of output via

pins. Keeping hand in hand with integrated usb attachment, one is capable in connecting NodeMCU devkit to your device



Particular:
- Supply Voltage:3.3V.
- Wi-Fi Direct delicate AP.
- Current consumption: 10uA~170mA.
  Streak memory expandable: 16MB max (512K typical).
- In-built TCP/IP convention system.
- Processing unit: Tensilica L106 32-digit.
- Processor speed: 80~160MHz.
- RAM: 32K + 80K.

The most essential method for utilizing the ESP8266 module is to utilize sequential orders, as the chip is fundamentally a Wi-Fi/Serial handset [4]. In any case, this isn't helpful. What we suggest is utilizing the exceptionally cool Arduino ESP8266 project, which is a changed rendition of the Arduino IDE that you want to introduce on your PC. This makes it very advantageous to utilize the ESP8266 chip as we will utilize the notable Arduino IDE.

**Light Dependent Resistor (LDR):** The light-reliant resistor (LDR) is a sensor whose obstruction diminishes when light encroaches on it. This kind of sensors is normally depend in light sensor circuits in open areas, to control streetlights for instance. Another conceivable use is in the spectroscopic contraption. In this sort of mechanical assembly, consistent

and use it with no inconvenience, similar to Arduino.[4]

light or beat light can be utilized. Consistent light is utilized in like manner spectroscopic mechanical assembly. The utilization of lock-in enhancers utilized beat lightly in spectroscopy more straightforward, with no guarantees ordinarily utilized in photoacoustic spectroscopy. LDR's are made of semiconductors as light delicate materials, on a separating base [7]. The most widely recognized semiconductors utilized in this framework are cadmium sulfide, lead sulfide, germanium, silicon, and gallium arsenide. A less known light sensor is the electret receiver. As the electret layer capacities as a retaining dark body, and as the electret amplifier case has an air chamber that can be utilized as a photoacoustic chamber, the electret amplifier can be utilized as a locator of beat light. This sort of receiver can be utilized to acquire the transmission range of any straightforward material. The point of this correspondence is to concentrate on the reaction of LDR to beat the light and the investigation of the unearthly bends got with an LDR and an electret receiver as light sensors in an optical spectroscopy gadget.

**Structure of LDR:** Structure of the photoresistor is horizontal in shape and is light sensitive given below the figure shows the 3-D representation of the LDR
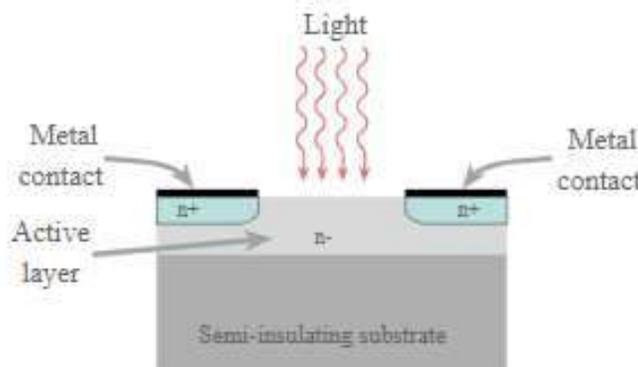
The dynamic semiconductor locale is normally stored over a less protective substrate and the dynamic district is regularly daintily dopped. In numerous discrete light sensitive gadgets, a digitalized design is utilized to develop the region of the photoresistor that is presented to light. The example is built in the metallization on the outer layer of the dynamic region, and this lets the light through. The two metaled regions is used as the two contacts for the resistor. This region must be made moderately spacious since the obstruction of the contact to the dynamic region should be limited.

**IR Proximity Sensor:** The Multipurpose Infrared Sensor is an add-on for your line follower robot and obstruction avoiding robot that enables your robot to identify lines or close by objects. The sensor works by identifying mirrored light coming from its own infrared LED. By estimating the measure of mirrored infrared light, it can identify light or dim (lines) or even articles straightforwardly in front of it. An installed white LED is used to depict the presence of an object or recognize the line. The detecting range is movable with an inbuilt variable resistor. The sensor has a 3-pin header which associates with the microcontroller board or Arduino board by means of female to female or female to male jumper wires. A mounting opening without any problem associated at least one sensor to the front or back of your robot frame. and in this circuit, it is used to detect the presence of the vehicle or the person on the road and based on that whole brightness control management will be controlled. [1]

**Feature**
- 5VDC working voltage.
- I/O pins are 5V and 3.3V consistent.
- Range: Up to 20cm.
- Movable Sensing range.
- Underlying Ambient Light Sensor.
- 20mA stockpile current.
- Mounting opening
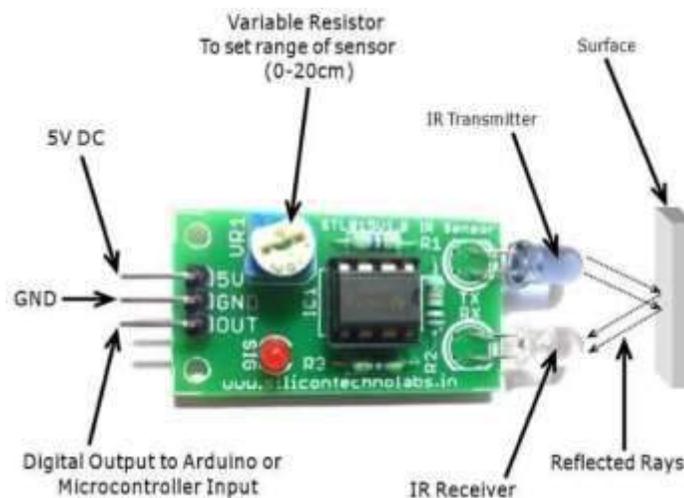


**MQ7 Gas Sensor**
**Features**
- Highly sensitive towards carbon mono oxide.
- It is highly reliable and cost-effective.
- Long life and durability.

The main function of this sensor in our research is to monitor the ambient environment around the street light lamp post and report if there is sudden smoke or fire around the lamp post, as soon as the report is sent to the control room the emergency services and can be called and the situation can be monitored.

**SENSITIVITY ADJUSTMENT**
Resistance capacity of MQ-7 is based on different types and different concerned gases emitting. Along these lines, when utilizing these parts, affectability change is extremely vital. we suggest that you align the indicator for 200ppm CO in air and use the worth of Load resistance that (RL) is around 10 KΩ(5KΩ to 47 Kω). When precisely estimating, the legitimate alert point for the gas finder ought still to be up in the air after considering the temperature and mugginess impact. The affectability changing system:
a. Associate the sensor to the application circuit.
b. Turn on the power, continue to preheat through power for more than 48 hours.
c. Change the heap opposition RL until you get a sign worth that reacts to a certain carbon monoxide fixation toward the endpoint of 90 seconds.

d. Change the one more burden opposition RL until you get a sign worth which reacts to a CO focus toward the endpoint of 60 seconds.

## III.CONCLUSION

This study showed and depicted how to apply the smart LED street-lighting system and an effective yet underdevelopment data management system for smart residence buildings without compromising occupant's comfort. The given lighting system ensures the use of Wi-Fi connectivity to control the operation of lights in a commercial/residential apartment, and it may also be used to manage street lights based on natural available daylight, occupancy, or as per the needs. For diverse uses, the lighting system has several modes. The data on the use of personalized smart LED lights by building inhabitants are collected via a wireless sensor and actuator network (WSAN). The results reveal that when the suggested lighting system is used, the lux values in the entire testbed are within the recommended range of brightness. We intend to improve the proposed system's capabilities in terms of self-surveillance system and making it more reliable on natural renewable resources of power extraction thus making it more effective.

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# A STUDY TO ASSESS THE PRACTICE LEVEL REGARDING NEEDLE STICK INJURY AMONG NURSING STUDENTS IN CHERRAAN'S COLLEGE OF NURSING AT COIMBATORE

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## ABSTRACT

**Statement of the problem**

*A study to assess the practice level regarding needle stick injury among nursing students in cherraan's college of nursing at Coimbatore was undertaken by a group of students in partial fulfillment of the requirement for the degree of Bachelor of Nursing during the year 2022.*

**Objectives of the study**

➢ *To assess the practice level to prevent needle stick injury among nursing students.*
➢ *To identify the association between selected variables such as age, sex, educational qualification, surgical details and knowledge and practice level among nursing students.*

**Research design and method**

*The research approach adopted for the study was qualitative . The conceptual framework adopted for the present study was based on general adoption system . The data was collected from 2nd year B.Sc Nursing students selected by non probability convenience sampling technique to assess the practice level regarding needle stick injury among nursing students.*

**Result**

*Descriptive statistical methods like mean, percentage, standard deviation and inferential statistics liked 't' test and chi-square was used to analyze the collected data.*

• *The percentage distribution of students according to demographic variables, majority of them 25 (83.33%) were in the age of 19-20 years, 16 (53.33%) were in the gender of female, 11 (36.66%) were in the monthly income of >10k, 23 (76.66%) were in family type of nuclear family, 22 (73.33%) were in area of rural, 17 (56.66%) were in father occupational status of self employee, 13 (43.33%) were in mother occupational status of un employee, 22 (73.33%) were in father educational status of 1o &2o Education, 17 (56.66%) were in mother educational status of 1o &2o Education, 20 (66.66%) were in know about needle stick injury of yes, 27 (90%) were in previous needle stick injury of no.*

• *The pre-test mean level of knowledge score was 13.63 with SD of 2.08. After the intervention, the post-test mean level of knowledge score was 13.33 with SD of 2.58. The mean difference between the pre-test and post-test was 0.30. Paired t test was employed and the calculated t value was 1.08 which indicates the significant difference between pre-test and post-test level of knowledge score at 0.05 level. Hence, this finding shows that the practice has a significance effect in increasing the level of practice among practice level regarding Needle stick injury.*

**Conclusion**

• *It was found that the main conclusion of the presents study status that in the pre-test, most of the students had adequate knowledge on needle stick injury. Effectiveness to improving in their knowledge. The study results show that there is significant association between the level of practice with their selected demographic variables. These the variables calculated by chi square test at p<0.05, therefore the investigator was proved the hypothesis is accepted for this study.*

**KEY WORDS:** *Assess, Practice, Students, College, Needle stick injury.*

## INTRODUCTION

Human beings are the greatest creation of God. Each organ in our body has its unique function towards successful maintenance of health. WHO designs health is a state of complete physical, mental and social well being not merely an absence of disease or infinity. If illness occurs each individual wishes to consult doctor. In service cases they will admit in the hospital. The first line of care in the hospitals is given by the nurses.

Nurses are also a human being. They also want to lead the life without illness. All nurses are coming after finishing their student periods. To the people they deliver the care. But they are at the risk of so many health problems.Some of the health

problems varicose vein, hypertension, and infection high risk for communicable diseases, respiratory infection and emotional disturbances. One of the most presenting needle stick injuries. Assessing the knowledge level, give an idea about needle stick injury also makes awareness among the nursing students who are doing their postings in the clinical area.

A needle stick injury is defined as an accidental skin penetrating stab wound from a hollow – bore needle containing another person blood {or} body fluid. Sharp injury is defined as the skin penetrating stab wound caused by sharp instrument and accidents in a medical settings.

The activities associated with the majority of needle stick injuries are administrating injections, withdrawing blood, recapping needles disposing off needles, handling trash and dirty linen and missing the target while attempting to transfer blood are any other body fluid from a syringe to a specimen container

In India, around 3-6 billion injections are given per year of which two third injections are unsafe (62.9%) and the use of glass syringe is constantly associated with a higher degree of unsafeness. The routine use of sharp instruments in dental treatment the presence of blood and saliva and the diverse bacterial flora in the oral cavity all contribute to the hazardous nature of the dental work place for blood borne infections preventing needle stick injury is a challenge faced in virtually every medical work place.

## Statement of the Problem
A study to assess the practice level regarding needle stick injury among nursing students in Cherraan's college of nursing at Coimbatore.

## Objectives
➢ To assess the practice level to prevent needle stick injury among nursing students.
➢ To identify the association between selected variables such as age, sex, educational qualification, surgical details and knowledge and practice level among nursing students.

## Hypotheses
**H1:** There is significant improvement between pre-test and post-test level of knowledge of student nurse regarding needle stick injury and its prevention.

**H2:** There is significant association between the pre-test level of practice regarding needle stick injury with selected demographic variables.

## Operational Definitions
### Practice
In this study, practice refers to the verbal response expressed by the nursing students regarding Needle stick injury which is measured by knowledge questionnaire.

### Needle Stick Injury Management
In this study, Needle stick injury management means the discarded materials which are generated during procedure, diagnosis, treatment, vaccination of human being.

➢ **Assumption**
Adequate knowledge regarding Needle stick injury will enable the nursing students implement in **clinical** and community care setting.

### Projected Outcome
➢ This study useful to reveal the practice level of nursing students regarding Needle stick injury.

## RESEARCH METHODOLOGY
### Research approach
Research Approach is a plan and procedure that consists of the steps of broad assumptions to detailed methods of data collection, analysis, and interpretation.
• The research approach selected for the study was qualitative approach has been adopted. Since the study attempts to assess the level of knowledge regarding needle stick injury among nursing students in cherran's college of nursing.

### Research design
• Research design refers to the framework of market research methods and techniques that are chosen by a researcher.
• A research design is a researchers overall plan for obtaining answer at to the research questions or for testing the research hypothesis.
• The approach selected for this study was qualitative design because it gives information regarding the co relation of knowledge level and prevention in those population.
• A pre – experimental one group pre – test, post – test research design.

### Setting of the study
Research setting is the physical, social, or experimental context within which research is conducted.
• The study was conducted in cherran's college of nursing Coimbatore.

## Population of the study

Study population is a subset of the target population from which the sample is actually selected. It is broader than the concept sample frame. It may be appropriate to say that sample frame is an operationalized form of study population.

- The study of population comprised of students who are studying 2$^{nd}$ years nursing students in cherraan's college of nursing.

## Sample

Sample is a group of people, objects, or items that are taken from a larger population for measurement.

- Sample is a small portion of population which represents the whole population.
- The sample size consisted of 30 nursing students.

## Sample selection

In qualitative research, only a sample (that is, a subset) of a population is selected for any given study. The study's research objectives and the characteristics of the study population (such as size and diversity) determine which and how many people to select.

## Inclusion criteria

- Students with age 19 to 21.
- Students who are willing to participate in the study.
- It includes the students who are going to posting in hospital.

## Exclusion criteria

- Students who are not willing to participate in the study.

## Sample technique

Sampling is a method that allows researchers to infer information about a population based on results from a subset of the population, without having to investigate every individual.

- Non probability convenient sampling technique was used for the study.
- Based on the objectives a questionnaire was prepared to assess the knowledge and practice of needle stick injury.
- The questionnaires are less costly and less time consuming then interviews and offers the possibility of anonymity and ensures that there will be no interviewer bias.
- The tool used for research study was knowledge questionnaire to assess the knowledge and practice of needle stick injury.
- The tool was formulated based on the review of literature and discussion with the expert in the field, after construction of an initial model of questionnaire, it was modified several times by consulting with the experts in the field of medicine and nursing.

## Description of tool

Tools for assessing the practice of needle stick injury.

## Reliability

- Reliability refers to how consistently a method measures something.
- The tool was administered to 30 students. The value was calculated by correlation co-efficient method and the reliability by pear son –product moment method.

## Pilot study

- A pilot study can be defined as 'small study to test research protocols, data collection instruments, sample recruitment strategies, and other research techniques in preparation for a larger study.
- The main aim of pilot study was to find out the feasibility of the study. For this study 10 samples were selected from cherraan's college of nursing. The pilot study revealed that the study was feasible.

## Data collection process

The data was collected from cherraan's college of nursing, Coimbatore. Before collection of data formal permission was obtained from principal of cherraan's college of nursing department. After getting the permission the data was collected from 2$^{nd}$ year of nursing 30 student, Who have the posted to the hospital.

## Variables

- Following variables will be compared in data analysis.
- Knowledge and practice.
- Demographic variables will be compared to estimate the risk group.

## Independents variable

- An independent variable is the variable you manipulate, control, or vary in an experimental study to explore its effects. It's called "independent" because it's not influenced by any other variables in the study. Independent variables are also called: Explanatory variables (they explain an event or outcome).

## Dependent variable

The dependent variable is the variable that is being measured or tested in an experiment. The level of knowledge of nursing students.

## Data analysis plan

- Descriptive statistics (example: demographics) was explained.

Chi-square test was used to find association between knowledge and practice of needle stick injury.

## ANALYSIS AND INTERPRETATIONS

This chapter presents the analysis and interpretation of data collected to assess the practice level regarding Needle stick injury. The data were analysed according to the objectives of the study. They are to assess the practice level regarding needle stick injury.

## Objectives of the study

- To assess the practice level regarding Needle stick injury among nursing students.
- To identify the association between the selected variable such as age, sex, educational qualification, and practice level among the nursing students.

**Section A: Description of demographic variables of students who are studying in Cherraan's college of nursing.**

**Table 4.1 Frequency and percentage description of demographic variables of students who are studying in Cherraan's college of nursing.**

(N=30)

| SL.NO | Demographic Variables | | Frequency | % |
|---|---|---|---|---|
| 1. | Age | 18 Years | 1 | 3.33 |
| | | 19 -20Years | 25 | 83.33 |
| | | >20 Years | 4 | 13.33 |
| 2. | Gender | Male | 14 | 46.66 |
| | | Female | 16 | 53.33 |
| 3. | Monthly Family Income(Rupees) | Less than10000 | 11 | 36.66 |
| | | 10001-15000 | 8 | 26.66 |
| | | 15001-20000 | 6 | 20 |
| | | Above20001 | 5 | 16.66 |
| 4. | Family type | Nuclear Family | 23 | 76.66 |
| | | Joint Family | 6 | 20 |
| | | Extended Family | 1 | 3.33 |
| 5. | Area Of Residency | Urban | 8 | 26.66 |
| | | Rural | 22 | 73.33 |
| 6. | Father Occupation Status | Private Employment | 8 | 26.66 |
| | | Self Employment | 17 | 56.66 |
| | | Government Employment | 1 | 3.33 |
| | | Un Employment | 4 | 13.33 |
| 7. | Mother Occupation Status | Private Employment | 3 | 10 |
| | | Self Employment | 12 | 40 |
| | | Government Employment | 2 | 6.66 |
| | | Un Employment | | |
| 8. | Father Education | Illiterate | 3 | 10 |
| | | $1^0$&$2^0$ Education | 22 | 73.33 |
| | | Under Education | 4 | 13.33 |
| | | Post Education | 1 | 3.33 |
| 9. | Mother educational status | Illiterate | 7 | 23.33 |
| | | $1^0$&$2^0$ Education | 17 | 56.66 |
| | | Under Education | 5 | 16.66 |
| | | Post Education | 1 | 3.33 |
| 10. | Know About Needle Stick Injury | Yes | 20 | 66.66 |
| | | No | 10 | 33.33 |
| 11. | Previous Needle Stick Injury | Yes | 3 | 10 |
| | | No | 27 | 90 |

**SECTION-B : Association between the practice with selected demographic variables**

(N=30)

| S. NO | DEMOGRAPHIC VARIABLES | LEVEL OF PRACTICE | | | | | | TOTAL | CHI-SQUARE | Df | P VALUE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INADEQUATE | | MODERATE | | ADEQUATE | | | | | |
| | | F | % | F | % | F | % | | | | |
| 1. | Age<br>a)18 years<br>b)19-20 years<br>c)>20 years | 0<br>0<br>0 | 0<br>0<br>0 | 0<br>10<br>2 | 0<br>33.33<br>6.66 | 1<br>15<br>2 | 3.33<br>50<br>6.66 | 1<br>25<br>4 | 0.82 | 4 | 9.49<br>NS |
| 2. | Gender<br>a)Male<br>b)Female | 0<br>0 | 0<br>0 | 2<br>10 | 6.66<br>33.33 | 12<br>6 | 40<br>20 | 14<br>16 | 7.22 | 2 | 5.99<br>S |
| 3. | Monthly income<br>a)Less than 10k<br>b)10k-15k<br>c)15k -20k<br>d)Above 20k | 0<br>0<br>0<br>0 | 0<br>0<br>0<br>0 | 6<br>4<br>1<br>1 | 20<br>13.33<br>3.33<br>3.33 | 5<br>4<br>5<br>4 | 16.66<br>13.33<br>16.66<br>13.33 | 11<br>8<br>6<br>5 | 3.46 | 6 | 12.59<br>NS |
| 4. | Family type<br>a)Nuclear family<br>b)Joint family<br>c)Extended family | 0<br>0<br>0 | 0<br>0<br>0 | 11<br>1<br>0 | 36.66<br>3.33<br>0 | 12<br>5<br>1 | 40<br>16.66<br>3.33 | 23<br>6<br>1 | 2.59 | 4 | 9.49<br>NS |
| 5. | Area<br>a)Urban<br>b)Rural | 0<br>0 | 0<br>0 | 3<br>9 | 10<br>30 | 15<br>3 | 50<br>10 | 8<br>22 | 0.025 | 2 | 5.99<br>NS |
| 6. | Father occupation status<br>a)Private employment<br>b)Self employment<br>c)Government employment<br>d)Unemployment | 0<br>0<br>0<br>0 | 0<br>0<br>0<br>0 | 3<br>7<br>0<br>2 | 10<br>23.33<br>0<br>6.66 | 5<br>10<br>1<br>2 | 16.66<br>33.33<br>3.33<br>6.66 | 8<br>17<br>1<br>4 | 0.846 | 6 | 12.59<br>NS |
| 7. | Mother occupation Status<br>a)Private employment<br>b)Self employment<br>c)Government employment<br>d)Unemployment | 0<br>0<br>0 | 0<br>0<br>0 | 2<br>6<br>0 | 6.66<br>20<br>0 | 1<br>6<br>2 | 3.33<br>20<br>6.66 | 3<br>12<br>2 | 4.43 | 6 | 12.56<br>NS |
| 8. | Father education<br>a)Illiterate<br>b)1 / 2 graduate<br>c)Under graduate<br>d)Post graduate | 0<br>0<br>0<br>0 | 0<br>0<br>0<br>0 | 1<br>9<br>2<br>0 | 3.33<br>30<br>6.66<br>0 | 2<br>13<br>2<br>1 | 6.66<br>43.33<br>6.66<br>3.33 | 3<br>22<br>4<br>1 | 0.877 | 6 | 12.59<br>NS |

| 9. | Mother education<br>a)Illiterate<br>b)1 / 2 graduate<br>c)Under graduate<br>d)Post graduate | 0<br>0<br>0<br>0 | 0<br>0<br>0<br>0 | 4<br>7<br>0<br>1 | 13.33<br>23.33<br>0<br>3.33 | 3<br>10<br>5<br>0 | 10<br>33.33<br>16.66<br>0 | 7<br>17<br>5<br>1 | 5.688 | 6 | 12.59<br>NS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10. | Know about<br>needle stick injury<br>a)Yes<br>b)No | 0<br>0 | 0<br>0 | 7<br>5 | 23.33<br>16.66 | 13<br>5 | 43.33<br>16.66 | 20<br>10 | 0.61 | 2 | 5.99<br>NS |
| 11. | Previous needle<br>stick injury<br>a)Yes<br>b)No | 0<br>0 | 0<br>0 | 0<br>12 | 0<br>40 | 3<br>15 | 10<br>50 | 3<br>27 | 8.22 | 2 | 5.99<br>S |

**S*:Significant at p<0.05 level; NS: Non significant; $X^2$: Chi-square value**

The above Table:4.2 The result shows that frequency, percentage and X distribution on level of practice on needle stick injury among nursing students with their demographic variables, it's reveals that there is significant association found between post-test level of practice at gender and previous Needle stick injury (p<0.05) level, there is no association found between the other demographic variables such as age, monthly income, family type, area, mother occupational status, father occupational status, mother educational status, father educational status, knows about needle stick injury.

**Table: 4.2.1 Data on frequency and percentage distribution of pre-test of practice level of needle stick injury among nursing students.**

| S.No | Pre-test of practice regarding needle stick injury | Frequency | Percentage |
|---|---|---|---|
| 1 | Inadequate | 0 | **0** |
| 2 | Moderate | 16 | 53.33 |
| 3 | Adequate | 14 | 46.66 |
| **4** | **Total** | **30** | **99.99** |
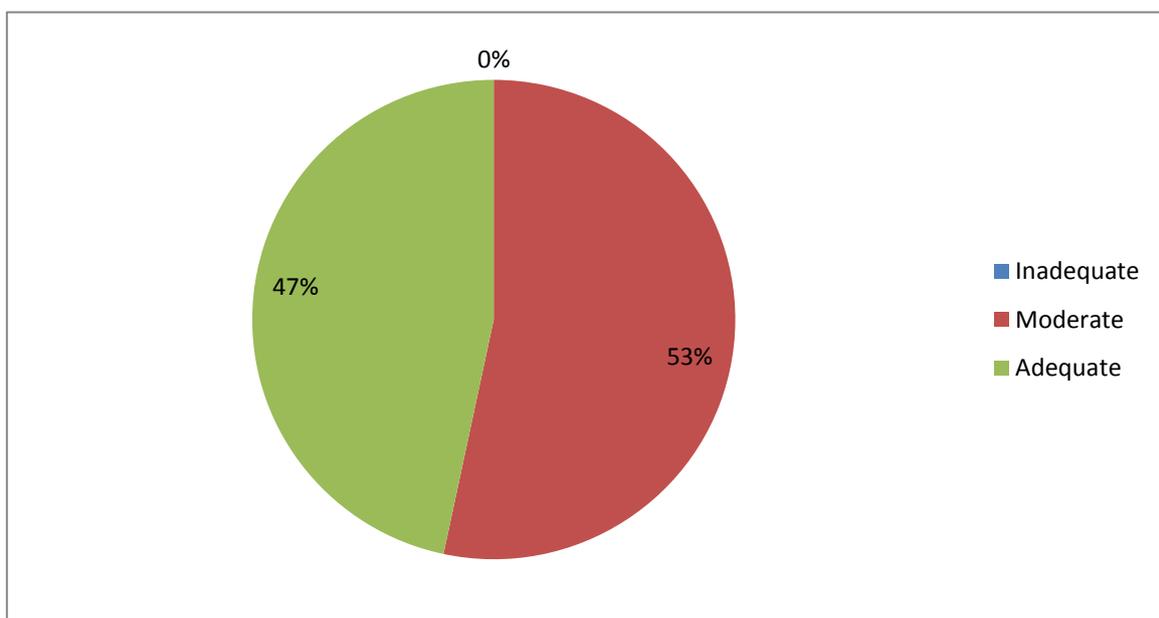


**Data on frequency and percentage distribution of pre-test of practice level regarding needle stick injury among nursing students.**

Table: 4.2.1 shows that during pre-test 16( 53.33%) of students had moderate level and 14(46.66%) of students had adequate level practice regarding needle stick injury.

**Table: 4.2.2 Data on frequency and percentage distribution of post-test of practice level of needle stick injury among nursing students.**

| S.No | Post-test of practice regarding needle stick injury | Frequency | Percentage |
|------|------------------------------------------------------|-----------|------------|
| 1 | Inadequate | 0 | **0** |
| 2 | Moderate | 11 | 36.66 |
| 3 | Adequate | 19 | 63.33 |
| **4** | **Total** | **30** | **99.99** |



**Data on frequency and percentage distribution of post-test of practice level regarding needle stick injury among nursing students.**

Table: 4.2.2 shows that during post-test 11(36.66%) of students had moderate level and 19(63.33%) of students had adequate level practice regarding needle stick injury.

## SECTION – III

**Data on mean, standard deviation and mean percentage of pre-test and post-test of practice level regarding needle stick injury among nursing students.**

**Table: 4.3.1 Data on mean, standard deviation and mean percentage of pre-test and post-test of practice level regarding needle stick injury among nursing students.**

| S.No | Practice regarding needle stick injury | Maximum score | Mean | Standard deviation | Difference in Mean % |
|------|----------------------------------------|---------------|-------|--------------------|----------------------|
| 1 | Pre-test | 30 | 13.63 | 2.08 | 45.43% |
| 2 | Post-test | 30 | 13.33 | 2.58 | 44.43% |
| | Total | 60 | 26.96 | 4.66 | 89.86 % |

The above Figure 4.3 shows that the pre-test mean level of knowledge score was 13.63 with SD of 2.08. After the intervention, the post-test mean level of knowledge score was 13.33 with SD of 2.58. The mean difference between the pre-test and post-test was 0.30. Paired t test was employed and the calculated t value was 1.08 which indicates the significant difference between pre-test and post-test level of knowledge score at 0.05 level. Hence, this finding shows that the practice has a significance effect in increasing the level of practice among practice level regarding Needle stick injury.



**Data on frequency and percentage distribution of post-test of practice level regarding needle stick injury among nursing students.**

Table: 4.2.2 shows that during post-test 11(36.66%) of students had moderate level and 19(63.33%) of students had adequate level practice regarding needle stick injury.

## SECTION – III

**Data on mean, standard deviation and mean percentage of pre-test and post-test of practice level regarding needle stick injury among nursing students.**
**Table: 4.3.1 Data on mean, standard deviation and mean percentage of pre-test and post-test of practice level regarding needle stick injury among nursing students.**

| S.No | Practice regarding needle stick injury | Maximum score | Mean | Standard deviation | Difference in Mean % |
|------|------------------------------------------|---------------|-------|--------------------|----------------------|
| 1 | Pre-test | 30 | 13.63 | 2.08 | 45.43% |
| 2 | Post-test | 30 | 13.33 | 2.58 | 44.43% |
| | Total | 60 | 26.96 | 4.66 | 89.86 % |



Chart Title

The above Figure 4.3 shows that the pre-test mean level of knowledge score was 13.63 with SD of 2.08. After the intervention, the post-test mean level of knowledge score was 13.33 with SD of 2.58. The mean difference between the pre-test and post-test was 0.30. Paired t test was employed and the calculated t value was 1.08 which indicates the significant difference between pre-test and post-test level of knowledge score at 0.05 level. Hence, this finding shows that the practice has a significance effect in increasing the level of practice among practice level regarding Needle stick injury.

## CHAPTER -5

**Discussion, Summary of findings, Conclusion, Nursing implication, Nursing administration, Nursing education, Nursing research and Recommendations**

- This chapter discusses the main finding of the research study and review that are relation to the findings from the results of the present study. For this study the data was obtained regarding practice on needle stick injury among the nursing students at cherraan's college of nursing, Coimbatore. The researchers has undertaken the study entitles assess the practice regarding needle stick injury and it's awareness among nursing students at cherraan's college of nursing, Coimbatore.

**Objectives of the study**
- To assess the practice level regarding Needle stick injury among nursing students.
- To identify the association between the selected variable such as age, sex, educational qualification, and practice level among the nursing students.

  **The first objectives of the study was to assess the practice level regarding needle stick injury among the nursing students.**
- The percentage distribution of students according to demographic variables, majority of them 25 (83.33%) were in the age of 19-20 years, 16 (53.33%) were in the gender of female, 11 (36.66%) were in the monthly income of >10k, 23 (76.66%) were in family type of nuclear family, 22 (73.33%) were in area of rural, 17

(56.66%) were in father ocuupational status of self employee, 13 (43.33%) were in mother occupational status of un employee, 22 (73.33%) were in father educational status of $1^o$&$2^o$ Education, 17 (56.66%) were in mother educational status of $1^o$&$2^o$ Education, 20 (66.66%) were in know about needle stick injury of yes, 27 (90%) were in previous needle stick injury of no.

**The second objectives of the study was to identify the association between the selected variable such as age, sex, educational qualification, and practice level among the nursing students.**

- The result shows that frequency, percentage and X distribution on level of practice on needle stick injury among nursing students with their demographic variables, it's reveals that there is significant association found between post-test level of practice at gender and previous Needle stick injury ($p<0.05$) level, there is no association found between the other demographic variables such as age, monthly income, family type, area, mother occupational status, father occupational status, mother educational status, father educational status, knows about needle stick injury.

## HYPOTHESIS
**H1: There is significant improvement between pre-test and post-test level of knowledge of student nurse regarding needle stick injury and its prevention.**
- From the finding of the present study, it was concluded that the practice on needle stick injury improves the practice of students who participated in the study. Thus the hypothesis was proved statistically.

**H2: There is significant association between the pre-test level of practice regarding needle stick injury with selected demographic variables**
- There was statistical association between of pre test level of practice regarding needle stick injury among students with their selected demographic variables.

**Summary of the finding:**
- The primary aim of the present study was to assess the practice level regarding needle stick injury among nursing students in Cherraan's college of nursing at Coimbatore.

**Objectives of the study:**
- To assess the practice level regarding Needle stick injury among nursing students.
- To identify the association between the selected variable such as age, sex, educational qualification, and practice level among the nursing students.

**Hypothesis of the study:**
- $H_1$: There is significant improvement between pre-test and post-test level of knowledge of student nurse regarding needle stick injury and its prevention.
- $H_2$: There is significant association between the pre-test level of practice regarding needle stick injury with selected demographic variables.

**Methods of the study:**
- Quasi experimental research design was adopted for this study. There are 30 second year B.Sc. nursing students in cherraan's college of nursing at Coimbatore and non probability convenience sampling techniques was used to collect the data. The data was collected with the help of quantitative instrumental questionnaire to assess the level of practice regarding needle stick injury which consists of 20 questionnaire and demographic variables of nursing students.
- For conducting pilot study, the investigator administered quantitative questionnaire to assess the level of practice of nursing students at cherraan's college of nursing in Coimbatore.
- The final study was conducted in the month of February to March 2022.By Non probability convenience sampling techniques the data was collected from 30 nursing students. Pre-test was conducted for the students administering quantitative instrument questionnaire to assess the practice on needle stick injury among nursing students. After the pre-test practice on selected aspects of Needle stick injury was performed to nursing students through verbal explanation and explaining with flash cards on prevention of needle stick injury for the period of 30 minutes. Evaluation of practice was conducted by post-test, after one day of implementation of practice a post-test was conducted from the same people by using the same quantitative questionnaire.

**Significant of findings are as follows**
- The percentage distribution of students according to demographic variables, majority of them 25 (83.33%) were in the age of 19-20 years, 16 (53.33%) were in the gender of female, 11 (36.66%) were in the monthly income of >10k, 23 (76.66%) were in family type of nuclear family, 22 (73.33%) were in area of rural, 17 (56.66%) were in father ocuupational status of self employee, 13 (43.33%) were in mother occupational status of un employee, 22 (73.33%) were in father educational status of $1^o$&$2^o$ Education, 17 (56.66%) were in mother educational status of $1^o$&$2^o$ Education, 20 (66.66%) were in know about needle stick injury of yes, 27 (90%) were in previous needle stick injury of no.
- The pre-test mean level of knowledge score was 13.63 with SD of 2.08. After the intervention, the post-test mean level of knowledge score was 13.33 with SD of 2.58. The mean difference between the pre-test and post-

test was 0.30. Paired t test was employed and the calculated t value was 1.08 which indicates the significant difference between pre-test and post-test level of knowledge score at 0.05 level. Hence, this finding shows that the practice has a significance effect in increasing the level of practice among practice level regarding Needle stick injury

- The result shows that frequency, percentage and X distribution on level of practice on needle stick injury among nursing students with their demographic variables, it's reveals that there is significant association found between post-test level of practice at gender and previous Needle stick injury (p<0.05) level, there is no association found between the other demographic variables such as age, monthly income, family type, area, mother occupational status, father occupational status, mother educational status, father educational status, knows about needle stick injury.

### Nursing implication
- The present study was one of the initial efforts to assess the level of practice regarding Needle stick injury among 2nd, year B. Se nursing students. So the student nurses can able to gain knowledge regarding Needle stick injury and implement Needle stick injury among their clinical posting Some of the implications derived from the present study in various areas of nursing are as follows:

### Nursing education
- Nursing educator should encourage the nursing student to improve knowledge about Needle stick injury.
- Nurse educator develop skill, knowledge about Needle stick injury in nursing practice, helps the students become aware of the variety of ways in which they can promote coping with Needle stick injury.
- The study helps nursing educator to understand practice regarding Needle stick injury
- The collected material helps to update the knowledge on evidence based practice.
- Student has to update their knowledge regarding Needle stick injury which is an essential prevention during clinical posting.
- The faculty member has to motivate the student to learn about the Needle stick injury.

### Nursing research
- The finding of this research motivate the researcher to conduct research in various setting.
- Research can be conducted to find the effectiveness of counselling in terms of better improvement in level of knowledge regarding Needle stick injury.
- The study may help to the research scholars to investigate further research in Needle stick injury.
- The study finding may support for conducting further study in Needle stick injury.
- The findings of the study would help to expand scientific body of Professional knowledge an Needle stick injury.

### Nursing administration
- Nurse administrators should motivate the subordinates to participate in various programmes and improving their knowledge and practice, with regard to needle stick injury.
- Nurse educators can organize seminars on needle stick injury.
- Nursing officers can motivate the nurse to organize health camps programme to urban and rural people at least twice in a month, to motivate the students on needle stick injury.
- Nurse educators can create awareness among nursing students regarding needle stick injury.
- Nursing supervisors can encourage the nurse to conduct the health awareness programme and regular health visits to the urban and rural students to insist to needle stick injury.

### Recommendation
Based on the research findings the recommendations are as follows.
- Similar study can be conducted for a large sample and different setting.
- Studies may be conducted to evaluate the effectiveness practice.
- A similar study may be conducted on a large students for wider generalization.
- Similar study can be conducted by using experimental and control group.
- A study can be conducted among group of people.
- Educational programme on needle stick injury can be conducted for the students.

### Conclusion
- It was found that the main conclusion of the presents study status that in the pre-test, most of the students had adequate knowledge on needle stick injury. Effectiveness to improving in their knowledge. The study results show that there is significant association between the level of practice with their selected demographic variables. These the variables calculated by chi square test at p<0.05, therefore the investigator was proved the hypothesis is accepted for this study.

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# A DESCRIPTIVE STUDY TO ASSESS THE SELFIE ADDICTION AMONG THE COLLEGE STUDENTS IN SELECTED NURSING COLLEGE AT COIMBATORE

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## ABSTRACT

**STATEMENT OF THE PROBLEM**
A descriptive study to assess the selfie addiction among the college students in selected nursing college at Coimbatore.

**Objectives**
- To assess the level of selfie addiction among nursing college students .
- To evaluate the different domains of selfie addiction among the nursing college students.
- To find out the association between selfie addiction with their selected demographical variables.

**Methods**
The study was conducted through quantitative research approach .The design of the study used in the research was non - experimental descriptive research design .The duration of the study was one week ,simple random stratified technique was used and sample size was 45 students. The study population was First year B.Sc (N) , Second year B.Sc(N) , Third year B.Sc(N) nursing students , who are studying in cherraan's college of nursing at Coimbatore . Test was conducted with standardized questionnaires for the samples .

**Result**
The findings shows that maximum 30(66.7%) of students had above acute level of selfie addiction , 14(31.3%) of them had chronic level of selfie addiction and 1(2.22%)had borderline level of selfie addiction .

**Conclusion**
Thus the study concluded that , the college students are not exposed towards selfie addiction .
**KEY WORDS:** Assess,Selfie addiction,College, Student

## INTRODUCTION

**Selfie** is defined as a self-portrait photograph that a Person has taken of oneself, typically with a smartphone or webcam and then shared via social media.

**- Oxford English Dictionary**

**Addiction** is a strong inclination to do , use , or indulge in something repeatedly .

**- Amanda Ripley**

**Selfie addiction** is when a person is almost obsessively taking selfies, multiple times a day,and posting that to whatever it might be - snapchat .

**-Dr.Ramani Durvasula**

A selfie is self portrait photograph typically taken with a digital camera or camera phone held in the hand or supported by a selfie stick .selfies are often shared on social networking services such as Facebook, Instagram ,and twitter.initially, popular

with young people, selfies gained wider popularity overtime.ln recent years, selfie-taking has become an incredibly popular activity often going viral online when sharing selfies via social media domains.

Certain studies have reported selfie taking being linked to psychopathologies such as grandiosity,narcissism, and body dysmorphic disorder.There are various studied at international and national level that stated selfitis selfie craze and addiction or selfie addition is obsessive compulsive disorder or new mental disorder of modern era. Defined as an " obsessive taking of selfies, when international media said that it has been classed as a mental disorder by the American psychiatric association.

## Statement of the study
A descriptive study to assess the selfie addiction among the college students in selected nursing college at Coimbatore.

## Objectives
- To assess the level of selfie addiction among nursing college students .
- To evaluate the different domains of selfie addiction among the nursing college students.
- To find out the association between selfie addiction with their selected demographical variables.

## Delimitation
Students belongs to 1st, 2nd, 3rd year B.SC[N] , who have mobile phone(or)smart phone.
The participants who are studying  B.SC(N);.
Students can able to understand read and write English .
Students are willing to participate in the study .
The study was limited to 45 student only .

## RESEARCH METHODOLOGY
This chapter deals with research design , research approach , the setting of the population , sample size , criteria for sample selection and sampling technique , description of the tool and method of scoring reliability , data collection process , pilot study and data analysis .

## RESEARCH APPROACH
Research approach used for this study was quantitative approach .

## RESEARCH DESIGN
Research design is the master plan specifying the methods and procedure for collecting and analyzing the needed information in a research study .
The research design for this study is non-experiment descriptive research design .

## Setting of the study
The setting is the physical location and condition in which data collection take place .
The study was carried out Cherraan's college of nursing situated in Telungupalayam pirivu , Coimbatore . this college at B.SC [N] and M.SC[N], it is headed by a principal .

## 3.4 Population
The population for the present study was 45 B.Sc Nursing students.

## a)  Target population
The target population for the study comprised of B.Sc Nursing students studying in cherraan's college of nursing at Coimbatore.

## SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY

RESEARCH APPROACH : Quantitative approach

↓

RESEARCH DESIGN ; Non experimental descriptive research design

↓

SETTING OF THE STUDY ; Cherraan's College of Nursing at Coimbatore

↓

TARGET & ACCESSIBLE POPULATION ;1st year B.Sc(N),2nd year B.Sc(N) ,3rd year B.SC(N) in Cherraan's College of Nursing at Coimbatore

↓

ACCESSIBLE POPULATION ;1st year B.Sc(N),2nd year B.Sc(N),3rd year B.SC [N] in Cherraan's College of Nursing at Coimbatore

↓

SAMPLING TECHNIQUE ; Simple random study

↓

DESCRIPTION OF THE INSTRUMENT ;Griffiths to assess the level of Selfie Addiction Scale

↓

SAMPLE SIZE ; 45 Students

↓

DATA ANALYSIS ; descriptive and inferential statics

↓

Findings and conclusion

**b) Accessible population**

The accessible population of the study comprised B.Sc Nursing students studying in Cherraan's college of nursing at Coimbatore and who were in access at time of data collection.

**Sample**

Sample is the sub set of the population of interest or representative set of population .
The sample for study is all the 1st , 2nd & 3rd year B.SC[N] in Cherraan's College of Nursing , at Coimbatore .

**Sample size**

The sample sizes comprised of 45 students studying from 1st , 2nd & 3rd B.Sc(N)in Cherraan's College of Nursing , at Coimbatore .

**Sample technique**

Simple random technique was used in this study .

**Criteria for sample selection**

The sample were selected based on the following criteria .

**1.Inclusion criteria**

Students belongs to 1st, 2nd, 3rd year B.SC[N] , who have mobile phone(or)smart phone.
The participants who are studying  B.SC(N);.
Students can able to understand read and write in an  English .
Students are willing to participate in the study .
The study was limited to 45 student only .

**2.Exclusion criteria**

Students who are not willing for participate
Students who are not available at the time of data collection .
Students are suffering from any illness .
Students are all having violent behaviour and also non co-operative person .

**Research tools and technique**

Tools were developed by the investigator based on his experience and expert opinion . The tools used for the study is ;
Demographic variables
Griffith's Selfie addiction scale

**Descriptive of the tool**

The schedule consist of two parts ; section - A and section - B

**SECTION -A:(Demographic variable )**

It consist of demographic variables selfie addiction students such as age in year, gender, monthly family income, academic year, type of family, area of residence, father's education status , mother's education status, father's occupational status , mother's occupational status, do you like taking selfies, which place of taking selfies, number of selfies taken per day, consequence of taking selfies, other addictive behaviour, do you think taking selfies is good.

**SECTION - B Standardized questionnaires Griffith 's selfie addiction scale**

It is the standardized tool used to find the level of selfie addiction behaviour . The self administered scale consist of 20 items of various aspects such as a environment enhancement , social competition , attention seeking , mood modification , self confidence and subjective conformity .

**SCORING PROCEDURE**

That are aggregated to provide the scores ranging from 20 to 100 ;

| | | |
|---|---|---|
| Borderline | - | 0 to 33 |
| Acute | - | 34 to 67 |
| Chronic | - | 68 to 100 |

## TEST OF VALIDITY AND RELIABILITY
### Validity of the tool and content
"validity is the degree of which an instrument measure , what is supposed to measure".

**Polit and beck .,(2008)**

Content validity of the standardized tool was established by sending the standardized questionnaire and content of selfie addiction scale to experts from the various fields such as nursing personnel - 3 . Their opinion and suggestion was taken to modify the tool .

### Reliability :
"Reliability is the consistency with which an instrument measure the target attributes".

**Polit and beck,( 2008)**

Reliability of the tool was tested by implementing the tool on five college students other than sample . It was done in Cherraan's college of nursing at Coimbatore . the reliability was established by questionnaires method . The 'r' value is 0.85 .

### Pilot study
A pilot study is a small scale version done in preparation for the main study.

**Polit and Hungler (2004)**

The pilot study was conducted from10/3/2022 six college students from Cherraan's College of Nursing at Coimbatore . Griffith selfie addiction scale used to assess the selfie addiction of nursing students and analyzed by using descriptive and inferential statistics, it was found to be effective .

### Data collection procedure
### A.Ethical consideration
Written permission was obtained from the principal of Cherraan's College of Nursing at Coimbatore .
Informed consent was obtained from the $1^{st}$ , $2^{nd}$ & $3^{rd}$ year college students in Cherraan's College of Nursing at Coimbatore.
### B.Period of data collection
The data collection was conducted from 10.3.2022 to 15.3.2022. During this period the investigator used to standardized questionnaire used to collected data from the 45 sample by simple random sampling technique.
### C. Stages of data collection
After explaining about the study the formal permission was obtained from the principal of Cherraan's College of Nursing at Coimbatore , considering the all ethical principles.45 students those meeting the inclusion criteria and were attending selected colleges were selected using simple random sampling techniques.Purpose of the study was explained to the samples, the confidentiality of their response was assured and their written consent was taken prior to the study .The standard questionnaire (Griffith's) was administered to the college students to assess the selfie addiction .

### SUMMARY
Standard questionnaire was carried to assess selfie addiction among college students in Cherraan's College of Nursing at Coimbatore . Griffith's selfie addiction scale was validated informational book let titled " prevention of selfie addiction "was distributed to the students after administration of the questionnaire . Analysis was planned to be done using descriptive statistics and inferential statistics .

## ANALYSIS AND INTERPRETATION
This chapter deals with the analysis and interpretation of the collected data from 45 students were Cherraan's College of Nursing at Coimbatore . The present study was designed "A descriptive study to assess the selfie addiction among college students in Cherraan's College of Nursing at Coimbatore . Analysis is a method of formulating data in such a way that they research question can be answered . Analyzed and interpreted data are based on the objectives of the study . Data presented under following headings .

### Organization of data
### Section I :
Data on demographic variables of college students .
### Section II :
a.Data on level of selfie addiction among college students .

b. Data on area wise distribution of mean ,standard deviation , mean percentage of selfie addiction of various domains among the college students .

**SECTION III :**
Data on association between the level of selfie addiction among the college students with their selected demographic variables .

### Section -II
**A)Data on level of selfie addiction among college students**
**Table :17  Frequency and percentage distribution of level of selfie addiction among the college students**

N=45

| S.NO | Level of selfie addiction | Frequency | Percentage% |
|------|---------------------------|-----------|-------------|
| 1 | Borderline | 1 | 2.22% |
| 2 | Acute | 30 | 66.7% |
| 3 | Chronic | 14 | 31.1% |
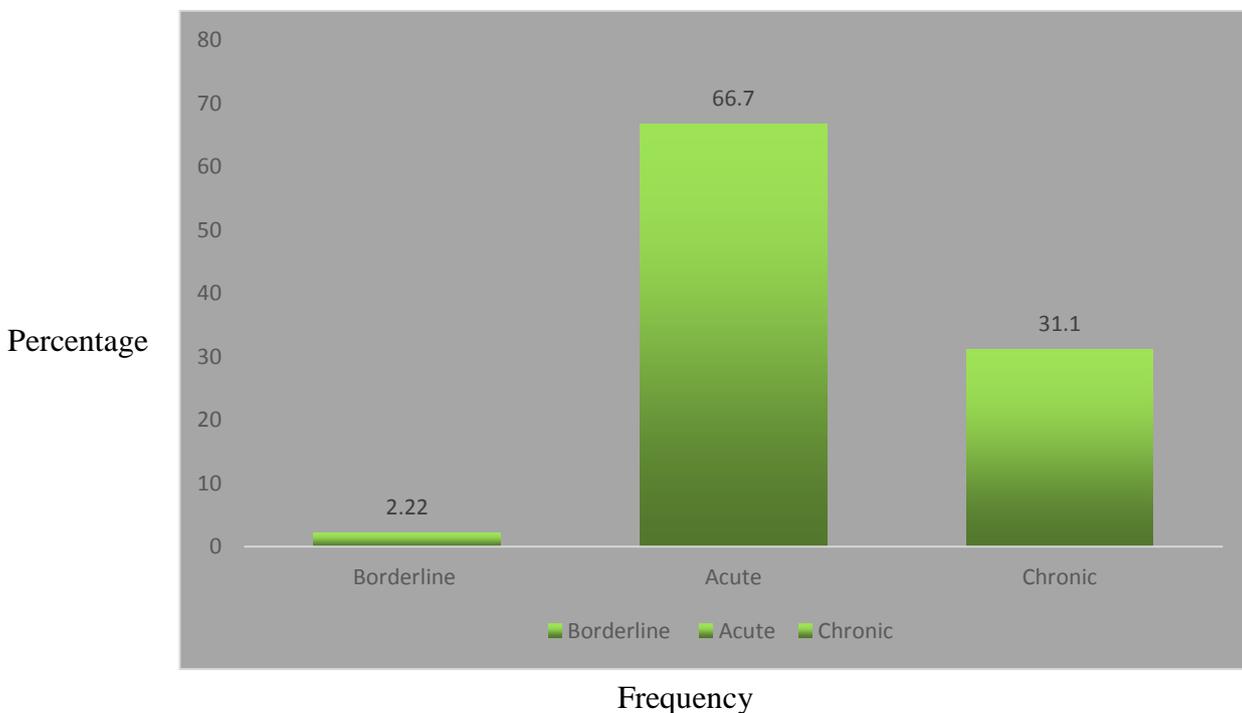


**Figure 19: Frequency and percentage distribution of level of selfie addiction among the college students .**

The above table - Maximum 30(66.7%) of students had above acute level of selfie addiction , 14(31.3%) of them had chronic level of selfie addiction and 1(2.22%)had borderline level of selfie addiction .

**B. Data on area wise distribution of mean ,standard deviation , mean percentage of selfie addiction of various domains among the college students .**

**Table : 18 Data on area wise distribution of mean , standard deviation , mean percentage of selfie addiction various domains among the college students .**

N=45

| S.NO | SELFIE ADDICTION | MAX SCORE | MEAN | SD | MEAN% |
|------|------------------|-----------|------|-----|-------|
| 1 | Environmental enhancement | 20 | 15.28 | 2.988 | 33.95% |
| 2. | Social competition | 20 | 11.2 | 3.832 | 24.88% |
| 3. | Attention seeking | 15 | 7.4 | 2.954 | 16.4% |
| 4. | Mood modification | 15 | 9.42 | 2.585 | 20.93% |
| 5. | Self confidence | 15 | 9.57 | 3.232 | 21.26% |
| 6. | Subjective conformity | 15 | 7.44 | 2.840 | 16.53% |
| | overall | 100 | 60.31 | 18.431 | 133.95% |

Area wise distribution of mean , standard deviation , and mean percentage of level of selfie addiction shows that the highest mean score (15.28+2.988),which is mean percentage 33.95 of the total score was obtained in the area of environmental enhancement , the mean score(11.2+3.832), which is mean percentage 24.88%of the total score was obtained in the area of social competition , the mean score ( 9.57+3.232), which is mean percentage 21.26% of the total score was obtained in the area of self confidence , the mean score (9.42+2.585), which is mean percentage 20.93% of the total score was obtained in the area of mood modification, the mean score (7.44+2.840), which is mean percentage 16.53% of the total score was obtained in the area of subjective conformity, where us lowest mean score (7.4+2.954), which is mean percentage 16.4% of the total score was obtained in the area of attention seeking .

From the overall mean was (60.31+18.431)which is mean percentage 133.95% of the total score reveals that the selfie addiction students under the study had moderate level of selfie addiction

## SECTION III

**Data on association between the level of selfie addiction among the college students with their selected demographic variables**

**Table : 19 Frequency, percentage and chi square distribution on level of selfie addiction among the college students with their selected demographic variables .**

N=45

| S.No | Demographic variables | Level of selfie addiction | | | | | | Total | Chi-square | df | P value |
|------|----------------------|--------|-----|-------|-----|--------|-----|-------|-----------|-----|---------|
| | | Borderline | | Acute | | Chronic | | | | | |
| | | F | % | F | % | F | % | | | | |
| 1. | Age | | | | | | | | | | |
| | a)16-17 years | 0 | 0 | 2 | 6.7 | 1 | 7.1 | 3 | | | |
| | b)18-19 years | 1 | 100 | 16 | 53.3 | 9 | 64.3 | 26 | 1.307 | 6 | 12.59 |
| | C)20-21 years | 0 | 0 | 12 | 40 | 4 | 28.6 | 16 | | | NS# |
| | d)22-23 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 2. | Gender | | | | | | | | | | |
| | a) Male | 0 | 0 | 13 | 43.3 | 7 | 50 | 20 | 7.26 | 2 | 5.991 |
| | b) Female | 1 | 100 | 17 | 56.7 | 7 | 50 | 25 | | | S* |
| 3. | Monthly family income | | | | | | | | | | |
| | a) Rs.5,000-10,000 | 0 | 0 | 6 | 20 | 2 | 14.3 | 8 | | | |
| | b) Rs.10,001-15,000 | 0 | 0 | 9 | 30 | 3 | 21.4 | 12 | 3.67 | 6 | 12.592 |
| | c) Rs.15,001-20,000 | 1 | 100 | 7 | 23.3 | 4 | 28.6 | 12 | | | NS# |
| | d) Above Rs.20,001 | 0 | 0 | 8 | 26.6 | 5 | 35.7 | 13 | | | |

| No. | Variable | | | | | | | | χ² | df | Table value |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4. | Academic year | | | | | | | | | | |
| | a) 1st year | 1 | 100 | 11 | 36.7 | 3 | 21.4 | 15 | 4.7 | 6 | 12.592 |
| | b) 2nd year | 0 | 0 | 8 | 26.7 | 7 | 50 | 15 | | | |
| | c) 3rd year | 0 | 0 | 11 | 36.7 | 4 | 28.6 | 15 | | | **S*** |
| | d) 4th year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 5. | Type of family | | | | | | | | | | |
| | a) Joint family | 0 | 0 | 11 | 36.7 | 2 | 14.3 | 13 | 2.72 | 4 | 9.488 |
| | b) Nuclear family | 1 | 100 | 19 | 63.3 | 12 | 85.7 | 32 | | | **NS#** |
| | c) Extended family | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 6. | Area of residence | | | | | | | | | | |
| | a) Urban | 0 | 0 | 13 | 43.3 | 7 | 50 | 20 | 0.995 | 2 | 5.991 |
| | b) Rural | 1 | 100 | 17 | 56.7 | 7 | 50 | 25 | | | **NS#** |
| 7. | Father's educational status | | | | | | | | | | |
| | a) Illiterate | 1 | 100 | 6 | 20 | 3 | 21.4 | 10 | 6.448 | 6 | 12.592 |
| | b) Primary and secondary education | 0 | 0 | 15 | 50 | 7 | 50 | 22 | | | |
| | c) Under graduate | 0 | 0 | 8 | 26.7 | 2 | 14.3 | 14.3 | | | **S*** |
| | d) Post graduate | 0 | 0 | 1 | 3.3 | 2 | 14.3 | 14.3 | | | |
| 8. | Mother's education status | | | | | | | | | | |
| | a) Illiterate | 1 | 100 | 6 | 20 | 2 | 14.3 | 9 | 4.32 | 6 | 12.592 |
| | b) Primary and secondary education | 0 | 0 | 19 | 63.3 | 10 | 71.4 | 29 | | | **S*** |
| | c) Under graduate | 0 | 0 | 5 | 16.7 | 2 | 14.3 | 7 | | | |
| | d) Post graduate | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| 9. | Father's occupational status | | | | | | | | | | |
| | a) Private employment | 0 | 0 | 8 | 26.7 | 2 | 14.3 | 10 | 3.02 | 6 | 12.592 |
| | b) Government employment | 0 | 0 | 5 | 16.7 | 1 | 7.1 | 6 | | | **NS#** |
| | c) Self employment | 1 | 100 | 15 | 50 | 9 | 64.3 | 25 | | | |
| | d) Unemployee | 0 | 0 | 2 | 6.6 | 2 | 14.3 | 4 | | | |
| 10. | Mother's occupational status | | | | | | | | | | |
| | a) Private employment | 0 | 0 | 1 | 3.3 | 1 | 7.1 | 2 | 1.59 | 6 | 12.592 |
| | b) Government employment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | **NS#** |
| | c) Self employment | 0 | 0 | 5 | 16.7 | 4 | 28.6 | 9 | | | |
| | d) Unemployee | 1 | 100 | 24 | 80 | 9 | 64.3 | 34 | | | |
| 11. | Do you like taking selfies? | | | | | | | | | | |
| | a) Yes | 0 | 0 | 25 | 83.3 | 12 | 85.7 | 37 | 5.004 | 2 | 5.991 |
| | b) No | 1 | 100 | 5 | 16.7 | 2 | 14.3 | 8 | | | **S*** |
| 12. | Which place of taking selfies? | | | | | | | | | | |
| | a) Public | 0 | 0 | 13 | 43.3 | 7 | 50 | 20 | | | |
| | b) Home | 0 | 0 | 10 | 33.3 | 4 | 28.6 | 14 | 3.396 | 4 | 9.488 |
| | c) College | 1 | 100 | 7 | 23.3 | 3 | 21.4 | 11 | | | **NS#** |
| 13. | No.of selfies taken | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | /day | 1 | 100 | 25 | 83.3 | 8 | 57.1 | 34 | | 9.488 |
| | a) less than 10 | 0 | 0 | 1 | 3.3 | 0 | 0 | 1 | 5.413 | 4 |
| | b) 11-20 | 0 | 0 | 4 | 13.3 | 6 | 42.9 | 10 | | **S\*** |
| | c) More than 20 | | | | | | | | | |
| 14. | Consequence of taking selfies | | | | | | | | | |
| | a) Addiction | 0 | 0 | 5 | 16.7 | 3 | 21.4 | 8 | | 12.592 |
| | b) Loss of attention | 0 | 0 | 5 | 16.7 | 1 | 7.1 | 6 | 3.23 | 6 |
| | c) Disturbance in mood | 0 | 0 | 6 | 20 | 5 | 35.7 | 11 | | **NS#** |
| | d) Wasting time | 1 | 100 | 14 | 46.7 | 5 | 35.7 | 20 | | |
| 15. | Other addictive behaviour | | | | | | | | | |
| | a) Internet surfing | 0 | 0 | 4 | 13.3 | 1 | 7.1 | 5 | | 12.592 |
| | b) Facebook | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.57 | 6 |
| | c) Television | 0 | 0 | 2 | 6.7 | 1 | 7.1 | 3 | | **NS#** |
| | d) Mobile | 1 | 100 | 24 | 80 | 12 | 85.7 | 37 | | |
| 16. | Do you think taking selfies is good ? | | | | | | | | | |
| | a) Yes | 0 | 0 | 19 | 63.3 | 8 | 57.1 | 27 | 1.66 | 2 |
| | b) No | 1 | 100 | 11 | 36.7 | 6 | 42.9 | 18 | | 5.991 **NS#** |

**Significant \* - Not significant #**

Table - 19 shows the frequency , percentage and chi square distribution on level of selfie addiction students with their selected demographic variables and it revealed that there is a significant association found the level of selfie addiction and gender, academic year , father's educational status , mother's educational status , do you like taking selfies , no. of selfies taken per day and no significant association found between the level of selfie addiction and age , monthly family income , type of family , area of residence , father's occupational status , mother's occupational status , which place of taking selfies , consequence of taking selfies , other addictive behaviour , do you think taking selfies is good.

## DISCUSSION

The aim of the study was to assess the selfie addiction among the college students. The research design used for the study was descriptive design.The subjects were assessed by using GRIFFITH selfie addiction scale to assess the selfie addiction .
1. To assess the level of selfie addiction among nursing college students .
2. To evaluate the different domains of selfie addiction among the nursing college students.
3. To find out the association between selfie addiction with their selected demographical variables.

**1. The first objective is to assess the level of selfie addiction among nursing college students .**
Analysis on the level of selfie addiction in college students(Table-19) highlight the maximum 30(66.7%) of students had above acute level of selfie addiction , 14(31.3%) of them had chronic level of selfie addiction and 1(2.22%)had borderline level of selfie addiction .

**2. The second objectives is to evaluate the different domains of selfie addiction among the nursing college students.**
Area wise distribution of mean , standard deviation , and mean percentage of level of selfie addiction shows that the highest mean score (15.28+2.988),which is mean percentage 33.95 of the total score was obtained in the area of environmental enhancement , the mean score(11.2+3.832), which is mean percentage 24.88%of the total score was obtained in the area of social competition , the mean score ( 9.57+3.232), which is mean percentage 21.26% of the total score was obtained in the area of self confidence , the mean score (9.42+2.585), which is mean percentage 20.93% of the total score was obtained in the area of mood modification, the mean score (7.44+2.840), which is mean percentage 16.53% of the total score was obtained in the area of subjective conformity, where us lowest mean score (7.4+2.954), which is mean percentage 16.4% of the total score was obtained in the area of attention seeking .

From the overall mean was (60.31+18.431)which is mean percentage 133.95% of the total score reveals that the selfie addiction students under the study had moderate level of selfie addiction .

**3.To find out the association between selfie addiction with their selected demographical variables.**
The result shows that age at $(X^2=1.307)$, Gender at $(X^2=7.26)$, Monthly family income at $(X^2=3.67)$, Academic Year at $(X^2=4.7)$, Type of family at $(X^2=2.72)$, Area of residence at $(X^2=0.995)$, Father's education status at $(X^2=6.448)$, Mother education status $(X^2=4.32)$, Father occupational status at $(X^2=3.02)$, Mother occupational status at $(X^2=1.59)$, Do you like taking selfies ? at $(X^2=5.004)$, Which place of taking selfies? at $(X^2=3.396)$, No. of selfies taken per day at $(X^2=5.413)$, Consequence of

taking selfies at ($X^2$=3.23), Other addictive behaviour at ($X^2$=0.57), Do you think taking selfies is good at ($X^2$=1.66), was significant.

## SUMMARY , IMPLICATION , RECOMMENDATION AND CONCLUSION.

**Nursing implication :**

The present study was one of the initial effort to assess the selfie addiction of college students .

The nurses are teaching to the college students .

**Nursing education :**

Nursing education needs to include selfies affect the various domains of college students like emotional , mind/body,relational,social,environmental and tolerability etc in the curriculum of basic nursing education as a part of psychiatric. Nursing educator should encourage the nursing students to Improve knowledge about selfie addiction.

**Nursing research:**

The finding of this research motivate the researcher to conduct research in various setting .

Research can be conducted to find the effectiveness of counselling in terms of better improvement in level of selfie addiction .

**Nursing practice:**

It helps the nurses to understand the importance of selfie addiction .

**Nursing administrator:**

The study helps the nurse administrator to encourage the nurse to teach about the plan for treating selfie addiction .

The nurse administrative services should be extended from the institution based service to the community service .

The study helps the nurse administrator to explore their potential innovative ideas in implementation of appropriate method .

**Recommendation :**

The present study recommends the following :

A similar study can be conducted in different settings with large peoples .

A descriptive study can be conducted the level of selfie addiction among the college students .

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# A STUDY ON SUSTAINABILITY DEVELOPMENT GOAL INDICATORS FOLLOWED BY NIFTY-FIFTY LISTED COMPANIES IN NSE

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## ABSTRACT

*The purpose of this study is to determine the relationship between the SDGs and companies. The Objective of this study to find the relationship between the SDGs and Companies, Sustainability Reporting and Verification of Adherence to GRI Indicators. This study relies on secondary data (Annual Reports, Sustainability Reports, NVG Principles). The study includes Nifty Fifty Companies. The research focuses on the theoretical framework of the SDGs, the GRI Indicators, and NVG Principles of these firms. Further, Scoring Methodology was utilized to collect data for the investigation. Then comes Descriptive Analysis of 17 SDGs, Reporting Practices, and EES Distribution. Chi-Square tests was used as statistical tests. The hypothesis was validated using the Chi-Square test, which revealed that there is relationship between the Economic and Environmental Components and their reporting. However, Social Component proved that there is no association between Social Component and its reporting.*

**KEYWORDS:** *Sustainable Development Goals, Global Reporting Index, NVG Principles, NSE Listed, Scoring Methodology.*

## INTRODUCTION

The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice. The United Nations provided 17 goals to help maintain corporate social responsibility across the globe; several countries have tried to follow them. In this study, Nifty Fifty listed companies investigated, if they were following the UN SDGs, GRI Indicators and NVG Principles or not. The GRI framework aims to enable third parties to assess environmental impact from the activities of the company and its supply chain. The standardized reporting guidelines concerning the environment are contained within the GRI Indicator Protocol Set. The performance indicators (PI) include criteria on energy, biodiversity and emissions. Sustainability reporting aims to standardize and quantify the environmental, social and governance costs and benefits derived from the activities of the reporting companies accordingly. Some of the examples of the reporting measures to be used would be the quantified results of the $CO_2$ emissions, working and payment conditions, financial transparency and alike. The SDGs address our world's most pressing sustainability challenges; therefore, it is crucial that the contribution of the private sector is both recognized and understood. That is why GRI continues to work with partners and reporting organizations to drive forward the transparency required to support the fulfilment of the SDGs."

## RESEARCH METHODOLOGY
**Objectives of the Study:**
➢ To study Sustainability Development Goals of various Companies listed in NSE.
➢ To find the relationship between the SDGs and Companies Sustainability Reporting.
**Research Design:** Descriptive Research Design
**Data Collection Method:** Secondary Data with Scoring Methodology
**Sampling Frame:** Annual Report, Sustainability Report and Business Responsibility Report (BRR) NSE website and Company's website.

## LITERATURE REVIEW
**(Garg, 2017)** This study has developed an indicator of sustainability reporting practices that takes into account economic and environmental aspects as well as social factors, in the business context in India. They built declarative index taking into account the environment or social factors. The first part of the study focuses on theory framework followed by sustainability challenges

facing businesses in India. In addition, research detail the methodology used to develop SRI, related to the identification of indicators, select the final indicator, develop hierarchical frameworks, factor analysis, and data pre-processing.

**(Ching, Gerab, & Toste, 2014)** The objective of this study was to verify compliance with the GRI indicators used by Brazilian companies listed in ISE and those listed in FTSE4Good in their sustainability report 2011 and the difference. The target population includes 70 companies, 35 from ISE and FTSE4Good. Content analysis was used to analyse the indicators disclosed in the reports and the information presented was classified into three rating categories according to their level of disclosure. Overall, our statistical results show that ISE companies are more compliant with the GRI indexes than 4,444 FTSE4Good companies, mainly in terms of economic and social aspects. However, companies pay equal attention in all 3 aspects regardless of economic sector and index.

**(Ali, Hussain, 2020),** did research on "The Implementation of Sustainable Development Goals in "BRICS" Countries". This study examines the adoption and implementation Sustainable Development Goals (UN SDGs) in Brazil, Russia, India, China and South Africa (BRICS). Using content analysis method, this study shows that that although companies in the BRICS countries have tried to adopt the SDGs identified by the United Nations, it is important missing targets. This study is unique in that it provides an analytical method.

**(Waal, Thijssens, 2020)** The Sustainable Development Goals (SDGs) emphasize the need to active participation of private companies, based on their creativity and innovate to create value for the common good, such as reducing hunger eradication, poverty alleviation and biodiversity protection. While currently some, especially recently established private companies may consider the common good is the primary business objective. This study aims to map the unknown topography of corporate SDGs participation of the 2000 sustainability report largest publicly traded companies in the world. First, using logistic and quantum regression, the potential associations between SDG involvement is reported and company attributes examined Quantitative for a sample of the 2000 largest listed companies all around the world.

**(Saxena & Arti, 2012)** in her research paper titled 'Disclosure Practices of Global Reporting Initiatives (GRI) for Sustainability Reporting in India' has mentioned about the history of GRI and GRI in the Indian scenario. Clear analysis of the selected Indian companies according to the GRI guidelines has also been made by developing GRI score cards for the selected units.

## DATA ANALYSIS AND INTERPRETATION

**Chart 1 Overall Work Reported on 17 SDGs**
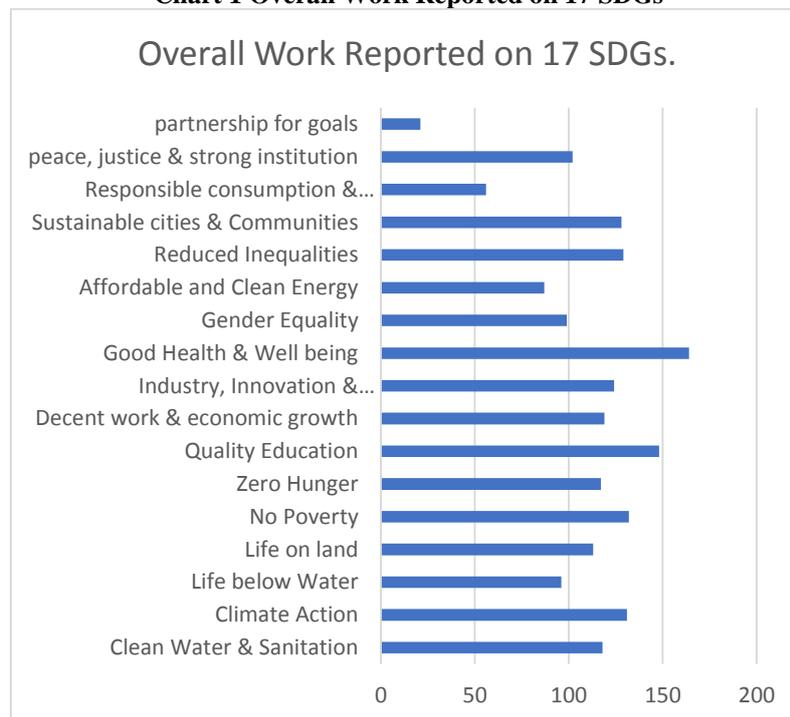


**Interpretation**
Through the above graph it is been observed that the slightest work is sealed on 2 out of 17 goals, those are: partnership for Goals and Responsible Consumption and Production. However, the goals which were focused more are: Good Health and Well Being, Quality Education, No Poverty, Climate Action, Sustainable Cities and Communities and Reduced Inequalities. Moreover, remaining 9 out of 17 Goals have Moderate Rate of fulfilment of the SDG'

**Table: 1 Descriptive Analysis of 17 SDGs**

| Descriptive Statistics | | | | | | |
|---|---|---|---|---|---|---|
| | N | Minimum | Maximum | Mean | | Std. Deviation |
| | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic |
| No Poverty | 248 | 0 | 4 | 2.95 | .079 | 1.249 |
| Zero Hunger | 248 | 0 | 4 | 2.69 | .091 | 1.432 |
| Good Health & Well being | 248 | 0 | 4 | 3.21 | .061 | .956 |
| Quality Education | 248 | 0 | 4 | 3.08 | .069 | 1.082 |
| Gender Equality | 248 | 0 | 4 | 1.68 | .112 | 1.763 |
| Clean Water & Sanitation | 248 | 0 | 4 | 2.31 | .105 | 1.655 |
| Affordable and Clean Energy | 248 | 0 | 4 | 1.48 | .108 | 1.703 |
| Decent work & economic growth | 248 | 0 | 4 | 2.01 | .107 | 1.685 |
| Industry, Innovation &amp; Infrastructure | 248 | 0 | 4 | 2.42 | .101 | 1.598 |
| Reduced Inequalities | 248 | 0 | 4 | 2.35 | .103 | 1.620 |
| Sustainable cities & Communities | 248 | 0 | 4 | 2.38 | .099 | 1.562 |
| Responsible consumption & Production | 248 | 0 | 4 | .68 | .087 | 1.373 |
| Climate Action | 248 | 0 | 4 | 2.38 | .104 | 1.633 |
| Life below Water | 248 | 0 | 4 | 1.82 | .112 | 1.759 |
| Life on land | 248 | 0 | 4 | 2.42 | .101 | 1.598 |
| Peace, Justice & Strong Institution | 248 | 0 | 4 | 1.99 | .110 | 1.725 |
| Partnership for Goals | 248 | 0 | 4 | .40 | .070 | 1.108 |

**Interpretation**

The above table shows Descriptive Analysis of 17 Sustainable Development Goals (SDGs) with respect to Minimum and Maximum value for reporting. Moreover, the table shows Mean Value and Standard Deviation of the same. The analysis is done by Scoring Method where representation is done as follows:

0 = No Information Provided, 1 = Only Qualitative Data Provided, 2 = Qualitative and Quantitative Data Provided, 3 = Qualitative and Quantitative Data Provided with Indirect mode of implementation, 4 = Qualitative and Quantitative Data Provided with Direct mode of implementation.

Through mean Value in the above table shows that quite less amount is spent on Affordable and Clean Energy (1.48), Responsible Consumption and Production (0.68), and Partnership for Goals (0.40). This indicates that the SDG Reporting in above 3 goals are Near to '1' which represents Only Qualitative Data are provided. On No poverty, Zero Hunger, Good Health and Well Being and Quality Education were near to '3' that means that Qualitative and Quantitative data were implemented through indirect mode.1.68 to Gender Equality, 2.31- Clean Water and Sanitisation, 2.01- Decent Work and Economic Growth, 2.42- industry innovation and Infrastructure, 2.35- Reduced Inequalities, 2.38- Sustainable Cities and Communities as well as Climate Action, 1.82- Life Below Water, 2.42- Life on Land and 1.99- Peace, Justice and Strong Institutions with only Qualitative and Quantitative data.

**Table: 2 Descriptive Analysis of Reporting Practices**

| Descriptive Analysis of Reporting Practices | | | | | | |
|---|---|---|---|---|---|---|
| | N | Minimum | Maximum | Mean | | Std. Deviation |
| | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic |
| NVG | 248 | 0 | 1 | .96 | .013 | .197 |
| GRI | 248 | 0 | 1 | .70 | .029 | .458 |
| Other | 248 | 1 | 1 | 1.00 | .000 | .000 |

**Interpretation**

From table 2, it is observed that mean value of Reporting Practices of NVG, GRI and Others are 0.96, 0.70, and 1.00 respectively. It is noticed that the companies follow NVG Principles (36%) and Other (38%) reporting practices more as compared to GRI Reporting Indicators (26%).

**Table: 3 Descriptive Analyses of SDGs Activities Distributed in EES**

| | N | Minimum | Maximum | Mean | | Std. Deviation |
|---|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic |
| Environment | 248 | 0 | 4 | 2.66 | .095 | 1.498 |
| Economics | 248 | 0 | 5 | 3.94 | .081 | 1.282 |
| Social | 248 | 0 | 8 | 4.26 | .124 | 1.965 |

**Interpretation**

From the table 3, it is observed that mean value of Environment, Economic, Social are 2.66,3.94 and 4.26 respectively, with 39% for social, 36% for economic and 25%, the least for environment.

**Reporting Practices of Chi-Square test of normality**

**Hypothesis**

H0 = There is no association between EES and Reporting Practices.

H1 = There is association between EES and Reporting Practices.

**Table: 4 For Environment Component**

| Chi-Square Tests | | | |
|---|---|---|---|
| | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 31.708[a] | 12 | .002 |
| Likelihood Ratio | 31.731 | 12 | .002 |
| Linear-by-Linear Association | 6.873 | 1 | .009 |
| N of Valid Cases | 250 | | |

**Interpretation**

For Environment: 0.02 < 0.05, hence, H0 rejected. Thus, there is association between environment and reporting practices.

**Table 5: For Economic Component**

| Chi-Square Tests | | | |
|---|---|---|---|
| | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 31.708[a] | 12 | .002 |
| Likelihood Ratio | 31.731 | 12 | .002 |
| Linear-by-Linear Association | 6.873 | 1 | .009 |
| N of Valid Cases | 250 | | |

**Interpretation**

For Economic: 0.013 <0.05, hence, H0 rejected. Thus, there is association between Economic and reporting practices.

**Table 6: For Social Component**

| Chi-Square Tests | | | |
|---|---|---|---|
| | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 28.153[a] | 24 | .254 |
| Likelihood Ratio | 28.121 | 24 | .255 |
| Linear-by-Linear Association | 1.548 | 1 | .213 |
| N of Valid Cases | 250 | | |

**Interpretation**

For Social: 0.254 > 0.05, hence, H0 Accepted. Thus, there is no association between environment and reporting practices.

## CONCLUSION

This study analyses company's sustainability report from NSE Index. The disclosures consist of economic, environmental and social reporting. By employing the scoring methodology, all the disclosures have been systematically aggregated into 3 parameters. The scoring methodology adopted to measure the extent of sustainability disclosures has also been explained. The companies listed in NSE are more adherent to the NVG principles which is 36% and GRI Indicators 26% in all sustainability dimensions (EES). According to first hypothesis type, the data was found to be abnormal. Second hypothesis was achieved through Chi-Square test where it was concluded that there is association between Economic and Environment Component with its reporting Practices. However, Social Component proved that there is no association between Social Component and its reporting.

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# THE CONCEPTUAL STRUCTURE OF THE REALITY REPRESENTED BY THE CATEGORY OF THE VOICE IN THE KARAKALPAK LANGUAGE

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## ABSTRACT

*The article describes the question of what is the general direction of research on issues related to the concept, conceptual meaning and conceptual interpretation in cognitive grammar in particular and general linguistics in general. The paper states that in Karakalpak language main voice with a developed new verb terminology has expanded to some extent due to some layer of derived verbs that now the presence of one or another voice affix in the verb has ceased to be a reliable criterion. Furthermore, in the article, different two diatheses are represented by the form of causative voice have been discussed and provided with examples in English, Russian and Karakalpak languages.*
**KEY WORDS:** *conceptual structure, English, Germanic, Karakalpak, typological, Turkic verb, voice.*

## INTRODUCTION

We will be going to consider the correlation of the traditional concept of the voice category with the new conceptual development of the voice category and concepts related to the semantics of the ways of expressing the voice in the languages of various systems. There are several directions in cognitive grammar and they all differ from each other depending on what exactly is fighting for the basis in defining the concept, conceptual structure, as well as all other concepts related to the cognitive approach to the study of the basic provisions and categories of grammar. The last word in the cognitive approach to the study of grammatical structure in English, Russian, and other languages can be called a collective monograph edited by N.N.Boldyrev [2]. The main problems raised by the authors of this book are the following:

-voice, return ability, and stative in the aspect of interpretative differences;

-morphological categories in the aspect of linguistic interpretation;

-interpretative potential of morphology from the point of view of the main aspects of the operation of meaning in language;

-secondary interpretation of knowledge in language using morphological forms.

-interpretative - evaluative potential of the level of human cognitive activity.

We might currently assert that cognitive linguistics, pragmalinguistics and linguoculturology have already reached the second degree of their development. The stage of formation of these sciences, the formation of the conceptual apparatus and the main categories has been completed and scientists are now busy analyzing the material that was collected during the initial period of the existence of sciences.

Therefore, the Cassirer was right when he wrote that "Symbols are known not by cognition, but only by interpretation" [2]. Road signs are necessary not only to know that they are road signs, but also a person should be able to interpret what meaning lies behind this sign, how to understand it, what to prepare for, what should be planned further according to the information received from the newly identified symbol. There are quite a few symbols in this world - continues "The Cassirer is a function, the intersection of symbols of language, the myth of culture". At the same time, the symbolic universe itself is placed in the significance of a person's consciousness. First - "Symbolic thinking, then "symbolic human behavior" [2].

## METHODOLOGY

The absolute majority of forms of compulsory voice have undergone rethinking and now represent a valid voice in its generally accepted understanding. Only the forms with *t, tyv,qfb* etc have more or less retained their former productivity in the actual voice value. Of all the indirect voices, only the passive is still widely used as a diathesis, in comparison with them the least associated with word formation.

In general, the main voice has undergone the biggest change. In the course of the historical development of indirect voices, especially with the activation and isolation of the word-formation function of their forms beyond the diathesis proper; expressed by them, a lot of lexical units have accumulated, in which voice affixes are distinguished exclusively as derivators, which do not change the original voice characteristics of the generating basis at all and, accordingly, do not in any way interfere with their natural attraction to the main voice, which gradually chose them entirely. Good cognitive linguists have written about these and other problems with a great response of work on this area of

linguistics. The chapters written by N.N. Boldyrev were especially successful. *Language as an interpretive factor of cognition* [ 3, 174 pp ] from 1978; E.G. Belyaevskaya [3, pp.82-157]; O.V.Magirovsky [8 , pp. 158-184]. A.L. Sharandin [10, pp.185-217]; L.A. Panasenko [9, pp. 218-243]; I.A.Besednaya [6, pp. 311-327]; L.A. Furs [11, pp. 328-351]; O.G. Dubrovskaya [7, pp. 371-395] ; I.Yu Bezukladova [5, pp. 422-440].

The scope of the main voice in the Karakalpak language with a developed new verb terminology has expanded so much due to this numerous layer of derived verbs that now the presence of one or another voice affix in the verb has ceased to be a reliable criterion. The separation of the imperative, reflexive, mutual and partly passive voices, especially since it was previously impossible to distinguish the reflexive and passive voices by one external structure of the verb.

## RESULTS AND DISCUSSION

The forms of optative (indirect) voices are generally characterized by polyfunctionality, which is far from fitting within the very category of voice. As part of a more or less wide range of verbs. They really have the proper voice meanings, which in existing linguistic sources are characterized without any reservations as the universal and unchangeable content of this voice form. In very many cases, the forms of the voice, unambiguously expressing the corresponding diathesis, simultaneously forms a qualitatively new or updated lexical unit: karakalpak: къыръин (бриться) (къыръ-скоблить,тереть),къorus (увидеться, встретиться, здороваться, здороваться за руку) (көр)видеть).

Even more often, the voice-forming affix, losing the meaning of this voice, acts exclusively for word-formation purposes, independently or as part of a complex purely derivational affix such as лаш-, -лат,-лан,-лэн – Compare, for example: totun – приступить, (tut-держать, ловить).

This clearly expressed dual (voice and word-forming) nature of voice-forming forms, which can be traced both in ancient written monuments and in modern language[1], is manifested in the fact that indirect voices, especially reciprocal causative and in their generally recognized voice meanings do not differ in uniformity, break up into semantically and functionally very different varieties, some of which tend to word formation, preserving only a distant genetic connection with this voice. As for the forms of mutual voice, in all Turkic languages, including some written monuments, they are divided into the following structural and semantic types, which are clearly defined independent models:

1. With numerous involuntary verbs (such as kul - смеяться) or active (such as йырлапеть) actions are distinguished as an independent lexico-grammatical category expressing an indefinite set of homogeneous actions occurring simultaneously, usually correlated with the same subject in the plural form - къушалаг сайрашды.

2. With a relatively smaller number of verbs of active action, especially in transitive verbs like къотер -поднимать - it stands out in the typical meaning of assisting in the implementation of an action, the main performer of which is

not the subject, but another person named in the position of an indirect complement in the form of the dative case.

Ол менга буғъдай йкғышди.(Он помог мне собрать пшеницу)

What is a fundamentally different diathesis than all the other diatheses organized by the form - ш Ol menga bugday ykgyshdi.(He helped me harvest wheat)

3. With a narrow circle of transitive verbs like учра- "встретить", the form -ш- appears in a reciprocal-reflexive meaning;

4. With a wider composition of transitive and partly intransitive verbs, the same form is distinguished in a joint meaning that does not contain an indication of the direction of the action on its performers themselves, provided in the sentence, as in the previous case, by two separately expressed names of persons, as required by the reciprocal voice itself. Ол менынг бирла йорушъы. Он состязался со мной в ходьбе.

5. In some verbs, such as "sura - расспрашивать", "bilish – разознавать", "уурлаш – воровать", the form -ш- expresses the repeatability and intensification of the action, completely without changing the original - voice characterization of the verb.

Fundamentally different two diatheses are represented by the form of causative voice. Compare:

1. Ол атын семиртти. Он откормил свою лошадь.

2. Ол болани ашатты, ана су ичиртти. Она накормила ребёнка, напоила её водой.

In the second variety, characteristic of the Altaic languages, the causative voice, in turn, reveals a multifaceted semantic variation (compulsion, motivation, assumption, resolution, etc). The content and functions of the form of reflexive and especially passive voices are much less branched. But they do not differ in unambiguity and monofunctionality. There is an obvious semantic stratification in the reflexive voice, the passive voice is essentially two different diatheses. No voice other than the main one, none of its varieties has an absolute character. Each indirect voice covers in general only a small part of the verbal vocabulary. In one of its general and particular meanings, it is formed from one circle of verbs, in another from another, depending entirely on the nature of their lexical meaning.

A large discrepancy is found in indirect voices and their functional and semantic varieties in terms of the scope of the verbal vocabulary, i.e. in terms of the number of verbs from which they can be formed, among other things, from their meanings, as well as in the degree of their use, which ultimately depends on the communicative significance of each voice and its varieties. This distinction is used by the fact that the voices and their varieties received precisely in the sphere of their distribution in the process of their historical development. But the most significant differences are found in the Karakalpak language in the composition of the so-called lexicalized forms of indirect voices, as well as in the composition of verbs, in which the voice form simultaneously plays a voice-forming and word-forming role, shedding light on the historical development of the voice category.

Its identity and sufficient features of stability, which gives the basis for the pratyurk language, form this category.

At the same time, among the so called lexicalized forms, in a fairly large layer of verb vocabulary, many have a character of generally Turkic.

For example, jan –(гореть) ;йакъ ( сжечь , развести огонь); йалқын; (пламя); сынъ (сломаться); уйрен (научиться); уйрет (научить), öкÿн (каяться, сожалеть), дÿшÿн (понять, постичь); тÿшъ (ниспадать. опуститься,-вапиться вниз); йÿв-(мыться ,умываться); йуу (мыть стирать); болуш -помочь принять участие в осуществлении чужого действия (исполняемого другим лицом)), танъышъ-(познакомиться, ознакомиться) от таны –(знать ,узнать распознать, признать); тырыл –(ожить); тырык (живой); сÿртъ (втирать); кырышъ (приступить); от кыр-(войти) ; келтыръ (доставить (сюда); от kel – (прийти, явиться ); кÿгъинъ- (показаться) от кöр (видеть) and others.

The word-formation function of voice forms, which left deep and indelible traces in all Turkic languages and nevertheless escaped the attention of researchers, has its roots in antiquity, organically intertwining with the very category of voice and illuminating the most distant origins such as йÿқъат ->йÿқадъ (Baskakov N.A. 387)
The numerous examples provided and similar to them samples clearly indicate that the word - formation function of voice forms is by no means a side spontaneous phenomenon, derived from their main original purposes. If this seems controversial, it is for the reason that not only grammarians, but also lexicographers and lexicologists have not sufficiently studied and revealed the actual dimensions of the so-called lexicalization of voice forms.

Lexicographers usually limit themselves to showing in dictionaries mainly the most striking semantic shifts that occur when the lexical basis of the verb is rejuvenated by voice affixes, and grammarians, describing the voice, as a rule, do not attract dictionary materials, do not use these selective illustrative examples of the use of voice forms for word-formation purposes.

The activeness of the word - formation function of voice forms began to develop on the basis of most of these languages in intra - verbal word formation in two main directions:

1. The forms with -т , -тир, - қар and others are much wider than before they began to serve to transform the nameless verbs of the state into verbs of active action:
For example: кÿбейтъ-(умножить) and кÿбей (увеличиться численно) кÿп (много) англат (объяснить) от англа (понимать)
 And the forms with -л- ,-н-,_-и-, -ш- on the contrary, have firmly established themselves as a regular means of transforming the derivatives of active verbs created by the highly productive affix -ла- ,-ле-, (лə) from names into ordinary verbs of state, completely depriving the voice meaning, or maintaining a distant semantic connection with it: ÿтъкъерлен-(сделаться острым, сделаться бойким, шустрым, от ÿтъкъерле - (точить) – "ÿтъкъеръ - острый:

2. On the basis of these two structural types of intra-verbal word formation, complex forms of nameless word formation with -лан-,-лен- , лəн-, -лаш-леш-лəш- и на -лат-,-лет-, -лəт, have arisen and are now developing their activity, of which the first two produce verbs of active action: For

example: къуралланъ (вооружаться), from къуралъ (оружие); файдалан (пользоваться); from файда (польза); кискенлеш (обостряться) from кискен (внезапно).

If in a similar way, we consistently eliminate all historical strata of word-formation processes associated with voice forms from the voice formation itself, then the derivational function of voice forms within their use as indicators of the actual diathesis really appears as an anomalous spontaneous phenomenon, as it separates from antiquity to modernity, increasingly narrowing with a clearly expressed tendency of demarcation and isolation from the very category of voice as a result of its increasing stabilization as such. Nevertheless, the category of voice, even in the modern and most developed state, is not free from word formation. Having arisen mainly on the basis of derivational forms, leaving clear traces of its original dual nature in them, it has never been able to completely break away from the former word-formation traces.

On the one hand, even in the composition of the clearly late highly productive and unproductive word-forming forms operating in the word-formation system outside the voice category, many formations can be noted such as туғъанлаш (породниться) from туғъан (роственник); берлене (объединиться) from бер (один); теллееш – (пререкаться) from tel (язык); судлаш (судиться) from суд (суд); Тугъäнлäштир (породнить); тынышландъыриш (успокоить) from тынышлäн (успокоится), шätлäн (радоваться) from шат (радостный) etc., which fall within the scope of the corresponding voice, or at least gravitate towards it, although at the same time they represent an unconditional derivation or lexical modification.

In other way, with the voice formation itself carried out in isolation from the organized word formation characteristic of the previous case, it is also not excluded. Spontaneous derivation or modification of the lexical content of individual generating bases.

However, in similar cases, updating the lexical meaning of the original basis or its transformation occurs most often because of calque from other languages. But voice forms are involved in it one way or another.

Thus, the voice in the Karakalpak language, neither in its current state, nor even in the historical past, can be distinguished in any consistent way from word formation and qualified as a purely grammatical category of voice [4, 5]

## CONCLUSION

Thus, Many Turkologists, following Betlingk, Dmitriev, Konov, interpret the category of voice as a grammatical category. This direction is essentially adjoined by the traditional interpretation of it, coming from Ramstedt and which has received the widest distribution, especially in foreign Turkology; supporters of this firmly established tradition attribute the voice without any justification to the intra-verbal word formation, but consider it not as a derivation proper, but as a category of voice in its generally accepted understanding under the unambiguous terms and terms *factive* or *causative passive reciprocal* and *reflexive* or under their Russian correspondences *compulsive voice passive voice mutual voice* and *refundable voice*. If grammarians up to the

50s were often limited to describing on the material of this language what their predecessors had noted in the field of other languages, starting with Betlingka, then some researchers later, especially from the mid 50s, began to find previously unnoticed typical private or even general meanings of voice forms, but sought to link them with generally recognized voice meanings. Gradually, the list of voice values, especially the list of values of mutual, compulsory and refundable voices, was filled with their more specific meanings and shades, qualified by individual scientists as the actual voice content, after which the very concept of voice became extremely vague.

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# A CASE STUDY ON OMNI CHANNEL PRESENCE IN RETAIL

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## INTRODUCTION

An Omni channel strategy helps retailers to create a seamless experience for customers across marketing channels. Its scope covers online as well as offline interactions with the customer. For example, you can sell your product using social media online, and the company's loyalty program is available to the customer throughout. Or a restaurant can allow diners to order using QR codes on a website, and in a physical location, and the experience is inter-connected at every step. Ranging from sophisticated multi touch campaigns to lavish dining and in-store experiences, large and small businesses are embracing the Omni channel business model.

## UNDERSTANDING THE CONCEPT OF AN OMNI CHANNEL STRATEGY

In order to stay relevant, businesses must deliver a cohesive and consistent brand experience across all marketing channels, whether they're accessed digitally, in physical locations, or both. It's really all about integrating the digital and physical presence. That is why an effective Omni channel strategy is significant.

The concept of Omni Channel business itself is evolving. Three years ago the expectation from an Omni channel was 'buy online, pick up in store'— called BOPIS in the retail sector. Now the Omni channel approach has expanded to the service sector along with retail. A good example of this expansion can be seen in the context of restaurants. This is seen in single ordering platforms that let you do on-demand delivery, order pickup, and offer shipping, on the same platform. Take the example of a wine supplier who ships bottles of wines and offers pickup and delivery options from the same platform that offers an in-store experience. Thus an integrated experience is created and is the essence of an Omni channel strategy that drives value for businesses.

## BUSINESSES ARE FAST ADOPTING OMNI CHANNEL STRATEGY

The contemporary business world is replete with examples of how businesses are gravitating towards Omni Channel models. Online retail giant Alibaba picked up stakes in Chinese supermarket chains Hema and Bailan. Amazon bought out grocery chain Whole Foods for a huge 13.7 billion dollars. Walmart- the world's largest brick and mortar supermarket chain bought out US based e-commerce Company for $3.3 billion. These strategic deals clearly indicate the need, both off line and online for an Omni channel business model. There are clear indications that retailers who don't have an Omni channel business model will lose customers. In a move towards an Omni channel strategy Amazon's investment arm, Amazon NV Holdings LLC, picked up 5% stake in Shoppers Stop for $179 crore. The small step towards an Omni channel business with Shoppersstop.com helped them acquire 4.5 million customers per month.

Shoppers Stop has over 80 physical stores and online stores and over 8 million visitors per month whereas Amazon.in gets over 400 million visitors per month. So the plan for Shoppers Stop is to build a multiplier effect-so while, Shoppers Stop will focus on building a catalogue, Amazon will bring in the traffic. Shoppers Stop hopes to grow its online revenue to 10% from the current 1%.

Other Indian retail companies such as Landmark retail and D'mart are also moving towards building an Omni Channel business. Even online retailers such as Urban Ladder, Pepperfry, CaratLane and Lenskart now have Omni channel strategies. Interestingly, while a store like Shoppers Stop aims to reach to more cities and consumers through online retail, online players are launching offline stores to get customers to touch and feel their products. Take the example of Lenskart, which has over 500 physical stores where consumers can visit, view and try the products on offer and then transact online, A new debate has also emerged regarding whether it makes sense for a multi brand store like shoppers stop to not only have a vibrant Omni channel presence but also a partnership with Amazon which is also multi brand. Only 15% of revenues of Shoppers Stop come from its private and exclusive brands. For single brand retailers like Zara and H&M which are powerful brands as well as retailers, Omni Channel works well.

While many retailers personalize engagement in varying degrees, the ones who pursue omnichannel personalization go beyond basic retargeting and "me too" segmentation. Sephora, for example, offers rich in-app messaging, personalized push

notifications, and the ability to book in-person beauty consultations from phones. In-store technology allows "cast members" to access a customer's favorite items and suggest new products that align with the customer's profile. Customers can also use scanners to match products to their specific hair color and skin type. Its Beauty Insider loyalty program taps unified customer data and links offers across email, web, and mobile to drive online and in-store purchases. Achieving this level of personalization requires great data-management capabilities and process integration but they certainly help Sephora to achieve greater value. In fact, data showed that customers who visited the retail website within 24 hours of coming to the store were thrice as likely to make a purchase and the order values were 13 percent higher as well.

An Omni Channel strategy in food and grocery will not be easy in India as consumers want fresh food and the cost of delivery is high. While the investment of Amazon in Whole foods in the US is right on target because grocery stores are not very accessible in the US. In India, mom and pop or local kirana stores, and vegetable vendors are available literally at the door step, so online grocery stores have a very limited audience.

**What makes an Omni channel strategy successful?**
It is important to understand the elements that can help to customers what they expect while also providing opportunities to delight them. The four distinct pillars of a successful Omni channel approach include:

1. **Sales:** The Sales strategy directly influences the Omni channel strategy and can help you prioritize the channels that make the most sense for your audience.
2. **Marketing:** Marketing messages must look consistent across your different channels. A unified Omni channel marketing strategy helps customers feel connected to the brand on each channel it appears.
3. **Fulfillment and logistics:** Order fulfillment helps customers get what they bought from you. It is an important part of the Omni channel experience and reinforces the promise made by the brand.
4. **Operations:** To do Omni channel well, you need a system that ties all of your channels together. Square can help you turn your Omni channel ideas into reality with integrated tools that work together.

**How can an Omni channel Strategy take your marketing to the next level**
**1. Understand your customers.**
The first step toward creating an effective Omni channel strategy is to understand who is the customer and their buying behavior. You may do this is with a simple survey that asks people about their shopping and dining preferences. You can ask customers how they discover new products and menu items (social media, in-store shopping, word of mouth) or what type of items they would buy in person rather than online. The information will help to focus efforts on specific channels. For

example, if many customers report that they discover new items on Instagram, you know you should focus on your Insta presence.

**2. Offer Wi-Fi in your physical store/location.**
Consumers do product research even when they are at a physical location. Research from Google found that 61% of people use their phones when in a restaurant or a bar. If you offer in-store Wi-Fi it will help customers in their buying experience. In-store and in-restaurant research can be made easier, by using QR codes that link to online product and nutritional information.

**3. Sell on diverse platforms.**
You should try to sell and market your products wherever your customers shop, browse, or search for information. Customers usually navigate between several channels to purchase an item — brick-and-mortar locations; social media; online marketplaces such as Amazon and Etsy; company website; review sites etc. While you diversify, remember to keep your customer experience consistent. As consumers move across different channels, they should find similar branding and pricing.

**4. Launch educational content.**
High-quality, engaging content is important to educate customers, answer questions, and instill trust across channels. The more compelling content you can create to explain why purchasing from you is a good choice, the more you'll sell. Content marketing campaigns come in many forms like blog posts, social media, guides, customer reviews, and live stream video.

**5. Integrate social media into your storefront.**
Try to integrate social media into your store experience. For example, a dressing room can have a display that lets customer's access product reviews of what they're trying on. Encourage customers to take photos of what they purchases and post it on Instagram.

**6. Integrate online purchases with in-store pickup.**
People love to save on shipping costs. Try turning your brick-and-mortar store into a fulfillment center for your online channels so people can pick up their products without paying for shipping.
Research shows that almost three in 10 shoppers prefer to pick up items curbside or in a physical store instead of getting delivery because they can get those purchases quicker. And over a quarter of consumers, who would rather pick up their items directly report that they also shop in stores after the pickup, continuing the Omni channel sales cycle.

**7. Leverage your expertise**
Small businesses have an advantage in Omni Channel. Since you're homegrown, you likely have loads of expertise about your products and industry. Leverage that in your business by offering tutorials and workshops. Online, integrate live chat or even the chance to video chat with an expert into your website.

## CONCLUSION

Clearly, an Omni channel selling strategy can help you reach more customers and deepen their loyalty by making the experience with your brand feel consistent and accessible. And it's an approach that's a natural fit for small businesses, since the levers and tools that can help you tie your channels together are already within reach.

Omni channel marketing is the future of retailing but one needs to wait and watch to see how deftly Indian retailers can crack the code.

## QUESTIONS

Q1) What do you understand by Omni channel marketing? How is it different from multi channel marketing?

Q2) Conduct a SWOT analysis for company practicing Omni channel Marketing Strategies.

Q3) Do you think that the food and grocery sector should adopt an Omni channel business model in India? Discuss the future of Omni channel strategy for the Indian Retail Industry.

# CATTLE RUSTLING IN KENYA: A REVIEW OF THE ROOT CAUSES, EMERGING TRAJECTORIES AND MITIGATION STRATEGIES

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## ABSTRACT

*Conflict is a global phenomenon with the upsurge spreading across borders due to the globalization which has brought about greater state interconnectivities. The practice of cattle rustling among the pastoral communities was considered as a cultural practice and was sanctioned and controlled by the elders. However, over a period of time there have emerged new trends, tendencies and dynamics, leading to commercialization and internationalization of the practice thus leading to multiple adverse effects. Conflict management and resolution processes adopted often involve significant segments of local authority structures, and often signify community desires for stability, enhanced production, and other benefits which conflict situations often deny the affected communities. The typology of most African conflicts could be greatly enriched by a careful exploration of the various conflict types viewed from the perspective of the different issues in contention. Conflicts in each category will only be satisfactorily resolved when they are addressed in relation to their specific root causes. This is due to the point that there are different types of conflicts in Africa and in Kenya to be precise, with cattle rustling being one of them. Consequently, each conflict needs to be analyzed on its own merits and addressed as a specific case rather than using the strait-jacket peace-keeping approach in every conflict as has been the case for decades. The conflict dynamics that fuel cattle raiding are complex and extend far beyond a simple 'competition for scarce resources' model to include wider regional dynamics.*

**KEY WORDS**: *Conflict, Cattle rustling, raids, banditry, livestock*

## 1.0 INTRODUCTION

Conflict today is fluid, spreading across borders to affect broader regions, a result of the greater interconnectivity of countries; the same networks that allow for increased trade and information flow can be exploited by organized crime and conflict entrepreneurs to spread violence. This upsurge in violence occurs in a volatile global context where the balance of geopolitical power is in flux, and transnational factors like advances in information and communications technology, population movements, and climate change create risks and opportunities to be managed at multiple levels (World Bank & United Nations, 2018; Cilliers, 2018).

In the Protocol on the Prevention, Combating and Eradication of Cattle Rustling in Eastern Africa, Cattle rustling has been defined as an activity carried out by a group of individuals, often not from the same community, who plan, organize and forcefully steal livestock from another person, community or entity or from the grazing field or kraal for the purpose of social, political or economic gain. It entails the planning, organizing, attempting, aiding or abetting the stealing of livestock by any person from one country or community to another, where the theft is accompanied by dangerous weapons and or violence. As noted by Avis, 2019, cattle rustling is a practice that has robbed pastoralist communities their right to achieving millennium development goals. A total of 27 counties are affected by cattle rustling in Kenya, with five counties being severely affected and these are West Pokot, Baringo, Laikipia, Turkana and Samburu counties. A report by IGAD 2017 indicates that livestock lost between 2014-2016 was estimated at a cost value of Kshs. 6.05 billion whereas displacement was estimated at a total cost of Kshs. 37.27 billion in terms of compensation and assistance to the affected population.

Cattle raids have escalated, fueled by the proliferation of small arms smuggled into the country. In recent years, the raids have grown deadly, with a sharp rise in the number of people killed during attacks. the frequency of cattle raids, the number of animals stolen at any one time, the levels of violence and loss of life are such that the phenomenon has little resemblance with its cultural roots. Thus, it is argued that a combination of all these factors qualifies cattle rustling in a class of its own, easily distinguishable from related crimes such as theft or robbery. Gangs of gun-slinging raiders usually storm villages at night, shooting people on sight before driving away entire herds of cattle, sheep and goats, leaving entire communities devastated (Gumba, 2019).

Traditionally, small-scale stock theft was a way of balancing community wealth and power, but crime and capitalism have commercialized this practice, making it a significant economic threat as well as many deaths among rural communities and security forces in Kenya and South Sudan (Gumba, 2020). Overtime, the practice of cattle rustling has intensified, the number of deaths among rustlers, security forces and affected populations has increased. Cattle rustling or raiding is no longer a cultural practice, but a form of organized crime committed by international criminal networks. The drastic change has been attributed to increased politicization, militarization, commercialization, and changes in social, cultural, and economic dynamics (Gumba, 2020; Harder, 2020; Ndambuki, 2016).

Response in the African countries has been advanced by using indiscriminate force and incentivised disarmament initiatives (ISIS, 2020). However, neither of these approaches have been particularly successful. Indiscriminate violence ratcheted up community resentment against state security forces, while the exchange of livestock for firearms and ammunition achieved the opposite effect – incentivising civilians to acquire more firearms.

National responses adopted have so far been characterized by inaction, indiscriminate force or ineffective disarmament initiatives. This is believed to be occasioned by the new trends, tendencies and dynamics, leading to commercialization and internationalization of the practice thus enhancing its adverse effects. The conflict situation in most incidences may be silenced but remain largely unresolved with the affected areas characterized by underdevelopment, under-resourced security structures and a limited government presence.

This paper presents a review of the root causes, and emerging trajectories to cattle rustling. This will be achieved through the objectives; assessing the changing nature and root causes of cattle rustling; examining emerging trajectories and dynamics; and an analysis of the resolution mechanisms used in mitigating cattle rustling.

## 2.0 METHODOLOGY

The research was basically through desktop reviews. Secondary data was obtained from sources which included relevant published and unpublished materials on the research area. These included books, journals (electronic and print), periodicals, United Nations reports, Non Governmental Organization and state Reports in East Africa, Kenya national and County government and parastals reports, previous empirical studies, magazines, Newspapers, and bulletin and internet sources. The sources were considered to be of great importance in tracing the historical development of the study and very key in guiding the foundations of the study.

## 3.0 RESULTS AND DISCUSSION
### 3.1 Root Causes and Trajectories of Cattle Rustling

Today, conflicts have become more complex and protracted. About 2 billion people, circa a third of the world's population, currently live in countries affected by conflict. Conflict is often linked to global challenges from climate change to human trafficking and contemporary violent conflicts are no longer defined by national borders. Schafer (2018) notes that conflicts cost an estimated $13.6 trillion every year and pose a significant threat to the 2030 agenda (Schafer, 2018). It is thus clear that actors need to understand the trends and address the drivers of conflict, including the tipping points that push fragility to violence. According to the Social Science Research Council (2018: 3) "conflicts and widespread violence have complex socio-cultural, economic, and political dimensions that operate through power networks which transcend conventional conceptual boundaries, e.g. public vs. private or local vs. national. It is a commonly held view that the nature, intensity, and frequency of conflict have evolved in recent years. This shift in nature of conflict, corresponds with a long- term decline in traditional symmetrical conflicts (e.g. between armies), to increasing numbers of intrastate conflicts and asymmetric wars (e.g. between state and militia) (Avis, 2019).

Cattle rustling in East Africa and the Horn was, in the past, predominantly practiced by pastoral and nomadic communities for two main purposes; as a way of restocking after a severe drought or disease had killed their livestock and the second was to enable suitors (young warriors) to acquire cattle to pay the bride price required in order to marry. This has changed dramatically in recent years, with the latest statistics and reports showing that the phenomenon of cattle rustling has evolved in both method and extent. It is now being practiced for commercial reasons and through criminal networks that cross communal and international borders, rendering cattle rustling a transnational (criminal) act (Gumba *et.,* al, 2019; Kaprom, 2013; OCHA 2017 and Melil, 2018).

In Kenya, several counties are affected by cattle rustling which has evolved over a period of time from being an accepted traditional practice sanctioned by the village elders into being a commercialized and criminal venture, with attendant grave human rights violations. Some of the causal factors that have contributed to the recent development and new trends in cattle-rustling in Kenya and her neighboring countries include perceived marginalization, weak mitigation strategies, commercialization of cattle raids, environmental insecurity, political instigation, poverty/unemployment, proliferation of Small Arms and Weapons and cultural practices (Kaprom, 2013; Gumba, 2020, Greiner, 2013, & Kushner 2017).

### 3.1.1 Proliferation of Small Arms and Light Weapons

According to Ndambuki 2016 there are estimated 40,000 guns unlawfully held by groups in northern Kenya and security strengths have only recouped under 10 percent of them. With such a tremendous uncontrolled measures of guns represents a

critical risk to national security. A 2015 Kenya Police report indicates that cattle raiders' weapons originate from neighbouring countries with internal strife, particularly Somalia and South Sudan. However, in recent decades the practice has increasingly involved the use of modern-day firearms. The gun culture and its historical background in West Pokot County, for instance, goes beyond Kenyan borders into the neighbouring countries of Uganda, Sudan, Ethiopia and Somalia. Some of these weapons are smuggled in from neighbouring countries, but many have been passed down from one generation to the next, or resold. The ubiquity of the gun, especially in pastoralist areas, and the government's failure to collect all illicit arms have fed perceptions of impunity. Other guns are often traded at cattle markets right alongside the livestock, smuggled into Kenya across land borders, or even through the port at Mombasa on the Indian Ocean (Kushner, 2017). Poor security and porous borders in the North and North East of Kenya have produced a complex set of conflict dynamics. It is considered to have contributed to the proliferation of small arms in the region and illicit trade in cattle

### 3.1.2. Political instigation

Ethnic mobilization has played a major role in political struggles at national levels in Kenya and these dynamics have been transferred even into the remotest pastoralist areas where cattle rustling is prevalent. A report by OCHA (2017) indicates livestock raiding emerges as a specific form of violent regulation: a well-adapted, dangerous, and powerful political weapon. A study by Melil, 2018 on cattle rustling in Baringo County indicates that the actors in cattle rustling involve politically linked and power yielding personalities and sometimes not pastoralists. It is argued that cattle rustling is motivated by competition for political power and resources: political barons use organized attacks to drive out their political rivals and extend their business interests. In West Pokot county on the other hand, inflammatory speeches by politicians frequently triggered raids and counter raids. Such speeches focused on real or assumed offenses of another group, like previous raids and/or violent attacks on women and children (Kaprum, 2013). In Turkana county for instance, where cattle raids are common, the practice has been highly commercialized and many politicians use to create support zones for themselves.

### 3.1.3 Commercialization of Cattle Raids

According to the Global Forum on Agricultural Research report, the Kenya Meat Commission estimates that some 500 tons of beef are exported from Kenya each week to the Middle East (United Arab Emirates, Kuwait, Qatar and Saudi Arabia) and Africa (Egypt, Tanzania, Uganda, Democratic Republic of Congo and Sudan). This has led to an emergence of commercialized cattle-rustling where wealthy businessmen, politicians, traders or local people pursuing economic objectives finance raids among the pastoral communities." Livestock from affected counties find their way into markets outside these

counties to new destinations like Nyahururu, Nairobi, Nakuru and even across borders. With this commercialization it becomes imperative for raiders to increase their cattle rustling practice (Melil, 2018). A study by Okumu 2021 notes that 'it often takes less than 24 hours for elaborate networks of criminals to steal livestock, load them onto trucks and transport them to markets or abattoirs in urban centres and across borders. The carcasses of slaughtered livestock bound for overseas markets are then transported using air cargo. A violent crime that once happened under the cover of darkness, cattle rustling now takes place blatantly during daylight hours.'

### 3.1.4 Perceived marginalization

In Baringo, Laikipia and West Pokot Counties, for instance, raids are more prevalent and they several times a year and sometimes as often as a few times a month along the border areas. Police camps have been set up in such areas and more security personnel deployed to beef up security. But studies indicate inadequate support from the security personnel. According to a number of previous studies some residents in the area feel that the police are not doing enough to stop them from being attacked. They say the police fear the bandits, but also have little motivation to do their job because of isolated and poor working conditions – many deployed police are reportedly junior officers and don't have adequate food or water supplies (Harder, 2020, Greiner, 2013; and Ndambuki, 2016). The North East has the greatest concentration of pastoral communities in the country and there is a strong perception among these communities that the government has treated them unfairly, signifying a high level of local alienation from the government (Menkhaus, 2015). The region lags behind the rest of the country in infrastructure, education and health services, with Northern Kenyan counties ranking at the bottom of almost every human development ranking in the country (Menkhaus, 2015).

### 3.1.5 Environmental insecurity

Competition for the control of political and economic resources in Northern Kenya – and unequal access to land and natural resources – are considered to be drivers of recurrent violence and key threats to security. Competing claims to land and natural resources and inequitable or inadequate access to land for the poor has been, and still remains, a source of conflict and the situation is often aggravated during times of food scarcity or when extractive resources are discovered. This can be witnessed in Turkana, Elgeyo Marakwet, Baringo among other counties (Nolasco;2017). Pastoral conflicts have become more frequent and unpredictable, exacerbated by scarce resources, and have increasingly involved the use of arms. The weakness of the traditional structures is also demonstrated by the radical changes in resource management. Dealing with and restrain the inevitable governance, demographic and economic changes that have entailed socio-economic stratifications and radical changes in land use patterns. The pastoral and rural communities are

convinced of the irreversible land change that would impact negatively on the sustainability of their livelihoods and would welcome and support measures to halt and ultimately reverse the trends. In addition, deep-rooted inequalities persist in areas where oil and hydrocarbon reserves are located, which makes the way in which anticipated revenues are shared of particular importance as a potential source of conflict or resilience (Harder, 2020).

## 3.2 Mitigation Strategies Employed in Curbing Cattle Rustling
### 3.2.1 Negotiation and Peace Committees

On several occasions negotiation has been used as a strategy to avert diplomatic rows between some of the Eastern African states related to cattle rustling. There has even been mention of bomber planes allegedly been used to pursue cattle rustlers who cross international borders. The fact that cattle rustling occurs in pastoral communities across national borders, further accords the crime a distinct characteristic. The National Steering Committee on Peace Building and Conflict Management (NSC), an interagency committee established in 2021 has deployed softer approaches of community level peace dialogues and negotiations among the pastoralists, and aided Sub-County Peace Committees (SCPC) with the support of national partners such as the National Cohesion and Integration Commission (NCIC), National Drought Management Authority (NDMA) and civil society actors. All these interventions have registered different levels of success. The SCPCs have had some success but have not been able to ultimately address the increased incidences of cattlerustling in the region.

Worth mentioning includes Kenya and Ethiopia having signed a peace agreement to end cross-border cattle rustling in 2009. In 2012 Uganda deployed more the 5 000 soldiers along the Uganda-Kenya border to stop cross-border raids. Additionally, in September 2019, Kenya and Uganda signed a memorandum of understanding for sustainable peace in the Karamoja cluster, a geographical area at the borders of Uganda, Kenya, Ethiopia and South Sudan inhabited by pastoralist groups (Gumba, 2020; Kabelo, 2019).

In 2008 an EAPCCO Protocol on the Prevention, Combating and Eradication of Cattle Rustling in Eastern Africa was signed. The member states of the EAPCCO are Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Seychelles, Tanzania and Uganda. The protocol was set to move from the traditional practice whereby Countries in the region responded, in the main, by adopting use of indiscriminate force and incentivised disarmament initiatives. The protocol further seeks to address cattle rustling by, among other steps, enhancing regional cooperation, harmonizing legislation and adopting livestock identification systems and records. However, neither of these approaches has been particularly successful. Indiscriminate violence ratcheted up community resentment against state security forces, while the exchange of livestock for firearms and ammunition achieved the opposite effect –

incentivising civilians to acquire more firearms (Gumba, 2020). This protocol could give the region a common policy or legal framework to deal with the crisis. Its lack of support from East African states is just one of the signs that governments in the region don't seem to consider cattle rustling a serious crime. In many East African countries there is no specific law that requires that the source of cattle at slaughter houses be identified.

### 3.2.2 Deployment of Kenya Police Reservists

Kenya Police Reserves (KPRs) are local security personnel available to counter attacks from external aggressors in pastoral areas. They usually support resource-constrained police departments. It is recognized that in the past few decades since independence, KPRs have become an important security agency in the rural areas, and gradually more as private security. Government's drive to enlist and arm the Kenya Police Reservists (KPRs) and home ensures as comparing security providers in the ASALs. The police reservists are selected from within affected communities, armed by government and trained at local police station posts in the affected counties (Okumu, 2021). In Turkana County, it is reported that KPRs are using government arms for profit as private security guards, and in Laikipia, large numbers of scouts are armed by the state to provide security for a few. This has led to a shift of balance in power from the official security to private security. While this was at initially proposed to be a clear gathering policing action, the same has been harmed with attestations of degradation, deficiency and inclination along tribal lines in so far as the decision on who should be equipped as a KPR (Ndambuki, 2016; Nolasco, 2017).

### 3.2.3 Security operations/ Military operations

Police are deployed and these include the General Service Unit and anti-stock units as well as armed forces. However, the relationship between Kenyan security forces and local communities in the cattle rustling bound regions remains strained by antagonism and distrust. Since independence, state security agents have contributed to the continued repression of the pastoralist communities by perpetrating serious human right violations among the communities during their so-called 'state-operations' in the ASALs. Oftentimes, these violations are carried under the terms of collective punishment where everyone the young, the old, the pastoralists and the men suffer in equal for committing real or imagined transgressions against the state. This blanket approach by state-security agents to security concerns in the ASALs has increased tension and animosity between the security agents and members of the communities, thereby impeding the likelihood of there being any effective collaboration in efforts aimed at curbing livestock theft, Weiss, (2004).

Poor coordination and relations between intelligence and policing departments have also been blamed for the failure to prevent terrorist attacks. The National Intelligence Service has

been accused of not providing actionable information to the police services; and the police have been accused of not acting on intelligence they receive (Ndambuki, 2016).

### 3.2.4 Disarmament

The government launched a massive disarmament in banditry-prone counties, leading to the gun mop-up being carried out. In 2004, a Nairobi Protocol for Prevention, Control and Reduction of Small Arms and Light Weapons in the Great Lakes region and Horn of Africa was signed. There has been successive commitment to the process of reducing illicit firearms in various regimes. The collected firearms have been on many occasions destroyed in public. However, other reports indicate that more attacks are reported and communities continue to smuggle in more illegal guns (Harder, 2020; Kushner, 2017). Additionally, there are few guns seized during the disarmament and there are no records of criminals who were arrested during disarmament just as there were none arrested previous years. Disarmament programs in the region have failed completely. For instance, the 2007 disarmament campaign claimed only 1710 firearms and 5700 rounds of ammunition. This has been attributed to Governments in the region response termed as heavy-handed coercive disarmament operations which have led to distrust and subsequent violent clashes between communities and security providers. According to Melil, 2018, absence of effective and accessible state security in these areas, small arms are naturally seen as a guarantor of security in such areas. Local leaders, clergy and professionals in the banditry prone have insisted that disarmament will not yield fruits in seizure of illegal guns, asking instead for the government to involve them and the community by embracing dialogue and providing tentacles of reaching out to the armed bandits.

### 3.3 Challenges and Opportunities

The problem of cattle rustling persists through more frequent cross border cattle raids leading to loss of lives and livelihoods, injuries, interruptions of local trade and education. Across the border, as well as in the aforementioned counties, life is characterized by fear and uncertainty. Many pastoralists are forced to be on alert all the time to fend off any incursions (Kabelo, et.,al 2019; Melil, 2018; Nolasca, 2017). Uganda has been quite successful in protecting its Karamoja region against livestock theft from Kenya's Turkana and Pokot herders. However, this has not stopped raids across its northern border with South Sudan. In Kenya, police reservists and local businessmen have been linked to banditry attacks in West Pokot and Baringo counties.

Cattle rustling in the region has also affected success of mitigation strategies and conflict resolution projects. Cattle raids have impacted negatively on the already fragile ecosystems, economic growth, and on the key social and livelihood sectors such as education often observed through high drop -out rates due to displacements, interference in local trade and markets. Collaborative resource-based conflict resolution

trends point to different avenues for conflict resolution and prevention. For instance, priority to sound management of environmental and natural resource usage factors could prevent conflicts and these requires the commitment and effort of governmental and non- governmental bodies and communities at national and local levels. However, the poor State of service delivery to Arid and Semi-arid Lands (ASAL) areas is central to the conflicts that destroy them. The capacity of pastoralist households to exploit opportunities in other sectors as well as robust partnerships between governments, civil society and development actors in community education, including vocational training for pastoralist warriors is very vital. These could enhance livelihood options for the youth and encourage them to pursue alternative means of production to cattle rustling. Other strategic options include as raising the education, delivering other services such as health and infrastructure, provision of security services through increase deployments of security forces, and improving communication services such as Global Positioning System (GPS) in addition to radio calls as suggested by Okumu, (2021) are important in their indirect role of reducing conflicts.

The issue of disarmament has been down played by the allegations of brutality and noninvolvement of community stakeholders (Greiner, 2013; Cheserek, 2007; Cheruyoit & kizito, 2008). The national and county governments should secure all illegal arms as a way of reducing hostilities and take up their legal duty of providing security for pastoral communities. There is need for commitment to this duty and gain trust and confidence from the pastoralist for them to surrender arms as one of the government programs to disarm the neighborhoods.

Collaborative approach to conflict management in the region could also be effective. Various stakeholders including the rural and pastoral communities, their indigenous organization, and other non-State actors should lobby and demand the governments provide and guarantee these people security as enshrined in the national constitution. In conjunction, addressing the historical marginalization of pastoralists is equally important. The provision of state security to guarantee public safety and reduce the illegal ownership of small arms and light weapons are two imperatives to changing this current insecurity.

## 4. CONCLUSION

Cattle rustling which began off as a cultural practice has evolved over decades to become more complex and deadlier with more sophisticated weapons being used. The conflict is experienced across counties as well as across borders. Notably causes discussed include environmental factors, livestock commercialization, Small Arms and Light Weapons (SALW) proliferation among others.
Efforts to curb cattle rustling exist regionally, nationally and at the local levels. Some of the mitigation measures are disarmament, negotiations, military operations and use of KPRs.

However, it is worth noting that cattle rustling still remains a great threat and counties in question still face the challenges of living with uncertainties, failed disarmaments, politicization among others. Major Improvements to the approaches tapping the opportunities need to be enhanced to address cattle rustling. This can be achieved through collaborative community sensitive and participatory approaches together with enhanced confidence building and public safety.

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# YOUTH EMPOWERMENT THROUGH PARTICIPATION IN ENTREPRENEURSHIP ACTIVITIES IN NORTH-WESTERN NIGERIA

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## ABSTRACT

*This paper seeks to examine socio-economic benefits of participation in entrepreneurship activities among youth in North-western of Nigeria. Youth empowerment through entrepreneurship activities which is the focus of this paper is a mechanism through which Nigerian youths are able to increase self-reliance in order to promote their well-being as it is believe that entrepreneurial development is a field that saddles its recipients with employable skills. A sample of 282 youths involved in the entrepreneurship activities from the study area were selected from a study population of 800, through sample random from the seven states of North-West of Nigeria and a schedule was designed and administered among the respondents. The results revealed that learning new skills and material status have significant impact on youth who participate in entrepreneurship activities. Most of the respondents have either primary or secondary school education which directly informed their participation in the programmes. The study finds out that there is high rate of involvement of youth in entrepreneurship activities in the study area, hence most of the respondents emphasized positive changes in their socio-economic well-being. The paper therefore concludes that youth involvement in entrepreneurship activities is a mechanism for youth empowerment and poverty alleviation in Nigeria. Its also concludes that entrepreneurial development is a field that saddles on how to be employable and to be useful to themselves and the society.*

**KEYWORDS:** *Empowerment, Participation, Entrepreneurship, Socio-economic.*

## 1.0 INTRODUCTION

Unemployment is a serious challenging task facing Nigeria today. Unemployment has become a major problem bedeviling the lives of Nigeria youth causing frustration, dejection and depending on family members (Lucas & Alaka 2014). The high rate of unemployment among youth in Nigeria has contributed to the high rate of poverty and insecurity in the country (Ajuto, 2013).

Youth have being known to play important functions to the development of any nation. As such, there is an emerging need to improve youth status which should start with social and economic empowerment through entrepreneurship activities and youth empowerment through participation in entrepreneurship activities. These would enable them to develop self-esteem, confidence, realize their potentials and enhance collective bargaining power and also improve their well being and self reliance. Thus, the increasing awareness and importance of youth participation in entrepreneurship activities and benefits drive calls for an in-depth study of youth involve in entrepreneurship activities in North-West of Nigeria.

The aim of this paper therefore, is to understand and describe the socio-economic benefits accrued to youth participating in entrepreneurship activities in the study area.

### 1.1 Empowerment - A Theoretical Postulation

Empowerment had two interrelated aspects that can be summarized as individual empowerment and collective empowerment. Each aspect has its own component (Mann, 2006). Individual empowerment relates to the way people think about themselves as well as the knowledge, capacities, skills and mastery they actually possess (Staples, 1999). A set of four components, including meaning, competence, self-determination and impact, were found in individual empowerment. The goal of individual empowerment is to achieve a state of liberation strong enough to impact one's power of life, community and society. Empowerment therefore develops from individual and a critical consciousness to collective action (Boehn & Staples, 2008). Individual empowerment develops when people attempt to develop the capabilities to overcome their psychological and intellectual obstacles and attain self-determination, self-sufficiency, self-confidence and decision making abilities (Becker & Korach 20004). While collective empowerment refers to the process by which individuals join together to break their solitude and silence, help one another, learn together, and develop skills for collective action (Boehm & Fatterson, 2004).

Empowerment process is therefore not a constant, but rather a continuing development that involves many changes and whereby an individual or group is able to strengthen and exercise the ability to act to gain control and mastery over life,

community and society. Empowerment thus is understood as a multi-dimensional process where people take control over their lives, gaining skills, building self-confidence and solving problems. Thus, youth empowerment especially through entrepreneurship activities would be able to develop self-esteem and confidence to improve their well being. Therefore, the involvement of youth in entrepreneurship activities can lead to empowerment where they can gain control over their lives because entrepreneurial development is a field that saddles its recipients with skills on how to be employable and useful to themselves and the society.

### 1.2 Aim Objectives of Study
The aim of this study was to examine the extent of youth empowerment through participation in entrepreneurship activities by youth from North-West of Nigeria.

**The specific objective are to**
i. Determine empowerment benefits (Social and economic) through participation in entrepreneurship practices.
ii. Identify the constraints militating against youth participation in entrepreneurship activities.

## 2.0 METHODOLOGY
The study was carried out in North-West of Nigeria. The study is descriptive in nature as it has attempted to describe the socio-economic benefits derived through participation in entrepreneurship activities among youths in the study area. The sample size of this study came from a population of 800 youths who are involved in entrepreneurship activities from the study area.

The sample size of 282 was selected for the study. The research instrument for data collection for this study was through questionnaire. The suggest items in measuring socio-economic empowerment were originally developed by past researchers and reported high rating in validity and reliability (Mann 2006, Kabeer, 2010). The volume of each response in these items as measured with four point likert scale (1. Strongly Disagree 2. Disagree 3. Agree 4. Strongly Agree). Data obtained from the respondents was coded, computed and analyzed using statistical package for social sciences (SPSS version 20).

## 3.0 RESULTS
While trying to examine the dynamics of youth participation in entrepreneurship activities in the study area, socio-economic benefits derived from the practice as well as challenges faced by the respondents were identified to be very important variables as the respondents of this study are youths that could explain better what they felt about entrepreneurial practices. This is shown in tables 1-3 below;

### 3.1 Economic Empowerment Derived through Entrepreneurial Practices
The main idea behind this section (Table I) was to measure the level of economic benefits derived by the respondent through participation in entrepreneurship activities.

The analysis showed that the overall score of youth economic empowerment was 2.74 and majority of the respondents are really privileged to enjoy many economic benefits. These include & increased in their purchasing power, improved living condition and increased in their income among others. The overall frequency thus indicated that youth who participates in entrepreneurship activities have moderate level of economic empowerment.

**Table 1: Items Analysis of Youth Economic Empowerment (n 282) mean 2.74**

| S/N | Items | Mean | SD | Low (1-2) | Mod (2.1-3) | High (3.1-4) |
|-----|-------|------|-----|-----------|-------------|--------------|
| 1. | My purchasing power has increased | 3.67 | 0.49 | 1.1% | 30.9% | 68.1% |
| 2. | I am feeling better about my living condition now | 3.58 | 0.53 | 1.4% | 38.3% | 60.3% |
| 3. | The level of my income has increased | 3.39 | 0.50 | 0.7% | 40.1% | 59.2% |
| 4. | I learn new income generation skills | 3.05 | 0.28 | 1.4% | 91.5% | 7.1% |
| 5. | I learnt how to manage my financial resources now | 2.98 | 0.23 | 2.8% | 95.4% | 1.8% |
| 6. | I am able to save some money now | 2.97 | 0.44 | 9.2% | 83.3% | 7.4% |
| 7. | I can now solve my financial problems | 2.90 | 0.35 | 10.3% | 88.3% | 1.4% |
| 8. | I have gained employable skills from my participation in entrepreneurship activities | 2.89 | 0.42 | 12.8% | 84.0% | 3.2% |
| 9. | I am able to overcome my personal needs now | 2.60 | 0.62 | 43.3% | 51.1% | 5.7% |
| 10. | I now have access to assets | 2.07 | 0.38 | 88.7% | 11.3% | - |
| 11. | I am able to teach others some income generation skills | 2.04 | 0.54 | 84.0% | 15.2% | 0.7% |
| 12. | I can now assist others financially | 1.80 | 0.50 | 95.0% | 5.0% | - |
| 13. | I have access to credit facilities | 1.73 | 0.57 | 96.1% | 2.5% | 1.4% |

**Source:** Field work, 2019

### 3.2 Social Empowerment Derived through Entrepreneurship Activities

This section (Table 2) was used to measure respondents, level of social empowerment through their involvement in entrepreneurship practices. The analysis showed that the overall mean was 2.81 and that most of the respondents of this study who participated in entrepreneurship activities have got a lot of social benefits. Based on the analysis in Table 2 below, respondents got social benefits such as improved quality life, having access to new skills and better decision making ability among others. Thus, the result showed that respondents who participated in entrepreneurship activities from this study area generally have moderate social empowerment.

**Table 2: Items of Analysis of Youth Social Empowerment (n 282) mean 2.81**

| S/N | Items | Mean | SD | Low (1-2) | Mod (2.1-3) | High (3.1-4) |
|-----|-------|------|-----|-----------|-------------|--------------|
| 1. | The quality of my life has improved | 3.62 | 0.50 | 1.1% | 35.8% | 63.1% |
| 2. | I happily work together with others | 3.58 | 0.51 | 1.1% | 39.4% | 59.6% |
| 3. | I learnt new things from the people | 3.04 | 0.33 | 3.2% | 88.7% | 8.2% |
| 4. | I learnt many things through networking | 3.03 | 0.43 | 7.8% | 8 1.2% | 11.0% |
| 5. | I have access to new skills | 3.01 | 0.27 | 2.5% | 93.6% | 3.9% |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6. | I feel better making decision about myself | 2.94 | 0.51 | 13.8% | 77.0% | 9.2% |
| 7. | I can act on my own now | 2.87 | 0.51 | 18.4% | 74.8% | 6.7% |
| 8. | I have new friends now | 2.81 | 0.51 | 23.8% | 70.9% | 5.3% |
| 9. | I have access to education now | 2.78 | 0.57 | 26.2% | 67.4% | 6.4% |
| 10. | I have access to useful information now | 2.52 | 0.69 | 46.5% | 48.2% | 5.3% |
| 11. | I know more about the society | 2.50 | 0.60 | 47.5% | 49.6% | 2.8% |
| 12. | I feel better making decision about myself | 2.02 | 0.30 | 86.2% | 13.1% | 0.7% |
| 13. | I perform my social responsibilities now | 1.86 | 0.46 | 96.1% | 3.5% | 0.4% |

**Source**: Field work, 2019

### 3.3 Youths Constraints in Entrepreneurship Activities
The main idea behind this section (Table 3) was to measure youth obstacles in entrepreneurship activities. The analysis showed that majority of respondents of this study has faced some challenges. Some of these challenges included: lack of enough initial capital, lack of financial support from the government and lack of enable environment.

**Table 3**: Items of Analysis of Youth Constraints (n 282) mean 1.90

| S/N | Items | Mean | SD | Low (1-2) | Mod (2.1-3) | High (3.1-4) |
|---|---|---|---|---|---|---|
| 1. | I get assistance from the government | 2.36 | 0.67 | 61.0% | 34.4% | 4.6% |
| 2. | I have enough capital | 1.31 | 0.58 | 86.5% | 12.4% | 1.1% |
| 3. | I have support from others | 2.31 | 0.63 | 65.5% | 31.2% | 3.2% |
| 4. | I have access to tools | 1.97 | 0.58 | 86.4% | 12.5% | 1.1% |
| 5. | I have good market for any product | 1.70 | 0.61 | 96.0% | 2.5% | 1.5% |
| 6. | I have my parents support | 1.90 | 0.60 | 88.0% | 11.9% | 1.1% |
| 7. | I have access to a shop | 1.70 | 0.61 | 96.0% | 2.5% | 1.5% |
| 8. | Government provide good environment | 1.59 | 0.60 | 97.0% | 2.5% | 0.50% |
| 9. | I have access to bank loan | 1.58 | 0.59 | 98.0% | 1.0% | 1.0% |
| 10. | I receive salary from n-power | 1.70 | 0.61 | 96.0% | 2.5% | 0.5% |
| 11. | I have constant electricity | 1.58 | 0.59 | 97.0% | 2.5% | 1.5% |
| 12. | Customers have access to my shop | 1.70 | 0.61 | 96.0% | 2.5% | 1.5% |
| 13. | I spend more on generator | 2.36 | 1.67 | 61.0 | 34.4% | 3.2% |

**Source**: Field work, 2019

## 4.0 DISCUSSION
The study was designed to understand the socio-economic impact of entrepreneurship activities on members. The result obtained from this study has shown the benefits and changes that respondents of this study have experienced in their lives as a result of their entrepreneurial practices. The outcome of this study showed that most of the respondents of this study have benefited considerable in terms of socio-economic empowerment. It is evident that economically, the respondents have opportunities through their participation in entrepreneurship activities to enjoy some economic benefits which include increased in their income. Most of them felt strong enough to meet unexpected financial challenges as a result of the increased in their purchasing power. Secondly, the outcome indicated that the respondents have got a lot of social benefits most of them felt that there is an improved life and access to new skills of income generation. To this end, respondents are able to make good decisions about themselves. They are able to articulate own strategy for change.

The findings of this study are consistent with previous studies (Ajuta 2013 & Salami 2013) who observed that entrepreneurial practice has the potentials establishing capacity building and self-efficiency among youth in socio-economic development.

Although, the respondents of this study faced some challenges in this practice. This includes lack of initial capital, lack of government support and many others, but the respondents were able to record moderate successes. It can be concluded that poverty and unemployment are the compelling forces for the youth to participate in entrepreneurship activities and the practice has proved to be a good strategy to alleviate poverty and youth development. It is understood from this study

that entrepreneurship activities are playing a vital role in empowering Nigeria youth as most of the respondents have emphasized changes in their wellbeing.

## 5.0 CONCLUSION

The outcome of this study indicated that youth in the area of study see entrepreneurial practice as a major means of livelihood and, therefore, put high expectation of returns on the practice. And as such, have benefitted considerably in terms of socio-economic development. The practice has clearly created impact upon the life pattern of Nigeria youth especially those from North-West of Nigeria.

## 6.0 RECOMMENDATIONS

The paper recommends the following:

1. Federal government should come out with mass enlightenment programme through ministry of youth development on the need for active participation of youth in entrepreneurship activities irrespective of educational status or sex.
2. There is the need for the three tiers of government to give support to youth engaged in entrepreneurship activities.
3. Graduates of entrepreneurship skills acquisition programmes should be supported with micro credits to start own business.

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# FEATURES OF INDEPENDENT WORK OF STUDENTS AT THE DEPARTMENT OF PROPADEUTICS OF CHILD DISEASES

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## ABSTRACT

*To improve the educational process in a medical university, much attention is paid to the organization of independent work of students (IWS). The article presents the purpose and objectives of independent work and reveals its role in the organization of the educational process. SRS is carried out on the basis of modern technologies and is an important element of the professional training of a future specialist.*

*IWS is a type of activity carried out under the guidance, but without the direct participation of the teacher in a specially allotted educational or extracurricular time. This is a special form of learning according to the tasks of the teacher, the implementation of which requires active mental activity of the student.*

*At the Department of Propaedeutics of Childhood Diseases, the teacher distributes the topics of independent work according to the calendar-thematic plan, taking into account his interests and individual capabilities. After receiving the topic, the student independently searches for material on a given topic in the library of the institute, gets acquainted with the necessary literature, finds the necessary information on the Internet and prepares a presentation.*

*The teacher monitors the work of students who have prepared a report and controls the correctness of their assessments according to the assessment table developed at the department. Conducting independent work of students in this form shows the effectiveness of the knowledge gained, the high level of their theoretical and practical training, their personal qualities, contributes to the development of clinical thinking, attention, performance, and thus plays an important role in improving the educational process.*

**KEY WORDS:** *independent work, students, educational process, improvement of knowledge.*

Currently, in order to improve the educational process at a medical university, great importance is attached to the introduction of innovative pedagogical technologies into the educational process that contribute to the formation of a creative personality capable of self-education and the development of intellectual abilities that determine an individual way of thinking and contribute to the self-development of personality and innovation.

The main purpose of the development and implementation of a credit-modular training system in the educational process in medical higher educational institutions is to improve the quality of training of a future doctor. In the educational process of a medical university, there is no problem more important and, at the same time, more complex than the organization of independent work of students.

There are the following forms of organization of independent work of students:

- creation of methodological manuals for independent work of students, which contain algorithms of student activity in the study of the discipline;
- organization of student scientific circles, where students present the results of their research in the form of reports;
- Organization of educational activities of students and others [1,3,4,5].

The tasks in organizing independent work of students at a medical university are:

- development of students' practical skills in examining a sick child, the ability to assess their significance based on the identified pathological symptoms;
- Training in the use and correct interpretation of data obtained using additional research methods (ECG, EchoCG, radiological, immunological, biochemical, etc.);
- Development of clinical thinking as a method of cognition based on understanding the processes occurring in the body of a sick child.

With this training system, the student works independently for maximum time, learns self-planning, self-control and self-assessment. This makes it possible for him to realize himself as a person, determine the level of assimilation of knowledge, see gaps in his knowledge and skills.

The effectiveness of self-education depends on intellectual development, as well as on the attitude to knowledge, on the volitional and other qualities of the student [2,6].

Independent work of a student is a variety of individual and collective activities carried out under the guidance, but without the direct participation of a teacher in a specially designated classroom or extracurricular time. This is a special form of teaching according to the tasks of the teacher, the implementation of which requires active mental activity of the student.

At the Department of Propaedeutics of Children's Diseases of the Samarkand State Medical Institute, the independent work of students is organized as follows:

for each student, taking into account his interests and individual capabilities, the teacher distributes the topics of independent work in pediatrics according to the calendar and thematic plan. After receiving the topic, the student independently searches for material on a given topic, studies its relevance, etiopathogenesis, clinic, diagnostics, differential diagnosis, treatment and prevention.

After the end of the practical classes, the student studies in the library of the Institute, gets acquainted with the necessary literature, finds the necessary information on the Internet and prepares a presentation.

The department draws up a schedule for independent work for each group taking classes on the subject "Propaedeutics of childhood diseases". To cover each topic of independent work, three students are preparing, i.e. work is carried out in small groups. At the beginning of independent work, two of the trained students offer students sitting in the classroom a handout that contains 20 tasks (tests, situational tasks and practical skills) to assess their initial knowledge (pre-test). 15-20 minutes are given to answer them. Then they collect a handout, and the students themselves evaluate their peers.

After the handout is collected, one of the trained students conducts a presentation on a given topic. After the presentation, the same handout is re-distributed to students to evaluate their knowledge once again, but less time is allocated, about 10 minutes (post-test). After 10 minutes, a questionnaire is collected, and before it is checked, students sitting in the audience demonstrate a video on the topic of independent work for 8-10 minutes. After the grades are put down in the evaluation sheet, one of the students announces the grades of his colleagues received before and after the presentation.

The teacher monitors the work of the students who have prepared the report and controls the correctness of their grades according to the evaluation table developed at the department.

Conducting independent work of students in this form showed that the effectiveness of the knowledge gained is much higher when re-evaluated after listening to the presentation. Independent work of students is such work that is performed without the direct participation of the teacher, but under his control and at a specially provided time for this [8,9,10].

The main factors influencing the effectiveness of independent work of students in the credit-modular system of education are the initial level of training of students, the degree of organization of the educational process, the qualifications of the teacher, the interest of the teacher and the student in the learning outcomes and the objectivity of control over the assimilation of educational material.

Control over the SRS should be objective, with mandatory assessment for the quality of the learned material. The forms of control can be very diverse: checking notebooks for independent work, interviewing students, written survey, testing, self-control [3].

The control of the SRS should become a motivating factor of the student's educational activity [7]. Independent cognitive activity of a student includes comprehension, deepening, expansion of knowledge according to the program of the studied discipline, mastering the necessary skills of independent work with various sources of knowledge, the formation of research skills.The control of the student's knowledge by the teacher is a motivating factor and stimulates educational and cognitive activity in the study of disciplines.

Thus, independent work of students provides a high level of theoretical and practical training of students, their personal qualities, contributes to the development of clinical thinking, attention, efficiency

and thereby plays an important role in improving the educational process in the preparation of future specialists.

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# CONTENT ANALYSIS OF THE WRITTEN WORKS BY @SENYORA SANTIBAÑEZ IMPLICATION IN LANGUAGE TEACHING

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## ABSTRACT

*Education is one of the most affected areas of the digital era, and it is an associated concern that should only be given rapid investigation and solutions, similar to how social media influencers influence young people. That's why the researcher decided to look into books based on a popular social media influencer's post. Only the researchers reviewed the two books written by @Senyora Santibañez in order to study the content and determine the implications in language teaching. The researcher did an excellent job of identifying topics that piqued the reader's interest and demonstrating linguistic characteristics based on Magaiwa's characteristic and conceptual neologism (2016). Based on the author's statement and the linguistic features found in the work, the researchers discovered and created four categories of topics: morphological process, which focuses on borrowing words and reduplication of words, and semantics, which focuses on denotation, connotation, and figures of speech. From there, the researcher has laid out and identified six implications: (1) realistic, (2) aid in the development of vocabulary knowledge, (3 ) innovative methods of expression, (4) cultivates creativity and linguistic ability, (5) misuses language and (6) potentially cause confusion. As a result, the researchers discovered that as a language teacher, she needed to pay greater attention to current expression trends.*

**KEYWORDS:** *Social Media Influencer, Linguistic Features, Implication for Language Teaching, Content Analysis and Qualitative Research*

## INTRODUCTION

The digital era has ushered in a new era of modern communication through technology, as well as a shift in the field of education, particularly in terms of educational goals, procedure, and delivery of teacher information. A variety of challenges and trials arose as a result of the change, which the administrator and educator had to overcome (Firman, 2020). One example is how social media influencers have influenced students' thinking, behavior, and learning.

This study was conducted out just to gain a better understanding of the changes that are occurring in today's world, specifically how social media influencers influence and effect students' language learning and instruction. This study examines the substance of work based on social media posts from a social media influencer known as @Senyora Santibaez and considers the consequences for language education.

In his study "A Narrative Discourse Analysis of Poe's Short Story "The Tell-Tale Heart": Implications for Language Teaching," Alsahafi (2019) demonstrated how the macrostructure and microstructure of work might be employed in language teaching. One of Edgar Allen Poe's most well-known pieces, which has long been admired by readers. Alfasahi was able to come up with a few suggestions and interesting exercises based on his analysis to help improve language teaching.

## OBJECTIVES

The research aims to discuss and show the possible implications of the works written by @Senyora Santibañez on language teaching. She was the chosen writer because she is one of the well-known social media influencers in the Philippines currently admired by young people.

## METHODS

Roller and Lavrakas (2015) emphasize that qualitative content analysis is a systematic reduction of content, in which the conducted analysis pays special attention to the context to identify the themes contained and obtain a meaningful interpretation of the data gathered. According to Bengtsson (2016), the purpose of content analysis is to understand, organized, and elicit meanings from the collected data, and from there the researcher will make a real conclusion. This design will help greatly to assess the topics and linguistic characteristics of the books from the morphological process and semantic nature towards its implications in language teaching.

Only the researcher reviewed the two books of @Senyora Santibañez entitled "Lakompake" and "Make Love Not War".

## RESULTS AND DISCUSSIONS

### Table 1

*The topic discussed by @Senyora Santibañez in her work*

| Topics by Category | Statements were taken from the books of @*Senyora Santibañez* | Reference |
|---|---|---|
| Timely topic | Sa panahon ngayon, laganap na ang mga taong paasa. Lalo na sa larangan ng pag-ibig. Talaga kasing may mga taong kina-career ang pag-papaasa sa ibang tao, nag-eenjoy sila na nakikitang may umaasa sa kanila. Feeling mo kasi nakakaganda at nakakagwapo kapag may patay na patay sa'yo tapos ikaw pa-chill chill lang, tatapunan lang ng pansin kung kailan mo gusto. Ny*ta 'di ba? | Lakompake (p83) |
| | Wala namang masamang manghiram lalo na kung gipit, pero 'yung nangutang na nga tapos siya pa mayabang at kapag siningil e nagagalit, aba e ang kakapal ng mukha n'yo! Pwe! Pera lang 'yan kung tutuusin, pwede 'yang palitan. Pwedeng kitain. Pero 'yung tiwala na nasira, mahirap 'yan ibalik. Nagpakumbaba ka na lang sana, hindi 'yung ikaw pa mayabang. Lecheng flang 'to! | Make Love Not War (p 48) |
| | Simula nung nauso ang hastags, aba! Ang mga Hampaslupa, na-curious na rin kung paano ba ito ginagamit. Ang pangunahing paggamit ng hashtag ay para maging organisado ang paghahanap ng opinion ng mga tao depende sa isang issue sa pamamagitan lamang ng pagclick sa hastag. Pero ayaw patalo ng mga Hampaslupa papansin, talagang dapat magamit nila ito, dapat sabay sila sa uso. | Lakompake (p 15) |
| | Isa pa 'tong mga lecheng mahilig magpicture na di related sa picture. Ano bang trip n'yo, ha? Lagi na lang ako nakakakita ng ganyan, pero ang kinakainisan ko talaga eh 'yung mga magpipicture na kita 'yung cleavage nila tapos may Bible verse. Aba! Very wrong! Maling mali! Masasampal ko kayo! Dinadamay n'yo pa Bibliya d'yan sa kaharutan n'yo! | Lakompake (p 16) |
| | Sa panahon ngayon, mahirap nang makahanap ng totoong kaibigan. Ang hirap na kasing magtiwala sa mga hampaslupa. Nagkalat ang mga abusado at manloloko. Isali mo pa 'yung mga kaibigan nan ang-aagaw ng jowa! Kaya naku, todo ingat talaga ako sa pagpili ng mga kaibigan ko. | Make Love Not War (p 28) |
| Interesting topic | Inggit ka? E di bumili ka. Mga bashers nating gusto tayo maging guilty sa mga bagay na pinagpaguran naman natin. Tama na pagiging inggitera, fren. | Make Love Not War (p 69) |
| | Pwede pa rin naming maging RK ang mga umiinom ng tubig gripo pero hindi sila ganap na rich kid. Dapat tatandaan na kung gusto mong maging tunay na RK, 'wag kang iinom ng tubig gripo. Hindi nakakaganda. Pwe! | Lakompake (p 34-35) |
| | Kasi pag kamag-anak, madalas, kung ano-ano pang sinasabi. Sila 'yung wala na ginawa kundi sabihin kang "Tumaba ka yata" "Uy, akala ko ba nagda-diet ka?", "Wow! Bilog na bilog ah!" Akala siguro nila, nakakatuwa sila. Kung pwde nga lang sabihin na, "At least itong taba pwedeng tunawin, pero 'yang kapangitan mo, hindi." Gano'n! Pero syempre, dahil kadugo mo (na hindi halata dahil ampapanget!), ngiti-ngiti na lang tayo. | Make Love Not War (p49-50) |
| | Ako 'yung tipo ng kaibigan na magsasabi sa'yo na 'wag kang masyadong ngumiti kasi andami mong tinga. Wala kang pambili ng dental floss? Pwe! Ganon dapat, totoo tayo sa friends natin! Pag mabaho hininga nila, realtakin mo agad! O kaya ikaw na lang ang mag-adjust? Lagyan mong toothpaste ilong mo, kakahiya naman kasi sa kanya di ba? | Make Love Not War (p 34) |
| | Hindi naman sa nilalahat ko yung mga nagpipicture ng pagkain, pero karamihan talaga ganyan ang intensyon. Hilig-hilig magmayabang ng kinakain pero 'pag kasama mo naman, tubig na nga lang, nagkukuripot pa. Pwe. | Lakompake (p 28) |

| | | |
|---|---|---|
| Controversial topic | "'Wag kang magugulat kung may kotse ka na after 3 months." Luh! 'Yan na naman s'ya! Ipapakita na naman 'yung kotse n'ya from Google. 'Yung ibang networkers, talagang dadalhin ka sa kotse nilang maganda para ipagmayabang. Sasabihin nilang 'yun ang bunga ng pagne-networking nila. Pero sa katotohanan, iisa ang kotse pero maraming may-ari! Lahat ng networkers 'yun din 'yung kotse! Mga hunghang! Alam ko na galawan n'yo!!! | Lakompake (p 57) |
| | Ang malanding nagpapakita ng motibo, gusto makakita ng embutido. | Lakompake (p81) |
| | Malandi, haliparot, at kiri. Sila na yata ang mga pinakakinakainisan ko sa lahat! Totoo! Galit ako sa malalandi! Lalo na dun sa mga wala naman karapatang lumandi! 'Yung mga lumalanding pailalim, 'yung mga lumalandi kahit taken na, 'yung lumalandi pero puro bagsak ang exam, 'yung lumalandi ng boyfriend/girlfriend ng iba! Basta lahat ng uri ng kalandian, ayaw ko! Against tayo d'yan! Very wrong! | Lakompake (p67) |
| | From the root word "pamin," ibig-sabihin pa-men, or nagpapanggap na lalake. Itinatago ng mga pepper steak na ito ang kanilang tunay na sekswalidad. Bakit? 'Di ko rin alam. Siguro dahil sa pamilya, takot sa panghuhusga, o kung real talk lang din naman, para makalandi rin ng ibang paminta! | Lakompake (p123) |
| | Pamintang buo. Ito 'yung mga bakla na bihis lalaki, astang lalaki, mahilig sa gym, mahilig magpa-macho, pero mahilig din sa macho. Sila 'yung hindi mo talaga mapagkakamalan na bakla pag nakita at kinausap mo, kasi nga BUONG-BUO 'yung character peg nila na lalaki sila. Kahit anong pilit mo, hindi talaga umaamin, magkamatayan na! | Lakompake (p125) |
| | Dede, boobs, boobies, breasts, at dyoga. Ilan lamang 'yan sa mga katawagan sa dibdib ng kababaihan. Ngunit hindi talaga lahat ay nabiyayaan ng Maykapal, karamihan sa kababaihan ay napagkaitan ng dede, talagang nagkangliliit, gamunggo! Swear! | Lakompake (p126-127) |
| The topic opens up a new issue | Ang tunay na RK, may paid apps. Feeling siguro ng ibang tao, porket naka-iPhone sila e RK na agad sila. Pwe! Naka-iPhone nga pero pagtingin mo ng mga apps puro libre. Paano hindi afford bumili. Ito talagang mga nagmamayaman na 'to, feeling nila iPhone ang solusyon para umangat ang social status nila. | Lakompake (p35) |
| | Etong mga emoji na ito ay may nga kahulugan at dapat ginagamit ng tama. Kadalasang ginagamit ang mga ito para iparamdam ang kanilang saloobin, para malaman ang mood nila, o manglandi! Totoo! 'Yan ang pangunahing silbi ng mga emoji, ang manglandi! Maglalagay ng heart-heart, kisses, o blushing emoji! Oo, mga higad talaga. | Lakompake (p118) |
| | Malalaman mo kung plastik ang isang tao sa pamamagitan ng pag galaw ng mata nila! Usong uso ito sa mga kabataan ngayon! Mga mahilig mandilat! Mang-irap! 'Wag na 'wag ko lang talaga mate-tyempohan na may nang-iirap sa'kin, nako dudukutin ko 'yang mga mata n'yo! | Lakompake (p41) |
| | Pwde kang i-back bite anytime, anywhere. Kaya hindi pu-pwede ang Social Media sa mga mahihina ang loob, hindi ka uubra dito fren. Konting mali mo lang, trending ka na agad! Lahat magagalit sa'yo kahit hindi pa nila naririnig 'yung side mo. Ang saya di ba? | Make Love Not War (p20) |
| | Agree ako kay BFF Nancy na mag-forgive. BUT DON'T FORGET. Magkaiba 'yun. 'Wag mong kakalimutan ang mga kawalanghiyaan nilang ginawa sa'yo para hindi na maulit. Dahil pag 'yon naulit nila sa'yo, shunga ka. | Make Love Not War (p57) |

**The topic discussed by @Senyora Santibañez in her work**

It's easy to see why @Senyora Santibaez's work is popular; the topics are relevant, engaging, and contentious, and they raise new issues.

**Timely topic**

It discusses those who give false hope, as well as unending debt and concerns of social media usage that, despite being corrected a few times, many people continue to do. People are no longer only critics; they are also contributors to the creation of content, as authors draw on their own experiences as well as information gleaned from social media (Von Nordheim et al. qtd. 2018).

**Interesting topic**

@Senyora Santibañez captures the tickle and interest of the readers because she knows that human emotions should not be ignored. Even the journalists they cannot afford to ignore people's preferences, it is difficult for them not to appreciate and pay attention because

readers may think to seek other sources of information and comfort (Tandoc & Vos, 2015).

**Controversial topic**

Writer's value controversial topics that are hotly debated on social media to inspire and draw on the story to be made (Garimella et al. 2018). @Senyora Santibañez boldly and fearlessly discussed these topics like wrongdoing of networking, lewdness, sexuality, and small tits of women because it gets more attention.

**The topic opens up a new issue**

It will be considered old-fashioned if people who share their own stories and have been included in a journalist's stories are not given enough recognition (Parmelee et al. 2017). While @Senyora Santibañez gives her followers the opportunity to share freely their opinions by opening up topics like real rich people should have paid apps, the real meaning of emojis, plastic gestures, social media, and moving on, it has many branches that are possible sources of new issues. She also gives appreciation and recognition by including their different opinions in her books.

**Table 2**

*The linguistic features used by the writer in her books*

| Linguistic Features (Morphology) | Statements were taken from the books of @Senyora Santibañez | Reference |
|---|---|---|
| Words borrowed from the English language that are trending because of social media | Jusko! Puro mukha n'yo nsa lang nakita ko sa **news feed** ko! Para na akong tumitingin ng Powerpoint presentation! | Lakompake (pahina 18) |
| | Eto pa! 'Yung mga mahilig magpasalamat sa lahat ng nagla-like at pumupuri sa mga status at pictures nila. Ay no, hindi kayo magalang, **famewhore** kayo. | Lakompake (pahina 19) |
| | Na-**poke** lang, soulmate n'ya na agad! Ganyan ang galawan nila! Dahil sa panahon ngayon, nakadepende ang bilis ng paglandi sa bilis ng internet connection! | Lakompake (pahina 75) |
| | .Mga feeling maganda **distorted** naman ang picture para lang magmukhang payat. | Make Love Not War (pahina 18) |
| | Noon pa man, laganap na talaga ang **Social Climbers,** at mas lalo silang dumami nung nauso ang social media. | Lakompake (pahina 27) |
| English words that are familiar and often used by youth especially the conyos | Kaya 'yung mga nagsasabi na, "nasa nagdadala lang 'yan," 'yan yung mga dukha na walang pambili kaya sa **imitation** umaasa. | Lakompake (pahina 35) |
| | Yung mga kababata mong ime-message ka sa Facebook! Sasabihin na mag-**catch up** naman daw kayo at matagal na kayong 'di nagkikita. | Lakompake (pahina 52) |
| | O, aminin n'yo 'yan. Di talaga maiwasan minsan na may maka-**clash** kang kamag-anak. | Make Love Not War (pahina 49) |
| | Una, 'yung **backstabber**. Ayaaaan, nakuuuu, magaling lang pag nakaharap ka. | Make Love Not War (pahina 50) |
| | Gustong ipakita ang isusuot nila, para ipaalam sa lahat na may pupuntahan silang lugar na pang sosyal man o hindi, pero ganun ang **get up** nila. | Lakompake (pahina 30) |

| | | |
|---|---|---|
| Borrowed words that are easy to remember because it pertains to different faces of love | Yang *closure* na 'yan ay para lang dun sa mga tanga na umaasa na magkakabalikan pa rin sila 'pag nagsawa na 'yung X nila sa pinalit sa kanila! | Lakompake (pahina 108) |
| | Sasabihan ng *cool off* para umasa 'yung isang tao na may chance pa pero wala na naman talaga dahil ang katotohanan, naglaho na yung pagmamahal, at gusto na humanap ng iba! Pwe!. | Lakompake (pahina 91) |
| | Ang ate at ang kuya, hindi nilalandi. Tandaan n'yo 'yan! *Incest* ba gusto n'yo? | Lakompake (pahina 76) |
| | Kailangan n'ya raw ng *space*. Balak yatang mag-astronaut namputa. | Lakompake (pahina 91) |
| English words reduplicate by the writer | *Break* na kayo 'di ba? Tulungan kitang kalimutan siya | Lakompake (pahina 73) |
| | Ang *sweet-sweet* sa isa't isa! Nagki-kiss pa! Akala ko ba best friend? Eh bakit daig n'yo pa ang magjowa? Mga malalanding 'to! | Lakompake (pahina 76) |
| | 'Yung *close-close* kunyari, pero pinaplastik ka lang pala. | Lakompake (pahina 50) |
| | 'Di kagaya dati na kailangan mo pang makilala ang tao, *date-date*, usap-usap para magkalandian! | Lakompake (pahina 75) |
| | Pag may type 'yan na lalaki, hindi n'ya pa rin sasabihin na bakla s'ya. Sasabihin n'ya lang, "Tol, *trip-trip* lang," ganya! Ganyan 'yang mga 'yan! | Lakompake (pahina 125) |
| | Bakit ka pa mag *e-exert* ng effort pansinin ang mga walang kakwenta-kwentang bagay? Mute! Unfriend! Block! Gano'n para wala laging iniisip. | Make Love Not War (pahina 20) |
| Reduplicate to emphasize her point | Wala namang masamang manghiram lalo na kung gipit, pero 'yung nangutang na nga tapos siya pa mayabang at kapag siningil e nagagalit, aba e ang **kakapal** ng mukha n'yo! | Make Love Not War (pahina 48) |
| | Aba ang galing naman, instant na pala ang dasal ngayon. Ito namang mga **uto-uto**, todo like, at ishe-share pa. | Lakompake (pahina 22) |
| | Marami ang nafa-fall **agad-agad** sa mga paasa na 'yan dahil sa karisma nila. | Lakompake (pahina 85) |
| | "Ang sarap mo sigurong maging girlfriend." 'Yang mga quing inang mga lalakeng 'yan, ang **hilig-hilig** sabihin sa mga babae ang lintanyang 'yan, para ano? | Lakompake (pahina 97) |
| | Kaya minsa, ang sarap idelete 'yung status kasi pag-open mo sa Facebook marami kang notifications tapos pag tingin mo, 'yung mga lecheng 'to pala! **Nagpulong-pulong** na naman! | Lakompake (pahina 19) |
| (Semantic) Direct and unbridled statements (Denotative meaning) | • The writer is really good at implying, this is one of her qualities that people admire because she can voice things that others cannot say.<br>Bakit ka pa makikipagtalo, kung pwede naman manampal? | Make Love Not War (pahina 122) |
| | Welcome sa social media. Kung saan ang mga may utang ay palaging naka #blessed at travel goals pero pagsiningil mo sila pa ang galit. | Make Love Not War (pahina 18) |
| | Laging mag-ingat, shunga ka pa naman. | Lakompake (pahina 18) |
| | Hindi pinapangalandakan kung anong ginagawa at kinakain nila. Tanging mga nagmamayaman lang ang gumagawa n'yan. | Lakompake (pahina 27) |
| | Lahat naman ng tao ay malandi, kanya-kanya lamang itong level. Pero 'yung iba talaga, sagad-sagaran ang kalandian! Hindi mapigil-pigilan! | Lakompake (pahina 67-68) |

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| Subtly implied (Connotative meaning) | • There are context clues to easily determined the meaning, it is really necessary not to take the world literally because it really has a deep meaning, in order to understand the statement.<br>Kaya nga thankful talaga ako na nahanap ko si BFF Nancy, siya ang nagsilbing liwanag sa madilim kong nakaraan. | Make Love Not War (pahina 28) |
| | Para makalimutan ang mga hayop na 'yan, kakailanganin mo ang mga sumusunod: lakas ng loob, dedikasyon at ganda. | Lakompake (pahina 103) |
| | Iniwan ka sa ere. | Lakompake (pahina 103) |
| | So eto ikaw, umasa na pagkahilom ng mga sugat, may taong handang tulungan kang bumangon ulit. | Lakompake (pahina 95) |
| | Kaya dapat sintomas pa lang, puksain na agad sila. Layuan habang maaga para hindi iiyak-iyak sa dulo | Lakompake (pahina 95) |
| Using Irony that hides teasing and insults in praise | • Statements that will make you really think, if it is praise or sarcasm<br>Malinis ang kanilang kalooban! 'Di ba nakakagulat na may malalanding malinis ang kalooban? Sila 'yung tipo ng malalandi na nakakaakit dahil mababait sila. | Lakompake (pahina 70) |
| | Ganyan sila ka-dedicated sa network! Talagang mapapatawa ka na lang sa inis pag nabasa mo ang mga comments nila! Mga mukhang walang pinagkakaabalahan sa buhay kundi pakikipag-debate kung ano raw ang mas sikat na network! | Lakompake (pahina 25) |
| | Alam na alam nila na kailangan mo ng karamay sa oras ng hinagpis kaya handa nilang ialay ang kanilang malanding katawan para lamang matulungan ka. | Lakompake (pahina 73) |
| At first, it seems flattering but in the end, it turns out the sarcasm | • People will think at first that this statement is about praising but in the following phrase, they will see the real intention.<br>Oh bigyan ng palakpak, kulang 'yan sa atensyon. | Lakompake (pahina 119) |
| | 'Wag na wag mong iisipin na panget ka, hayaan mong kami na lang mag-iisip no'n, ipaubaya mo na. | Make Love Not War (pahina 122) |
| Using Simile with intention of ridiculing and amusing | • Although the language used is not a direct comparison, it is obvious what the statements want to convey.<br>Tapos lumalaki pa ang tyan. nagmumukhang butete. | Make Love Not War (pahina 21) |
| | Kahit anong gawin mo, kung mukha ka namang rambutan, never ka magmumukhang rich kid. | Lakompake (pahina 40) |
| | Talagang hopeless case na, 'di kaya sa makeup-makeup lang, nagmumukha tuloy silang tempura. | Lakompake (pahina 69) |
| | Hayaan mo silang maglaway, tutal mukha naman silang aso. | Lakompake (pahina 105) |
| | Then pag sila sila na lang, mas malambot pa sila sa bulak. | Lakompake (pahina 125) |
| Direct criticism using Metaphor | • The persona referred to in the statements is directly compared to the crab, shrimp, animal, bamboo, and plateau.<br>Iwas-iwas din tayo sa mga talangka na 'yan! 'Yan 'yung mga friend na hindi nagiging masaya sa mga achievements mo sa life. | Make Love Not War (pahina 32) |
| | Nandyan din yung mga malalanding hipon na babae na walang tigil sa paglalagay ng makeup. | Lakompake (pahina 68) |
| | Ang x minsan letra, madalas hayop! oo! hayup talaga 'yang mga lecheng 'yan! | Lakompake (pahina 102) |
| | Dios mio! Kawayan ba 'to? kasi super straight talaga nila, plateau kung plateau. | Lakompake (pahina 127) |

| | | |
|---|---|---|
| Human error is realized through Personifica-tion | • The writer chooses to give life to the plant called 'makahiya', 'karma', and pimples to make people realize their mistakes.<br>Nahiya ang makahiya sa sobrang sensitive ng mga taong ito | Make Love Not War (pahina 48-49) |
| | Always remember, laging nagmamasid si kumareng karma natin. | Make Love Not War (pahina 56) |
| | Nilalahat ko na dahil pimples na lang ang hindi nang-iiwan sa panahon ngayon! | Lakompake (pahina 92) |
| Using Synecdoche that consistently draws on human emotions | • Only a part of a person is mentioned, there are the heart, blood, and intestines to represent the person.<br>Ano ang dapat sundin sigaw ng puso o sigaw ng nanay mo? Bakit kaya bang mangbato ng tsinelas ng sigaw ng puso? | Make Love Not War (pahina 76-77) |
| | Talagang namang mag-iinit ang dugo mo . | Lakompake (pahina 40) |
| | 'Yan palang mga paasa na 'yan ay iisa lang ang takbo ng bituka, talagang pare-parehas lang ang ginagawa nilang style. | Lakompake (pahina 84) |
| | Mga walang puso 'yang mga 'yan! | Lakompake (pahina 93) |
| | Kukunin ang opportunity kahit kakabreak n'yo lang o habang walang nagmamay-ari ng puso mo. | Lakompake (pahina 72) |
| Her persona stands as a cocky and perfect person with use of Hyperbole | • These statements are no longer reflect reality. One of her styles was to exaggerate his statements as a cocky and perfect person to make her readers happy<br>Kaya pagsasampalin mo sila sa isip mo hanggang macomatose ang mga leche. | Make Love Not War (pahina 20) |
| | Wala akong kamalian kaya walang mapupuna sakin. | Lakompake (pahina 42) |
| Her point was emphasized by using Hyperbole | • The writer has done too much underestimation and exaggeration to emphasize what she wants to convey.<br>Dapat tatandaan na kung gusto mong maging tunay na rk, 'wag kang iinom ng tubig gripo. Hindi nakakaganda. | Lakompake (pahina 34-35) |
| | Ang kalandian ay nakakahawa, feeling ko dapat na itong bantayan ng World Health Organization dahil widespread disease na ito. | Lakompake (pahina 67) |
| | "Bigyan ng milyong palapak!" Gunggong! Baka ikaw ang sampalin ko ng milyong beses! | Lakompake (pahina 57-58) |
| Using Metonymy to talk about different faces of love | • The wording in these statements is more than the literal meaning, a term has been changed to deepen the statements<br>Ganyan ang takbo ng roleta nila. Kaya hindi nauubos ang mga umaasa sa mundo. | Lakompake (pahina 83) |
| | Pagnahulog ka, nako, kabahan ka! Mahirap umahon. | Lakompake (pahina 84) |
| | Pag na-fall ka sa isang tao, sahig ang bagsak mo dahil walang sasalo sa'yo. | Lakompake (pahina 85) |
| Utilize Metonymy to talk about hypocrisy | • The word gay was replaced by 'pamintang buo'(whole pepper) and 'pamintang durog' (crushed pepper) while the eagerness was replaced by word hungry.<br>Itong mga pamintang durog naman na ito ay nagmula sa pagiging buo, then biglang nadurog. Mga dinikdik ng tadhana. | Lakompake (pahina 125) |
| | Mga gutom lagi sa papuri. | Lakompake (pahina 30) |

**Linguistic features that seen in the two books of @Senyora Santibañez**

Draws inspiration from Magaiwa's neologism concept (2016) and Sperber and Wilson's relevance theory (1997). The analysis of the morphological process focuses on word borrowing and reduplication. In semantics, it focuses on denotation, connotation meaning, and figures of speech.

## Words borrowed from the English language that are trending because of social media

Often in multilingual human-to-person interactions on social media, he often changes his language (Patro et al. 2017). Newsfeed, famewhore, poke, distorted and social climbers are just a few of the words borrowed by the author that is trending because of social media.

## English words that are familiar and often used by youth especially the conyos

According to Reyes (2017), conyos are people who love to use Taglish in their expressions. The borrowed words catch up, clash, backstabber, imitation, and get-up are just a few of the frequently heard words spoken by conyos.

## Borrowed words that are easy to remember because it pertains to different faces of love

The issue of love has also been the subject of numerous academic studies from various cultures and societies (Sun & Yang, 2019). It just means that it really grabs attention, especially if uses the right term, @Senyora Santibañez preferred to borrow words in English like closure, cool-off, incest, space, and break, even though it has an equivalent word in the Filipino language.

## English words reduplicate by the writer

Reduplication is the term for words that are processed to produce different meanings by repeating some parts or the whole words themselves (Urbanczyk, 2017). In books, you can see the English words that she borrowed and reduplicated, like 'sweet-sweet, 'close-close', 'date-date', 'trip-trip', and eexert where only part of the root word exert is reduplicated.

## Reduplicate to emphasize her point

Reduplicate should be used on a special occasion like if you want to emphasize or prove something (Magaiwa, 2016). Like @Senyora Santibañez used of the word 'kakapal', 'uto-uto', 'agad-agad', 'hilig-hilig', and 'nagpulong-pulong' she used it to emphasized what she was saying and gain attention.

## Direct and unbridled statement (Denotative meaning)

Denotative is the primary literal meaning of words with one specific meaning (Zuhdah & Alfain, 2020). @Senyora Santibañez is known for her unbridled speech like this one "Lahat naman ng tao ay malandi, kanya-kanya lamang itong level. Pero 'yung iba talaga, sagad-sagaran ang kalandian! Hindi mapigil-pigilan!" It is straightforward and easy to understand.

## Subtly implied (Connotative meaning)

Connotative is a word that can have many meanings beyond its original meaning (Pratiwi et al. 2020; Masriyah et al. 2019). "Kaya nga thankful talaga ako na nahanap ko si BFF Nancy, siya ang nagsilbing liwanag sa madilim kong nakaraan." This statement carries many hidden meanings, the word light means guidance while darkness are wrong doings.

## Using Irony that hides teasing and insults in praise

Words that you think are praiseworthy but it was the opposite (Weitzel et al. 2016). The author uses many words of praise but behind the words, it is already streaked with insult.

## At first, it seems flattering but in the end, it turns out the sarcasm

In the middle or end of the statement, you can see the true purpose of the statement, an insult like this statement " Oh bigyan ng palakpak, kulang 'yan sa atensyon." It is also possible that the author just wants to make people laugh, using sarcasm is not just focused on insulting (Thompson et al. 2016).

## Using Simile with the intention of ridiculing and amusing

A simile compares two different things but has similar characteristics (Siregar & Pane, 2020; Damayanti 2018; Harun et al. qtd. 2020; Bjorklund, 2020). The author loves to use the word 'mukha' for her vague comparison with the purpose of ridicule and amuses, she compares a fat person to pufferfish, someone who pretends to be rich to 'rambutan', and ugly people who are trying to be pretty to tempura.

## Direct criticism using Metaphor

In metaphor, it no longer uses a related word because the comparison is directly made (Setiawati & Maryani, 2018). The author, directly criticizes human beings, she compares them to the crab that loves to pull down, people with beautiful bodies to shrimp, caterpillars that itch, animals because of their behavior, and bamboo and plateau due to small chest.

## Human error is realized through Personification

Human nature is applied to the plant which becomes shy according to the author if you think carefully, it really happens in real life because if you touch the 'makahiya' it will fold, but the description made by the author can still be considered personification. Because it applies human characteristics to objects as if they could act like humans (Fitria, 2018; Nursolihat & Kareviati, 2018).

## Using a Synecdoche that consistently draws on human emotion

There are two types of synecdoche first there is generalization where sum stands for the part of an object (Yousif, 2020). What can be seen in the works of @Senyora Santibañez is the second type where only the body part represents the whole person, there is the heart which the author used to describe the person who's in love and the person who is ruthless, blood for the person who feels angry and the intestine used to represent and describe the person who's giving falls hope.

## Her persona stands as a cocky and perfect person with use of Hyperbole

Hyperbole is a statement that is too much about something that no longer reflects the reality of life (Nursolihat & Kareviati, 2020). For example, the cocky statement of the author "Pagsasampalin mo sila sa isip hanggang macomatose."

**Her point was emphasized by using hyperbole**

Often it is used to get the attention of the reader (Nursolihat & Kareviati, 2020). Just like the author's desire not to multiply people who love to flirt, she exaggerated her statement that she even called the attention of the World Health Organization and said that flirting is a widespread disease.

**Using Metonymy to talk about different faces of love**

In metonymy, the name of an object is replaced by another name (Siallagan et al. 2017; Syafitri & Marlinton, 2018). As the life course of a person who's in love and deceiver, the author @Senyora Santibañez chose to use the

term "takbo ng roleta" because it is just winding, the person who is being deceived becomes the one who's giving falls hope and the person who's deceiver before becomes ready to get serious to commitment but eventually deceived.

**Utilize Metonymy to talk about hypocrisy**

Metonymy was used to talk about people who are pretending, like gays trying to become masculine instead of using this term, the author explained that they are also called 'pamintang buo' and 'pamintang durog' that have been crushed by time but they still acting like men but it is obvious from their actions that they are gays.

**Table 3**

*Implications for Language Teaching*

| Implication for language teaching | Proof taken from the books | Reference |
|---|---|---|
| Realistic | Realistic statements impress the mind of reader that will ease language teaching | Make Love Not War (pahina 48) |
| | • Ang lalakas pang mag-post ng mga travel goals nila, party dito, bili niyan. Pero pag bayad-utang pinag-uusapan, nganga! | |
| | • 'Yung mga tao na feeling mo may malasakit pero may malagkit palang hangarin. | Lakompake (pahina 73) |
| | • Gagamit pa ng po at opo habang kinakausap, hindi bilang respeto dahil nakakatanda kundi panglandi para cute raw. | Lakompake (pahina 76) |
| | • Sa panahon ngayon, laganap na ang mga taong paasa. Lalo na sa larangan ng pag-ibig. Talaga kasing may mga taong kina-career ang pagpapaasa sa ibang tao, nag-eenjoy sila na nakikitang may umaasa sa kanila | Lakompake (pahina 83) |
| | • Kaibigan mo, takbuhan mo pag nag-aaway kayo ng jowa mo, tapos'yun pala naka-abang na sila sa paghihiwalay n'yo! Ready to attack na! Or in short, 'yung plastikada nating friends na hindi pa rin natin ma-FO kasi minsan gustong gusto natin silang sakalin! | Make Love Not War (pahina 50) |
| Aid in the development of vocabulary knowledge | It expands the vocabulary of young people | Lakompake (pahina 45-46) |
| | • Mga oportunistang dayukyok! Pero sa oras na maramdaman o malaman nila na wala ka nang pera, bigla kang lalayuan na parang may sakit, mga manggagamit. | |
| | • Ito namang malalanding bulalo, sila 'yung patapon na nga 'yung mukha, patapon pa 'yung ugali pero mautak! | Lakompake (pahina 60) |
| | • Ito namang malalanding buko, sila naman yung mga hindi na nga mga gwapo at maganda dahil sa katigasan ng mukha, wala pang laman ang utak. | Lakompake (pahina 70) |
| | • Ang satire ay 'yung mga 'di totoong mga sulatin na ginawa para maging katawatawa. Oh alam n'yo na? pasalamat kayo sakin. Sobra sobra talagang nakakainis 'tong mga shunga-shungang naniniwala sa mga satire articles. | Lakompake (pahina 24) |
| | • 'Yung mga keyboard warriors. Ito 'yung ang tatapang sa social media, pero pag kaharap mo na, tiklop naman. Pwe! | Make Love Not War (pahina 49) |
| Innovative methods of expression | Providing ways to freely use the *code -switching*. | Make Love Not War (pahina 20) |
| | • In short, pwde kang i-back bite anytime, anywhere. | |
| | • Promoting peace pala, and not war (pero with a little bit of darkness siguro) | Make Love Not War (pahina 21) |
| | • Wala e, ganito talaga ang social media na kung saan lahat ng bagay ay big deal at feeling ng mga tao, ang lahat ng bagay ay umiikot sa kanila. Kumbaga, sign up at your own risk ito. | Make Love Not War (pahina 20) |
| | • Kaya kung meron kayong kaibigan na totoo sa inyo, palaging nandyan for you at | Make Love |

| | | |
|---|---|---|
| | tanggap ka kahit anong klase ka pang tao, keep them. Don't take them for granted. Treasure 'yan! | Not War (pahina 44) |
| | • Love your enemies. Mas okay na siguro yon kesa pumutok ang litid n'yo sa galit. | Make Love Not War (pahina 52) |
| **Cultivate creativity and linguistic ability** | It encourages young people to cultivate their expressive creativity and language skills | |
| | • Syempre gusto kong malaman ang kwento ng mga Alipin ko about sa Networking kaya tinanong ko sila kung ano-anong experience nila mula sa mga manlolokong Hampaslupang networkers na ito. Syempre, libo-libong Alipin ko ang nagbahagi ng kanilang istorya, pero ilan lang ang pinili ko para isama sa libro. | Lakompake (pahina 58) |
| | • Lagi na lang tanong ng karamihan sa mga galing sa break up at pagpaasa, "Ano ba ang ginawa kong mali?" Ang sagot? | Lakompake (pahina 103) |
| | • Maraming hampaslupa ang nagsasabing mahirap mag move on, pero ang totoo, madali lang ito! Ang gagawin mo lang naman ay kalimutan ang isang taong naging parte na ng buhay mo, oh 'di ba sobrang dali? | Lakompake (pahina 110-111) |
| | • Pero nung handa ka na, biglang naglaho! Pinaasa ka lang! Akala mo forever na, drawing lang pala. | Lakompake (pahina 95) |
| | • Kung magkaka-forever man sa larangan ng pag-ibig, siguro wala nang magsasabi ng salitang forever. Oh di ba ang gulo ng explanation ko? Pangmatalino lang kasi 'yun, kaya kung di mo magets, alam mo na. | Lakompake (pahina 112-113) |
| **Misuses language** | There are a few statements that use language in the wrong way | Lakompake (pahina 81) |
| | • Ang malanding nagpapakita ng motibo, gustong makakita ng embutido. | Lakompake (pahina 120) |
| | • Bigyan ng malulutong na sampal 'yang hudas na 'yan. | |
| | • Buhusan ng pagmamahal? Buhusan mo ng mainit na tubig kamo. | Make Love Not War (pahina 56) |
| | • Dito bibigyan ko kayo ng tips kung paano iiwasan 'yang mga lecheng paasa na 'yan at kung paano gumanti! Oo! Dapat lagging gumaganti! 'Wag kayong maniwala sa sinasabi ng iba na hayaan lang 'yang mga lecheng 'yan! Dapat n'yong gantihan 'yang mga 'yan! Pag hindi n'yo 'yan niresbakan, nako! Mamimihasa 'yang mga 'yan! Wag kayong papaya na inaapi-api kayo! | Lakompake (pahina 83-84) |
| | • Save the planet, kill the malalanding panget!!! | Lakompake (pahina 81) |
| | • Nakakap*nyeta. Ang sasakit sa mata n'yang mga lecheng estudyanteng nag-aaral daw sa "edi sa puso mo." | Lakompake (pahina 15) |
| **Potentially cause confusion** | Does not follow the traditional formal use of language | |
| | • Para kang laging nasa korte, anything you say can be used- ah basta yon. | Make Love Not War (pahina 20) |
| | • Heto ang tip ko: hintayin na sila ang mag-first move (text or chat) para hindi halatang karengkeng ka. Gamitin mo ang pagiging pabebe mo! | Lakompake (pahina 86) |
| | • Kaya ako, happy ako for BFF Nancy at sa new hair niya. Bagay! Matchy-matchy kami. | Make Love Not War (pahina 35) |
| | • Kung saan ang mga in a relationship ay nagiging single depende sa kung sinong ka-chat! Malalande! | Make Love Not War (pahina 18) |
| | • Mga mapanlinlang na 'to! Salestalk pa more! Pwe! | Lakompake (pahina 55) |

## Implications for Language Teaching

The researchers were able to identify four (4) positive and two (2) negative implications for language teaching.

## Realistic

A story must be based on true occurrences in order to strengthen a person's reaction to it (Park, 2016). @Senyora Santibañez uses words to convey the reality of life, which is both enjoyable and chaotic.

## Aid in the development of vocabulary knowledge

There are many modern and old terms that the author uses in her books and she explains them well such as the word 'dayudok', 'malalanding bulalo', 'malanding buko', 'satire', and 'keyboard warriors.' The books are able to expand the students' vocabulary and help them to be street smart students.

## Innovative methods of expression

In news or everyday conversation, there are words in English that are often used, it becomes part of the Filipino vocabulary (Baklanova, 2017). The books gave way to the free use of code-switching, students should claim freedom of using it without being afraid.

## Cultivate creativity and linguistic ability

Motivation is important for an individual to learn a language (Burns & Garcia, 2017; Takaloo & Ahmadi, 2017). This motivation can be seen in the works written by @Senyora Santibañez, she easily captures the tickle of the audience, pushes people to learn how to use language and she also influences her fans to share their feelings freely through it they become more creative while they also enrich the language.

## Misuses language

Table 3 shows the quotations on what kind of words the author tends to use that are not suitable for the young reader even if she says that she is just joking. It is still inevitable that there will be readers who will use and do the same. According to Buslon and Rillo (2019), there are also young Filipino children who are tempted to be fond of this kind of humor, they are influenced by what they see and hear in various forms of media entertainment.

## Potentially cause confusion

@Senyora Santibañez does not follow the accustomed formal use of language, there are times when the author deliberately exaggerates the word. For example, the word 'malandi' will be 'malande' to emphasize the word and change the tone that she thinks best suits her statement. In the study of Korolkovo and Bowes (qtd. 2020) they mentioned a writer named Alexander Rushkin who produced a work that mixed poetry, fairytales, novels, and pamphlets because of this he was criticized, that his work is erroneous, deviant, and destroys the norms. Yet it cannot be denied that the particular mistake of the writer is considered the modern rule of the new generation of writers.

## CONCLUSIONS

It is necessary to keep up with the cycle of time, as discovered in this study, there are intentional mistakes that writers made specifically in their use of language; they do it so that they can express themselves more freely and consider it art that will open a new door to expression; it should not be called a mistake because it is more about cultivating; it should not be called a mistake because it is more about cultivating. The improvements that the present generation of writers wishes to make will not be easy. The researchers hope that critics will be receptive to this type of speech because the modifications that the writer seeks will make the language and those who use it more comfortable.

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# MODIFIED RELEASE DRUG DELIVERY SYSTEM: CONCEPT AND SYSTEM DESIGN OF RATE-CONTROLLED DRUG DELIVERY SYSTEM

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## ABSTRACT

*Purpose-Among the various routes of drug delivery oral route is most preferred route. But conventional dosage form offers few limitations which could be resolved by modifying the existing dosage form. Sustained and controlled drug delivery system helps in maintaining of constant plasma drug concentration and retards the release rate of drug thereby extending the duration of action. There are various formulation strategies for sustained release tablets among which matrix tablet serves as an important tool. Hence the problem like poor patient compliance, multiple dosing, see-saw fluctuations can be easily minimized. Matrix tablets can be formulated by either direct compression or wet granulation method by using a variety of hydrophilic or hydrophobic polymers. The rate of drug release from the matrix is primarily governed by rate and extent of water penetration, swelling of polymer, dissolution and diffusion of drug.*

*Conclusion- Thus, sustained release matrix tablet can offer better patient compliance and could be quite helpful in treatment of chronic diseases. The present article concentrates on oral sustained release tablets with a special emphasis on matrix tablet.*

KEYWORDS: *Conventional tablet, Sustained release, Controlled release, Polymer, Matrix tablet.*

## 1. INTRODUCTION

Sustained release, sustained action, controlled release, extended action, timed release dosage forms are the terms used to identify drug delivery systems that are designed to achieve a prolonged therapeutic effect by continuously releasing medication over an extended period of time after the administration of single dose. The term Controlled release has become associated with those systems from which therapeutic agents maybe automatically delivered at predefined rates over a long period of time. But, there are some confusion in terminology between[3] Controlled release and Sustained release.

**Sustained Release:** The term sustained release has been constantly used to describe a pharmaceutical dosage form formulated to retard the release of a therapeutic agent such that its appearance in the systemic circulation is delayed &/or prolonged & its plasma profile is sustained in duration.

**Controlled Release:** This term on the other hand, has a meaning that, goes beyond the scope of sustained drug action. It also implies a predictability & reproducibility in the drug release kinetics, which means that the release of drug ingredient from controlled delivery system proceeds at a rate profile that is not only predictable kinetically, but also reproducible from one unit to another.

**Advantages of Sustained/Controlled release drug delivery system over the conventional dosage form**
- Reduced dosing frequency.
- Dose reduction. Improved patient compliance.
- Constant level of drug concentration in blood plasma.
- Reduced toxicity due to overdose.
- Reduces the fluctuation of peak valley concentration. Night time dosing can be avoided.

| Advantages Of Controlled Release Dosage Forms | DisadvantagesControlled Release Dosage Forms |
|---|---|
| Avoid patient compliance problems | Physician has less flexibility in adjusting the dosage regimen |
| Minimization or elimination of local or systemic side effects | Administration of this type of dosage form does not permit the prompt termination of therapy. |
| Minimal drug accumulation on chronic usage. | Costly processes |
| Control the condition more promptly. | All drugs are not suitable candidates for controlled release medication |
| Improve efficiency of treatment | Very short half life |

**Fig. 1 demonstrate the merits and demerits**

## Mechanism of Drug Release from Matrix Devices
### Dissolution Controlled Release
Sustained release oral products employing dissolution of drug from the solid surface to the bulk solution through an unstirred liquid film, is the rate limiting step. In this case the dissolution process at steady state would be described by Noyes-Whitney equation, As the time limiting step are simplest to prepare. If a drug has a rapid rate of dissolution it is possible to incorporate it into a tablet with a carrier that has a slow rate of dissolution. In the dissolution process if the dissolution process is diffusion layer control, the rate of diffusion.

$$(Cs - C) \text{ ------------------ } (1)$$
Where,

$dc/dt$ = Dissolution rate.
$KD$ = Dissolution rate constant.
$Cs$ = Saturation solubility of drug.

### Diffusion Controlled Release
These systems are of two types; a. Encapsulation diffusion control In this system water –insoluble polymeric material encases a core of drug. Drug will partition into the polymer membrane and exchange with the fluid surrounding the particle or tablet.
The rate of drug release is given by the equation

$$dm/dt = Adk\Delta c \text{ ------------------- } (2)$$
Where,

A = Area
D = Diffusion coefficient
K = The partition coefficient of the drug between the membrane and the drug core
I = The diffusion path length
Δc = The concentration difference across the membrane. An important parameter

In the above eq. 2 is the partition coefficient, which is defined as the concentration of the drug in the membrane over the concentration if the drug in core

## Polymers in Modified Release

Modified release dosage forms are designed by altering drug absorption or the site of drug release in order to accomplish predetermined clinical objectives. Possible therapeutic benefits of a modified release product include improved efficacy and reduced adverse effects, increased convenience and patient compliance, optimized performance, a greater selectivity of activity. Polymers are becoming increasingly important in design and development of modified drug delivery systems to provide modulation of drug release. The pharmaceutical applications of polymers range from their use as binders, solubility modifier, filler, coating agent in tablets to viscosity, flow controlling agents in liquids, suspensions and emulsions. The choice of a specific material and control mechanism for active pharmaceutical has become a critical aspects. The selection of polymeric material mainly is based on drug properties, target site, desired release environment, duration of action and desired release rate.

The polymers are inseparable part of our life. The use of polymers and polymer based sustained drug release system has been widely studied by numerous scientists and achieved many fruitful results. The first polymeric devices developed for controlled drug release system was way back in 1960s. The use of hydrogels in drug delivery applications was discovered in the 1960 by Wichterle and Lim. In the mid 70s, hydrogel membranes based on poly methacrylates was used in studies for the design of controlled release systems containing fluorides, for the treatment of dental caries in the patients. Folkman and Long in 1966 first represented a drug delivery system based upon the diffusion of small molecules through the wall of silicone rubber tubing. Polymer based controlled drug release systems are generally classified as either reservoir membrane devices or matrix monolithic devices. In it the release is controlled by a polymeric membrane that surrounds a drug moiety. These polymeric membranes may be subdivided into hydrophobic, nonporous, microporous and water-swollen, hydrophilic substances like hydrogels. Various cellulose materials like cellulose triacetate, polycarbonate and polypropylene, could be used in the formation of membranes with a diameters of the order of $1.5 \times 10\text{-}3$ μm to several microns.

Polymers that are used in pharmaceutical coating are primarily based on cellulosic and acrylic polymers, as they both have good film-forming properties that enable them in the production of tough protective coatings. The process ability of chitosan into film-forms may permit its extensive use in the formulation of film dosage forms or as drug delivery systems. Chitosan could be dissolved in organic acids such as lactic acid and acetic acid, before casted to films. Starch acetate (SA) polymer has been investigated as a novel, multifunctional excipient for the direct compression tableting process. Drug release rate is influenced by factors such as rate of diffusion across the membrane, tablet coating so that neither dissolution nor degradation of the polymer should occur during its active lifetime. Various materials such as fibrinogen, fibrin, and collagen have been tested as carriers for drug delivery systems. Collagen has been shown to have potential as a biomaterial since it is a major constituent of connective tissue. In addition to biocompatibility and non-toxicity to most tissues, collagen has efficient structural, physical, chemical and immunological properties that could be easily altered.

## Physiochemical Properties/Parameters
### Dose Size

For orally administered systems, there is an upper limit to the bulk size of the dose to be administered. In general, a single dose of 0.5-1.0 g is considered maximal for a conventional dosage form. This also holds for sustained-release dosage forms. Those compounds that require large dosing size can sometimes be given in multiple amounts or formulated into liquid system. Another consideration is the margin of safety involved in the administration of large amounts of a drug with narrow therapeutic range.

### Ionization and Pka

Drugs existing largely in an ionized form are poor candidates for oral SR DDS. Absorption of the unionized drugs is well whereas permeation of ionized drug is negligible because the absorption rate of the ionized drug is 3-4 times less than that of the unionized drug. The pKa range for an acidic drug whose ionization is pH sensitive is around 3.0-7.5 and pKa range for a basic drug whose ionization is pH sensitive is around 7.0-11.0 are ideal for optimum positive absorption. Drug shall be unionized at the site to an extent 0.1-5.0%.

### Partition Coefficient

The partition coefficient is defined as the fraction of drug in an oil phase to that of an adjacent aqueous phase. Partition coefficient influences not only the permeation of the drug across the biological membranes but also diffusion across the rate controlling membrane or matrix between the time when a drug is administered, and when it is eliminated from the body, it must diffuse through a variety of biological membranes that act primarily as lipid-like barriers. A major criterion in evaluation of the ability of a drug to penetrate these lipid membranes (i.e., its membrane permeability) in its apparent oil or water partition coefficient defined as,

**K=CCow**

**Where,**

Co = Equilibrium concentration of all forms of the drug in an organic phase at equilibrium,

Cw = Equilibrium concentration of all forms in an aqueous phase.

## Adequate Aqueous Solubility

Most of the drugs are weak acids or weak bases. Drugs with low water solubility will be difficult to incorporate into SR mechanism. For a drug with high solubility and rapid dissolution rate, it is often quite difficult to retard its dissolution rate. A drug of high water solubility can dissolve in water or GI fluid readily and tends to release its dosage form in a burst and thus is absorbed quickly leading to a sharp increase in the blood drug concentration compared to less soluble drug. It is often difficult to incorporate a highly water-soluble drug in the dosage form and retard the drug release, especially when the dose is high. The pH-dependent solubility, particularly in the physiological pH range, would be another problem for SR formulation because of solubilisation obstacles and often compounds with solubility 10 mg/ml present difficulties to solubilisation dosing formulation. In general, highly soluble drugs are undesirable for formulation into an SR product.

## Stability

Drugs undergo both acid/base hydrolysis and enzymatic degradation when administered oral route. Drugs that are unstable in gastric pH can be developed as slow release dosage form and drug release can be delayed until the dosage form reaches the intestine. Drugs that undergo gut wall metabolism and show instability in the small intestine are not suitable for SR system. In such case, the drug can be modified chemically to form prodrugs, which may possess different physicochemical properties or a different route of administration should be chosen.

## Biological Properties
## Half Life

The usual goal of an oral sustained-release product is to maintain therapeutic blood levels over an extended period. The duration of action significantly influences the design of oral SR delivery system and it is dependent on the biological half-life. Factors influencing the biological half-life of a drug include its elimination, metabolism and distribution patterns. Drugs with short half-lives required frequent dosing to minimize fluctuations in the blood levels. SR dosage forms would appear very desirable for such drugs. For a given steady state drug concentration, the zero-order rate of release of a drug from its dosage form is directly proportional to its rate of elimination. Thus drug with very short half-lives require faster rate of release, for a modest duration of time while dosage form requires large dosage. In general, drugs with half-lives shorter than 2 hrs are poor candidates for sustained-release preparations. Compounds with long half-lives, more than 8 hrs, are also generally not used in sustaining forms, since there effect is already sustained.

## Absorption

Absorption is the transfer of a drug from its site of administration to the bloodstream. The rate and efficiency of absorption depend on the route of administration. For IV delivery, absorption is complete; that is, the total dose of drug reaches the systemic circulation. Drug delivery by other routes may result in only partial absorption and, thus, lower bioavailability. For example, the oral route requires that a drug dissolves in the GI fluid and then penetrates the epithelial cells of the intestinal mucosa, yet disease states or the presence of food may affect this process.

The constant blood or tissue concentration of drug can be obtained from the oral SR systems through uniform and consistent release as well as absorption of the drug. The desirable quality of the sustaining system is that it should release completely absorbed. Apparently the release of the drug from the system is the rate limiting step, where rapid absorption relative to the drug release is always expected, i.e., Kr << Ka.

If we assume the transit time of dosage forms in the absorptive areas of GI tract is about 8-12 hrs, the maximum half-life for absorption should be approximately 3-4 hrs. Otherwise, the dosage form will pass out of absorptive regions before drug release is complete. Therefore, the compounds with lower absorption rate constants are poor candidates. Some possible reasons for the low extent of absorption are poor water solubility, small partition co-efficient, protein binding, acid hydrolysis and metabolism or site specific or dose-dependent absorption. Drugs with the high apparent volume of distribution, which influence the rate of elimination of the drugs, are a poor candidate for oral SR DDS. A drug which extensively metabolizes is not suitable for SR DDS. A drug capable of inducing metabolism, inhibiting metabolism, metabolized at the site of absorption or first-pass effect is the poor candidate for SR delivery, as it could be difficult to maintain constant blood level. Drugs that are metabolized before absorption, either in the lumen or the tissues of the intestine, can show decreased bioavailability from the sustained releasing systems.

## Approaches for SR/CR oral formulation

Sustained release drug delivery system. It includes any drug delivery system achieves release of drug over an extended period of time, which not depend on time. Hydrophilic polymer matrix is widely used for formulating an Sustained dosage form. The role of ideal drug delivery system is to provide proper amount of drug at regular time interval & at right site of action to maintain therapeutic range of drug in blood plasma. Controlled release It includes any drug delivery system which releases the drug pre determined rate over an extended period time.

## Additional measures to assess bioequivalence

It is generally agreed that the present regulatory criteria are adequate in the assessment of bioequivalence for many MR

formulations with conventional drug release profiles in vivo. However, for MR products designed to achieve a rapid rise in drug plasma concentrations (and thus a rapid onset of therapeutic effect) following administration or newer MR products with different drug release mechanisms (such as pulsatile- or chrono-release), other measures in addition to the current pharmacokinetic parameters (i.e., AUC and Cmax) may be needed for assuring bioequivalence. The use of pharmacokinetic/Pharmacodynamics (PK/PD) modeling and simulations allows for linking drug concentrations to their effects (safety or efficacy) and thus can be used to assess the impact of a difference in input rate on therapeutic equivalence.

## CONCLUSION

Drug delivery is the method or process of administering a pharmaceutical compound to achieve a therapeutic effect in humans or animals. For the treatment of human diseases, nasal and pulmonary routes of drug delivery are gaining increasing importance. These routes provide promising alternatives to parenteral drug delivery particularly for peptide and protein therapeutics. For this purpose, several drug delivery systems have been formulated and are being investigated for nasal and pulmonary delivery. These include liposomes, proliposomes, microspheres, gels, prodrugs, cyclodextrins, among others. Nanoparticles composed of biodegradable polymers show assurance in fulfilling the stringent requirements placed on these delivery systems, such as ability to be transferred into an aerosol, stability against forces generated during aerosolization, biocompatibility, targeting of specific sites or cell populations in the lung, release of the drug in a predetermined manner, and degradation within an acceptable period of time.

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# A STUDY ON COMPARING INVESTOR BEHAVIOR TOWARD TRADITIONAL INVESTMENT PLAN & MUTUAL FUND IN SURAT

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## ABSTRACT

*Indian mutual fund industry is growing at a good pace. But large segment of investors are still outside the umbrella of the industry. The aim of study was preference about various schemes for asset in mutual fund and factors considered by the investors while making invest in mutual fund. Safety, high return, tax benefits, and low risk are the factors that you feel are important while making investment in mutual fund or traditional investment plan. A sample size of 141 respondents was taken for carrying out research. For achieving the objective of the study has used the descriptive research design and primary data collection method for getting the result. Researcher has used Chi-square, Frequency, cross tabulation, to get verified result. It is conducted through this research work that employees are tried to save a good amount for their future needs. The best option for the employees is Mutual Fund. Employees believe that saving money helps in many ways.*

**KEYWORDS:** *Mutual fund, Traditional investment plans, Analysis, Study*

## INTRODUCTION

Unit Trust of India was the first mutual fund set up in India in the year 1963. In late 1980s, Government allowed public sector banks and institutions to set up mutual funds. Different investment avenues are available to investors. Mutual funds also offer good investment opportunities to the investors. Like all investments, they also carry certain risks. The investors should compare the risks and expected returns after adjustment of tax on various instruments while taking investment decisions. The investors may seek advice from experts while making investment decisions. With an objective to make the investors aware of functioning of mutual funds, an attempt has been made to provide information in question-answer format which may help the investors in taking investment decisions. the notion of traditional investments refers to putting money into well-known assets (such as bonds, cash, real estate, and equity shares) with the expectation of capital appreciation, dividends, and interest earnings. Traditional investments are to be contrasted with alternative investments.

## LITRETURE REVIEW

**Sridevi, JULY, (2019)** conducted A study on Investor Behavior toward Mutual Fund Investment. Their Objective are to study the investment pattern of the mutual fund investor in Kerala. To identify the factor that influences the choice of investment of the individual investors. The respondent was selected by using probability random sampling method from investor and questionnaires was collected from 150 samples. Conclusion is it can be concluding that the Indian mutual fund industries are growing at a good pace But large segment of investor are still outside the umbrella of the industry the reach of the fund houses to different segment of investors are still a key challenges.

**Dr. JK Raju, February, (2018)** conducted A study on Investors Attitude towards Mutual Fund as an Investment Avenue. Their Objective are to study about the factors responsible for the selection of mutual fund as investment options. To study and rank the factor having implication on attitudes of investor towards mutual fund. Research Methodology Data has been collected from primary data through questionnaire. The respondent was selected by using survey method from investor and a questionnaire was collected from 100 samples. Conclusion is the result of the study reveals that the low income investors have invested their money in systematic investment plan schemes with the savings motives. The high income investors, most of the respondents have invested their money in the mutual fund.

**Sharma D., September (2013)** conducted A study on Investment Perception and Selection Behavior towards Mutual Fund. Their Objective are to study the meaning, organization, working, and growth of mutual fund in India. To depict the present & Future potential of mutual fund. To find out the various factor affecting the behavior of selection towards mutual fund. Research Methodology The researcher was used causal design and primary data collection. The respondent was selected by using non convenient sampling method and it was collected through personal interviews. Conclusion is the result of the study mutual fund plays an increasingly important role in financial intermediaries. As of yearend 1992, the U.S mutual fund industry had more than $ 1.5 trillion under management in +3000 funds.

**Rao, Mohana P. (2006)** opined that, UTI followed by LIC Mutual Fund dominated the market with 54 and 15 schemes respectively. His interview with 120 respondents showed that, 96 percent invested in UTI due to better service and return. 50 percent of shareholding and 25 percent of unit-holding respondents were from metro cities. Investor's services, income–cum-growth option and capital appreciation were very important aspects while choosing a fund. He identified that the close-end schemes were very popular among investors and respondents in general expected private sector funds to improve the quality of services, investors' confidence besides reducing fraud and mismanagement.

**Mishra (1986)** in his study has worked on objective to check the impact of operating of LIC and impact of LIC's performance on the client satisfaction. It had been complete that being the sole company providing best services to the customers by satisfying their desires, is running with success by earning sufficient and by providing extended services to the purchasers. The study examined that LIC is managing its client base primarily with agency channel. With the wide unfold hands of LIC in each a part of the country, the purchasers are given with variety of insurance product at their door steps as per their needs.

## OBJECTIVE

- To know various factors of investment considered by the investors while selecting to invest in the mutual fund.
- To find out demographic factors of investors affecting investment decision in traditional investment plan and Mutual fund.

## RESEARCH METHODOLOGY

The research is an exploratory followed by descriptive one because the entire project is based on questionnaire and analysis which is of exploratory nature followed by the detailed description and analysis show the project is of descriptive design also. In this research primary data for the present study. Primary data were generated through questionnaire for this study. A well-structured questionnaire was prepare and distributed to collect information. The study has been conducted in the Surat city were the population for the research was general people. For this study, the sample size taken for the survey is of 141 people from Surat city. The sampling technique used in this study is non-probability convenience sampling. In such a techniques research seeks his or her own convenience to reach the ultimate target group. Statistical techniques like simple percentage analysis, frequency distribution table, chi-square test and various chart by MS Excel and SPSS has been used for data analysis.

## ANALYSIS

**Table: 1**

| | | Frequency | Percentage |
|---|---|---|---|
| **Gender** | Male | 94 | 66.6 |
| | Female | 47 | 33.3 |
| **Age** | < 20 years | 9 | 6.4 |
| | 21 to 30 years | 62 | 44.0 |
| | 31 to 40 years | 41 | 29.1 |
| | 41 to 50 years | 20 | 14.2 |
| | > 50 years | 9 | 6.4 |
| **Qualification** | HSC | 25 | 17.7 |
| | Graduate | 59 | 41.8 |
| | Post graduate | 37 | 26.2 |
| | Specific | 20 | 14.2 |
| **Occupation** | Student | 26 | 18.4 |
| | Business | 43 | 30.5 |
| | Professional | 18 | 12.8 |
| | Salaried | 37 | 26.2 |
| | Others | 17 | 12.1 |
| **Earning Family Member** | 1 | 13 | 9.2 |
| | 2 | 54 | 38.3 |
| | 3 | 33 | 23.4 |
| | 4 | 22 | 15.6 |
| | More than 4 | 19 | 13.5 |
| **Family Annual Income** | Below 3,00,000 | 16 | 11.3 |
| | 3,00,001 to 5,00,000 | 23 | 16.3 |
| | 5,00,001 to 7,00,000 | 27 | 19.1 |
| | 7,00,001 to 9,00,000 | 23 | 16.3 |
| | Above 9,00,001 | 52 | 36.9 |

| Marital Status | Married | 92 | 65.2 |
|---|---|---|---|
| | Unmarried | 46 | 32.6 |
| | Divorce | 3 | 2.1 |

The study Of Mutual fund and Traditional investment plan found that 66.6% investors are male and 33.3% investors are female respondents. Majority of the investor's age group has between 21-30 years which considered highest 40% of sample population. 141of respondents were represent done with graduate which constituted highest 41.8% of sample population. Majority of the investors are doing business which considered highest 30.5%.The majority of the investors in their family earning member is 2 which constituted highest 38.3%. The majority of the investors in their family annual income are Above 9, 00,001 which constituted highest 36.9%. Majority of the investors are married which constituted highest 65.2% of sample population.

**Table: 2**

| Particular | Frequency | Percent |
|---|---|---|
| **Are you investor?** | | |
| Yes | 138 | 97.9 |
| No | 3 | 2.1 |
| **How do you know about mutual fund schemes? (Multiple choice)** | | |
| Family & Friends | 53 | 20.2 |
| Agent & broker | 66 | 25.1 |
| Outdoor media | 48 | 18.3 |
| Print media | 43 | 16.3 |
| Electronic media | 36 | 13.7 |
| Word-of-Mouth | 17 | 6.5 |
| **How do you select mutual fund schemes?** | | |
| Schemes objective | 36 | 25.5 |
| Performance | 40 | 28.4 |
| Investment | 31 | 22.0 |
| fund manager | 12 | 8.5 |
| Comparison with others schemes | 22 | 15.6 |
| **Which types of traditional plans do you prefer?** | | |
| Insurance | 40 | 28.4 |
| Bank deposit | 37 | 26.2 |
| Postal schemes | 15 | 10.6 |
| Mutual fund | 31 | 22.0 |
| Equity | 15 | 10.6 |
| Others | 3 | 2.1 |

The total investors141, 97.9% of the respondents are Investors and 2.1% of the respondents are not Investors. Majority of the investors are known about mutual fund scheme by the Agent and Brokers which constituted highest 25.1% of sample population. Majority of the investors are select Performance option which constituted highest 28.4%. Majority of the investors prefer Insurance Traditional plan which constituted highest 28.4% of Population.

**Table: 3**

H0: There is association between Gender¸ Qualification and investment decision of MF.
H1: There is no association between Gender¸ Qualification and investment decision of MF.

| Statements | Mean | Standard deviation | Chi-square | Result(H0) |
|---|---|---|---|---|
| **Represent association between Gender and investment decision of mutual fund.** | | | | |
| I review my investment decision frequently | 1.65 | 0.927 | 0.694 | Accepted |
| Investment decision do have impact on life style | 1.95 | 0.936 | 0.260 | Accepted |

| | | | | |
|---|---|---|---|---|
| I made wise decision for investing in MF | 2.25 | 1.050 | 0.126 | Accepted |
| I set long term financial goal and strive to achieve them | 1.84 | 1.086 | 0.981 | Accepted |
| I never put all money in a single investment option | 2.01 | 1.236 | 0.533 | Accepted |
| I have invested in MF after consult with expert | 2.06 | 1.184 | 0.723 | Accepted |
| I have invested repeatedly in MF | 2.40 | 1.207 | 0.616 | Accepted |
| I recommend others to invest in Mf | 2.02 | 1.268 | 0.441 | Accepted |
| **Represent association between Qualification and investment decision of mutual fund**. | | | | |
| I review my investment decision frequently | 1.65 | 0.927 | 0.325 | Accepted |
| Investment decision do have impact on life style | 1.95 | 0.936 | 0.670 | Accepted |
| I made wise decision for investing in MF | 2.25 | 1.050 | 0.023 | Rejected |
| I set long term financial goal and strive to achieve them | 1.84 | 1.086 | 0.397 | Accepted |
| I never put all money in a single investment option | 2.01 | 1.236 | 0.189 | Accepted |
| I have invested in MF after consult with expert | 2.06 | 1.184 | 0.148 | Accepted |
| I have invested repeatedly in MF | 2.40 | 1.207 | 0.636 | Accepted |
| I recommend others to invest in Mf | 2.02 | 1.268 | 0.545 | Accepted |

## RESULT

chi square result shows that investment decision frequently, Investment decision impact on life style, decision for investing in MF, set long term financial goal, never put money in a single investment, invested in MF after consult with expert, invested repeatedly in MF, recommend others to invest in Mf this all statements shows that there is association between Gender and investment decision because result is greater than 0.05 so H0 is accepted.

Chi square result shows that there is association between Qualification and investment decision of mutual fund because all statements chi square result are greater than 0.05 so H0 is accepted and H0 is rejected in made wise decision for investing in MF because there result is less than 0.05.

## CONCLUSION

It can be conclude that the Indian mutual fund industry is growing at a good pace. But large segment of investors are still outside the umbrella of the industry. The aim of study was preference about various schemes for asset in mutual fund and factors considered by the investors while making invest in mutual fund and traditional investment plan. Safety, high return, tax benefits, and low risk are the factors that you feel are important while making investment in mutual fund and traditional plan. From the above report it is conclude investor do investment with the suggestion of their friends and families, agents & brokers, media and word-of-mouth. Insurance plan is most prefer by the investors and Bank deposit, Postal scheme, equity and others traditional

investment plan. Mutual fund plan and investment period place are better to concentrate.

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# THE RELEVANCE OF TEACHING FOREIGN LANGUAGES AT A MEDICAL UNIVERSITY

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## ANNOTATION
*This article discusses issues related to the teaching of foreign languages in medical universities in Uzbekistan.*
**KEY WORDS:** *structure of education, foreign languages, cultural and business contacts, dialogic, monologue, and written speech.*

# АКТУАЛЬНОСТЬ ПРЕПОДАВАНИЯ ИНОСТРАННЫХ ЯЗЫКОВ В МЕДИЦИНСКОМ ВУЗЕ

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## Аннотация
*В данной статье рассматриваются вопросы, связанные с преподованием иностранных языков в медицинских вузах Узбекистана.*
*Ключевые слова: структура образования, иностранные языки, культурные и деловые контакты, диалогическая, монологическая, и письменная речь.*

Осуществляемое в последние десятилетия реформирование системы высшего профессионального образования в Узбекистане учитывает перспективные тенденции мирового развития в этой сфере. В соответствии с этим меняется не только роль, но и структура образования в целом и иноязычного образования в частности. В современном мире требуются квалифицированные специалисты, владеющие иностранными языками на высоком уровне. Именно они призваны стать той интеллектуальной элитой, которая должна решать существующие и предотвращать возникающие социально-экономические проблемы, работать в интересах безопасности Узбекистана, укреплять еѐ внутреннюю стабильность и международный авторитет. В

связи с этим требования к качеству подготовки специалистов в определенной профессиональной сфере, способных осуществлять свою деятельность на иностранном языке, в системе высшего языкового образования в нашей стране постоянно повышаются. Современные условия жизни, требования к будущему специалисту, новые приемы принятия на работу требуют поиска новых подходов к подготовке будущего специалиста. Владение иностранными языками становится необходимым качеством личности. Научно-техническая революция, повлекшая за собой информационный взрыв, обусловила вовлечение возрастающего числа специалистов в непосредственное осуществление международных научно-технических связей и расширение культурных и деловых контактов. Нормальное функционирование системы международной информации немыслимо без специалистов, реально владеющих иностранными языками, способных быстро извлекать информацию из иностранных источников без переводчика, излагать ее на родном языке и использовать в научной работе. Всем известно, что распространение и изучение иностранных языков является одним из важнейших условий человеческого прогресса. Языки нужны для того, чтобы получать знание и уметь использовать их в профессиональном общении. Изучение иностранных языков в медицинском вузе рассматривается как обязательный компонент профессиональной подготовки специалиста с высшим образованием. Современная концепция языкового образования в неязыковом вузе предполагает создание такой системы подготовки специалиста, которая позволит ему легко адаптироваться к динамично изменяющимся условиям профессиональной деятельности, т.е. нацелена на профессионально-ориентированное обучение иностранного языка.

Профессионально – ориентированное обучение основано на учете потребностей студентов в изучении иностранных языков, диктуемого особенностями будущей профессии или специальности. Оно предполагает сочетание овладения профессионально-ориентированным иностранными языками с развитием личностных качеств обучающихся, знанием культуры страны изучаемого языка и приобретением специальных навыков, основанных на профессиональных и лингвистических знаниях. Профессионально-ориентированное обучение иностранным языкам признается в настоящее время приоритетным направлением в обновлении образования. Появилась настоятельная необходимость по-новому взглянуть на процесс обучения вообще и на обучение иностранным языкам в частности. Иноязычное общение становится существенным компонентом профессиональной деятельности специалистов. Целью обучения иностранным языкам в медицинских вузах является достижение уровня, позволяющего пользоваться иностранными языками практически, то есть владение иностранным языком, для реализации таких аспектов профессиональной деятельности как своевременное ознакомление с новинками в области литературы, науки и техники, установление контактов с зарубежными партнерами, возможность работать в совместных предприятиях. Наряду с практической целью изучение иностранных языков преследует и также образовательные и воспитательные цели. Неотъемлемой частью обучения иностранным языкам является развитие личности, способной участвовать в межкультурной коммуникации на изучаемом языке и уметь самостоятельно совершенствоваться в иноязычной речевой деятельности. Новая социально-экономическая и политическая ситуация требует реализации в обществе языковой политики в области иноязычного образования, нацеленной на удовлетворение как общественных так и личных потребностей по отношению к иностранным языкам.

С реализацией новой языковой политики связано создание гибкой системы выбора языков и условий их изучения, а также вариативной системы форм и средств обучения, отражающих современное состояние теории и практики обучения предмету. Необходимость иностранного языка в современном медицинском вузе диктуется, прежде всего, требованиями современного общества и специальности, которую получает студент. Но для ВУЗа, если он дорожит своей репутацией, самое главное - это качество образования, которое он дает своему студенту. И здесь без отличного знания иностранного, а лучше нескольких не обойтись.

В соответствии с требованиями Государственного образовательного стандарта высшего профессионального образования Республики Узбекистан задачами обучения иностранному языку являются: закрепление знаний, полученных в средней школе на базе индивидуального подхода и предварительного контроля уровня остаточных знаний, освоение программы высшей школы, то есть углубленное изучение

иностранного языка в сфере профессиональной коммуникации, изучение нового лексико-грамматического материала, необходимого для общения в наиболее распространенных повседневных ситуациях, освоение различных видов речевой деятельности и форм речи (устной, письменной, монологической и диалогической), овладение лексико-грамматическим минимумом, курсом реферирования и аннотирования специальной и научной литературы, курсом научнотехнического перевода. В течение всего периода обучения иностранным языкам формируется коммуникативная компетенция. Коммуникативная цель обучения, которую мы должны понимать как цель интегративную, направлена на достижение практического результата в обучении языкам, а также на образование и развитие личности. Следует отметить, что традиционно обучение иностранному языку в медицинском вузе было ориентировано на чтение, понимание и перевод специальных текстов, а также изучение проблем синтаксиса научного стиля. Сейчас необходимо думать о перемещении акцента в обучении на развитие навыков речевого общения на профессиональные темы и ведения научных дискуссий, тем более что работа над ними не мешает развитию навыков, умений и знаний, так как именно на них она и базируется. Устная речь в учебном виде должна пониматься как слушание или чтение, понимание и репродуктивное воспроизведение прослушанного или прочитанного в формах как устной, то есть диалогической или монологической, так и письменной речи. Таким образом, речь идет о реализации речевого акта говорения в процессе устной коммуникации между двумя или более лицами.

Анализ программ по иностранным языкам в медицинском ВУЗе показывает, что в учебном процессе задействованы в основном только два вида речевой деятельности (чтение и говорение), в то время как аудирование и письмо выступают лишь как вспомогательные средства, а не самостоятельные виды речевой деятельности. Это приводит к разрыву цепочки и, соответственно, к неполноценному иноязычному образованию. Только введение в учебный план медицинского ВУЗа четырех видов речевой деятельности позволит сформировать целостный образ. Большое значение для преподавателей имеет концепция обучения иностранному языку как языку профессионального общения. Проблема медицинского ВУЗа в том, что объем времени, отведенный на предмет «иностранный язык», весьма незначителен, а цели и задачи, стоящие перед студентами в современных условиях, все более усложняются. Так, Программы обучения иностранным языкам студентов медицинского ВУЗа, зачастую формулируют эти цели как овладение всеми видами речевой деятельности на основе профессиональной лексики, а также овладение навыками делового общения. Данные цели требуют особого подхода к самому процессу обучения.

Опыт практической работы показывает, что в подавляющем большинстве студенты медицинского ВУЗа, наряду с чтением литературы по специальности, которая выступает как основная цель обучения, проявляют интерес к образу жизни, культуре других стран и желание непосредственно общаться с зарубежными сверстниками. Однако содержание обучения в медицинском вузе больше ориентирует на профессиональную подготовку и не вполне отвечает познавательным потребностям студентов. Как показал анализ, в учебном процессе возникают противоречия между:

• потребностями общества в подготовке специалиста, готового к постоянному пополнению своих знаний и сложившейся практикой обучения иностранным языкам в медицинском вузе;

• профессиональной направленностью обучения иностранным языкам и гуманитарным потенциалом предмета «иностранный язык» (русский язык), который открывает большие возможности познания иноязычной культуры;

• осознанием важности новых информационных технологий и недостаточно высоким уровнем их применения в обучении иностранным языкам;

• получением информации и неумением ее критического осмысления. Изучать иностранный язык как средство общения без знания мира данного языка невозможно. Картина мира, окружающего носителей языка, не просто отражается в языке, она и формирует язык и его носителя, и определяет особенности речеупотребления.

Таким образом, основные цели обучения иностранным языкам в медицинских вузах на современном этапе можно сформулировать как обучение языку как средству общения между специалистами, максимальное

развитие коммуникативных способностей обучаемых, ознакомление с социокультурной картиной мира изучаемого языка.

В XXI веке наука утрачивает национальные черты. Для того чтобы быть в курсе новейших открытий и изобретений нужно иметь возможность читать новейшие научные статьи и монографии, которые естественно пишутся на иностранных языках, ведь наука развивается не только в Узбекистане.

Все больше исследований проводится совместными усилиями ученых из разных стран. Чтобы научное открытие было замечено мировой научной общественностью, о нем надо заявить на международном конгрессе или конференции, надо опубликовать статью в иностранном журнале. Многие проблемы, связанные с развитием узбекской науки, с признанием ее достижений, с участием узбекских студентов, аспирантов и ученых в совместных проектах и мероприятиях, связаны, в частности, и с тем, что мы пока плохо знаем иностранных языков.

Поэтому в ведущих медицинских ВУЗах без отличного знания иностранного уже сейчас сложно учиться и конкурировать со своими однокурсниками. Ведь и фундаментальные, и прикладные науки требуют в настоящее время выхода за пределы отдельной страны и включения в общемировой контекст.

Кроме того, студенты, аспиранты и ученые всего мира участвуют в конкурсах на получение научных грантов и стипендий, позволяющих им заниматься научной работой в зарубежных Университетах. Но для того чтобы побеждать в конкурсах мало отличных знаний по своей специальности и гениальных научных идей. Нужно еще уметь донести их до грантодателей на хорошем иностранном.

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# PROBLEMS OF STUDYING BYRON'S INFLUENCE ON PUSHKIN'S WORKS

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**ANNOTATION**

*This article deals with the influence of Byron's work on the poetry of the great classic of Russian literature A.S. Pushkin.*
**KEYWORDS:** *Byron, A.S. Pushkin, Byron's poetry, the flowering of romanticism, freedom-loving motifs, romantic symbols.*

# ПРОБЛЕМЫ ИЗУЧЕНИЯ ВЛИЯНИЯ БАЙРОНА НА ТВОРЧЕСТВО ПУШКИНА

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**Аннотация**

*В данной статье идет речь о влияния творчества Байрона на творчеств поэзию великого классика русской литературы А.С.Пушкина.*
*Ключевые слова: Байрон, А.С. Пушкин, байроновская поэзия, расцвет романтизма, вольнолюбивые мотивы, романтические символы.*

Велика роль английской литературы в развитии мировой литературы. Влияние западной литературы было особенно велико в творчестве представителей русской классической литературы.

Поэзия Байрона вызывала в то время большой интерес на Западе.Многие художники слов также подражали поэзии Байрона.

Справедливо будет сказать, что поэзия Байрона внесла значительный вклад в творчество великого русского поэта А. С. Пушкина.

Сведения о Байроне начали проникать в Россию вскоре после выхода I–II песней «Чайльд-Гарольда» и трех «восточных» поэм («Гяур», «Абидосская невеста», «Корсар»). Уже в письме С.С. Уварова к В.А. Жуковскому от 20 декабря 1814 говорилось, что поэтов «теперь у англичан только два: Walter Scott и Lord

Byron»[1]. Широкое знакомство в России с поэзией Байрона началось через посредство французских переводов, публиковавшихся в 1817–1819 в женевском журнале «Bibliothèque universelle» ( Универсальная библиотека). Особо важную роль в приобщении русских читателей к творчеству Байрона играло предпринятое французским литератором Амедеем Пишо (1796–1877) многотомное собрание прозаических переводов.

В 1819 близкие и хорошие знакомые Пушкина: Жуковский, А. И. Тургенев, П. А. Вяземский, Козлов, возможно, К. Н. Батюшков — все с упоением читают Байрона и обмениваются восторженными впечатлениями. С этого же времени в русской печати начинается поток переводов из Байрона, суждений и отзывов иностранных и отечественных авторов о его произведениях и о нем как поэте и как человеке, заметок биографического содержания из европейской прессы.

«Байрон, — писал один из рецензентов «Полтавы», — чувствуя потребность своего века, заговорил языком, близким к сердцу сынов девятнадцатого столетия и представил образцы и характеры, которых жаждала душа, принимавшая участие в ужасных переворотах, потрясших человечество в последнее время. Байрон сделался представителем духа нашего времени. Постигая совершенно потребности своих современников, он создал новый язык для выражения новых форм» [2]. В художественной манере Байрона, нарушавшей все классические каноны жанра поэмы, русские поэты увидели путь к освобождению от приевшихся литературных шаблонов, новаторскую форму, прекрасно подходившую для выражения мыслей, чувств, мироощущения человека XIX в., к чему обветшалые старые литературные формы признавались уже неспособными.

Условия для того, чтобы байроновская поэзия нашла у Пушкина отзвук, возникли уже в ссылке, когда он, вырванный из привычного круга общения и остро переживавший «измену» якобы легко с ним расставшихся и сразу его забывших друзей, испытал разочарование в радостях и ценностях столичной жизни, а принудительный отъезд из Петербурга трансформировался в его сознании в им самим желанное добровольное изгнанничество.

Именно на юге, в период расцвета романтизма в поэзии Пушкина, свобода становится едва ли не основной темой его творчества. Но теперь на первый план выходит идея свободы отдельной романтической личности, а не гражданская или политическая свобода, необходимая всему обществу. Причиной тому служит разочарование в своих прежних идеалах и главное – неверие в возможность их осуществления.

Вольнолюбивые мотивы теперь становятся у Пушкина романтической мечтой о воле, стремлением вырваться из тюрьмы – ведь он сам ощущает себя изгнанником, узником. В стихотворении «Узник» поэт сравнивает себя с «вольной птицей», молодым орлом, который сидит за решеткой и мечтает вырваться на свободу, улететь.

<div style="text-align:center">

Туда, где за тучей белеет гора,

Туда, где синеют морские края,

Туда, где гуляем лишь ветер … да я!..[3]

</div>

Так поэт находит романтические символы свободы: то придает ей вид орла, то растворяет ее в «свободной стихии» или среди пейзажей Кавказа. Так или иначе, узник – это он сам.

Во время трехнедельного пребывания в Гурзуфе весной 1820 года Пушкин имел возможность ознакомиться с некоторыми произведениями Байрона при помощи Елены Раевской и ее брата Николая Николаевича Раевского, владевших английским языком. Всего вероятнее, они читали отрывки из «Чайльд-Гарольда» и, видимо, целиком некоторые поэмы «восточного цикла»: «Гяур», «Корсар», возможно, и другие. Затем в Одессе Пушкин читал Байрона по-французски из воронцовской библиотеки. Это и определило влияние «восточных» поэм Байрона на южные поэмы Пушкина, особенно на «Бахчисарайский фонтан». Сам Пушкин признавался в письмах к друзьям: «Бахчисарайский фонтан» слабее «Пленника» и, как он, отзывается чтением Байрона, от которого я тогда с ума сходил»[4]

А. Н. Вульф вспоминал, что Пушкин «в те годы, когда жил здесь, в деревне <в ссылке в Михайловском>, решительно был помешан на Байроне» и «его изучал самым старательным образом»[5]

Общее представление о «байронической» поэзии и ее творце, сформировавшееся у Пушкина в начале и в пик увлечения ею, сохранялось и тогда, когда его собственные опыты в этом роде были уже в прошлом.

Новизна поэм Байрона, разрушивших все каноны эпического жанра, заключалась для Пушкина, как и для его современников, не только в их герое, «мрачном, ненавистном, мучительном характере», но в огромной мере в их форме, прежде всего в их композиции, главная особенность которой определялась, как понимал Пушкин, тем, что Байрон «мало заботился о планах своих произведений, или даже вовсе не думал о них» и «несколько сцен, слабо между собою связанных, были ему достаточны для этой бездны мыслей, чувств и картин.

Сильное впечатление, полученное Пушкиным от «очаровательной, глубокой поэзии Байрона» подвигло Пушкина к собственным опытам в подобном роде, которыми стали так называемые «южные» поэмы (1820–1824): «Кавказский пленник», набросок «Вадим», «Братья разбойники», «Бахчисарайский фонтан», «Цыганы». Разрабатывая новый для себя и русской литературы жанр романтической поэмы, Пушкин следует своему образцу в выборе эффектной фабулы и героя, сходного определенными чертами с байроническим, сосредоточивается, по примеру Байрона, на изображении внутреннего мира персонажей, их чувств и страстей, заимствует ряд тем и мотивов, повторяет некоторые сюжетные коллизии, ситуативные положения, позы и жесты действующих лиц. В разной мере использованы в «южных» поэмах композиционные приемы Байрона: фрагментарность повествования, образуемая выделением «вершинных», кульминационных эпизодов, моментов высшего драматического напряжения, с опущением промежуточного действия и событий; неясность, недосказанность биографии героя, необъясненность важных моментов действия, повествовательная недоговоренность и проистекающая из них таинственность.

Но все меняется, и вот уже вслед за Южной ссылкой приходит ссылка в Михайловское, а романтические пейзажи сменяет реалистическое описание красоты природы среднерусской полосы. Не мог не измениться при этом и пушкинский идеал свободы, что находит отражение в его дальнейшем творчестве.

Вопрос о «байронизме» Пушкина имеет длительную непрерывную историю. Он возник в кругу друзей и знакомых Пушкина с появлением «Кавказского пленника», «Бахчисарайского фонтана» и «Цыган». Для критики 1820-х – начала 1830-х гг. (Вяземский, Н. А. и К. А. Полевые, И. В. Киреевский и др.) влияние Байрона на Пушкина было неоспоримым и в большинстве признавалось плодотворным, имевшим своим результатом освоение русским поэтом новых художественных форм и создание в отечественной литературе жанра романтической поэмы, позволявшего выразить в полную силу настроения, мысли и художественные искания современного поколения. В свою очередь, литературные, политические и другие оппоненты и противники Пушкина (М. С. Воронцов, Ф. В. Булгарин, Н. И. Надеждин и др.) представляли его с целью дискредитации слабым подражателем английского поэта, показавшим себя во всех отношениях беднее и мельче его, не способным создать образы равной силы и величия.

Принимая «байронизм» Пушкина за бесспорный факт, современники поэта уловили вместе с тем и самостоятельный характер тех его произведений, где ощущалось влияние Байрона. Уже в 1824 г. критик М. М. Карниолин-Пинский в рецензии на «Бахчисарайский фонтан» отмечал: «Байрон служил образцом для нашего поэта; но Пушкин подражал, как обыкновенно подражают великие художники: его поэзия самопримерна».[6]

В 1830-е, на фоне существенных изменений в творчестве Пушкина, связанных с его отходом от романтической поэзии, начинается переосмысление его «байронизма», и на первый план выдвигается представление о несходстве основного настроения поэзии Пушкина и Байрона вследствие различия их мировосприятия, обусловленного индивидуальным психическим и творческим складом каждого из них и особенностями преломления в России общеевропейских послереволюционных настроений, получивших

название «мировой скорби». Пушкин — русский Байрон по силе и полноте чувства <…> но более верящий, более примиренный с действительностью и более мудрый.[7]

В. Г. Белинский в своих статьях о Пушкине настойчиво проводил мысль о том, что сравнение Пушкина и Байрона «более чем ложно, ибо трудно найти двух поэтов столь противоположных по своей натуре, а следовательно, и по пафосу своей поэзии». По мнению критика, опиравшегося в своем суждении на В. П. Боткина, «мнимое сходство это вышло из ошибочного понятия о личности Пушкина», чья натура «была внутренняя, созерцательная, художническая», не знавшая, в отличие от Байрона, «мук блаженства, какие бывают следствием страстно-деятельного (а не только созерцательного) увлечения живою могучею мыслию, в жертву которой приносится и жизнь и талант»[8]

Представление о невозможности для Пушкина проникнуться в полную силу байроновским пафосом сменялось взглядом на него как выразителя иной, более глубокой и человечной идеи, прошедшего в своем творческом развитии неизбежный, плодотворный и необходимый этап «байронизма», но в конечном итоге преодолевшего влияние английского поэта и нашедшего собственный путь. Например, Ф. М. Достоевский, полемизируя в «Дневнике писателя» с распространенным в среде революционно-демократической молодежи мнением, согласно которому А.С.Пушкин и М. Ю. Лермонтов стоят по причине своего «байронизма», ниже Н. А. Некрасова, писал: «Всякий сильный ум и всякое великодушное сердце не могли и у нас тогда миновать байронизма. Да и не по одному лишь сочувствию к Европе и к европейскому человечеству издали, а потому что и у нас, и в России, как раз к тому времени, обозначилось слишком много новых, неразрешенных и мучительных тоже вопросов, и слишком много старых разочарований... Но величие Пушкина, как руководящего гения, состояло именно в том, что он так скоро, и окруженный почти совсем не понимавшими его людьми, нашел твердую дорогу...»[9]

Новый подход к изучению проблемы «Пушкина и Байрона» был найден В. М. Жирмунским. Рассматривая «поэзию как искусство, а изучение поэзии — как анализ и интерпретацию художественной формы»[10], понимаемой «как система средств, выражавших ее поэтическое содержание»[11], он сосредоточил внимание исключительно на художественном воздействии поэзии Байрона на поэзию Пушкина и показал, что эффект, ставивший в тупик критиков и ученых и порождавший полярно противоположные оценки, явился результатом взаимопроникновения и взаимотрансформации двух исходно различных художественных систем — байроновской «романтической», накладывавшейся на «классическую», которой по своему творческому складу принадлежал Пушкину.

Байрон подсказывал современную форму повествования, более соответствующую динамичности действительности и разорванному сознанию, чем та форма эпического повествования, развернутого во времени и пространстве, изобилующая эпизодами, подвигами героев, которая применена Пушкиным в «Руслане и Людмиле». Эта «байроническая» форма, построенная на обособлении сюжетного пространства, кульминационном драматизме изображаемого события, повышающих лиризм исповедей героев и авторского присутствия, перейдет затем во многие другие произведения Пушкина различных жанров.

И сам Пушкин, и российский академик Жирмунский, и американский профессор Гаррард указывают на определенную связь творчества Пушкина с творчеством Байрона.

С одной стороны, зависимость Пушкина от Байрона была признана самим поэтом и в какой-то мере является непосредственно очевидной для всякого читателя и исследователя, с другой стороны, мы так же непосредственно ощущаем гениальное своеобразие поэзии Пушкина и неохотно соглашаемся признать его зависимость от образцов, боясь тем самым умалить его оригинальность, а обостренное национальное сознание пытается обосновать самобытность и народность русского поэта отрицанием значительности и глубины различных иноземных влияний.

Однако же, несмотря на сходство с поэмами Байрона, мы находим в произведениях Пушкина столько самобытных художественных форм, принадлежащих исключительно этому поэту, такую неподдельную свежесть чувств, такую верность описаний, такую тонкость в замечаниях и естественность в

ходе, такую оригинальность в языке и, наконец, столько национального, чисто русского, что даже в этом периоде его поэзии нельзя назвать его простым подражателем.

Нельзя, однако же, допустить и того, что поэмы Пушкина случайно похожи на поэмы Байрона; что, воспитанные одним веком и, может быть, одинаковыми обстоятельствами, они должны были сойтись и в образе мыслей и в духе поэзии, а следовательно, и в самых формах ее. «Нельзя, говорю я, допустить сего мнения потому, что Пушкин там даже, где он всего более приближается к Байрону, все еще сохраняет столько своего особенного, обнаруживающего природное его направление, что для вникавших в дух обоих поэтов очевидно, что Пушкин не случайно встретился с Байроном, но заимствовал у него или, лучше сказать, невольно подчинялся его влиянию. Лира Байрона должна была отозваться в своем веке, быв сама голосом своего века. Одно из двух противоположных направлений нашего времени достигло в ней своего выражения. Мудрено ли, что и для Пушкина она звучала недаром? Хотя, может быть, он уже слишком много уступал ее влиянию и, сохранив более оригинальности, по крайней мере в наружной форме своих поэм, придал бы им еще большее достоинство».[12]

Такое влияние обнаружилось прежде всего в "Кавказском пленнике". Здесь особенно видны те черты сходства с Байроном, которые мы выше заметили; но расположение поэмы доказывает, что она была первым опытом Пушкина в произведениях такого рода. Такое же или, может быть, еще большее сходство с Байроном является в "Бахчисарайском фонтане"; но здесь искуснейшее исполнение доказывает уже большую зрелость поэта.

Таким образом, соприкосновение А.С.Пушкина с творчеством Байрона не были поверхностными и механическими влияниями со стороны. Они были подсказаны Пушкину русским литературным развитием, в котором он участвовал, и русской общественной действительностью, которую он изображал. Включая в русскую литературу лучшее наследие мировой литературы, в частности – английского поэта Джорджа Гордона Байрона, А.С.Пушкин творчески перерабатывает это наследие на основании живого опыта русской современности и русской истории и тем самым понимает русскую литературу на новую небывалую высоту.

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# QUESTIONS OF THE STUDY OF THE HISTORICAL ROOTS OF COMPARATIVE RUSSIAN LITERATURE

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## ANNOTATION

*This article deals with issues related to comparative literature.*
**KEYWORDS:** *comparative literature, literary criticism, object of comparison, literary process, literary translation.*

# Вопросы исследование исторической корни сравнительной русской литературы

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## Аннотация

*В данной статье рассматриваются вопросы, связанные с сравнительной литературы.*
**Ключевые слова:***сравнительная литература, литературоведение, объект сравнения, литературный процесс, литературный перевод.*

В художественной литературе освещение образа человека всегда было очень сложным процессом для писателя. Этот вопрос важен и при переводе художественного произведения.В художественной литературе перевод играет очень важную роль.Здесь доскональное знание сравнительного литературоведения требует от писателя мастерства.

Вот почему сегодня углубленный анализ сравнительной литературы, ее изучение стали требованием времени.

Сравнительное литературоведение изучает структуру мировой и национальной литературы во взаимосвязи, на основе метода историко-генетического анализа, и опирается в основном на существующие литературные процессы, различные направления и школы в мировой литературе. , а также изучение и обобщение международных литературных отношений , средств литературного и художественного влияния, сходства или общности различных международных национальных литературных событий или особенностей, возникающих из-за влияния этой общности, проблем литературного перевода, делает выводы.[1]

Предпосылкой сравнительно-исторического литературоведения является единство социально-исторического развития человечества. В результате сходных общественных отношений у разных народов в развитии разных литератур в одну историческую эпоху могут наблюдаться историко-типологические аналогии

Объектом сравнения сравнительной литературы могут быть, помимо вопросов, поднимаемых в мировой литературе или отечественной литературе, произведения основных представителей национальной литературы либо (как пример их работы) отдельное произведение. Даже конкретный литературный жанр или определенный литературный стиль и литературное направление может быть включен в объект сравнительного анализа литературы.

В свою очередь, под национальной литературой в современной научной литературе понимается литература, которая возникает на определенном этапе развития общества, когда оно начинает идентифицировать себя как нация.

Важно отметить, что национальные литературы существенно отличаются по своему содержанию, форме, средствам выразительности. Историческое развитие – неравномерный процесс, соответственно, и становление национальных литератур существенно отличается. Сегодня в процессе литературоведческих исследований изучению подвергаются:

«Старые», высокоразвитые литературы большинства европейских народов, которые сформировались, осознали себя нациями уже давно;

«Молодые», новые национальные литературы, возникшие в обществах, осознавших себя нациями относительно недавно. К таким литературам можно отнести, например, грузинскую, армянскую, японскую.

Ведущим подходом к изучению национальных литератур является конкретно-исторический, направленный на выявление общих закономерностей литературного развития в их общественной обусловленности, раскрытие общих исторических, историко-литературных закономерностей, которым подчиняется развитие национальных литератур.

Основные принципы русского сравнительного литературоведения сформировались во второй половине прошлого века, причем, центральное место в исследования занимали контактные формы связи – странствующие сюжеты, их заимствование, миграция и т. д. На сегодняшний день существенным изменениям подвергся сам объект изучения сравнительного литературоведения - произведения национальных литератур, в результате чего кардинальным изменениям подверглось и сравнительное литературоведение, кроме того, возник ряд противоречий между отечественными и зарубежными компаративистами.

Таким образом, на основании проведенного анализа можно сделать вывод, что объектом исследований сравнительного литературоведения выступают национальные литературы, что позволяет выявлять общие механизмы развития литературного процесса, становления национального художественного дискурса.

Основная задача сравнительного литературоведения также состоит в изучении проблем сходства, близости, общности и специфичности родственных национальных литератур, составляющих мировую литературу. Сходство общественно-исторических процессов, переживаемых всеми существующими в мире литературой, обеспечивало схожесть литературных событий, проявившихся в этих национальных литературных произведениях. Ведущие направления в национальной литературе, события, которые считаются событиями или открытиями в литературе как исторические факты, - это явления, которые наблюдались в науке до или после той или иной национальной литературы.

Сходные пути развития литературы у разных народов не исключают возможности международных контактов и взаимовлияний и обычно перекрещиваются с ними. Однако для того чтобы влияние стало возможным, должны существовать внутренняя потребность в таком культурном «импорте», аналогичные

тенденции развития в данном обществе и в данной литературе. А. Н. Веселовский говорил о «встречных течениях» в заимствующей литературе.[2]

Поэтому всякое литературное влияние бывает связано с частичной трансформацией заимствованного образца, т. е. с его творческой переработкой в соответствии с национальным развитием и национальными литературными традициями, а также с идейно-художественным своеобразием творческой индивидуальности писателя; эти различия для сравнительно- исторического литературоведения не менее важны, чем сходство.

Международные литературные влияния не ограничиваются сферой современной литературы. Литературное наследие великих художников прошлого продолжает воздействовать на современность созвучными элементами или аспектами.

Таким образом, сравнительная литература рассматривает национальные литературные события в контексте социально-культурного развития наций и в связи с культурными и литературными отношениями между ними. В этом смысле в некоторых случаях сравнительная литература также именуется «сравнительно-исторической литературой» и является неотъемлемой частью науки истории мировой литературы (Н. И. Конрад). На международной арене это также чаще называют «компаративизмом».

Хотя первые признаки сравнительно-исторической литературы появились в трудах немецких ученых И. Г. Гердера, Дж. Бенфея, английского ученого Дж. Денлона и русского ученого Ф. И. Буслаева, ее основные принципы подробно изложены в трудах европейца Х. М. Познетта и русского А. Н. Веселовского. Например, сравнительная литература как наука зародилась в России в XIX веке и была основана главным образом Александром Веселовским (1838), профессором Санкт-Петербургского университета. [3]

Веселовский был основоположником сравнительного литературоведения в истории мировой литературы со своим главным произведением «Историческая поэтика», написанным в 1870–1906 годах. Сформированный под влиянием немецкой идеалистической философии, А.Н. Веселовский оставил в этой области большое научное наследие. В конце концов, его 26-томные книги и 280 научных статей составили основу, ядро и фундамент мировой сравнительной литературы.

Под влиянием Веселовского с 1914 по 1918 г. возник большой интерес к изучению проблем международных литературных отношений и отношений в Западной Европе. В результате научная работа французских ученых Ф. Балдансперье и Поля ван Тигема привела к появлению «сравнительной литературы» как особой науки в этом обширном регионе. По инициативе этих двух французских ученых в 1921 г. было выпущено научное издание и многие монографии были опубликованы в качестве приложений к нему. По инициативе В. Фридриха, Р. Веллека и других были созданы две основные серии журналов, «Сравнительная литература» и «Сравнительное исследование литературы», которые внесли большой вклад в развитие этой области. Начали публиковаться серьезные исследования.

Начиная с 1963 года, география сравнительной литературы еще больше расширилась, и теперь лидерами стали Германия, Канада и Франция. В этот период ряд немецких ученых под руководством К. Вайса также провели крупные исследования. С 1966 года немецкий журнал Arcadia, специализирующийся в области сравнительного литературоведения, играет важную роль в развитии этой области литературы. По инициативе мировых ученых в 1955 году была создана Международная ассоциация сравнительной литературы, а ее центром был назначен Париж. Точно так же в этом аспекте науки определенную роль сыграли научные исследования венгерских ученых, таких как И. Шетер, Т. Кланицам, Г. Вайда.

В России в 50-60-е годы прошлого века было проведено много исследований в области сравнительной литературы, которые останутся в истории этой отрасли. В этот период двое российских ученых сыграли неоценимую роль в становлении «сравнительной литературы» как мировой науки. Это: Н.И. Конрад, В.М. Жирмунский. В результате усилий и научной работы этих двух трудолюбивых ученых в этой области плодотворные исследования в области сравнительной литературы привели к радикальным изменениям в сравнительной литературе, что признано мировыми сравнительными исследованиями.[4]

В своих работах ученые внесли значительный вклад в сбор информации о художественном развитии человечества и в выявление некоторых сходств и связей между литературой и фольклором разных стран. Однако они часто изучали художественные события без борьбы противоборствующих фракций и не уделяли должного внимания социальному содержанию произведений, уделяя особое внимание формальным элементам, таким как сюжет, образ, мотив и тропы, а также их «ассимиляции». Кроме того, основным методологическим принципом сравнительной литературы является сбор и сравнение бесчисленных собраний внешних сходств между большинством национальных литератур, в которых преобладал формальный подход. Это приводит к известной степени схематизма и субъективизма, отрицанию самобытности национальной литературы, преувеличению роли «ассимиляционных» сюжетов. Представители сравнительно-исторической литературы также сосредоточились на выявлении сходства между литературными течениями, национальной литературой и отдельными произведениями, образами и сюжетами и рассматривали миграцию сюжетов как фактор развития литературы.

При сравнительном изучении литературы и фольклора интерпретируют сходства не только как простые переходы сюжета или мотивов, но и как типологические явления. В частности, Н. И. Конрад и В. М. Жирмунский поставили на повестку дня исследование проблемы литературной общности в контексте ее внутренних закономерностей и географии идейно-эстетического значения и содержания этих общностей. Что касается процесса методологического обновления на основе созданных ими теоретических обобщений, мир сравнительной литературы теперь полностью принял принцип определения его основных тем и текущих проблем в контексте региональных проблем. То есть основная цель и задача - проанализировать объекты сравнительного анализа исследования на примере двух регионов мира с богатыми древними культурами, Запада и Востока или Востока-Запада. И в связи с этим монографии «Запад и Восток» Конрада (Москва, 1966), «Сравнительное литературоведение» Жирмунского. Восток и Запад »(Ленинград, 1978) была широко известной в мире сравнительной литературы .

Они доказывают, что любая национальная литература, достигшая культурной цивилизации в ходе своего исторического развития, в соответствии с требованиями социальных условий, тем или иным образом читает авторитетные и приемлемые литературные события, происходившие в других национально-литературных средах. И неизбежно будет испытывать, заново открывать их, воссоздавать их. То есть необходимость «идеологического импорта» из одной национальной литературы в другую создается развитием общества на социальной основе.

В двух словах, Н. Конрад и В. В Жирмунский в мире сравнительной литературы создали закон «неизбежности идеологического импорта и экспорта» в процессе международных литературных отношений.
В трудах узбекских ученых Ф. Сулаймонова, Б. Саримсакова, К. Имамова, Х. Хомидия, М. Джураева и других присутствуют элементы сравнительно-исторической литературы.[5]

В некоторых случаях можно найти сходство между литературами без полного знания друг друга. Это сходство называется типологическим отношением. Сходство, возникающее в результате обучения друг у друга и взаимодействия друг с другом, называется контактом. Ни одна литература не может развиваться в собственной оболочке без влияния других.

В целом, невзирая на успехи сравнительного литературоведения, его методы и принципы до сих пор недостаточно разработаны. Но, как сказал еще в XIX в. С. П. Шевырев, «всякий предмет в одиночестве никак не может быть ясен и определен, если нет других предметов для сравнения», [1] и, следовательно, литературоведению и впредь не обойтись без сравнительных исследований, выполняющих в то же время не только научные, но и общественные функции.

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[1] С. П. Шевырев Теория поэзии в историческом развитии у древних и новых народов

Показывая, что ни одна литература не может плодотворно развиваться вне общения с литературами и — шире — культурами других народов, сравнительное литературоведение противостоит любой проповеди национально-культурной изоляции, утверждает духовное единство человечества.

**Воспользованные литературы**

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2. *Веселовский А. Н. Историческая поэтика / А. Н. Веселовский. – М. : Высшая школа, 1989. – 405 с*
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# CHALLENGES TO MAINTAIN WORK LIFE BALANCE OF TEACHING FACULTIES - A CASE STUDY

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## ABSTRACT

*Work- life balance is very important to happy professional and personal life. And also, it is one of the important aspects of healthy work environment. Healthy work life balance is a daily challenge. In addition to the demands of the work place, it is very tough to make time for family, friends, community participation, personal growth, self- care, spirituality, personal activities etc. A good work- life balance which enables employees to feel more control their lives, benefited to organization and employees can contribute for the betterment of the society also. The purpose of this paper is an attempt to know the challenges faced by teaching faculties of Shree Devi Group of Colleges in Mangalore, Dakshina Kannada for maintaining work- life balance. People who are in teaching profession also have to do more adjustment in their work and personal life. Sometimes imbalance in work life results increased stress level. So, the present study tries to understand the various means adopted by the teaching faculties cope with the maintaining balance between professional and personal life. The study is descriptive one. A structured questionnaire is formed to collect data from 100 respondents. The collected data was analyzed and thereby conclusion was drawn.*
**KEY WORDS:** *Work- life balance, Teaching Faculties, Professional and personal life*

## 1. INTRODUCTION

Work- life balance is important for employees' productivity, better performance and also for their healthy well-being. Work- life balance is striking balance between assigned work and the personal/ social responsibilities of an employees are expected to perform. It is the responsibility of management of educational institution to see that their teaching faculties work is not affected by their personal needs. It is the responsibility of the management to provide various provisions to their employees i.e., flexible working hours, class room facilities, good working environment etc. to enable their employees to balance their personal needs with social responsibilities. Work and family life balance is a very important issue. It is the responsibility of employees to plan their career effectively in order to balance work- life balance and this would be the challenge to them for their career and personal advancement also. They should have proper awareness about various factors influence good work- life balance, it includes current working position, working environment, update latest technology, strategies to manage work and family life etc. Impact of Covid-19 also caused lot of problems in their work and family life. And also, covid- 19 resulted more stress in their teaching career due to postponement of semester exams.

This study is focused to understand challenges faced by teaching faculties to maintain work- life balance and also this study would provide insight about how teaching faculties are effectively balancing work commitment and family obligations. Based on this the present study might provide suggestions for college management regarding work- life balance of teaching faculties working in their college.

## 2. REVIEW OF LITERATURE

(Dr. Sunitha R, 2020), the study was proposed to find out the effect of long working hours, satisfaction level of working at work place. The study was found out that working hours is the one of the factor affect more in managing their work – family life. The study highlight that education institution should address work- life balance related issues among their staff especially women. And also effective implementation of policies would help to support the teaching staff to manage their work-life balance and increase performance.

(Dr. Kavita Pareek, 2018), it has recommended that the women have to come forward to access of ways that can lead them to maintain work- life balance. And also women should take self-step to create work- life balance. Women should learn how to prioritize activities then only they can balance the work and life. They should understand what can give value of their values. They should find and select method which provides maximum satisfaction for life and motivation to work.

(Divya Thankom Varghese, 2018), the study reveals that main reason of imbalance in work- life is heavy work load and extensive working hours. Educational Institution should address work- life balance issue to women employees.

(V. Madhusudhan Goud and K. Nagaraju, 2013) have conducted a study to identify the key factors influencing work life balance. The study reveals that majority of the faculty undergo severe stress which result in poor performance in the institution and domestic life.

(Ms. A. Meharaj, 2015), the study assess the impact of work-life balance on the job satisfaction of the faculty members in Autonomous Colleges. The study concluded that, the faculties highest job satisfaction is on system of payment and on job secuirity.

## 3. OBJECTIVES OF THE STUDY
1. To know the opinion of respondents about work-life balance.
2. To find out the impact of work life balance on respondents' work and family life.
3. To understand the coping strategies used to maintain work- life balance.

## 4. RESEARCH METHODOLOGY
Teaching faculties working in Shree Devi Group of Colleges, Mangalore were selected as a sample for conducting the study. The sample comprised 100 respondents which were

## 1. ANALYSIS OF DATA
A structured questionnaire has been used for the study. Research was conducted by using questionnaire method. Simple percentage technique was used to analyze the collected data.

selected on the basis of simple random sampling technique. The study is descriptive and empirical in nature. Data was collected by using primary and secondary sources. The structure questionnaire is prepared. For collecting primary data, structure questionnaire is prepared. Secondary data were collected from various journals, articles and websites. Descriptive research is carried out in this study. Size of the sample 100 respondents. Two types of data have been collected i.e. primary data and secondary data. Primary data collected through structured questionnaire method and secondary data collected through internet, articles and journals.

## 5. SAMPLE DESIGN
Primary data have been collected from 100 respondents and they are selected by adopting simple random sampling method. Respondents are teaching faculties who are working in Shree Devi Group of Colleges in various departments i.e., Shree Devi Institute of Technology, Shree Devi College of pharmacy, Shree Devi College of Physiotherapy, Shree Devi College of Nursing, Shree Devi College of Allied Health Sciences, Shree Devi College of Hotel Management, Shree Devi College of interior Design, Shree Devi College of fashion Design, Shree Devi College of Information Sciences, Shree Devi Institute of Social Work and Shree Devi College.

## 6. GEOGRAPHICAL AREA
The universe of the study comprises of Shree Devi Group of Colleges in Mangalore.

**Table 1: Demographic characteristics of sample with frequency distribution**

| VARIABLES | FREQUENCY | PERCENTAGE |
|---|---|---|
| Age (years) | | |
| 24- 30 | 13 | 13% |
| 30-36 | 40 | 40% |
| 36-42 | 35 | 35% |
| 42-48 | 08 | 08% |
| 48-54 | 04 | 04% |
| Total | 100 | 100% |
| Sex | | |
| Male | 37 | 37% |
| Female | 63 | 63% |
| Total | 100 | 100% |
| Educational Qualification | | |
| MPhil | 12 | 12% |
| PhD | 09 | 09% |
| NET/ SLET | 36 | 36% |
| Post-Graduation | 43 | 43% |
| Total | 100 | 100% |
| Total No. of teaching experience | | |
| 0-5 years | 20 | 20% |
| 5- 10years | 25 | 25% |
| 10- 15years | 46 | 46% |
| 15- 20 years | 06 | 06% |
| Above 20 years | 03 | 03% |
| Total | 100 | 100% |
| Salary | | |
| Below Rs. 20,000 | 19 | 19% |
| Rs. 20,000- Rs. 40,000 | 72 | 72% |
| Rs. 40,000- Rs 60,000 | 06 | 06% |
| Above Rs. 60,000 | 03 | 03% |
| Total | 100 | 100% |
| Designation | | |
| Principal | 11 | 11% |
| Assistant Professor | 89 | 89% |
| Total | 100 | 100% |

Source: Primary Data

**Table 2: Opinion about work life balance**

| Particular | Frequency | Percentage |
|---|---|---|
| To a greater extent | 65 | 65% |
| Some what | 32 | 32% |
| Very little | 03 | 03% |
| Not at all | 0 | 0 |
| Total | 100 | 100% |

Source: Primary Data

**Table 3: Factors lead to poor work life balance**

| Variables | Difficulty in teaching subjects | Lack of recognition | Poor salary | Poor working environment | Increased responsibility towards family | Difficulty in managing students |
|---|---|---|---|---|---|---|
| Strongly Agree | 0 | 12 | 45 | 07 | 35 | 0 |
| Agree | 13 | 33 | 40 | 09 | 40 | 08 |
| Neutral | 05 | 0 | 8 | 06 | 0 | 02 |
| Disagree | 68 | 42 | 4 | 43 | 12 | 70 |
| Strongly Disagree | 14 | 13 | 3 | 35 | 13 | 20 |

*Source: Primary Data*

**Table 4: Impact of work life balance**

| Variables | Frequency | Percentage |
|---|---|---|
| Positive impact | 73 | 73% |
| Negative Impact | 15 | 15% |
| Neutral | 12 | 12% |
| Total | 100 | 100% |

*Source: Primary Data*

**Table 5: Coping Strategies Used to Maintain Work- Life Balance**

| Variables | Class room Management | Setting priorities | Schedule time thoughtfully | Avoid multi-tasking | Set boundaries for conversation | Yoga/ Meditation |
|---|---|---|---|---|---|---|
| Strongly Agree | 20 | 46 | 24 | 0 | 47 | 23 |
| Agree | 56 | 54 | 76 | 0 | 34 | 68 |
| Neutral | 0 | 0 | 0 | 2 | 12 | |
| Disagree | 12 | 0 | 0 | 63 | 05 | 7 |
| Strongly Disagree | 12 | 0 | 0 | 35 | 02 | 2 |

*Source: Primary Data*

## 2. RESULTS

- Table 1 shows that demographic profile of the respondents i.e., majority 40% of the belong to the age group between 30 to 36 years and 35% of them belong to the age group between 36 to 42 years. 63% of the respondents are female. In this data majority of them are married and they have two children. 43% of the respondents are completed Post Graduation in various subjects. 36% are cleared NET/ SLET. Majority i.e. 46% of the respondents have 10- 15 years of teaching experience. Most of the respondents i.e. 72% of them drawing a salary of between Rs. 20,000 to Rs. 40,000. Majority i.e., 89% of them working as a designation of Assistant Professor.
- Table 2 data reveals that majority i.e., 65% of them opined that they have positive opinion towards work life balance to a greater extent.
- Table 3 data indicates that respondents various opinion towards factors lead to poor work life balance. Out of 100% of the respondents, 13% of them agree that difficulty in teaching subject is one of the reasons for work stress which affect them in work life imbalance. In the

same 100% of the respondents, 33% of them agree and 12% of them strongly agree that lack of recognition is also one factor for work life imbalance. Same 100% of the respondents expressed their reason they consider for work life imbalance i.e. 45% of them strongly agree and 40% of them agree that poor salary is the one more factor lead to poor work life balance. Again in the same 100% of the respondents, 40% of them agree and 35% of them strongly agree that increased responsibility towards family is the reason to poor work life balance. From the same 100% of the respondents only 8% of them said that difficulty in managing students is the factor led to poor work life balance. It was found out from the study that lack of recognition at work place, poor salary and increased responsibility towards family are the major factors lead to poor work life balance.

- Table 4 data reveals that majority i.e., 73% of them opined that they have positive opinion towards impact of work life balance. It indicates that they have good working atmosphere and also getting support from management/colleagues to discharge their responsibility in

a productive way. And least 15% of the respondents opined that impact of work life balance affected them negatively in their performance. Because the strong reason they said that poor salary made them difficult to manage their increased responsibility towards family.

- Table 5 data reveals that respondents opinion about coping strategies used by them to maintain work life balance. 76% of them said that class room management strategies used by them to maintain work life balance. In that same 100% of the respondents in that all the respondents that they set priories for their responsibility in work place and family life and also scheduled time thoughtfully which would help them to manage both work and family life. Again same 100% respondents in that 81% of them said that set boundaries for conversation would be helpful for them more to concentrate on work and also to avoid unnecessary clashes. Again, same out of 100% of the respondents said that i.e., 91% of them yoga/ meditation will be helpful them to cope up with work related stress.

## 3. SUGGESTIONS
Based on the finding of the study would like to give following suggestions: -

- Most of the respondents are unhappy with their salary, they felt that management is not provide them salary according to their experience and educational qualification. Hence Management has to put a glance on it.
- Management should organize more awareness programmes for their faculties about stress management and how to balance work life.

## 4. CONCLUSION
Work life balance is an important concept to all the employees who works in different organizations. In teaching profession also faculties are facing lot of work-related stress and it causes impact to their work and family life also. The important finding of the study is majority of the female faculties have positive attitude towards their working environment. And also, they know how to cope up with work stress and also balance work life and family life. But they are dissatisfied towards poor salary, lack of recognition, lack of provisions, lack of career development programmes etc. Hence management should take appropriate action to enhance their faculties quality of work life and it would be help them to maintain proper work life balance.

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# ANALYZATION OF PHYSICAL SCIENCES PROBLEMS

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**ABSTRACT**
*Most of the issues in physical sciences area unit usually solved by adopting calculus methodology or Laplace transformation methodology or matrix methodology or convolution methodology. The paper inquires some issues in physical sciences via Dinesh Verma rework methodology. the aim of paper is to prove the pertinency of Dinesh Verma Transformation to research the issues in physical sciences.*
**KEYWORDS**: *DVT Transform, Problems in Physical Sciences.*

## INTRODUCTION

The Dinesh Verma Transform (DVT) has been applied in different areas of science, engineering and technology [1], [2], [3] [4], [5], [6], [7]. The Dinesh Verma Transform (DVT) is applicable in different fields and successfully solving linear differential equations. Via Dinesh Verma Transform (DVT) Ordinary linear differential equation with constant coefficient and variable coefficient and simultaneous differential equations can be easily resolved, without finding their complementary solutions. It also comes out to be very effective tool to analyze differential equations, Simultaneous differential equations, Integral equations etc.

## BASIC DEFINITIONS
### DEFINITION OF DINESH VERMA TRANSFORM (DVT)

Dr. Dinesh Verma recently introduced a completely unique remodel and named it as Dinesh Verma remodel (DVT). Let f(t) may be a well-defined perform of real numbers t $\geq$ zero. The Dinesh Verma remodel (DVT) of f(t), denoted by D, is outlined as

$$D\{ \{f(t)\} = p^5 \int_0^\infty e^{-pt} f(t)dt = \bar{f}(p)$$

provided that the integral is focused, wherever p may be a true or complicated parameter and D is that the Dinesh Verma remodel (DVT) operator.

## DINESH VERMA TRANSFORM OF ELEMENTARY FUNCTIONS

According to the definition of Dinesh Verma transform (DVT),

$$D\{t^n\} = p^5 \int_0^\infty e^{-pt} t^n dt$$
$$= p^5 \int_0^\infty e^{-z} \left(\frac{z}{p}\right)^n \frac{dz}{p} \ , z = pt$$
$$= \frac{p^5}{p^{n+1}} \int_0^\infty e^{-z} (z)^n dz$$

Applying the definition of gamma function,

$$D\{y^n\} = \frac{p^5}{p^{n+1}} \lceil (n+1)$$
$$= \frac{1}{p^{n-4}} n!$$
$$= \frac{n!}{p^{n-4}}$$

Hence, $D\{t^n\} = \frac{n!}{p^{n-4}}$

Dinesh Verma Transform (DVT) of some elementary Functions

- $D\{t^n\} = \frac{n!}{p^{n-4}}$ , $where\ n = 0,1,2,..$

- $D\{e^{at}\} = \frac{p^5}{p-a}$,

- $D\{sinat\} = \frac{ap^5}{p^2+a^2}$,

- $D\{cosat\} = \frac{p^6}{p^2+a^2}$,

- $D\{sinhat\} = \frac{ap^5}{p^2-a^2}$,

- $D\{coshat\} = \frac{p^6}{p^2-a^2}$.

- $D\{\delta(t)\} = p^4$

- **T**he Inverse Dinesh Verma Transform (DVT) of some of the functions are given by

- $D^{-1}\left\{\frac{1}{p^{n-4}}\right\} = \frac{t^n}{n!}$, where $n = 0,1,2,..$

- $D^{-1}\left\{\frac{p^5}{p-a}\right\} = e^{at}$,

- $D^{-1}\left\{\frac{p^5}{p^2+a^2}\right\} = \frac{sinat}{a}$,

- $D^{-1}\left\{\frac{p^6}{p^2+a^2}\right\} = cosat$,

- $D^{-1}\left\{\frac{p^5}{p^2-a^2}\right\} = \frac{sinhat}{a}$,

- $D^{-1}\left\{\frac{p^6}{p^2-a^2}\right\} = coshat$,

- $D^{-1}\{p^4\} = \delta(t)$

**DINESH VERMA TRANSFORM (DVT) OF DERIVATIVES**

$$D\{f'(t)\} = p\bar{f}(p) - p^5 f(0)$$
$$D\{f''(t)\} = p^2\bar{f}(p) - p^6 f(0) - p^5 f'(0)$$
$$D\{f'''(y)\} = p^3\bar{f}(p) - p^7 f(0) - p^6 f'(0) - p^5 f''(0) \text{And so on.}$$

$$D\{tf(t)\} = \frac{5}{p}\bar{f}(p) - \frac{d\bar{f}(p)}{dp},$$

$$D\{tf'(t)\} = \frac{5}{p}\left[p\bar{f}(p) - p^5 f(0)\right] - \frac{d}{dp}\left[p\bar{f}(p) - p^5 f(0)\right]$$

and

$$D\{tf''(t)\} = \frac{5}{p}\left[p^2\bar{x}(p) - p^6 x(0) - p^5 x'(0)\right] - \frac{d}{dp}\left[p^2\bar{x}(p) - p^6 x(0) - p^5 x'(0)\right] \text{ And so on.}$$

**MATERIAL AND METHOD**
**MODULE I:**
The rate at which a body cools is proportional to the difference between the temperature of the body and that of the surrounding air. The temperature T of the body at any instant is given by the differential equation (assuming that in air at 25 degree Celsius will cool from 100 to 75 degree Celsius in one minute)

$$\dot{T} - kT = -25k$$

Applying DineshVerma Transform, we have

$$p\bar{T}(p) - p^5 T(0) - k\bar{T}(p) = -25kp^4$$

Put T (0) = 100 and rearranging, we get

$$\bar{T}(p) = \frac{-25kp^4}{(p-k)} + \frac{100p^5}{(p-k)}$$

Hence

$$T = D^{-1}\left\{\frac{-25kp^4}{(p-k)} + \frac{100p^5}{(p-k)}\right\}$$

Applying inverse DVT and solving, we have
$$T = 25 + 75e^{kt}$$

**MODULE II:**
The rate at which the ice melts is proportional to the amount of ice at the instant. If M is the amount of ice initially, the amount m of ice at any time t is given by the differential equation

$$\dot{m} - km = 0$$

Applying Dinesh Verma Transform, we have

$$p\bar{m}(p) - p^5 m(0) - k\bar{m}(p) = 0$$

Put m(0) = M and rearranging, we have

$$\bar{m}(p) = \frac{Mp^5}{(p-k)}$$

Hence

$$m = D^{-1}\left\{\frac{Mp^5}{(p-k)}\right\}$$

Applying inverse DVT and solving, we have
$$m = Me^{kt}$$

## MODULE III:

Under certain conditions cane sugar is converted into dextrose at a rate, which is proportional to the amount unconverted at any time. If M is the amount of cane sugar initially and the amount m of the cane sugar converted into dextrose is given by the differential equation

$$\dot{m} + km = kM$$

Applying Dinesh Verma Transform, we have

$$p\bar{m}(p) - p^5 m(0) - k\bar{m}(p) = kMp^4$$

Put m(0) = 0 and rearranging, we have

$$\bar{m}(p) = \frac{Mkp^4}{(p-k)}$$

*Hence*

$$m = D^{-1}\left\{\frac{Mkp^3}{(1+kp)}\right\}$$

Applying inverse DVT and solving, we have

$$m = M[1 - e^{-kt}]$$

## MODULE IV

The rate of increase of the population is proportional to the number of inhabitants. If N is the population initially, the population n of the country at any time is given the differential equation

$$\dot{n} - kn = 0$$

Applying Dinesh Verma Transform, we have

$$p\bar{n}(p) - p^5 n(0) - k\bar{n}(p) = 0$$

Put n(0) = N and rearranging, we have

$$\bar{n}(p) = \frac{Np^5}{(p-k)}$$

*Hence*

$$n = D^{-1}\left\{\frac{Np^2}{(1-kp)}\right\}$$

Applying inverse DVT and solving, we have

$$n = Ne^{kt}$$

## MODULE V

A particle is projected with velocity u making an angle $\alpha$ with the horizontal. Neglecting air resistance, the differential equations of the motion are

$$\ddot{x} = 0 \dots (1)$$
$$\ddot{y} + g = 0 \dots (2)$$

Applying Dinesh Verma Transform of (1), we have

$$D\{\ddot{x}\} = 0$$
*or*
$$p^2\bar{x}(p) - p^6 x(0) - p^5 x'(0) = 0$$

Put $x(0) = 0, x'(0) = u\cos\alpha$ and rearranging, we have

$$\bar{x}(p) = p^3 u\cos\boldsymbol{\alpha}$$

*Hence*

$$x = D^{-1}\{p^3 u\cos\boldsymbol{\alpha}\}$$

Applying inverse DVT and solving, we have

$$x = (u\cos\alpha)t$$

Applying Dinesh Verma Transform of (2), we have

$$D\{\ddot{y} + g\} = 0$$
*or*
$$p^2\bar{y}(p) - p^6 y(0) - p^5 y'(0) + gp^4 = 0$$

Put $y(0) = 0, y'(0) = u\sin\alpha$ and rearranging, we have

$$\bar{y}(p) = p^3 u\sin\boldsymbol{\alpha} - \boldsymbol{g}p^2$$

*Hence*

$$y = D^{-1}\{p^3 u\sin\boldsymbol{\alpha} - \boldsymbol{g}p^2\}$$

Applying inverse DVT and solving, we have

$$y = (u\sin\alpha)\boldsymbol{t} - \boldsymbol{g}t^2/2$$

## MODULE VI

A particle moving in a plane is subjected to a force directed towards a fixed point O (origin) and proportional to the distance of the particle from O. The differential equations of the motion are

$$\ddot{x} + k^2 x = 0 \dots (1)$$
$$\ddot{y} + k^2 y = 0 \dots (2)$$

Applying Dinesh Verma Transform of (1), we have

$$D\{\ddot{x} + k^2 x\} = 0$$
*or*
$$p^2 \bar{x}(p) - p^6 x(0) - p^5 x'(0) + k^2 \bar{x}(p) = 0$$
Put $x(0) = 1, x'(0) = 0$ and rearranging, we have

$$\bar{x}(p) = \frac{p^6}{k^2 + p^2}$$
*Hence*
$$x = D^{-1}\left\{\frac{p^6}{k^2 + p^2}\right\}$$
Applying inverse DVT and solving, we have

$$x = coskt$$

Applying Dinesh Verma Transform of (2), we have

$$D\{\ddot{y} + k^2 y\} = 0$$
*or*

$$p^2 \bar{y}(p) - p^6 y(0) - p^5 y'(0) + k^2 \bar{y}(p) = 0$$
Put $y(0) = 0, y'(0) = 2$ and rearranging, we have
$$\bar{y}(p) = \frac{2p^5}{k^2 + p^2}$$
*Hence*

$$x = D^{-1}\left\{\frac{2p^5}{k^2 + p^2}\right\}$$
Applying inverse DVT and solving, we have

$$x = (2/k) \, sinkt$$

## CONCLUSION
In this paper, we have analyzed the problems in physical sciences by Dinesh Verma Transform method. It may be finished that the method is accomplished in analyzing the problems in physical sciences.

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# SPEED AND RELIABILITY OF 5G NETWORK

## Priya J, Shivaleela S

## ABSTRACT

*Everybody loves speed and moreover speedy internet, so it's no surprise that every major telecom in the world is working to make it even faster. Smartphones, watches, homes, and cars are increasingly requiring stable internet connections. In order to survive in the world where in every second the speed changes and where we urge for more and more technology, here comes the fifth-generation technology: 5G. In future, i.e., a world beyond 4G, some of the prime objectives that need to be fulfilled are increased capacity, improved data rate, decreased latency, and quality service. To meet these demands, large scale improvement in the cellular architecture of 5G is required. This paper basically lays emphasis on the 5th generation i.e., 5G cellular network architecture and some of the essential emerging technologies that can prove fruitful in humanizing the architecture and summiting the demands of users. This paper is contented with the details related to 5g with the prime focus on the massive multiple input multiple output technology and device-to-device communication (D2D). A general credible 5G cellular network architecture is being proposed with the guideline taken from the internet books and by the detailed study of the topic.*

## INTRODUCTION

The G in 5G stands for generation. and 5 is the advancement denoted through a number. Wireless phone technology technically entered with 1G, and in the early 1990s it upgraded to 2G when companies enabled people to send text messages between two cellular devices which fascinated the world. Eventually the world moved on to 3G, which imparted the liberation of making phone calls, send text messages, and browse the internet at excellent speed.4G enhanced many of the capabilities that were made possible only with the third generation of wireless. People could browse the web at lights speed, send text messages, and can make phone calls and they could even download and upload large video files without any issues and without long waiting. Then companies added LTE, abbr. for long term evolution, to 4G connectivity. LTE became the fastest and most consistent variety of 4G and it started competing with the technologies like WiMax in the market. Both technologies resulted in similar outcomes, but it was vital to create a standard for everyone to use. LTE did just that, by making 4G technology even faster and this laid the foundation of 5G. 5G will make it easier for people to download and upload Ultra HD and 3D video. So, we can say that there is advancement in the speed of living. It would be fascinating to imagine upgrading your data

connection from a backyard hose to a flames hose. The difference will be noticeable and worth appreciable.
The NEXT GENERATION MOBILE NETWORK ALLIANCES defines the following pre-requisite for 5G networks:

- Increased Data rates
- 1 Gb per second simultaneously to many workers on the same office floor
- SPECTRAL efficiency more enhanced as compared to 4G
- Coverage speed

- Signalling efficiency enhanced
- Legacy reduced significantly compared to LTE

A new-fangled mobile generation has appeared in roughly every 10 years since the first 1G system was introduced, Nordic mobile telephone in 1982. The first '2G' system commercially came into being in 1992, and the 3G system was started in the year 2001. 4G systems fully compliant with IMT Advanced were first made identical in 2012. The development of the 2G (GSM) and 3G (IMT-2000 and UMTS) standards took a extended time of about 10 years from the official initiative of the R&D projects, and thus the development of 4G systems began in 2001 or 2002. The evolution of wireless has been shown in Fig. 1. It depicts the embryonic generations of wireless technologies in provisions of data rate, mobility, network coverage and spectral competency. As the wireless technologies are emerging at a thick range, the data rate, mobility, coverage and spectral efficiency increases. Even it shows that the 1G and 2G technologies uses circuit switching while as 2.5G and 3G uses together circuit and packet switching whereas the next generations from 3.5G to till now i.e., 5G are using packet switching. Along with these factors, it also clears out the difference between licensed spectrum and unlicensed spectrum. All the budding generations make use of licensed spectrum while the Wi-Fi, Bluetooth and WiMax are using the unlicensed spectrum.
This paper is mainly classified into following sections:

- Evolution of generation
- 5G cellular network architecture
- Emerging technologies for 5g wireless network
- Conclusion

A sequential summary of all the generations has been given below:

**A. 1G**
1G (or 1-G) refers to the very first generation of wireless telephone technology (mobile telecommunication). The 1st

generation was announced in initial 1980s. With data rate up to 2.4kbps. The subscribers were Advanced Mobile Phone System (AMPS), Nordic Mobile Telephone (NMT), and Total Access Communication System (TACS). The setbacks of first generation were below par capacity, reckless handoff, inferior accent associations, and with no safety measures, since audio calls were accumulated and played in radio towers due to which weakness of these calls from not so needed connections i.e., noises from the third-party increases. The main difference between the two mobile network system (1G and 2G), is the medium of encoders i.e. The radio signals which 1G networks uses are basically analog, while 2G networks are digital. We are aware of the fact that both the systems use digital signalling to connect the radio towers (which pay attention to the handsets) to the rest of the telephonic networks, the tone of voice itself during a call is programmed to digital signals in 2G whereas when we are talking about 1G, its modulation is done and that to on higher frequency, classically 150 MHz and up. This inherited advantage of digital over that of analog resulted in the replacement of 1G over 2G

## B. 2G

2G (or 2-G) is short-term for second-generation wireless telephone technology. The three key benefits of 2G networks over their predecessors' generations were that:

- Phone conversations were digitally encrypted;
- 2G systems were considerably more competent on the spectrum allowing greater mobile phone penetration levels.
- 2G introduced data services, and gave rise to SMS text messages.

2G technologies enabled the various mobile phone networks with the services such as picture messages, text messages, and MMS (multimedia messages) All text messages sent over 2G are digitally encrypted as said above, allowing for the transfer of data in such a way that only the intended receiver can receive and read it i.e. more advanced than the 1G in terms of privacy.

## C. 2.5G

It is generally a 2nd generation cellular system subscription combined with General Packet Radio Services i.e., GPRS and other amenities which doesn't commonly endow in 2G or 1G network. It can get high with data rate up to 144kbps system frameworks, but it applies both packet switching and circuit switching. GPRS, Enhanced Data Rate for GSM Evolution mainly known as EDGE, and Code Division Multiple Access i.e., CDMA 2000 were the man 2.5G technologies.

## D. 3G

Then, came the introduction of 3rd generation which was established in late 2000. It imparts the world with transmission rate up to 2Mbps. The main purpose of Third generation (3G) system was to merge high speed mobile access to services based on Internet Protocol (IP) and it was successfully accomplished. Aside from transmission rate, avant-garde improvement was made for maintaining QoS. Supplementary facilities like global roaming and improved audio quality made 3G as a noteworthy and qualitative

generation. The major annoyance for 3G handsets is that, they grab more power than most 2G models. Looking from the market point of view, 3G network plans are more expensive than 2G. 3G involves the utilization of Wideband Code Division Multiple Access i.e., WCDMA, Universal Mobile Telecommunications Systems (UMTS) and Code Division Multiple Access (CDMA) 2000 technologies, along with the introduction of the evolving technologies like High-Speed Uplink/Downlink Packet Access (HSUPA/HSDPA) and Evolution-Data Optimized (EVDO) which has made an intermediate wireless. 3G telecommunication networks prop up services that offer an information transfer rate of at least 200 kb/sec. Generation between 3G and 4G named as 3.5G provides an improved data rate of 5-30 Mbps

## E. 3.75G

Long-Term Evolution technology (LTE) and Fixed Worldwide Interoperability for Microwave Access (WIMAX) is the outlook of mobile data services. LTE and Fixed WIMAX have the potential to complement the capability of the network. It also provides a substantial number of users, the facility to access a broad range of high-speed services approximating on stipulate video, peer to peer le sharing and fused Web services.

## F. 4G

4G is the fourth generation (4th) of wireless mobile telecommunication technology, succeeding 3G and even more fascinating. A 4G system must provide capabilities defined by ITU in IMT. Advance 4G is generally referred as the progeny of the 3G and 2G standards. Presently, the standardization of Long-Term Evolution (LTE) advanced
as forthcoming 4G standards along with Mobile Worldwide Interoperability for Microwave Access commonly called WIMAX is done by 3rd generation partnership project (3GPP). A 4G system improves the customary communication networks by imparting complete and reliable solution based on IP. Facilities like voice, data and multimedia will be given to the users every time and everywhere basis and at quite elevated data charge as related to earlier generations. Applications which use a 4G network are Multimedia Messaging Service (MMS), Digital Video Broadcasting (DVB), and video chat, High-Definition TV content and mobile TV.

## G. 5G

Huge consortiums of major global telecoms are already working to create worldwide values around 5G. Although most of those standards don't get solidified, experts yet expect it to be more compatible (with 4G and 3G) in addition to having some interoperability across the world. With an increment, in the demand of the users exponentially, 4G can now be easily replaced with 5G with a new advanced access technology named as Beam Division Multiple Access i.e. BDMA and or Filter Bank multi carrier abbr. as FBMC multiple access. The concept behind BDMA techniques can be explained by considering the case of the base station communicating with the mobile stations. An orthogonal beam is owed to each mobile station and by BDMA technique we

can split that antenna beam according to locations of the mobile stations for openhanded multiple accesses to the mobile stations, which likewise increase the competency of the system and thus is the main process of this communication. An idea to swing towards 5G is based on present drifts; it is commonly assumed that 5G cellular networks can tackle six obstacles that are not well addressed by 4G i.e.

1. Higher capacity
2. Data rate higher
3. End to End latency has been lowered
4. Connectivity to massive device
5. Reduced cost
6. Consistent Quality

5G CELLULAR NETWORK ARCHITECTURE.

There are several obstacles in way for 5G designers. One of the most vital challenges is the physical paucity of radio frequency (RF) spectra owed for cellular communications. Moreover, these frequency spectra have been profoundly used, and there is no more auxiliary in the existing cellular bands. Further challenge is the operation of advanced wireless technologies comes at the tag of high energy consumption. Toting up to environmental concerns, it has been seen and reported by cellular operators that the energy which is consumed by the base stations contributes to over 70% of their electricity bill. To study 5G network in the market now, it is clear that the multiple access techniques in the network are almost at a halt and requires sudden upgrading. Current technologies like OFDMA are reported to work at least for next 50 years. Furthermore, there is no need of change in the technology. The wireless setup had come about from 1G to 4G. Alternatively, the addition of an application or we can say amelioration done at the elementary network for pleasing the user requirements is provoking the package providers to drift for a 5G network as soon as 4G is commercially set up. However, there was a widely agreement on the fact that as compared to the 4G network, the 5G network should achieve the below benefits over it:

1. 1000 times the system capacity
2. 10 times the spectral efficiency
3. Energy efficiency
4. Data rate.
5. 25 times the average cell throughput.

Drastic changes in the policy of designing the 5G wireless cellular architecture is needed to meet the difficulty of the user and to triumph over the challenges that have been put forward in the 5G system. In attendance wireless cellular architecture, for a mobile user to get connected or to communicate whether inside or outside, an outside base station is always present in the middle of a cell which helps in communication. The signals have to travel through the walls of the indoors, in providing communication between inside and outside base station which will result in very high penetration loss, along with the correspondingly costs with reduced spectral effectivity, data rate, and energy competency of wireless communications. To tackle this obstacle, a new idea for designing the 5G cellular architecture has come into existence i.e., to distinct the outside and inside setups. With the help of this designing technique, the loss due to the

penetration through the walls of the building will be to some extent reduced. This scheme or we can say that this plan will be supported with the help of massive MIMO technology, in which the dispersed array of antennas are deployed geographically, which consists of many small units or it is made up of tens or hundreds of antenna units. Since at present MIMO systems are using either two or four antennas, but the idea of massive MIMO systems which has been introduced mainly lays emphasis on the utilizing the advantages of large array antenna elements in terms of huge aptitude gains. To erect or construct a large massive MIMO network, lastly, we have to fit the outside base stations with hefty antenna arrays and among them some are discrete around the hexagonal cell and connected to the base station through the fastest cables Optical cables, mainly aided with gigantic MIMO technologies. The mobile users which are present outside usually contains certain number of antennae fitted in it but with collaboration, a large reel antenna array can be erected, which jointly with antenna arrays of base station form practical massive MIMO links. Secondly, we have installed every building with big antenna arrays from outside, for establishing communication with outdoor base stations with the help of line-of-sight components. The wireless access points which are there inside the building are associated or we can say connected with the giant antenna arrays through cables for communicating with users present indoor. This will significantly lead to the improvement in the energy efficiency, cell average output, data rates, and spectral competency or efficiency of the cellular system but at the outlay of amplified i.e., huge and levelled infrastructure cost. With the introduction of such architecture and such a advanced plan, the inside users will only have to connect or communicate within wireless access points while huge erected antenna arrays remained installed outside the buildings. For the communication which has to be established inside i.e., for indoor communication, certain technologies like Wi-Fi, Small cell, ultra-wideband, millimetre wave communications, and visible light communication (VLC) proves helpful for little range communications having great data rates. However, technologies similar to millimetre wave and visible light communication (VLC) are utilizing higher frequencies which are not typically used for cellular communications. But it is not a proficient idea to use these high frequency waves for outside and also for long distance applications or uses because these waves cannot be filtered from dense materials proficiently and can easily be dissipated by rain droplets, gases, and by some kind of ore. Millimetre waves and visible light communications technologies can develop the transmission data rate for indoor setups because they have come up with large bandwidth.

As we know that the 5G wireless cellular network architecture mainly comprises of only two logical layers i.e.

1. A radio networks
2. Network cloud.

Basically, different types of components which are performing different functions constitute the radio network. User plane entity i.e., UPE and a Control plane entity i.e., CPE both performs advanced layer functionalities related to

the User and Control plane, respectively are generally the part of the network function virtualization (NFV) cloud. One of the terms related to this section is XaaS which is basically the connection between a radio network and a network cloud. In this paper, a general architecture of 5G cellular network has been proposed. So, what exactly we can say about XaaS is that it is the interconnectivity among the different budding technologies like Massive MIMO network, Cognitive Radio networks, and mobile and static small-cell networks. This anticipated architecture also tries to explains the function of network function virtualization i.e., NFV cloud in the 5th Generation cellular network architecture. The thought of Device to Device (D2D) communication, small cell access points and Internet of things i.e., IoT has also been integrated in this proposed 5G cellular network architecture. So, we can say that the proposed 5G cellular network architecture can be used as a platform for the standardization of upcoming 5G network in future. Since, there are numerous issues that need to be taken care of in order to apprehend the wireless network architecture in fastidious and 5G networks in all-purpose.

## EMERGING TECHNOLOGIES FOR 5G WIRELESS NETWORKS:

In the next decade, it is expected that mobile and wireless traffic volume will increase a thousand-fold and this eventually will be obsessed by the anticipated 50 billion or much more connected devices connected to the cloud by 2020. Improving energy efficiency, increasing capacity, cost and spectrum utilization as well as offering better stability and scalability for handling the escalating number of connected devices are the remedial measure taken against various challenges when there is rapid increase in the number of connected devices. Today the world is upgrading at the lights speed and we relay more and more on technology through which we can communicate more speedily and for this the overall technical aim is to provide a system idea that supports:

- Increment in data volume per area by 1000 times.
- Number of connected devices should be increased by 10 to 100 times.
- 10 to 100 times increased typical user data rate.
- Extended battery life up to 10 times for low power Massive Machine Communication i.e., MMC devices.
- Also 5 times reduced End-to-End i.e., E2E latency.

In this paper, I have tried to touch all the generation of the evolution in internets and also, I have left no stone unturned in discussing the budding technologies along with their technical challenges which arises due to a variety.

## CONCLUSION

In this paper, a comprehensive review has been done on the recital necessities of 5th Generation wireless cellular communication systems that have been denied in requisites of data rate, spectral efficiency, latency, capacity, energy efficiency, and Quality of service. In this paper, 5G wireless network architecture has been detailed along with massive MIMO technology, network function virtualization (NFV) cloud and device to device communication. In terms of better quality in future and increased data rate for the inside users and at the corresponding time reduces the pressure from the

outside base station, certain short range communication technologies, like Wi-Fi, Small cell, Visible light communication (VLC) and millimetre wave communication (MVC) technologies, has been explained. Some key promising technologies and the upcoming generation step by step have also been discussed full the credible routine desires, like huge MIMO and Device to Device communication (D2D) in fastidious and intervention management, multi radio access technology ultra-dense networks, full duplex radios, millimetre wave communication (MVC) and Cloud Technologies in general with radio access networks, spectrum allocation with cognitive radio and software dined networks.

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# IMPACT OF WORK- LIFE BALANCE ON JOB SATISFACTION OF HOSPITAL NURSES- A CASE STUDY

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## ABSTRACT
*A positive work- life balance makes employees feel job satisfaction towards their work and increase their productivity. Good quality work- life balance will be reduced employee retention. This study aims to know the impact of work- life balance on job satisfaction of Hospital Nurses working in Private Hospitals in Mangalore City, Dakshina Kannada. Nursing profession is a multi-tasking job. So excessive work load and long hours shifts makes imbalance in work and family life of nurses. The sample used in this study is 100 respondents. The study is descriptive one. A structured questionnaire is prepared to collect data from 100 respondents. The collected data was analyzed and thereby suggestions & conclusion are drawn.*
**KEY WORDS:** *Positive work life balance, Job satisfaction, impact of work life.*

## 1. INTRODUCTION

Work – Life Balance means proper prioritizing work and life. Work- life balance supports the efforts of employee to manage their time and energy between work and other important aspects of their lives.

Woman employees have to play two roles in their professional and personal life. Achievement of professional goals and fulfillment of personal needs lead to job satisfaction.

Nurses employing in hospital plays a key role for hospital development and patient well-being. They have to work in shifts, work for different types of illness affected patients. Due to long shifts works and also giving services to various diseased patients, their emotional condition would be stressed. It leads to physical and mental disturbances which affect their performance and job satisfaction.

Therefore, work stress is one of the factors that affect work- life balance of nurses. Wok- life balance is an important challenge to any employees to manage work and family situation together in a balanced way. Employees who are working in health sector carry heavy responsibility which forced them. to encounter work- life balance related issues. In this context, the present study on impact of work- life balance on job satisfaction of hospital nurses working in private hospitals would be more relevant.

## 2. REVIEW OF LITERATURE

(Alamzeb Aamir, Abubakar Abdul Hamid, Maqsood Haidar, Chandhry Shoaib Akhtar, 2016), the study indicates the influence of work- life balance on job satisfaction which leads to employee retention. The study highlights significant influence of all work violation as a moderator and also job satisfaction effected on the relationship of work- life balance and retention.

(Kavishree P, Ms. Benita S Monica, 2018), the objective of the study was to study the dimensions, influence of work quality and life quality of nurses. The study indicates that the better quality of work life will increase the nurse's performance.

(Fasla NP, Dr. C. Dhanalakshmi, 2018), the study put an attempt to explore the tough challenges faced by working women in maintaining a balance between their personal and professional life. The study indicates that most of the respondents are faced high level of stress. The study focus about various variable influence on work life balance are convenient shifts, good working condition and job security.

(Puja Roshani, Chaya Bagrecha, 2017), the study reveals that satisfaction with work life balance has a positive and significant influence on increased effectiveness at work. The study found out that respondents were satisfied towards work-life balance, reduced work interference and personal life interference.

(Siva Prasad K.I, P.T. Raveendran, 2019), the study aim was to know how stress makes influences in their family commitments and extent which effects on the current work – life balance of women employees working in the health care industry. The study findings highlight that satisfied work- life balance among women nursing employees about this issue management should pay attention to frame formalized work – life management policies at the hospital.

## 3. OBJECTIVES OF THE STUDY

1. To know the influence of work- life balance on performance.
2. To find out the impact of work life balance on job satisfaction.
3. To understand barriers to work- life balance.
4. To Know the interventions and strategies uses to manage work stress and maintain work- life balance.

## 4. RESEARCH METHODOLOGY

Nurses working in the Private Hospitals in Mangalore City, Dakshina Kannada were selected as a sample for conducting the study. The sample comprised of 100 respondents. The data collection techniques used in this study using instrument in the form of questionnaire. Data was collected by using primary and secondary sources. Primary data collected through structured questionnaire method.

Secondary data were collected from various journals, articles and websites.

## 5. SAMPLE DESIGN

The nature of the study is descriptive with an attempt to understand the impact of work- life balance on job satisfaction of nurses working in Private Hospitals. For selecting the 100 sample, convenient sampling method was used.

## 6. GEOGRAPHICAL AREA

The universe of the study comprises Private Hospitals in Mangalore City.

## 7. ANALYSIS OF DATA

A structured questionnaire has been used for the study. Research was conducted by using questionnaire method. Simple percentage technique was used to analyze the collected data.

**Table 1: Demographic details of the respondents**

| Variables | Frequency | Percentage |
|---|---|---|
| **Age (years)** | | |
| 23- 33 | 32 | 32% |
| 33- 43 | 35 | 35% |
| 43- 53 | 22 | 22% |
| Above 53 | 11 | 11% |
| Total | 100 | 100% |
| **Sex** | | |
| Male | 26 | 26% |
| Female | 74 | 74% |
| Total | 100 | 100% |
| **Marital Status** | | |
| Married | 78 | 78% |
| Unmarried | 22 | 22% |
| Divorced | 0 | 0 |
| Total | 100 | 100% |
| **Educational Qualification** | | |
| Master's Level | 12 | 12% |
| Bachelor's Level | 35 | 35% |
| GNM | 53 | 53% |
| Total | 100% | 100% |
| **Salary** | | |
| Below Rs. 15,000 | 32 | 32% |
| Rs. 15,000 – Rs. 30,000 | 51 | 51% |
| Rs. 30,000- Rs. Rs 45,000 | 12 | 12% |
| Above Rs. 45,000 | 5 | 5% |
| **Total work experience** | | |
| 0-5 years | 13 | 13% |
| 5-10 years | 26 | 26% |
| 10- 15 years | 35 | 35% |
| Above 15 years | 26 | 26% |
| **TOTAL** | **100** | **100%** |

**Table 2: Opinion towards work life balance and job satisfaction have strong relation**.

| Variables | Frequency | Percentage |
|---|---|---|
| Extremely agree | 94 | 94% |
| Somewhat disagree | 6 | 6% |
| Neutral | 0 | 0 |
| Somewhat agree | 0 | 0 |
| Extremely agree | 0 | 0 |
| **TOTAL** | **100** | **100%** |

**Table 3: Influence of good work- life balance dimensions to job satisfaction**.

| Variables | Optimized work schedule | Strong social support system | Time management | Proper personalized plan | Work recognition | Support from management and colleagues | Salary and other monetary benefits |
|---|---|---|---|---|---|---|---|
| To a great extent | 94 | 35 | 68 | 23 | 100 | 100 | 100 |
| Some what | 6 | 37 | 32 | 20 | 0 | 0 | 0 |
| Very little | 0 | 10 | 0 | 48 | 0 | 0 | 0 |
| Not at all | 0 | 18 | 0 | 9 | 0 | 0 | 0 |

**Table 4: Reasons for increased work stress**

| Variables | Shift hours | Patient needs | Work load |
|---|---|---|---|
| To a great extent | 89 | 45 | 65 |
| Some extent | 11 | 30 | 30 |
| Very little | 0 | 10 | 5 |
| Not at all | 0 | 15 | 0 |

**Table 5: Suggestions towards intervention and strategies can used for maintaining work-life balance which led to job satisfaction.**

| Variables | Frequency | Percentage |
|---|---|---|
| Identify specific stressors | 50 | 50% |
| Take time for self-care | 5 | 5% |
| Establish personal professional boundaries | 30 | 30% |
| Effective communication | 10 | 20% |
| Maintain healthy diet and exercise | 5 | 5% |
| **TOTAL** | **100** | **100%** |

## 8. RESULTS

- Table 1, the data revels that majority i.e., 35% of the respondents belongs to the age group of 33 to 43 years and 32% of the respondents belong to the age group of 23- 33 years. The data indicates that majority of the nurses are from middle age group. Majority i.e., 74% of the respondents are female. Most of the respondents i.e., 78% of them are married. Most of the respondents i.e., 53% of them are studied GNM and 35% of them are studied Bachelor's level nursing course. Majority i.e., 51% of the respondents are drawing a salary of Rs. 15,000 to Rs. 30,000/. Most of the respondents i.e., 35% have 10 to 15 years of total work experience.

- Table 2, the data reveals that respondents believe that work- life balance and job satisfactions have strong relation. Here, the majority of the respondents i.e., 94% of them were extremely agree with this statement. They said that if they are free from work stress/ burden, then only they can manage their work and family responsibility which leads them to job satisfaction.

- Table 3, the data reveals the opinion of respondents about influence of good work- life balance towards

job satisfaction. Majority 94% of the respondents opined that optimized work schedule led to job satisfaction to a great extent. From the same 100% of the respondents, 37% of them believe that to some extent strong social support system would help to manage work- life responsibility which would increases the job satisfaction level also, 68% of them said that proper time management at work place help to reduce work burden thereby employee would have job satisfaction. All respondents believe that work recognition through increased salary, promotion etc. enhances job satisfaction level. 100% of the respondents opined that support from management and colleagues would help them to discharge their responsibility in a feasible way, this would help them to show high level of job satisfaction at work place. All the respondents opined that salary and other monetary benefits also enhance their job satisfaction level. And 48% of the respondents said that personalized plan helps them maintain work life balance.

- Table 4, data reveals 89% of the respondents said the reasons for increased work stress due to long work shift hours would affect their work life balance to a great extent. 45% of them said that meeting patient needs made them emotional weak to a greater extent might be the reason of work stress.65% of them felt that due to the increased work load might be the reason of work stress.

- Table 5, data reveals the respondents' suggestions towards intervention and strategies used for maintaining work life balance which gives more job satisfaction to nursing staff at work place. On that majority i.e. 45% of the respondents suggested that by identifying specific areas of stresses in work and family life would help to maintain work- life balance, 30% of the respondents opined that establishing personal professional boundaries  may help to  prevent personal or family matters from disrupting work, 5% of them said that take time for self-care  would help to deal with nurses stress in the work  place.20% of them said that effective communication is a significant tool in managing work stress because nurses have to communicate with various professionals, patients and their family members about illness diagnoses and treatment. So, clarity in communication would help to manage various confusions, misunderstanding would help to

reduce work stress.5% of the respondents said that maintaining sound nutrition and exercises helps to clear mind and prevent unwanted physical effects of stress such as heart problems and diabetes.

## 9. SUGGESTIONS
Based on the finding of the study would like to give following suggestions: -

- Nurses should learn about way of managing work stress, and then only they have work- life balance and job satisfaction.
- Nursing job is a more stressful job and there may be more chances of work burnout in their profession. So, they need strong support from family and society to manage this.
- Hospital management should arrange various programmes to their hospital nurses to manage their stress level which will help them to give good services in their work and also it will lead them job satisfaction.
- There may be chances of emotionally weak of nurses by seeing the various ill conditions of patients. Hence hospital social workers should help the nurses to cope up with emotional stress.
- Nurses should know how to schedule their work and personal life responsibility properly. Then only they can manage their responsibility without any hurdles and also spent their leisure time by involving various activities like yoga/ Meditation, gardening, spent with family/ friends.
- They should learn how to make their mind always happy and tension free.

## 10. CONCLUSION
A good work- life balance status always indicates increased job satisfaction of employees. The present study also intended to study the impact of work- life balance on nurses' job satisfaction. Nurses opined the study that there would be connection between work-life balance and job satisfaction. Therefore, positive quality of work life always motivates nurses to do better services in their work place, spent their time with family members/ friends and also discharge responsibility meaningfully. Both management and each individual nurses should know proper strategies to enhance quality of work life.

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# CHALLENGES FACED BY STARTUP ENTREPRENEURS - A REVIEW STUDY

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## ABSTRACT
*Startups give birth to innovative ideas, which immensely contribute for finding answers to many unsought problems of the society. Despite of huge efforts of the government, startups are encountering issues such as lack of financial support, unavailability of marketing opportunities, digital illiteracy, competition, etc. Unemployment is the major issue of the country it can be only tackled by addressing the challenges faced by startup entrepreneurs. This paper focused on the studies done so far and effort has made to discuss the challenges confronted by startup entrepreneurs.*
**KEYWORDS:** *Startups, Encountering issues, Government.*

## INTRODUCTION
A startup venture could be defined as a new business that is in the initial stages of operation, beginning to grow and is typically financed by an individual or small group of individuals. Entrepreneurs are the individuals who undertake a new business venture, risk and reward are borne by entrepreneur himself. in this startup era government is doing maximum efforts to encourages entrepreneurs through monetary and non- monitory benefits . Although government is supporting startup entrepreneurs still there are numerous bottlenecks exist, some are controllable and others are uncontrollable in the hands of entrepreneurs therefore identification of those issues could be the first step .lack of infrastructure, improper mentoring, and unavailability of angel investors, inadequate market and technical knowledge and many other issues are discussed in the articles reviewed below.

## OBJECTIVES OF THE STUDY
1. To analyze the challenges faced by the startup entrepreneurs in India.

## RESEARCH METHODOLOGY
The respective study is based on secondary data collected from research articles, thesis and books. The method of research used is descriptive research method.

## REVIEW OF LITERATURES
**M.Jegadeeshwaran,S.Kaleeshwari (2021)** this paper certainly deals with startup India action plan and other schemes like MUDRA,ATAL INNOVATION MISSION etc and their role in supporting startups . Researcher highlighted the challenges of startups. As per DPIIT (department of promotion of industry and internal trade) in India Maharashtra state has highest number of startups and 3783 and Karnataka ranks second with 2938 DPIIT recognized startups.

**Dr. Sujata Chincholkar (2021)** In her paper titled 'Bottleneck to success: scaling up issues of start-ups' studied about many start-ups encounter major setbacks at the scaling up stage.
Her qualitative study examines the problems encountered by start-up companies while scaling up the business. The results show that non- availability of financial resources, acquisition of right talent and acceptance of the product are some of the major challenges faced by the start-ups while scaling up by developing a model.

**Mohan Kumar (2021)** has done a research paper on 'Startups, Barriers and its Opportunities in India' His study reveals that there are a lot of barriers for the startups that need to be worked on such as towards. Like, lack of technical education, no transparency of government funding scheme. The government will have to open such private intermediary centers which will

work under the supervision of the government and they will be rated according to their work. These private intermediary centers will help all those startups who want to take advantage of the government scheme but do not know-how. Therefore, the government should need to lots of taking care of startups so that startups can run at full speed and contribute to the Indian economy.

**Dr. Walter D'souza (2021)** published a research article on the topic of startups titled 'Indian start ups – issues, challenges and opportunities.' The paper discussed few issues and challenges that an Indian startup has to face and the opportunities that the country can provide in the current eco system.

**Arana Kausar & Md.Aziz Ahmed (2020)** in their paper titled "a study on Financial Literacy creating sustainable startups in the Indian context ,discussed on case studies of failure of startups in India due to financial illiteracy ,financial insufficiencies, no market requirements of products or services and concluded that there is abig need for financial literacy among the entrepreneurs. Poor financial literacy will drive inventorsaway, and will put entrepreneurs at the risk of getting failure. Each investment must be evaluated for its returns, for this knowledge of financial management is indispensible .we need sustainable startups for better products and job creation for economic growth.

**Srinivas Subbarao Pasumarti & Anubhab Patnaik (2020)** in their research paper analyzed the different problems faced by entrepreneurs. Major startup entrepreneurs encounter obstacles in finding and allocating of right resources which are basic need of any enterprise. the paper attempts to highlight the challenges faced by entrepreneurs of SME sector such as difficulty in choosing the right resources ,finding needed resources which are completely new and not available anywhere ,lack of training and research and development and also time and funding for development of needed resources etc..are the obstacles leads to close down or shift to alternate business ideas .the paper finally concludes that large number of startups face difficulty in development not only in the early stage of inception but also in their advance stages too. Some problems can be passed through proper planning and strategy but others need government intervention and new reforms .it is the duty of the startup entrepreneur to check all probable ways to solve the problem in advance and specially try for alternative solutions.

**Trilok Kumar Jain (2019)** in his paper titled 'Policy initiatives for startups: the India story' explores the case study on startup initiatives in India. Researcher views language barrier is the most concerned issue among entrepreneurs. Youth has inferiority complex towards speaking English, only those who knows better English and read English well are getting benefits of policy initiatives.

**Dr.G Sureshbabu and Dr.K Sridevi (2018)** in their research paper titled 'A study on issues and challenges of startups in

India" highlighted about startup scenario, ecosystem, issues, challenges and opportunities for startups in India.

**Ganesaraman Kalyanasundaram (2018)** in his research paper 'Why do startups fail- a case study based on empirical analysis in Bangalore' explored the real case studies how they leads to take towards failure and precautions to be taken by new entrepreneurs.

**Sarika Sharma, Mrinal Raj, Tanya Gandhi (2018)** in their research paper titled 'Challenges and issues faced by startup companies in India' describes the startups financing cycle and the journey of Indian startups. Entrepreneurs are facing marketing, financial, and other challenges although government is hardly trying for ease of doing business.

**Mohammed Habeebuddin, D. Sakriya (2017)** in their paper titled 'Startups in India-issues and challenges' discussed the various challenges and issues of startups which hinders on growth. This paper deals with secondary data and focused on opportunities available for Indian entrepreneurs like large population, demographic dividend etc.

## MAJOR CHALLENGES FACED BY ENTREPRENEURS

Financial challenges:
**1. Collateral issues:-** startup firms face problem of procuring loan ,main reason for this is they lack security as those are formed with less initial capital.

**2. Delay in loan processing:-** Rigid formalities of sanctioning loan leads to delay in working of startups.

Marketing challenges:
**1. Lack of market research: -** research about the market to understand the segments and micro and macro environment is necessary for succeed in competition.
**2. Pilot testing: -** testing the product or service in selected small portion of the target market is better before commercialization.
**3. Peer competition: -** competition from rival firms is a big challenge for survival and growth of the startups.

Other challenges:
1. **Tax burden: -** startups which are recognized under the startups India scheme only gets tax holiday for 3 years but after that they need to pay tax.
**2. Technology up gradation:-** continuous changes in technology need more funds its difficult
For startups to indulge continuous improvements.
**3. Change in tastes and preferences:-** macro economic factors like changes in tastes and preferences of customers ,demand for substitutes impact on firms.
**4. Inflation rates and bank rates :-** increase inflation rates can impact o heavy interest rates for procuring loans by the startups.

**6. Regulations:-** huge legal formalities makes the procedures delay and leads to interest loss for the firms.

**7. Finding suitable employees:-** human resources is scares ,so recruiting and selecting right person for the right job plays vital role.

## CONCLUSIONS

Entrepreneurs are getting benefits through schemes like startup India ,stand up India, Atmanirbhar bharat, Atal mission, Mudra schemes ,but these benefits are not reaching all entrepreneurs because of lack of knowledge .these above said articles mainly focus on problems like financial resources, lack of mentorship , regulations, infrastructure problems etc . remedies for these issues also been discussed such as Forming of agencies by the government to mentor startup entrepreneurs ,conducting workshops for digital know-how, effective supervision of banking aid to entrepreneurs. Despite of all these issues the Indian ecosystem has ranked 3rd in whole world and it indicates in near future India will achieve rapid growth in GDP and hence economy of the country develops gradually.

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# REVIEW OF PCK ENHANCEMENT PROGRAMS FOR SCIENCE AND TECHNOLOGY TEACHERS: PROSPECTS FOR LOCAL INTERVENTIONS IN THE PHILIPPINES

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## ABSTRACT

*Utilizing the systematic literature review method, this paper analyzed past professional development programs aimed at enhancing science and technology teachers' pedagogical content knowledge to provide prospects for local interventions. Lesson study, teacher-mentoring, and school-based collaborative curriculum development were the most locally appropriate, demographically, and contextually. However, they can afford a few participants only. This setback can be offset by supporting the interventions with a partly technology-based delivery platform. The study concluded that an innovative intervention must be designed for local use because it must be acceptable to the country's situation along all stages of implementation. The intervention must be collaborative, not too multi-faceted, and flexible enough to use quality materials and human resources without compromising efficiency and effectiveness.*

**KEYWORDS:** *Lesson study, PCK, pedagogical content knowledge, science education, systematic review*

## INTRODUCTION

Since the time of Shulman (1986), pedagogical content knowledge (PCK) has been regarded as a core construct in the teaching profession. Particularly in science and technology education, it has become clear to teachers, school managers, and researchers that PCK is crucial to both good teaching and student understanding. Many have corroborated its positive contribution to realizing science and technology learning goals. It is the primary determinant of instructional quality (Lange et al., 2011; Abell, 2007); and is influential in student achievement in chemistry (Lange et al., 2011), physics (Ohle et al., 2015), biology (Gess-Newsome et al., 2010), and mathematics (Olfos et al., 2014) education. It defines the teacher's ability to assess student learning (Tacoshi, 2014) appropriately.

The importance of PCK in the realm of science and technology education indeed cannot be overemphasized. Furthermore, the need for researchers to explore and devise frameworks that would enhance PCK among science educators is unquestionable. In actuality, several studies have already highlighted many variables impacting teachers' PCK, and the most prominent was the quantity and quality of experience (Simmons et al., 1999), interactions with colleagues (Kind,

2009), and learning opportunities (Haston & Leon-Guerrero, 2008) during in-service teaching.

While the literature has clarified the "must-haves" and "the must-be-done" in enhancing science and technology PCK, most of them have been challenging to actualize in the school setting. They have been almost neglected for various reasons, such as insufficient funding, poor physical facilities, and lack of qualified resource persons, especially in third-world countries where resources are meager, and the bureaucracy is inefficient. In the Philippines, the predominant hindrances to science and technology PCK development are insufficient to support further studies among teachers, the proliferation of low-quality teacher education institutions, poor quality of the overall educational system, and lack of regular and poor quality in-service training opportunities. While there are programs to improve the science and technology PCK on the job, most have been sporadic, if not ineffective. Several in-school local training programs have been borne out of the necessity to comply with administrative requirements only—such as cluster meetings, departmental echo-seminars, and the like—and are usually not taken seriously by teachers and administrators themselves are not engaging. On the other hand, Off-school training is rare and costly—requiring teachers to leave their workstations and travel to distant training

centers and reach few beneficiaries only. Advanced studies, another typical off-school professional development means, have been practical to some due to lack of time and motivation and apparent inadequacy of scholarship opportunities.

Given these circumstances, it is imperative to explore and analyze past accounts on PCK-focused professional development programs intended for science and technology teachers. It is well-established that PCK must be central to professional teacher training efforts; thus, the researcher believed that understanding how recent PCK-focused interventions work could help frame sound ones locally in the Philippines. Such may improve teaching quality and enhance our students' science and technology education achievement.

## OBJECTIVES

This paper explores and analyzes past professional development programs to enhance science and technology teachers' PCK, utilizing the systematic literature review method. Specifically, this paper attempts to meet the following objectives:

1) Describe past local and foreign PCK-focused professional development programs for science and technology teachers in terms of methodology.
2) Determine the compelling features of these programs and discuss the challenges encountered by their implementers and beneficiaries.
3) Suggest what prospects may be taken for effective and efficient PCK-focused professional development programs for local science and technology teachers.

## METHODOLOGY

This paper employed the systematic literature review method of investigation. In this method, the researcher addresses specific research questions; and then identifies, appraises, selects, and synthesizes high-quality research evidence and arguments pertinent to those questions. Systematic here means that "reviewers follow an appropriate (but not uniform) design and that they communicate what they have done" (Briner & Denyer, 2012). In principle, a systematic literature review means "research about research" and applies the same process of reviewing literature that is generally done in primary research papers (Briner & Denyer, 2012).

The following databases were used for gathering research: Google Scholar, Proquest, EBSCO, and SCOPUS. These databases were utilized because they contain quality and relevant educational research repositories. Four combinations of search terms were used in browsing for appropriate literature to wit "pedagogical content knowledge," "science education," "professional development," and "teacher." There were approximately 100 potentially relevant hits in all three databases using at least three combinations of the keywords chosen. So, the dataset was filtered to only ten manuscripts based on four criteria implicit in this paper's objectives: 1) the articles must be peer-reviewed and written in English; 2) they must be studies—not just conceptual manuscripts—on the effectiveness of a specific professional development program or activity for science and technology teachers; 3) they must be studies conducted in the last ten years locally or internationally; 4) and they must focus on PCK.

All ten studies were thoroughly reviewed based on this paper's objectives. Each intervention's delivery or methodology was described to fulfill the first objective. Each project's seeming features, the issues encountered by their implementers and clienteles upon their implementation, and the challenges they posed to involved entities were discussed to meet the second objective. Lastly, inferences from the researcher, mainly covering each intervention's prospects for possible local usage in the future, were given to satisfy the third objective.

## RESULTS AND DISCUSSION

PCK has been both expanded and implemented widely in education since the concept was introduced by Shulman (1986). Now that it is so well-embedded within the realm of teaching and learning, professional development programs aimed at enhancing teachers' PCK need to be instituted, especially in science and technology education.

***Local PCK-Focused Teacher Professional Development Efforts***. While there were numerous foreign studies on improving PCK, there was not much in the Philippines, more so in science and technology education. The few existing local studies are worthy of consideration because their subject interventions were mainly effective in improving science and technology PCK, and their findings were based mainly on longitudinal and experimental works.

For example, two local studies attempted to evaluate the transferability or replicability of lesson study to a local context. Lesson study is a professional development model for teachers with its roots in Japan. In this model, teachers form small groups and meet regularly to collaboratively conduct systematic inquiries of their practices through peer-to-peer examinations of a particular lesson. Here, every input from group members is considered to develop the lesson into one that will satisfy the lesson's objectives and address contextual concerns.

The first was a qualitative case study by Gutierez (2015) wherein the viability of lesson study as a sustainable professional development program to enhance the inquiry-based teaching practices of 30 local science teachers was evaluated.

The intervention comprised of two phases. The first phase consisted of a five-day seminar-workshop (covering orientations on the nature of lesson study and inquiry-based teaching, collaborative goal setting and lesson plan development, constructive critiquing of lesson plans, and revising of lesson plans), lesson plan constructions by the participants, and lesson plan try-outs with help from trainers. Meanwhile, the second phase was mainly a post-lesson

reflection and discussion between the participants and the trainers, with the objectives of arriving at a consensus on how to revise the tried-out lesson plans and determining what further revisions may be done given another series of lesson plan try-outs. The lesson plan try-outs and post-lesson discussions and reflections were spread across the school year, with an interval of five days between the first and second try-outs.

According to Gutierez (2015), the year-long intervention revealed one main result—the participants' analyses of their instructional practices deepened as they engaged continuously in collaborative and constructive self-assessments and discussions. It made them reflect on their practices. Through lesson study, the teachers became very vocal about whom to approach when they had content and pedagogical concerns and wanted to learn more about aligning pedagogy with student diversity. Moreover, Gutierez (2015) noted that the participants did not demonstrate any sign of resistance to modifying their current practices. Instead, they became very open to reflections, constant research, blending theoretical knowledge, and sustainable and systematic professional improvement frameworks.

However, the author noted one primary challenge in the intervention. As conducted indirectly, the post-lesson reflection and discussion sessions were too focused on requiring the participants to express their difficulties in trying out the lesson plans. The participants somewhat became apprehensive about sharing problems with colleagues at times, and with such, the intervention's main premises—teacher collaboration and exchange of ideas—were defied.

Meanwhile, the second study was by Lucenario et al. (2013). It was about the effectiveness of a PCK-guided lesson study in developing the PCK of chemistry teachers at public high schools in Rodriguez, Rizal. The study was of quasi-experimental design where the teacher competencies were compared based on two groups, the treatment group, and the conventional group. The treatment group applied the intervention (PCK-guided lesson about solution concentrations), which involved prototypical steps in conducting lesson studies such as lesson plan design, lesson plan implementation, the conduct of post-conference, implementation of the recommended improvements, and lesson plan revision based on consolidated suggestions from all team members.

Before and after the experiment, both groups were assessed in terms of PCK using two instruments. The first was the Chemistry Teachers' PCK questionnaire (adapted and modified from Jang et al. [2009]), which was intended to measure the teachers' PCK with a focus on subject matter knowledge, instructional objective, and context, knowledge of student understanding, and instructional representation and strategies. The second was the Framework for Science Teacher Education questionnaire, a self-assessment tool constructed by the Department of Science and Technology and University of the Philippines-National Institute for Science and Mathematics Education and intended to gauge the teachers' professional knowledge, practices, and attributes.

It was found that there was a significant difference in the teaching competencies of the two groups based on both PCK instruments after the intervention. The result was attributed to the openness of the intervention. It provided an avenue for the participants to reflect on their practices, thereby promoting new insights into the teaching process and contributing to their reframing processes. The study recommended using the intervention across other chemistry topics and in other science and technology education areas such as biology, earth and environmental science, physics, and mathematics.

Aside from lesson study, another locally popular professional development means to enhance science and technology PCK is online distance learning. This learning platform utilizes information and communications technology (ICT) tools to enhance the learning experience. Such a model uses the Internet, teleconferencing, video streaming platform, short-messaging system, social media platform, learning management system (LMS), and the like to achieve a bridged or extended educational milieu.

Online learning was given attention by Orleans (2010) when he assessed the PCK modifications of physics teachers who were given a month-long, fully online distance training on the subject matter and teaching strategies. The intervention involved nine teachers from a region in the Philippines which had been pre-determined to represent the country's physics teachers demographically. The primary delivery media used were teaching training modules and Macromedia MOODLE as the LMS.

The training modules were developed with the guidance of content and teaching strategy experts: a physics specialist, a physics education expert, and a school's division science supervisor. The modules contained varied learning activities to engage the teachers during training sessions. Alternative learning assessment procedures and sample lesson organization for logical subject-matter presentation (in the classroom) were also integrated into the modules. Online examinations were also administered using the said training platforms.

Before the actual training, the participants were oriented on and exposed to the nature of the intervention's delivery platform. The participants' commitment and their science supervisor were also solicited to ensure cooperation. Pre-training achievement tests and the pre-test for each module were administered online before actual training sessions. During training proper, the teachers were given a week to study the modules and accomplish the requirements. Outputs were submitted, and feedback was delivered online via asynchronous and synchronous discussion using MOODLE, e-mails, and a short-messaging system. A post-test was administered online every end of each module. Test feedback was given right after taking the online learning assessment.

Using a multi-method assessment procedure including achievement testing, concept mapping, lesson planning, and demonstration teaching, substantial modification in two knowledge-based PCK components in science teaching—knowledge about science curriculum and understanding of science—was found to have transpired among the participants. A significant increase in achievement scores, better concept map structure, and corrected misconceptions was also observed post-training. However, not much improvement was seen in the two other skill-based PCK components—knowledge about instructional strategies and assessment in science. Moreover, only a few changes were noticed in the participants' topic-specific strategies and science learning assessment skills.

Orleans (2010) concluded that while online teacher training could benefit professional development, full online mode is inadequate in enhancing all facets of science and technology PCK. He noted that challenges and activities must be hurdled and conducted first to achieve meaningful online learning experiences. Such activities include but are not limited to 1) an extensive pre-survey of the participants' demographic characteristics to know their inclinations and preferences that might be influential to their motivation to undergo rigorous online training; 2) overcoming the participants' anxiety about ICT tools by giving them enough ICT exposure pre-training; and 3) designing suitable learning materials that complement the participants' current competencies per Orleans (2010).

In a case study of how PCK development proceeds in science and mathematics, lecturers of the University of San Carlos in Cebu City, Berg (2010) compared four emerging approaches for science teacher PCK development. The context for the study was the creation of new science teacher education programs that involved faculty selection and development through a series of on-the-job activities and formal degree studies. Berg (2010) was able to monitor, illustrate, and compare the different methods used to stimulate effective PCK development among the faculty members selected for the program, such as 1) through formal studies (acquisition of advanced degrees primarily within USC, University of the Philippines System campuses, and universities abroad), 2) through team-teaching and joint course development (development of primary and science education courses through teacher collaborations), 3) through coaching (having a seasoned faculty member to coach new ones on designing and implementing science education curricula), and 4) through workshops (participation of faculty members to local and international workshops relating science content and pedagogy).

It was revealed that advanced science and science education studies could lead to improved content knowledge and pedagogical knowledge, which are elements of PCK. However, such may or may not translate to enhanced PCK and would depend mainly on the nature of the teachers' theses or dissertations (which must be closely linked to their subject areas of assignment) and how well-supervised they are by their advisers and graduate school professors (they must be very hands-on during the supervision) while pursuing their master's theses and dissertations Berg (2010) noted. Moreover, it was found that team-teaching and joint course development activities can enhance PCK only when conducted intensively. Not all team-teaching experiences work out well, as Berg (2010) noted. Team teaching frequently exposes teachers' weaknesses, and such problems may arise. While some may treat the experience constructively, some may treat it negatively, leading to them withdrawing from the program at times. Similarly, workshops are practical only if they can answer course concerns, result in easily practical suggestions, and are a part of a long-term faculty and course development program, as noted by Berg (2010).

***Foreign Approaches to Teachers PCK Development.*** Unlike locally, there were plenty of foreign studies about PCK development programs for science and technology teachers. The typical intervention themes were ICT-based training, school-based curriculum development projects, school-to-school collaborations, teacher mentoring, and collaborative-constructivist teacher training.

Brooks et al. (2007) reported on the development of and success of delivering 15 PCK-focused web-based chemistry courses for in-service high school teachers in the United States whom their respective state education departments recruited. The materials covered undergraduate or early graduate chemistry and integration of chemistry with other courses. The courses were divided by "topics" representing big chemistry ideas, cross-cutting themes, and related pedagogy. In the system, as with typical web-based open coursewares of today, the participants are required to create their profiles for their basic personal information and record or save their percentage completion of the course. From then on, the participants manage their own learning time and pace. They can choose topics from a coded, indented list on a selector page, where clicking a title brings up a content page with quiz items links that change color once passed (quiz scores are recorded into the system's database to monitor the participant's performance and progress). There were also links to in-depth content, often external to the course and project.

Short-answer quiz item formats include true or false, multiple-choice, fill in the blank, rank, matching, check, select the correct representation, and multiple labeling. The system generates and returns detailed worked-out solutions using problem specifics upon receiving responses. Meanwhile, in essay quiz items, the participants immediately receive a prototypical response after submitting their answers. The essay answers are evaluated by "course mentors" (content and pedagogic experts that the project implementers hired for the project's purposes), who provide feedback.

The project was outright successful in courses completion, 100% per Brooks et al. (2001), but had unique challenges for both implementers and clienteles. The two main issues noted were the participants' varying completion rates and

time and technology-related problems. The participants' work was seasonal, with high completion rates during spring and summer breaks, but stagnated over the winter break. Meanwhile, the common technology-related problem was hyperlink failures, where hyperlinked resources had problems loading or sometimes were utterly disappearing.

Another ICT-driven intervention was the 3-C Model for PCK development proposed by Juang et al. (2008). The model, which was implemented through a web-based support system dubbed EDUPLAN, was an ICT-supported school-based curriculum development intervention that revolved around enhancing science and technology teaching via technology lesson plan construction and revision.

The participants were grouped into three in the intervention: class, grade, and schoolteachers having respective tasks. The class teachers were the "typical teachers" and were given the tasks of 1) analyzing lesson planning and implementation conditions, 2) designing detailed lesson plans and instructional materials, 3) implementing lesson plans, and 4) evaluating the adaptability of lesson plans during and after instruction. Meanwhile, the grade teachers included teachers who are skilled at teaching and adopting appropriate pedagogy for specific topics or contexts and were given the tasks of 1) analyzing past conditions of the whole grade level's curriculum design and implementation, 2) designing lesson plan templates based on national curriculum standards, and 3) evaluating curriculum integrity and adaptability. Lastly, the schoolteachers were comprised of teachers who are masters of curriculum development and implementation and were given the responsibilities of 1) analyzing past conditions of the school's overall curriculum design and implementation, 2) designing the overall school curriculum framework, and 3) evaluating curriculum continuity, sequence, and adaptability.

The participants were required to exchange, regenerate, and utilize their knowledge through a software support system called EDUPLAN to develop a consistent curriculum from the top down. The whole process was guided by three mechanisms: creation, collaboration, and communication; thus, 3-C, where each had a corresponding tool or application in the EDUPLAN software. The creation tool allows the participants to incorporate the three stages of curriculum development, namely analysis, design, and evaluation and helps them make frequent revisions in creating knowledge base components. Meanwhile, the collaboration tool allows the participants to link the creation mechanism processes and products to form an integrated curriculum development procedure. Lastly, the communication tool allows the participants to communicate through a group discussion system, reducing the time usually consumed by face-to-face meetings and discussions.

Focus group discussions with the participants revealed that they agreed strongly that the ICT-enhanced 3-C model is effective in developing their PCK due to the following: 1) the intervention allowed them to craft a whole school-based curriculum through integral and stratified curriculum planning with peers, which is improbable when constructing lesson plans individually; 2) the 3-C model affords them of identifying instructional problems with colleagues during lesson plan design and gave them opportunities to learn about instruction methods for overcoming those problems from seasoned peers; 3) the intervention allowed them to develop their PCK, particularly in designing and evaluating instructional activities; 4) the web-based tools which can be used anytime and anywhere enabled them to perform curriculum development more efficiently; and lastly, 5) school-based curriculum development activities placed them under pressure to work with colleagues.

However, because of its complexity in the sense that it is too technology-driven, the intervention poses two pressing challenges: 1) its efficiency can be affected by teachers and school administrators who lack sufficient technical skills and knowledge, and can be significantly hampered even by minor technological issues like poor internet connection and network glitches; 2) the system is too lesson-plan-construction-centered; the other facets of the school and the teaching-learning process such as student behavior coaching, parenting education, classroom management, educational research methods, are somehow neglected in the system.

Indeed, the collaborative and constructivist approaches to science and technology PCK enhancement have been gaining ground in the past two decades. Yeung-Chung (2011), in his case study of a school-based PCK development approach involving two schools, ten science teachers, and a teacher-educator, for instance, found that PCK-focused collaborative professional development activities can be effective in helping teachers embrace inquiry-based science teaching.

Yeung-Chung's (2011) subject intervention pivoted on "collaboration between teachers and teacher-trainers" to develop and reflect upon inquiry-based science lessons. The collaboration process was guided by a teaching cycle model involving three phases: planning, implementation, and evaluation. The planning phase included the following: 1) selection of theme or problems for scientific inquiry, 2) eliciting students' alternative conceptions, 3) setting learning objectives and designing inquiry tasks, and 4) preparing lessons. Meanwhile, the implementation phase comprised mainly of 1) delivering instructions, 2) guiding students to learn through inquiry, and 3) providing explanations. Lastly, the evaluation phase consisted only of the evaluation of teaching and learning. Both the teachers and the teacher-trainers were tasked to apply the model with different foci. The teachers were required to focus on how they could use the inquiry-based approach to teach science using their PCK. Meanwhile, the teacher-trainers were tasked to focus on how in-service teachers can be helped to develop the necessary PCK to teach through inquiry.

The planning stage was found to help elicit and develop teachers' content knowledge. In contrast, the implementation phase was found to be more effective in facilitating their

understanding of students' reasoning ability and their development of teaching strategies to further this ability, or simply their pedagogical knowledge. Both are components of PCK.

While the approach successfully improved PCK, there were two significant challenges during implementation. First was the teachers' inability to reflect on their classroom interactions or acute episodes due to limited experience in collaborative professional development activities. Such inability hindered total interactions between them and the teacher-trainers at times. The second was the teachers' dissonance regarding the concept of PCK and inquiry-based teaching itself, which hindered efficient collaborations between them and the teacher-trainers. Indeed, as a personal judgment, participants in this kind of intervention must be first equipped with knowledge about the nature and processes of scientific inquiry and must be re-oriented on their views about PCK before proceeding.

In an assessment of a similar approach of some sort, Appleton (2008) found that training under a teacher-mentoring program can indeed have considerable, lasting changes in participants' teaching practices. His study assessed a professional development program involving two elementary science teachers and a university professor, where the latter served as a mentor to the former, taking the roles of a participant-observer in the classroom, a critique, and a helper, in the course of lesson plan construction, designing of instructional materials, actual teaching, and assessment of learning.

The context of the intervention was to develop the teachers' PCK necessary for them to shift from hands-on science using process skills to outcomes-based science curriculum typified by constructivist-based pedagogy, and with that, develop a new model for science and technology teachers' professional development to replace typical ones where teachers are withdrawn from the school for intensive training with experts. Appleton's (2008) subject intervention was influential in developing the teachers' science PCK but much must be considered before and during its implementation. Per Appleton (2008), there has to be a common understanding of the mentoring process and a sense of mutual respect between the mentor and mentees. Moreover, there has to be a sense from both parties on why the mentoring process must proceed. In this way, the interaction will be productive for both participants in the sense that commitment will be established, and the needs of both parties will be the utmost priority. Lastly, there must be a partnership between both parties because the nature of the mentoring relationship is evolving as necessary as personal and professional growth occurs.

In a somewhat contrasting purpose, Khourey-Bowers and Fenk (2009) found that a constructivist professional development program can enhance chemistry-specific PCK, particularly in terms of scientific representational thinking, implementation of conceptual change strategies, and model development in the classroom through an experiment involving

37 participants (elementary and secondary school chemistry teachers).

Khourey-Bowers and Fenk's (2009) focus intervention was a typical professional development scheme where participants are pulled out of school to join intensive training sessions. The intervention spanned five semesters and was delivered in 11 sessions across six months. The instructional team included a university science educator, a chemistry professor, and two teachers with experience at the secondary and elementary levels. A wide array of constructivist teaching methods, framed within a learning cycle, were used to enhance the participants' PCK.

According to Khourey-Bowers and Fenk (2009), the intervention provided many opportunities for discussion, experimentation, and peer interactions. In training, conceptual linkages were introduced to the participants during each session, primarily via outlines linking chemistry topics with specific collaborative activities. The participants were also tasked to share their laboratory experiences through open inquiry, guided inquiry, and problem-based methods. Moreover, the participants were required to apply inquiry methods and conceptual change strategies in their classrooms through various course assignments, including content reviews focusing on scientific principles, term papers unfolding conceptual change applications, safety inventory of the participants' workstations, and lesson plans for an entire week of science discussions.

Quantitative and qualitative analyses by Khourey-Bowers and Fenk (2009) revealed improvements in the participants' chemistry-specific PCK. Based on interviews, the teachers felt more efficacious in their ability to teach chemistry. The constructivist manner of the training delivery helped them construct more scientific understandings. The training also used different forms of constructivism, like radical constructivism (in model-building) and social constructivism (in alternative conceptions), which led to fruitful learning experiences as the participants implemented their learned chemistry-related strategies in their classrooms. Moreover, through the constructivist methodology, the participants were given opportunities for curriculum decision-making through lesson design, personal reflection, and assessment of their teaching practices.

While there were many benefits documented from the approach, there was one minor setback. There were no groupings involved during the training, and the mixing of participants created some minor problems. Initially, the elementary teachers were hesitant to ask questions or actively participate in some discussions, confiding only their thoughts through some anonymous feedback forms. At times, they felt out of place and intimidated and protested that the strategies employed by the trainers were not suitable for their capacities.

The last subject intervention was a mixed-method approach, which Carlson et al. (2013) revealed to be effective in improving biology teachers' PCK. The multi-faceted

intervention centered on using educative curriculum materials (constructivist materials that are intended to promote teacher learning in addition to student learning) to challenge, deepen, and strengthen high school biology PCK; and was supported by a multi-year, multiple component transformative professional development program that encompassed three parts: 1) a multi-day process in which the participants analyzed constructivist curriculum materials as a way of choosing their program for implementation; 2) an intensive, multiple-week summer experience on a university campus yearly for subject matter knowledge development; and 3) periodic collaborative lesson study sessions for two years.

Quantitative and qualitative data analyses indicated that the complex intervention positively affected the participants' knowledge and practice in general and their PCK in particular. The enhancements were attributed to the nature of the curriculum and to the intensive summer university course works where the conceptual flow graphics method was intensively utilized to identify overarching concepts. The said method helped the participants pinpoint links between activities and lessons and small and big scientific ideas.

One major challenge in the intervention was the participants' varying teaching and learning beliefs, as these did not align well with the nature of the curriculum materials and the goals of the while intervention itself. Some participants did set in the constructivist view of learning—they did not believe that learners could construct their understanding of crucial concepts¬—so often, they get frustrated with the lesson structures. Interestingly, some participants even regard the constructivist approach as an old traditional approach that is obsolete and must not be used.

*Prospects for Local Interventions.* Developing and enhancing the competencies of science and technology teachers is no easy task, especially in the Philippines, where financial resources are meager, and some culture of apprehension for change and innovation persists in many forms. Despite the many benefits the interventions reviewed can offer, we must weigh in on their corresponding disadvantages. At the very least, we must consider our educational system's seeming demographic, financial, and contextual dynamics in designing, implementing, monitoring, and evaluating our interventions.

Lesson study, teacher-mentoring, and school-based collaborative curriculum development are locally fitting, demographic, and contextual approaches. Their synergistic nature is more meaningful and appealing than the practice of conducting "tell-how-to-teach" in- or off-school type of training that predominated the local scene for so many decades. Their participatory feature can strengthen the cohesion of the faculty because they can provide an atmosphere of active participation and interaction. They are empowering and hence are more engaging.

However, these approaches can accommodate a few beneficiaries only, a setback that we cannot tolerate given our

situation. Our performance in science and technology education is way behind many countries, as reflected by past TIMSS results—2003 and 2008—as we know and uplifting the quality of teaching in our schools certainly is one reasonable way of addressing the issue. We need an intervention that is not only effective but efficient at the same time in the sense that it will be encompassing, benefitting more participants. We cannot have interventions that will only cover a handful per school and then expect positive outcomes on a broad scale—which we need—straightaway.

We cannot be efficacious with lesson study and other mentoring- and collaboration-based interventions in their conventional delivery method if we lack the fundamental tools in the first place. What complicates our situation is that we do not have the sufficient number of experts necessary for their effective and efficient delivery. Take, for example, lesson study, which is a research-based approach, and, therefore, will necessitate mentors and participants with above par research competencies upon implementation. The problem is that we do not have a strong research culture in our schools. Research under-productivity is even a significant issue locally in many state- and private-funded universities. Conducting lesson study and the other mentoring-and collaboration-focused interventions without the necessary number and quality of leaders and experts would only be pointless.

The flexibilities of ICT may provide the efficiency that the above interventions cannot afford us. However, we cannot engage totally for a fully ICT-driven approach. So much work must be done first, particularly teacher training in ICT literacy which would necessitate intensive efforts from teachers (for the motivation), school administrators (for the political will), the government (for the financial support), and other agencies concerned. Nevertheless, we can at least have a blended platform and take advantage of ICT's flexibility in providing contexts for collaboration and interactivity.

What this paper is trying to emphasize is that we have to innovate. Curriculum developers can use the findings of this study as bases for framing a financially and contextually justified PCK-focused professional development program that would combine the effectiveness of collaboration-based approaches with the flexibilities of ICT and would take into consideration the drawbacks of both. We need an effective intervention but not too multi-faceted in the sense that it can be implemented in-school only but with high-quality materials and resource persons. Also, we need an efficient intervention in the sense that it is encompassing but not too technology-driven, would not require intensive preparations on the part of both the participants and implementers, and would not exhaust too many financial and human resources.

Such is a daunting task, but curriculum planners can start researching supporting lesson study with online distance learning, for example. Such a blended mode has been gaining ground in recent years because of its advantages concerning

access and costs savings and the mobility restrictions brought by the recent pandemic. It can potentially cut expenses (through fewer required experts or mentors hence lower professional fees) and cover a more significant number of participants (the program can employ more groups, thus more teachers). Unlike some of the reviewed interventions, friendlier user interfaces in cheaper and easily accessible platforms can be considered in the delivery, such as the MOODLE mobile application and Google Classroom, which are free and can be run and maintained using smartphones and low-cost mobile data connection.

## CONCLUSION

This paper reflects the results of a systematic review of literature on PCK-focused professional development programs for science and technology teachers to provide prospects for local interventions. Overall, lesson study, teacher-mentoring, and school-based collaborative curriculum development are the most locally fitting, demographically, and contextually. However, they can only afford a few beneficiaries. This setback can be offset by supporting any of the three interventions with a partly ICT-driven delivery mode.

Hence, in conclusion, an innovative intervention must be designed for local use, innovative in that it is acceptable to the local situation from planning, implementation, monitoring, and evaluation. It must be collaborative, not too multi-faceted, and flexible enough to use quality materials and human resources without compromising efficiency and effectiveness.

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# CRITITICAL FAILURE FACTORS AND PROSPECTIVE SOLUTIONS OF CONSTRUCTION PROJECT IN NIGERIA: CASE OF BIDA–MINNA ROAD PROJECT

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## ABSTRACT
*The study used sequential data collection approach through an in-depth semi-structured interview (16 participants) and questionnaire survey (230 participants) to gather the perceptions of some project management practitioners: contractors, consultants and client on the factors that lead to failure of project in Nigeria with reference to Bida–Minna trunk–B road maintenance project. The Relative Importance Index (RII) was used to determine the relative importance of the factors identified. This was followed by Spearman rank correlation coefficient and Kruskal Wallis test to measure the degree of agreement among the variable perceptions. Thirty five (35) factors were identified as the main factors, the top eleven (11) factors were depicted as primary, 'money, corruption and politics', these factors have indexed averagely between 0.702 and 0.793. Secondary, were other management practices within the client's organizations that impede the success of the project. These unpleasant phenomena were termed as 'management deficiencies and unorganized bureaucracy protocols'. The average scores of these factors ranges between 0.609 and 0.686. The least factors were regarded as minor and were referred to as lack of resources and external forces. These factors were averagely rated very-low (0.577 and 0.593) by all participants and lack of resources according to the respondents was regarded as insignificant factor causing delay but was linked to the chief delay factors, which can be traced back to insufficient funds to mobilise resources, as such, work progress were hampered on site. Four (4) recommendations were offered among which was that, parliament should make laws that would give independence to technocrats that are charged with the execution of government projects from the political interference.*

**KEYWORDS:** *Project delay, Project failure, Construction projects, Bida–Minna Trunk–B Road, Critical failure factors.*

## INTRODUCTION

Delay in Construction Projects has been a global phenomenon, hence one of the most important problems in the Construction industry. The 82-km Bida–Minna Trunk–B road project was awarded in February, 2020 to a local contractor at a total sum of Eighty six million, six hundred and forty thousand dollar ($86.64m) and 18 months completion period. Delays occur in most construction projects and the magnitude of the delays varies considerably from project to project. In the construction context, the word "delay'' refers to something happening at a later time than planned, beyond the date that the parties agreed upon for the delivery of the project. In construction project, delay could be defined as the slowing down of works without necessarily stopping the construction progress entirely. Delay can lead to time overrun, thereby resulting to failure in project delivery. Delays occur in most construction projects in different magnitudes and the significant of these delays varies considerably from project to project. Construction projects are facing many uncertainty and unpredicted factors that may

result in a delay, and ultimately failure in completion of the project. Generally, according to Ahsan and Gunawan, (2010), and Remon and Asmaa (2016); the origin of the delay in construction projects could be traced to incapacitations of the teams involved in the project, unavailability of resources, unfriendly environmental conditions, interference of third parties and breaching of contractual relationships. The literature and previous studies from Amid *et al.* (2012) and Rauzana (2022) classified the causative factors of construction delay as clients induced delay; contractors induced delay and external factors.

## RESEARCH METHODOLOGY

Using an in-depth semi-structured interview (exploratory) and questionnaire survey from project management practitioners, contractors and client (government officials), thirty five (35) factors were identified as the causes of construction projects failure in the 82-km Bida–Minna Trunk–B road project, that has lingered for good 26 months with only about 5% certified and paid job as against the

planned 18 months completion period. The failure factors were grouped into three main themes namely: '[1]money, [2]corruption and [3]politics', secondly: 'management deficiencies and unorganized bureaucracy protocols', and thirdly; 'lack of resources and external forces.'

Kruskal–Wallis's test was used to analyse data. It is a one-way ANOVA and a non-parametric method for testing whether samples originate from the same distribution. It was used for comparing two or more independent samples of equal or different sample sizes. It was used to test agreements of scoring amongst groups of respondents. Spearman's rank correlation was used in conjunction with Kruskal Wallis test to test the parametric equivalent of the Kruskal–Wallis's test.

A significant Kruskal–Wallis's test indicates that at least one sample stochastically dominates one other sample. The test does not identify where this stochastic dominance occurs or for how many pairs of groups stochastic dominance obtains. Since it is a nonparametric method, the Kruskal–Wallis's test does not assume a normal distribution of the residuals, unlike the analogous one-way analysis of variance. If the researcher can make the assumptions of an identically shaped and scaled distribution for all groups, except for any difference in medians, then the null hypothesis is that the medians of all groups are equal, and the alternative hypothesis is that at least one population median of one group is different from the population median of at least one other group. Kruskal – Wallis Formular is presented below.

$$H = \left( \frac{12}{n(n+1)} \sum_{j=1}^{k} \frac{R_j^2}{n_j} \right) - 3(n+1)$$

where $k$ = number of comparison groups,
$n$ = total sample size,
$n_j$ = sample size in the jth group,
$R_j$ = sum of the ranks in the jth group.

# RESULTS

**Table 1: Tabulation of results**

| Factors | Contractor's Representatives | | Consultant's Representatives | | Client's representatives | | Overall Average | | |
|---|---|---|---|---|---|---|---|---|---|
| | RII | Rank | RII | Rank | RII | Rank | RII | Rank | Importance level |
| Delays in payments | 0.817 | 1 | 0.773 | 1 | 0.789 | 4 | 0.793 | 1 | Most important |
| Political interference | 0.841 | 4 | 0.788 | 2 | 0.744 | 1 | 0.791 | 2 | Most important |
| Partisan politics | 0.823 | 2 | 0.752 | 4 | 0.751 | 2 | 0.775 | 3 | Most important |
| Project funding | 0.817 | 4 | 0.756 | 3 | 0.747 | 3 | 0.773 | 4 | Most important |
| Corruption by client's officials | 0.814 | 6 | 0.746 | 6 | 0.737 | 7 | 0.766 | 5 | Most important |
| Release of funds | 0.791 | 7 | 0.737 | 7 | 0.74 | 5 | 0.756 | 6 | Most important |
| Political bully by project leaders | 0.757 | 10 | 0.748 | 5 | 0.74 | 5 | 0.748 | 7 | Most important |
| Poor planning | 0.823 | 2 | 0.704 | 10 | 0.709 | 10 | 0.745 | 8 | Most important |
| Many projects with government | 0.774 | 9 | 0.713 | 9 | 0.73 | 8 | 0.739 | 9 | Most important |
| Change in government | 0.786 | 8 | 0.717 | 8 | 0.705 | 11 | 0.736 | 10 | Most important |
| Scope changes | 0.733 | 11 | 0.65 | 16 | 0.723 | 9 | 0.702 | 11 | Most important |
| Poor Management practices | 0.719 | 13 | 0.681 | 12 | 0.659 | 20 | 0.686 | 12 | More important |
| Lack of project monitoring | 0.681 | 17 | 0.692 | 11 | 0.668 | 17 | 0.680 | 13 | More important |
| Lack of human capacity | 0.704 | 14 | 0.65 | 16 | 0.691 | 14 | 0.681 | 14 | More important |
| Bureaucracy | 0.649 | 25 | 0.66 | 14 | 0.68 | 15 | 0.663 | 15 | More important |
| Communication gap | 0.643 | 26 | 0.644 | 19 | 0.694 | 13 | 0.660 | 16 | More important |
| Lack of resources | 0.681 | 17 | 0.633 | 23 | 0.667 | 18 | 0.660 | 17 | More important |
| Change in project leadership | 0.704 | 14 | 0.642 | 20 | 0.625 | 29 | 0.657 | 18 | More important |
| Wrong specification | 0.669 | 20 | 0.64 | 22 | 0.656 | 21 | 0.655 | 19 | More important |
| Wrong project scope | 0.669 | 20 | 0.642 | 20 | 0.653 | 22 | 0.655 | 20 | More important |
| Feasibility studies | 0.658 | 23 | 0.623 | 25 | 0.702 | 12 | 0.661 | 21 | More important |
| Sanction by regulations | 0.722 | 12 | 0.612 | 28 | 0.642 | 24 | 0.658 | 22 | More important |
| Pressure groups (media& NGOs) | 0.693 | 16 | 0.623 | 25 | 0.649 | 23 | 0.655 | 23 | More important |
| Procurement process | 0.667 | 22 | 0.648 | 18 | 0.631 | 26 | 0.649 | 24 | More important |

| Project management deficiencies | 0.670 | 19 | 0.617 | 27 | 0.674 | 16 | 0.654 | 25 | More important |
|---|---|---|---|---|---|---|---|---|---|
| Unmatched Project team | 0.652 | 24 | 0.669 | 13 | 0.604 | 31 | 0.642 | 26 | More important |
| Poor project supervision | 0.635 | 27 | 0.656 | 15 | 0.628 | 27 | 0.640 | 27 | More important |
| Consultants delay to certify work | 0.62 | 28 | 0.627 | 24 | 0.614 | 30 | 0.620 | 28 | More important |
| Project not needed anymore | 0.577 | 31 | 0.603 | 30 | 0.663 | 19 | 0.614 | 29 | More important |
| Users' involvement | 0.586 | 30 | 0.606 | 29 | 0.635 | 25 | 0.609 | 30 | More important |
| Natural disaster | 0.562 | 32 | 0.59 | 31 | 0.628 | 27 | 0.593 | 31 | Least Important |
| Traditional Belief system | 0.602 | 29 | 0.577 | 34 | 0.593 | 33 | 0.590 | 32 | Least Important |
| Resistance from local community | 0.554 | 33 | 0.587 | 32 | 0.596 | 32 | 0.579 | 33 | Least Important |
| Inclement weather | 0.553 | 34 | 0.586 | 32 | 0.595 | 34 | 0.578 | 34 | Least Important |
| Discovery of artefacts on site | 0.552 | 35 | 0.586 | 35 | 0.595 | 35 | 0.577 | 35 | Least Important |

## RESULTS AND DISCUSSIONS

From table 1, it is important to establish that the rankings provided by the Contractors, Consultants and the Client (government officials) were not due to chance or some form of bias but represent the true causes of the project failure. Kruskal–Wallis's test is used for comparing two or more independent samples of equal or different sample sizes. The test is a non-parametric test which means the distribution does not necessarily need to be normal before they can be applied. In other words, the computation uses median and not mean, hence, they are not affected by outliers. Spearman rank correlation was also used. The results of the computations showed a Spearman rank correlation coefficient of 0.791, 0.766 and 0.750 for Contractors and Consultants, Contractors and Client's organization and Consultants and Client's organization respectively. All the three coefficients were strong and positive which shows a high agreement between the rankings of the three categories. The pair with the highest agreement was Contractors and Consultants. The thirty five factors were grouped into three and the rankings showed that the most important factors in descending order.

Primarily, 'money, corruption and politics', these factors have averagely indexed between 0.702 and 0.793. The money factor was summarized as inability of the client to pay as at when due, this hampers the progress of the work greatly, as there is no money to finance the projects by the contractors and commercial banks not willing to borrow out funds due to accrued debts by the construction firms. Corruption by government officials cannot be overemphasized; this has led to bullying the contractors handling the job. The Client resulting to demining the scope of work and specification; according to contractors, scope of works and specification has changed more than ten times within the five years. Concerning politics, in Nigeria, apart from the fact that each government do not like to build upon the work of its predecessor which is a form of political inconsistency, within a government set up, the political leadership many a time to take the full control of the execution of such projects regarded as 'constituency project', they turn all government project to partisan politics.

Secondarily, there were other management practices within the performing organizations that impede the success of the project. These unpleasant phenomena are termed 'management deficiencies and unorganized bureaucracy protocols. The average scoring of these factors ranges between 0.609 and 0.686. This shows that within the management leadership, there were other management and administrative practices such as lack of planning, administrative inconsistency and unorganized bureaucracy that led to failure in government construction projects. And lastly, 'lack of resources and external forces. These factors were averagely rated very-low by all participants between 0.577 and 0.593. This means they are insignificant factors that caused delay in executing the project. The lack of resources according to the respondents is not an original factor causing delay but is linked to the chief delay factors, which can be traced back to insufficient funds to mobilise resources, as such work progress were hampered on site. The external forces are factors beyond the control of the Client, Contractors and Consultants such as inclement weather and natural disaster. Even though these factors were not considered by the respondents as very important factors, attention to them is very essential as they may cause failure through the total abandonment of construction works.

## CONCLUSION

From the results obtained and the subsequent analysis of the result, it is safe to conclude that factors that caused failure in the reconstruction of Bida–Minna 82 km Trunk–B Road are:

1. The project lacks funding
2. Corruption of government officials
3. Political interference
4. Unorganized Bureaucracy
5. Vagaries of weather condition

## RECOMMENDATIONS

The following recommendations were offered-

1.0 It is recommended that parliament should make laws that would give independence to technocrats that are charged with the execution of government projects from the political interference.

2.0 The government should reduce the bureaucratic processes involved in the procurement of Nigerian government construction projects.

3.0 The use of hard copies of projects documents should be replaced with electronic copies; this will simplify easy access of projects documents by the media and the general public and enhance monitoring and transparency of the project.

4.0 Enough allowances (**7.5%** to **10.0%**) should be provided for contingencies.

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# PERFORMANCE MANAGEMENT: IT'S ESSENCE IN THE CONTEMPORARY MANAGEMENT CONTEXT

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## ABSTRACT

*Strong performance management rests on the simple principle that "what gets measured gets done." In an ideal system, a business creates a force of metrics and targets flowing from its top-level strategic objectives down to the daily activities of its frontline employees. Thus, the management is saddled with the responsibility to continually monitor those metrics and regularly engage with their teams to discuss progress in meeting the targets. Hence, good performance is rewarded; underperformance triggers action to address the problem. Organizations that get performance management right become formidable competitive machines; therefore, it is recommended that in the contemporary management context, performance management should not be underplayed as it remains strategic to overall wellness of business institutions today.*

## INTRODUCTION

Note that many organizations have what is labeled a 'performance management' system. However, we must distinguish between performance management and performance appraisal. A system that involves employee evaluations once a year, without an ongoing effort to provide feedback and coaching so that performance can be improved, is not a true performance management system. Instead, this is only a performance appraisal system. Although performance appraisal (i.e., the systematic description of an employee's strengths and weaknesses) is an important component of performance management, it is just a part of the whole (DeNisi & Smith, 2014).

Organizations can achieve their goals and objectives only through the combined efforts of their employees and it is the task of management to get work done. Employee performance management is fundamental to the effective operation of organizations.

Performance management is an integral part of the employees and organizations relationship. It is essentially an integrating activity that permeates every fact of the operations of an organization.

It is true that successful organization knows, how to win today's competitive world; this they do by attracting, developing and retaining talented and productive employees. Big organizations get their competitive edge from performance management system that helps them to hire talented people. On the other side, the organizations have to place employees in the right position, along with their individual performance with the organization's vision, objectives and develop their abilities and reward with contributions to the organization's success (Mustafa, 2013).

Organizations need to be efficient in doing right things, in the optimum use of their resources and in the ratio of out puts to inputs. But organizations must also be effective in doing the right things and in their out puts related to some specific purpose, objectives.

Performance should be related to such factors as increasing profitability, improved the results in important areas of organizational activities (Mullines, 2007). Innovation as the key to long term success and what leaders of best practice organizations do that is different. They

a) ensure they have vision, mission and organizational strategy that are known and understood;
b) oversee the setting of demanding but realistic targets;
c) set examples in the generating an open, communicative management style;
d) champion a culture conductive to learning and continuous improvement;
e) distribute leadership responsibilities with the necessary authority, training and resources (Mullines, 2007; Mustafa, 2013)

## PERFORMANCE MANAGEMENT

Performance management is the system through which organization set work goals, determine performance standards, assign and evaluate employee's work, provide performance feedback to employees, determine training and development

needs and distribute rewards to employees (Latham & Locke, 2006); thus, offering more than performance appraisals.

Performance management is very important to both employers and employees. From the employers prospective, it is vital to understand how your employees contribute to the objectives of the organization. A good performance management system enables the organization to understand how its employees are currently performing. It allows organizations to undertake a thorough assessment of the training needs of its employees, set development plans and gives them the option of using the result of the performance management process to influence an individual remuneration (Buller & McEvoy, 2012).

From the employees prospective, the performance management process provides transparency over performance at workplace and can be used to assess future career development requirements

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Efforts to assess employee performance have been focused primarily on the outcomes that are static and sometimes dysfunctional. The changing nature of work, the need for constant improvement and adaptability, necessitates a more dynamic, process-oriented perspective on an employee performance.

Heneman and Thomas (1997) indicate that as performance measures for performance management, outcomes may measure performance relative to the organization's financial goals, while competencies represent the means by which these results are attained. Therefore, a performance management system should be designed to emphasize competencies as well as outcomes consistent with the organization's overall mission and objectives Holt, Noe & Cavanaugh, 1996).

Performance measures discussed above rely on the assumption that personal variables are more important in performance management process. They did not consider other explanations, including the possibility that system factors exert a larger influence on performance in higher level jobs such as executive position or that system factors constrain the variance in performance in lower level jobs (Jawahar & Williams, 1997). In general, managers do not regard constraints on performance as very serious problems hindering the attainment of desired performance, whereas those performing the work believe constraints are a serious problem

## PERFORMANCE PAY

Performance pay simply delineates appropriately rewarding employees according to their individual output levels, in consideration of fairness and equity; incentives given are classified; whereas short-term incentives usually involve an attempt to motivate performance in the short term (i.e., quarter, year) and involve cash bonuses or specific prizes (e.g., two extra days off), long-term incentives attempt to influence future performance over a longer period of time (O'Boyle & Aguinis, 2012). Typically, they involve stock ownership or options to buy stocks at a pre-established and profitable price (DeNisi & Smith, 2014). The rationale for long-term incentives is that employees will be personally invested in the organization's success, and this investment is expected to translate into a sustained high level of performance; however, this is encapsulated in performance management; other benefits that accrue to the system include;

a) Improved employee morale - Resulting from one time performance appraisals and reward commensurate with employee contribution; morale of workers has direct effect on productivity within the organization. To recognize the value of employee is key to success of any organization. A few words of sincere admiration for a job well done will help increase moral among employees.

b) Retention of top performers - Employees who feel accomplished in their work becomes loyal employees.

c) Increased profitability - Loyal employees deliver higher levels of service that result in customer loyalty. It is very important to create an effective team of people which help to increased profitability.

d) Recruitment of talented people all the time, proper training plan for them according to their jobs. Proper system of motivation, Monitor and measure their productivity and performance. Giving employees the support they need and reward your employees when they deserve.

e) Right job for right person - The right job for right person in organization effect lot on organizational productivity, the employee who was a real pleasure to be around but who was terrible at his job -Such as really friendly third stringer on the football team who cracks great jokes but can't catch a ball to save his life? Have you ever felt stuck with an employee as if you or your predecessor made the wrong hiring decision and now you have to live with the person, pulling out your hairs because to attempt to improve your performance always end up falling flat. Some-times no matter how like able or hard working an employee is or how much effort you together invest in improving his or her performance even reality dictates him or her never will

be good at his or her current job. He or she will never good with job not because he or she is not motivated for this job or he or she do not have a right tool for this job that he or she need to do his or her job but because he or she does not have the talent or fit for the job.

## CONCLUSION

Performance management of an organization is directly connected with performance of employees. Achievement of high level employee's performance is a big need to achieve organizations goals all the time. A high level organization management could not be without high level of employee's performance management in this age of competition.

Effective performance management is essential to businesses. Through both formal and informal processes, it helps them align their employees, resources, and systems to meet their strategic objectives. It works as a dashboard too, providing an early warning of potential problems and allowing managers to know when they must make adjustments to keep a business on track.

Selecting the right targets is both science and art. Hence, every corporate target ought to remain SMART (specific, measurable, achievable, realistic and time-bound); if they are too easy, they won't improve performance. If they are out of reach, staff won't even try to hit them. The best targets are attainable, but with a healthy element of stretch required.

## RECOMMENDATIONS

i) Modern organizational managers should uphold performance management as veritable tool to keep them abreast with incessant changes in technologies, markets, or competitive environments because a disregard of it can leave them unable to respond.

ii) Every effort should be made towards improving performance of the people who work in organizations by developing the capabilities of teams and individual contributions

iii) A performance management is a strategic and integrated approach to deliver sustained success to organizations and as such should be upheld for such favorable outcomes to be elicited.

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# A STUDY TO ASSESS THE LEVEL OF FAMILY BURDEN AMONG CARE PROVIDERS OF CLIENTS WITH SCHIZOPHRENIA AT A SELECTED SETTING IN COIMBATORE, TAMILNADU

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## ABSTRACT

*Statement of the Problem*

*A study to assess the level of family burden among care providers of clients with schizophrenia at a selected setting in Coimbatore,Tamilnadu.*

*Objectives*

*1. To assess the level of family burden among the care providers of client with schizophrenia.*

*2. To associate the level of family burden with the selected demographic variables of the care providers of client with schizophrenia.*

*Methods & Materials*

*A non-experimental descriptive research design was used in the study. The study was conducted at Kongunadu Mananala Arakkattalai, Coimbatore. After a formal permission and consent from the samples, data was collected. A non-probability purposive sampling technique was used to select the sample size, which was noted to be 100. The tools consisted of two sections: Section A - Demographical Variables and Section B – Standardized Questionnaire.*

*Results*

*The findings revealed that care givers suffer from 24(24%) of the respondents low, 48(48%) of the respondents moderate, 28(28%) of the respondents high level of family burden. The findings also indicated that there was no statistically significant association found between the level of family burden care providers with the demographic variables.*

*Conclusion*

*The study concluded that care providers suffer from moderate level of family burden. So, need to provide psychological assistance to the caregivers to help them cope with the burden, stress and anxiety.*

**KEY WORDS:** *Assess, Family burden, Caregiver, Schizophrenia, Clients.*

## INTRODUCTION

Schizophrenia is the most common of all psychiatric disorders and is prevalent in all cultures across the world. About 15 % of new admission in mental hospitals is schizophrenic patients. It has been estimated that patients diagnosed as having schizophrenia occupy 50% of all mental hospital beds. About three-four a thousand in each community suffer from dementia praecox. About 1% of the general population stands the risk of developing this disease in their lifetime. Schizophrenia has a global prevalence of 0.3-0.7%. In India, the prevalence rate of schizophrenia is high. The epidemiological study concludes that prevalence rate was 2.62 cases per 1000 population.

It is one of the major mental disorders characterized by abnormalities in perception or expression of reality. The onset of symptoms usually happens in young adulthood. Even with available treatments, most people with Schizophrenia continue to experience symptoms throughout their lives. This will create a profound burden in the lives of their family members. Families touched by mental illness are often faced with significant financial burdens that arise from healthcare costs and job loss. A study done in India showed that the antipsychotics are affordable to the family, but the treatment expenditure of co-morbidity, side effects and cost of consultation including travel add to the burden for the family.

Caregiver burden has been defined as the strain or load borne by a person who cares for a chronically ill, disabled, or elderly family member **(Stucki & Mulvey, 2000).**

The number of people with schizophrenia in the world, particularly in developing countries, is increasing and 1 out of 100 people (approx) in the world suffer from schizophrenia **(Mental Health Research Association, 2006).**

According to World Health Organization (WHO) report 2001, bipolar affective disorder and schizophrenia find a place in the list of most disabling illness for the most productive age group of 15-44 years. Until 1950s, a large number of these patients used to be confined to the walls of the mental hospitals. With the advances in the psychopharmacology and growing emphasis on outpatient treatment in psychiatry, most patients with these disorders are being looked after by their families thus deinstitutionalization became possible.

It is a multidimensional response to physical, psychological, emotional, social, and financial stressors

associated with the care-giving experience. The burden can be objective or subjective. Objective burden is defined as readily verifiable behavioral phenomena. Example: Negative patient symptoms; caregiver's life disrupted in terms of domestic routine, social activities, and leisure; social isolation; problems related to finance and employment; effects on the health of the entire family; and the unusual behavior of the patient. Subjective burden comprises emotional stressors such as fear, sadness, anger, guilt, loss, stigma, rejection, etc., on the caregiver.

The shift towards community care for patients with mental disease has resulted in the transfer of responsibility of their day-to-day care to their family members, which has led to profound psychosocial, physical, and financial burden on the patients' families.

Schizophrenia is found in all societies and geographical areas and is a major cause of death in patients. About 15% of new admissions in mental hospitals are schizophrenia cases, and it has been estimated that they occupy 50% of the hospital beds. About 3-4% per 1000 people in every community suffer from schizophrenia.

About of the general population carries the risk of developing this disease in their lifetime. India ranks among the highest in the prevalence rate of schizrenia. Amongst the epidemiological studies in India, the study of functional psychosis in urban community (SOFPU) in Madras is the most confounding one. It was a multistage census survey wherein the prevalence rate of schizophrenia was estimated to be at 2.62/1000 people.

The World Federation of Mental Health estimates that 80% of the caregivers in the world are female. They could be the spouse, mother, or daughter of the patient. Studies have shown that women, who have to care for a mentally ill patient, are prone to have six times more depressive and anxiety symptoms than those who have no such liability. It has been reported that factors influencing the caregiver burden include the gender and age of the patient, severity of the disease, cultural factors, stigma, duration of the disease, and disability. Studies exploring the relationship between the economic condition and caregiver burden have shown that a lower socioeconomic level is associated with increased caregiver burden.

The World Federation of Mental Health has assessed the burden of those providing care to patients with chronic diseases as a global problem and has announced that caring for these patients requires continuous energy, knowledge, empathy, and economic power, and that it influences the daily living of the caregivers to a large extent. While attempting to establish a balance between their jobs, families, and patient care, caregivers usually neglect their own physical and mental health.

The negative impacts of persons with a serious mental illness on their family members have been explored since the 1950s, and the term "caregiver burden" began to be used in the 1970s. It is a widely accepted concept and includes all of the physical, mental, social, and economic problems experienced by the relatives of an individual with a chronic mental illness. Some studies have demonstrated that caregivers usually do not have the knowledge and competency necessary for providing the appropriate care to such patients.

The burden on the family caregivers results in negative consequences not only for themselves but also for the patients, other family members, and the health care system as a whole. It affects their physical, emotional, and economic status.

Emotional distress affects the ability to cope with stress as well as productivity and thus the impact of the mental illness is enormous. Other negative implications among the family members include alcohol and substance abuse, delinquent behavior and impaired quality of life. Interest is growing in the field of mental health around the families who care for their mentally ill members. The interest generated has been due to factors such as deinstitutionalization of the mentally ill, increasing professional recognition of the family's burden in caring for the mentally ill members and growing self-help movement of the families of mentally ill.

**The objective of the present study was,**
- ❖ To assess the level of family burden among the care providers of client with schizophrenia.
- ❖ To associate the level of family burden with the selected demographic variables of the care providers of client with schizophrenia.

## MATERIALS AND RESEARCH METHODOLOGY

A non-experimental research design and descriptive approach was adopted to assess the level of family burden among the caregivers of schizophrenic patients at the Kongunadu Mananala Arakkattalai in Coimbatore. The demographic characteristics of the caregivers, such as age, gender, relationship, marital status, religion, education, occupation, income, area of residence, and health issues, as well as their level of burden of care giving were analyzed in this study. It included 100 caregivers of schizophrenic patients, selected through non-probability purposive sampling technique based on the inclusion and exclusion criteria.

**Inclusion Criteria**
- ➤ Caregivers who were in the age range of 20 to 60 years;
- ➤ Taking care of a family member diagnosed with schizophrenia for more than a year and
- ➤ Whose patients were under medication and had regular follow-up.
- ➤ Caregivers who had: patients with co-morbid conditions

**Exclusion Criteria**
- ➤ Not been living with the patient for at least 6 to 10 months
- ➤ History of medical or psychiatric illness before becoming a caregiver and
- ➤ Were not willing to participate in the study.

**The Study Consisted of Two Sections**
**Section A:** Demographic variables of the caregiver – age, gender, relationship with the patient, marital status, religion, area or residence, education, occupation, income, and any past health issues.

**Section B:** Assessment of the level of burden among the caregivers using the standardized questionnaire and the scores obtained from the "Burden Assessment Scale".

## DATA COLLECTION PROCEDURE

The permission to collect data was obtained from the chief psychiatrist of Kongunadu Mananala Arakkattalai Dhaliyur, Coimbatore before study initiation. Informed consent was obtained from the study participants. The data was collected by the researcher for 4 weeks. All the caregivers were asked to visit the center. Individual pre-tests were done by asking them to provide answers to a standardized questionnaire, and their responses were scored according to the "Burden Assessment Scale," used to assess the level of burden on families of mentally ill patients. The total number of questions is 20. The levels of burden based

on the scores were categorized as follows: 0-20 (low), 21-40 (moderate), and 41-60 (high).

## ANALYSIS AND INTERPRETATION

Based on the caregivers demographic information, it was noted that: 45 (45%) of them were in the age group of 41-50 years; majority of them were female: 65 (65%); about half of them were married: 60 (60%); most of the caregivers were the spouses of the patients: 68 (68%); one-third of them were Hindu: 64 (64%); half of them resided in rural areas: 57 (57%); many of them had completed higher secondary education: 40 (40%) and were employed: 41 (41%); 43 (43%) of them had an income in the INR 5,000-10,000 per month range; and 61 (61%) of them had no health issues.

**Table 1: Distribution of caregivers according to their level of family burden**

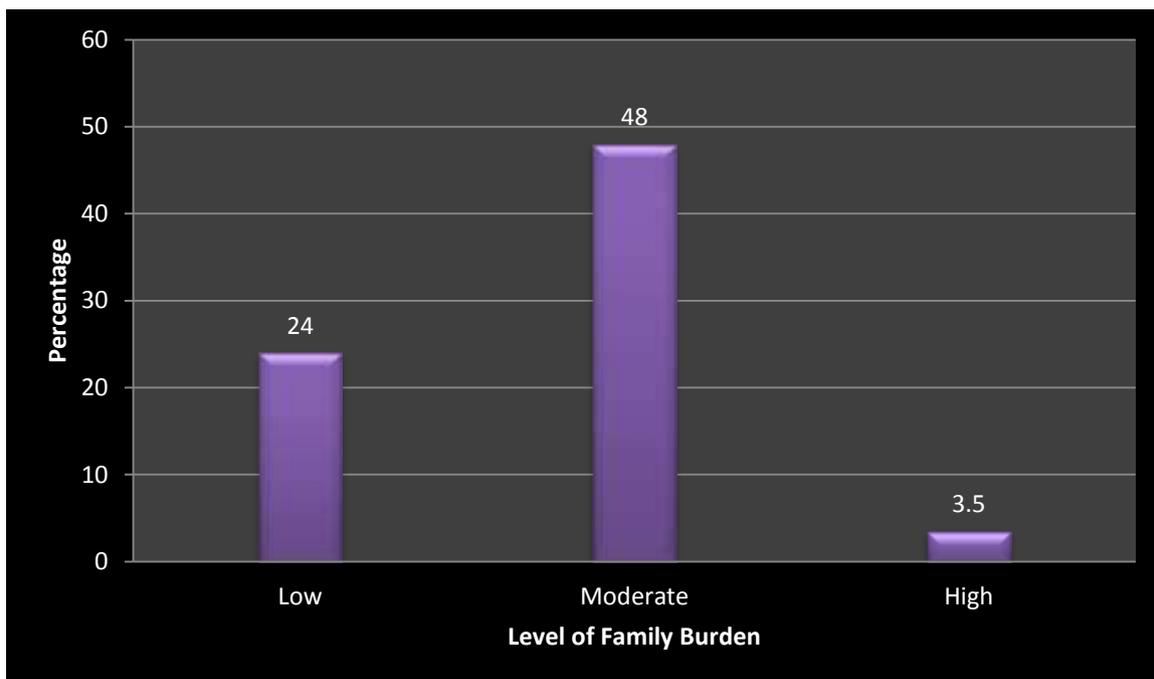| S.No | Score | Level of family burden | Frequency (n) | Percentage (%) |
|------|-------|------------------------|---------------|----------------|
| 1 | 0-20 | Low | 24 | 24 |
| 2 | 21-40 | Moderate | 48 | 48 |
| 3 | 41-60 | High | 28 | 28 |



**Figure:1 Percentage distribution of caregivers according to their level of family burden**

It was observed that 24 (24%) of the respondents had low, 48 (48%) had moderate, and 28 (28%) had high level of family burden, respectively. There was no significant association between the caregivers level of family burden and their demographic variables such as age, gender, relationship with the patient, marital status, religion, residential area, education, and health issues; however, it was highly significant for joint family setting, occupation, and the income of the caregiver.

## NURSING IMPLICATION
### Nursing Education
1. Nurses should give attention to improve the knowledge of schizophrenia and its treatment and prevention.
2. Inadequate knowledge will lead to high prevalence of stress and family burden among family care providers of clients with schizophrenia.
3. Therefore the family care providers must be aware of the nature of the disease, its treatment and prevention.

### Nursing Research
1. The study creates awareness for further studies among family care providers of clients with schizophrenia.
2. Further, researcher can use this study as a valuable reference material. Large scale studies can be conducted.

### Nursing Management
Steps should be taken by the higher authorities to organize seminars and workshops for the up gradation of knowledge through skilful training for health professionals.

### Nursing Administration
Classes should be provided for family care providers which will help them how to tackle stress, coping and family burden while caring for clients with schizophrenia.

## RECOMMENDATION
1. A similar study can be conducted on a larger sample using random sampling technique for broader generalization.
2. The same study can be replicated in urban, semi urban and rural settings.
3. A longitudinal prospective study can be carried out to rule out the causes of stress, family burden and coping among family care providers of clients with schizophrenia.

4. Interventional studies may be carried out on larger sample.

### Limitations of the study
The study was limited for the following reasons:
• It was restricted to caregivers of schizophrenic patients
• The sample size was limited to 100 caregivers
• The data was collected only from first-degree relatives of schizophrenic patients.

## CONCLUSION
The majority of caregivers of schizophrenic patients had moderate level of family burden. Certain social traits such as living in joint families can increase the risk of caregiver burden. There is a need for providing psychological assistance to the vulnerable caregivers to help reduce their burden and employ positive coping strategies, as well as strengthening and increasing the economic support for families affected due to schizophrenia.

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# SOCIO – ECONOMIC STATUS OF THE SCHEDULED TRIBES IN TELANGANA
## (With Special reference to BhadradriKothagudem District)

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## ABSTRACT

*Tribes are one of the many divergent groups that make up the Indian population. They continue to be disadvantaged primarily because they have been considered the smallest segment of Indian society since olden history. Cultural and geographic exclusion, a lack of appropriate healthcare facilities, an inability to meet basic needs, a loss of control over resources and assets, a lack of skills and education, poor nutrition, a lack of affordable housing, poor clean water and sanitation, insecurity to shocks, violence and crime, a denial of available to proper infrastructure facilities and technologies, and a lack of political freedom and voice are all factors that continue to disadvantage tribes. All of these obstacles can make life difficult for them. In light of these issues, the government is attempting to assist the tribes through various welfare schemes.*

*The purpose of the study was to learn about the socioeconomic status of tribal people in the Bhadradri kothagudem district. To learn about their socio-cultural status, primary data were collected through a series of structured questionnaires. Discussions were held with tribal elders who were wise and insightful, and secondary data was gathered by reading tribal magazine articles and background. According to the findings of this study, the tribal's socioeconomic situation has improved day by day. Though there are some issues in the area, such as poor communication, joblessness, power generation, social security, and clean drinking water, the primary education and health commonly known as "to be adequate, and the socio-cultural bonding between tribes is also very powerful.*

**KEYWORDS:** *Scheduled Tribes, Socio – Economic Status, Koya, Lambada, Bhadradri District.*

## INTRODUCTION
**Development of the tribal's should be according to the "lines of their own thinking"**

*Jawaharlal Nehru*

Article 366 (25) of the Constitution of India refers to Scheduled Tribes (ST) as those communities, who are scheduled in accordance with Article 342 of the Constitution[1].Our country's aboriginal inhabitants are identified as the tribal population. For centuries, they have lived a simple life based on the natural atmosphere, developing cultural characteristics that are compatible with their physical and social environments. The Telangana State constitutes highest tribal population in Southern India. The BhadradriKothagudem is a tribal belt with maximum number of tribal populations in the State[2].

Economic development is facilitated by social development. Tribes have always experienced challenges in their economic growth due to a variety of factors such as geographical and social alienation, a lack of proper health facilities, an inability to meet basic needs, a lack of control over resources and assets, a lack of skills and education, malnutrition, a lack of shelter, a lack of access to water and sanitation, insecurity to disruptions, victimization, a lack of access to necessary infrastructure facilities and technologies, and a lack of entrepreneurship. The social sector, which includes sub-sectors such as access to education, medical and health care, housing, and water supply, is critical to their economic development.

## REVIEW OF LITERATURE
In this field, few studies were conducted in India. The researcher reviewed many researchers conducted in India and abroad to find out the correct area to carry out the research work, which will be fruitful for the professionals and country.

**Kumar (2021)** In his study, the skill development programs are helping the tribes to get employment and entrepreneurship opportunities and to improve their socioeconomic conditions. The skill development schemes have a positive impact on the socioeconomic status of the tribal beneficiaries, and they have expressed satisfaction as there is significant social advancement in their lives.

**Raju (2020)** in his study, Tribe population is the most backward and disadvantaged group in the State of Telangana and in the entire world, faced with severe economic exclusion. Although certain constitutional protections are provided for, these societies do not have economic, social and political mobility. Parallel to Scheduled Castes and other Backward Castes, the Scheduled Tribes also reside on harsh grounds, which have seen certain degrees of advancement in terms of the protection of government unfair policies.

**Deepak Kumar, et al. (2020)** in their research, Tribal are uplift in the sanitation, primary education, health awareness, social security and cosmopolitans etc. Women of tribal are very secular in taking decisions and equal participation in families working. Women of tribal are worked in cropping field with men there is no social hesitation and impede. Garos are Christianity in religion. They are spontaneously participation in religious festival. Christmas day is a great day of Garos. Before time they were Hindus. Some are stay still Hinduism. Hajogs are Hinduism in religion. They are enjoying religious festival as much as Hinduism like Durga puja, Mansha puja, Sharashathi puja etc. Both tribes are very much simple, honest, royal, industrious and sacrificing in mind.

## STATEMENT OF THE PROBLEM

BhadradriKothagudem district, a newly emerged district of the infant state Telangana, is a symbol of diversity as it is one of the highly industrialized areas in the state and similarly with the tribal population. Most of the mandals of the district are dominated by the backward tribal population and a few areas are covered with basic industries like coal extraction, thermal power production, paper production, etc., Well-educated employees on one side, agency illiteracy on the other side show the extremes of this region. The present study is an attempt to study and analyze theSocio-Economic status of the Scheduled Tribes in BhadradriKothagudem District.

## OBJECTIVES OF THE STUDY
1. To study the socio-economic condition of tribal people at BhadradriKothagudem District.
2. To examine the educational facility available for tribal people in the selected area of the study.
3. To identify the resources available in the selected area of the study.
4. To propose various measures to improve the socioeconomic conditions of the tribal population in the study area.

## METHODOLOGY OF STUDY
### 1) Data collection
To undertake this study the data collected from two sources
- **Primary source**: The tribal chosen for the study are urban and rural area tribes of the BhadradriKothagudem District of Tealangana State. Data collected through structured interview schedule, using questionnaire.
- **Secondary Source**: Data for this study has been collected from various sources such as Journals, books, magazines and articles.
2) **Sample size:** The Tribes are including the Lambada and Koyas, who are agricultural cultivators by occupation and employees of various sectors and Labourers. Two tribal villages are covered in the study area, namely Jagannadapuram of Mulakalapallymanadal and VeerunaikThanda of Palonchamandal. In these two selected villages 120(60+60), respondents have been selected in simple random sampling method.
3) **Statistical Tools Used:** The Data is analyzed with simple Mathematical tools, like averages and percentages.

## DATA ANALYSIS AND INTERPRETATION
**Demographic Features of Tribal Community**
This section contains demographic information of the respondents in the study area. It is concerned with Gender, Age, Marital Status, Occupation, Monthly Income, Monthly expenditure and Monthly savings.
Table-1 Given below analyzed the gender-wise distribution of the sample in the study area.

**TABLE-1**
**GENDER-WISE DISTRIBUTION OF RESPONDENTS**

| PARTICUALRS | FREQUENCY | PERCENTAGE |
|---|---|---|
| Male | 64 | 53 |
| Female | 56 | 47 |
| Total | 120 | 100 |

The above table shows that, majority of the respondents (53%) are male, and 47 percent of the respondents are Female.

**TABLE-2**
**AGE-WISE DISTRIBUTION OF RESPODENTS**

| PARTICULARS | FREQUENCY | PERCENTAGE |
|---|---|---|
| Below 20 years | 30 | 25 |
| 20-30 | 22 | 18 |
| 30-40 | 50 | 42 |
| 40-50 | 13 | 11 |
| Above 50 years | 5 | 4 |
| Total | 120 | 100 |

The above table reveals that, Because of differences in religion, custom, values, dietary habits, social structure, and other factors, the types of respondents are a key consideration for the tribe. The age of the respondents is a significant aspect in any study because it has to do with their earning potential and experience. The tribal of this area's responses range in age from under 20 to over 50 years old. It reveals that 25% of respondents are under the age of 20, 18% are between the ages of 20 and 30, 42% are between the ages of 30 and 40, 11% are between the ages of 40 and 50, and 4% are beyond 50. Middle-aged people in this area stay at home to take care of their business, such as agriculture, jobs, and other responsibilities. For education, garments work, and other functions, the majority of young people remain outside of the home.

**TABLE-3**
**EDUCATIONAL QUALIFICATIONS OF THE RESPONDENTS**

| PARTICULARS | FREQUENCY | PERCENTAGE |
|---|---|---|
| Illiterate | 10 | 8 |
| Primary | 23 | 19 |
| Secondary | 25 | 21 |
| Higher Secondary | 14 | 12 |
| Graduation | 36 | 30 |
| Post-Graduation | 12 | 10 |
| Total | 120 | 100 |

The above table shows that, Education allows a person to become more knowledgeable about current facts and technologies. The educational status of tribal families was separated into five groups to study the educational state of tribal people. Those who cannot read and write considered as illiterate. From table-3, 8% tribal people are illiterate. Primary and secondary level are 19 and 21 percent which is indicate the low level of Primary and Secondary education. Higher secondary and graduate level are 12 and 30 percent which is indicate greater part of the people of tribal in this level.

**TABLE-4**
**MARITAL STATUS OF THE RESPONDENTS**

| PARTICULARS | FREQUENCY | PERCENTAGE |
|---|---|---|
| Married | 65 | 54 |
| Un-Married | 53 | 44 |
| Divorce | 1 | 1 |
| Widow | 1 | 1 |
| Total | 120 | 100 |

The above table illustrate that, the majority of the respondents were married (54%), and 44 percent of the respondents are unmarried, and the rest of respondents are divorce and widow respectively.

**TABLE-5**
**OCCUPATION OF THE RESPONDENTS**

| PARTICULAR | FREQUENCY | PERCENTAGE |
|---|---|---|
| Agriculture | 70 | 58 |
| Govt.Employee | 6 | 5 |
| Business | 14 | 12 |
| Other | 30 | 25 |
| Total | 120 | 100 |

The above table depicts that, Agriculture is the tribals' main source of income. Wheat, Rice, watermelon vegetables, sugarcane, citrus, cucumber and fruits are among the principal crops farmed in this region. It shows that 58 percent of tribal people are engaged in agriculture, 5 percent are government employee and rest of the business and others occupations.

**TABLE-6**
**HAVING AGRICULTURAL LAND OF THE RESPONDENTS**

| PARTICULARS | FREQUENCY | PERCENTAGE |
|---|---|---|
| Nil | 40 | 33 |
| Below 2 Acres | 58 | 48 |
| 2-5 Acres | 20 | 17 |
| Above 5 Acres | 2 | 2 |
| Total | 120 | 100 |

From table-6, Land ownership of Bhadradri Kothagudem is four categories. These are (1) landless having '0' acres of cultivable land without household; (2) Below 2 acres of cultivable land; (3) 2 to 5 acres of cultivable land; (4) Above 5 acres of cultivable land. It shows that most of the respondents, 48 percent having below 2 acres of land, landless farmer that is 33 percent. 2 to 5 acres are 17 percent. This result indicates that in the area of the people are lower land owner and economically poor in nature.

**TABLE-7**
**MONTHLY INCOME LEVELS OF THE RESPONDENTS**

| PARTICULARS | FREQUENCY | PERCENTAGE |
|---|---|---|
| Below 10000 | 62 | 52 |
| 10001-20000 | 22 | 18 |
| 20001-30000 | 5 | 4 |
| 30001-40000 | 4 | 3 |
| Above 40000 | 27 | 23 |
| Total | 120 | 100 |

The table-7 shows that the monthly income is determined by income-generating activities such as larger land ownership, business activities, and job services. The area's business and job opportunities are severely limited. It shows that most of the respondent are last category of income which is 52 percent, 18 percent of respondents income level is 10001 to 20000 per month; 4 percent are 20001 to 30000 per month; 3 percent are 30001 to 40000 per month and more than 40000 per month is 23 percent.

**TABLE-8**
**MONTHLY EXPENDITURE OF THE RESPONDENTS**

| PARTICULARS | FREQUENCY | PERCENTAGE |
|---|---|---|
| Below 10000 | 62 | 52 |
| 10001-20000 | 36 | 30 |
| 20001-30000 | 10 | 8 |
| 30001-40000 | 3 | 2 |
| Above 40000 | 9 | 8 |
| Total | 120 | 100 |

From the above table, His or her monthly expenses are determined by his or her monthly income. Because the respondent's income is in the lowest group in this location, monthly expenditure is necessarily lower. It shows that the tribal respondent's monthly expenditure is in the lowest category. Less than 10000 expenditure per month of 62 percent respondents. 30 and 8 percent of respondents are laid in 10001 to 20000 and 20001 to 30000 per month expenditure respectively and 30001 to 40000 and above 40000 is 2 and 8 percent.

**TABLE-9**
**MONTHLY SAVINGS OF THE RESPONDENTS**

| PARTICULARS | FREQUENCY | PERCENTAGE |
|---|---|---|
| Below 3000 | 90 | 75 |
| 3001-6000 | 12 | 10 |
| 6001-9000 | 8 | 7 |
| Above 9000 | 10 | 8 |
| Total | 120 | 100 |

The above table reveals that, Monthly saving is also influenced by the family's income; if the family's income is large, then saving is likely to be high as well. Savings differ from person to person; some people are naturally frugal, while others are naturally miserly. It demonstrates the tribal people's saving instinct. Because income is the lowest category, saving is often low. 75 percent of the respondent are laid in less than 3000saving per month. 10 percent are laid in 3001 to 6000 saving per month and 7 percent are in 6001 to 9000 saving per month, and above 9000 saving is 8 percent.

**TABLE-10**
**Socio-Economic Scenario**
**Access to Socioeconomic Resources by Tribal Communities**
**5-point Likert scale**

| STATEMENTS | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Total |
|---|---|---|---|---|---|---|
| 1. In the tribal region, there are sources of income-generating facilities. | 13 (11%) | 16 (13%) | 34 (28%) | 48 (40%) | 9 (8%) | 120 (100%) |
| 2. There are sufficient educational facilities in tribal areas. | 5 (4%) | 37 (31%) | 33 (27%) | 36 (30%) | 9 (8%) | 120 (100%) |
| 3. A variety of job opportunities are available in the area. | 24 (20%) | 29 (24%) | 23 (19%) | 22 (18.5%) | 22 (18.5%) | 120 (100%) |
| 4. There is clean drinking water available in society. | 13 (11%) | 10 (8%) | 28 (23%) | 51 (43%) | 18 (15%) | 120 (100%) |
| 5. There are health care facilities in tribal areas. | 27 (22%) | 11 (9%) | 26 (22%) | 37 (31%) | 19 (16%) | 120 (100%) |
| 6. In the tribal region, electricity is available. | 5 (4%) | 5 (4%) | 26 (22%) | 60 (50%) | 24 (20%) | 120 (100%) |
| 7. The tribal people's sanitation facilities are clean. | 14 (12%) | 21 (18%) | 42 (35%) | 27 (22%) | 16 (13%) | 120 (100%) |

## INTERPRETATION

- Opinion regarding point 1 in table-10, Majority (52%) of the respondents disagreed and strongly disagreed, while the other 48 percent of the respondents expressed their opinion as Strongly agree and agree. It implies, most of the respondents are expressed there are no sources of income generating facilities in the tribal area.
- 62 percent of the respondents are negatively responded on point 2 in table-10, as Strongly disagreed and neutral, disagreed. Just 38 percent responded as agreed and strongly agreed.
- Point 3 of table-10, indicates that 63 percent of the respondents have responded negative opinion on job opportunities, and the remaining, 37 percent of the respondents agreed and were strongly agreed.
- Opinion of the respondents on point 4 of table-10, 58 percent of the respondents agreed and strongly agreed, and the rest of 42 percent of the respondents are Disagree and neutral. It shows that most of the respondents are agreed there is clean drinking water available in society.
- Table-10 of point 5 states that the majority of the respondents (53%) have opined that health care facilities in the area are not good. While the remaining 37 percent agreed with the statement.
- Opinion about points 6, that the majority of the respondents (70%) agreed positively and the remaining 30 percent of the respondents Disagreed and neutral.
- 65 percent of the respondents are negatively responded on point 7 in table-10, as strongly disagree and neutral. Just 35 percent responded as agreed and strongly agreed.

## MAJOR FINDINGS

- The majority of the respondents are 53 percent are the gender of male.
- The majority of the respondents 42 percent are in the age group of 30-40.
- The majority of the respondents 30 percent have completed Graduation.
- 54 percent of the respondents are married
- 58 percent of the respondent's occupation is agriculture
- Majority of the respondents 48 percent having below 2 acres of agricultural land
- 52 percent of the respondent's monthly house income is below 10000 only
- The majority of the respondents 52 percent monthly expenditure is below 10000
- 75 percent of the respondent's monthly savings are below 3000
- 52 percent of the respondents expressed, there is no income generating facilities in the tribal area.
- 62 percent of the respondents opined that, there is in sufficient educational facilities in the tribal area

- 65 percent of the respondents reveals that, sanitation facilities are not up to the mark.

## CONCLUSION

The tribal of the Bhadradri Kothagudem Lambada and Koya are rich in their culture. Their socio-economic condition is not so good. Because agriculture is their primary occupation, they are impoverished. The tribal people's social security is insufficient. Majorities have always endangered them. Pure drinking water is scarce in the area, and finding it during the dry season is difficult. The tribal community has a limited number of job options. The area's working facilities are inadequate. Although infrastructure development and communication facilities are the first conditions for a community's development, they are limited. Electricity does not cover the entire tribal area, which is a major issue in the area. The education institutions are not as good as they may be. Tribals are benefiting from improvements in sanitation, elementary education, health awareness, social security, and cosmopolitanism, among other things. Tribal women are quite secular in their decision-making and equal involvement in family work. There is no societal reluctance or hindrance for tribal women to work in the farming field with men. They celebrate Hindu religious festivals such as Durga puja, Saraswathi puja, and others. Keep in mind that both tribes are simple, honest, royal, hardworking, and sacrificing.

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# FUNCTIONAL-SEMANTIC AND LINGUO-POETIC CAPABILITIES OF IMPERATIVE STRUCTURES

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## ABSTRACT
*World linguistics pays special attention to the in-depth study of the specific phenomena of the national language and the literary language in its further development. Social development, as in all sciences, made new demands on linguistics. The phenomenon of national languages and their individuality is central to global issues. In recent years, there has been a tendency to reflect the national mentality in works of art. Indeed, just as fiction and its language are unique sources that more reflect the spirit of the era, so this situation also influences the creation of spontaneous linguistic and poetic research. The study of the syntactic features of the text of works of national literature in the context of world linguistics on the basis of descriptive, comparative, functional-semantic, linguopoetical, historical-typological and analytical methods actively used in world linguistics, their analysis and study.*

**KEY WORDS:** *poetics, poetry, fiction, linguistic and poetic analysis, speech, imperative, functional, linguistic units, artistic speech, aesthetics.*

As the first manifestations of the study of artistic speech, its linguo-artistic and aesthetic quality and level of influence, one can take purely linguistic and linguo-stylistic interpretations, which have recently served as the basis for linguo-poetic interpretations. These areas set themselves scientific tasks, based on the requirements of the time and social needs. At the same time, they have to perform empirical tasks, such as describing the synchronous state of the language in a given period on the example of works of art, the degree to which artists use the word of the possibilities of language.

It is known that the term poetics was first used in Aristotle's Poetics. But experts say that "Aristotle's theory is based not only on his personal observations and study of works of art, but also on his research on literary theory by his contemporaries and predecessors"[1]. Since time immemorial, the term poetics has been regarded as the science of literature. But as much as poetics is related to literature, so it is related to linguistics. The well-known Russian philologist V. Zhirmunsky in his work "The Tasks of Poetics" referred to the works of A. A. Potebnya, mentioning the method of convergence of poetics with the general science of language - linguistics, is therefore generally recognized emphasizes separately, although there are many objections in his holistic concept [2]. Particularly noteworthy are the views of V. Zhirmunsky on the close connection between poetics and linguistics: Each of these facts, subject to an artistic task, thus becomes a poetic device. Thus, each section of the science of language must correspond to a separate

section of theoretical poetics [2]. Well-known researchers in the field of poetic poetry came to the conclusion that without linguistics there is no poetics. For example, R. Jakobson in his keynote lecture "Linguistics and Poetics" put forward the thesis that "poetics can be considered as an integral part of linguistics" [3]. V. Vinogradov, a well-known researcher of artistic language, stylistics and poetics, in many of his works focused on clarifying each of these issues [4]. For example, "Stylistics. Theory of poetic speech. In his fundamental work "Poetics", in particular, reflecting on poetics, he emphasizes that the study of the structure of literary and artistic works combines linguistic, aesthetic-stylistic, literary criticism and other artistic approaches in the field of poetics. This means that the linguistic approach to the poetics of a literary text, that is, linguopoetics, does not at all deny other approaches, but shows the leadership of this approach[5].

"Artistic speech differs from other types of speech in that it is the most productive means of figurative perception of being, which has a very high level of aesthetic impact". Therefore, the image of a work of art will remain in the memory of a person for a long time. This is one of the main reasons why expressions with high figurativeness are passed from ancestor to generation, from mouth to mouth, like catchwords [6].

The study of word usage is conducted in such aspects as linguistics and literature, aesthetics and culture, linguopoetics and cognition. Especially today, the strengthening of the conceptual approach to the

artistic image and speech, on the one hand, leads to the expansion and deepening of the scope of research, on the other hand, to the strengthening of interdisciplinary integration. Thus, the linguo-cognitive and cognitive-psychological approaches to the art of aesthetic perception of being and the art of word application show that the theory and practice of identifying the features of artistic thinking, the formation of artistic speech and the level of its artistic and linguo-aesthetic impact reach a new qualitative level [7].

The implementation of the method of linguistic and poetic analysis after the methods of poetic, linguistic, linguistic and stylistic research serves to ensure the coherence and consistency of scientific conclusions. Because without artistic analysis it is difficult to correctly and clearly understand the artistic and aesthetic intention of the writer. The results of artistic analysis make it possible to conduct an objective artistic analysis of the linguistic features of a work on the basis of artistic intent, as well as to draw adequate scientific empirical conclusions. Nevertheless, such artistic and linguistic elements have the character of isolation due to the empirical nature of the system of analytical processes. In this sense, linguistic and poetic analysis serves to look at these "disparate" phenomena as a whole, to identify common features in individuals, to coordinate the analysis. The original aesthetic value of a work of art in this approach is reflected more fully than in earlier stages [8].

Each era will have its own unique aesthetics, worldview, artistic generalizations. Language units reflected in a literary text are considered on the basis of an artistic concept, regardless of whether it is a "writer's" or "textual" analysis. Art, reflected in linguistic units, is the field of study of linguopoetics. In this work, we aim to explore the problems of art that are reflected in command-interrogative constructions. We examined how command and interrogative forms are manifested in poetic, prose and dramatic speech manifestations. This form of speech in its general characteristics is an artistic text. However, each of them differs in formation, composition and content. In this sense, we tried to analyze the functional-semantic and linguistic-poetic possibilities of imperative and interrogative units in the context of speech phenomena.

The researchers emphasize the need to consider the imperative as a functional-semantic category as part of the context-dependent component of the modal system (for example, "affirmation / negation", etc.) [9]. In the field of domestic linguistics, a lot of research has been done on this subject, and the content of imperatives has been developed. For example, in the literature on Uzbek linguistics and stylistics of the Uzbek language, the following information is given about command expressions: "Command speech". In addition to

prompting the listener to do or not do something, this also includes threats, strict orders, requests, advice, entreaties, suggestions, and so on. The infinitive form of command sentences is formed only with the help of the affix "-ma". Command sentences are widely used in fiction, in the form of a dialogue, in the style of official papers, in various appeals, in exercises and assignments of a scientific style. The imperative participle is often represented by verbs in the imperative mood. In this type of imperative sentence, the affix "-gin" (-gil) may also appear in contraction. At this time, the team will be asked to respond please. In order to surprise the order, a part of speech brings a load [10].

Imperative means have a very wide range depending on the ability to express: a specific thought can be conveyed to the listener in the form of a command, please, advice or other forms, depending on the purpose and will of the speaker or the speaker.

On the expression of the command and desire of O.G. Belyaeva, M.Ya. Blox, A.V.Doroshenko, L.P. Chaksoyan, J. Lyons and their followers carried out a serious functional-semantic analysis. As a result, it was possible to single out different semantic types of command-semantic sentences and study their thematic-rhetorical relationships. In a literary text, there is a close semantic-functional and pragmatic connection between the characters' imperative speech and the author's statement, since they are interconnected on the basis of a single communicative task [10].

The materialization of consciousness through speech, emphasized by A.E. Suprun, and the process of transformation of individual consciousness into social consciousness are formed on the basis of a specific aesthetic setting in a literary text. The linguistic indicators of this process (it can refer to the phonetic, lexical or syntactic level) can be revealed more fully and comprehensively with a linguo-conceptual approach. Today, the advantage of this principle is emphasized in almost all scientific research. The term "concept" has become one of the basic concepts of modern linguistics and was first used in Russian linguistics in the 1920s [11]. By the 1980s, this term began to be actively used in their work by such linguists as N. D. Arutyunova, V. I. Karasik, D. S. Likhachev, Yu. S. Stepanov. The study of the appearance of certain words not only in the lexical meaning, but also as a concept, the ability to express the individual and social nature of speech, its place in the structure of speech, the level of perception of the people, worldview and artistic and aesthetic thinking, communicative competence. Greater emphasis is placed on what spiritual realities the word/unit in question reveals within the framework of a particular text.

The position of the researcher is important in the analysis of the meanings expressed in a literary text.

When the task is to study the writer's aesthetic intention, a "writer's" analysis is carried out and the writing skill is revealed. If the task is to explore the inner world of the characters, the language culture, the work is subjected to a "heroocentric" analysis. In addition, in the "text-centered" analysis, all units are considered from the point of view of text linguistics as units that form the text.

At the moment, we can say that the imperative in the language exists as a possibility. Clear linguistic mechanisms are used to translate them into speech. Such techniques are formed in each language on the basis of national culture, a specific worldview. Imperative means have a very wide range in the Uzbek language: this or that thought is expressed in the form of a command, please, advice, encouragement or other forms, depending on the intentions and wishes of the speaker or the speaker, and the listener can understand the thought not in form, but in content. . Sometimes this leads to misunderstandings in communication. The emphasis on the notion of an imperative situation by linguists is important because it refers to the solution of the same problem.

Approaching imperative constructions in a literary text on the basis of linguo-poetic, linguo-pragmatic and linguo-culturological principles, it is possible to identify unexplored aspects of such techniques. In the rapidly developing Uzbek linguistics, such phenomena should be studied using the achievements of modern linguistics. A complete study of the content and possibilities of expressing imperative constructions in fiction, making a great contribution to the development of our linguistics, reveals the hidden potential of our language.

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# A REVIEW ON CASTE DYNAMICS AND ITS INFLUENCE ON HIGHER EDUCATION

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## ABSTRACT

*Caste dynamics, for whatever function they serve, whether beneficial or harmful, have a little influence in contemporary society. In India, the dynamics of caste are referred to as "discrimination." What would be the ramifications of a society devoid of them? If we were to see it today, in the current situation, it would be more evolved. The caste dynamics of a society may be performed by upper groups who have a high level of social status, educational awareness, and group dynamics if there are no indifferences between them. The poor, on the other hand, must assert their social standing.*

*One of the reasons caste has piqued sociological interest is because it is considered as a symbol of pure rank, founded on religious and ideological grounds (Milner 1994; Dumont 1980; Weber 1958), with class disparities being epiphenomenal to caste (Milner 1994; Dumont 1980; Weber 1958). The Indian caste system has a "sociological" feature that distinguishes it from other kinds of social inequality based on material resources because of this separation of the holy and profane. Weber defines the caste system – as opposed to affinity groups – in terms that have underpinned most of the sociological debate on caste.*

*The systematic review was done on literature on how the caste dynamics were influencing the education system and student's, from the different papers published in different journals in the year 2012.*

*However, the evidence offered above suggests that this is an over simplification. Caste continues to be linked to access to productive resources, notably education and skills. In comparison to children from higher castes, children from lower castes continue to be educationally disadvantaged. Caste in contemporary India, if stripped of its religious and ideological tropes, is one of the most remarkable instances of the concentration of material riches in the hands of a few people while market forces continue to gain root.*

**KEYWORDS**: *Caste, caste alliance, higher education.*

## 1) INTRODUCTION

The previous century was marked by a vast global educational growth. A better-educated workforce is required in increasingly complicated economies. Furthermore, amid a globalising world culture, nation-states are increasingly required to assume responsibility for citizen education (Meyer, Ramirez, and Soysal 1992). However, many national governments are grappling with whether educational expansion is sufficient to eliminate educational inequities or if explicit affirmative action is required, with insufficient empirical data to guide future decisions.

Despite educational advancement, research on educational stratification reveals that educational disparity across various socioeconomic strata persists and, in certain cases, even grows (Halsey, Heath, and Ridge 1980; Hauser and Featherman 1976). With two exceptions, the influence of parental socioeconomic position on children's educational opportunity remained consistent or even expanded, according to the findings of a ground-breaking investigation examining educational developments across 13 nations (Shavit and Blossfeld 1993). At the higher levels of schooling, socioeconomic disparities are becoming more pronounced. The most ironic finding in this line of research is that cultural capital reflected in a father's educational level increased children's chances of obtaining higher education in communist societies as well (Treiman, Ganzeboom, and Rijken 2003), and that even as access to education became universal in primary school, ethnic inequalities widened in secondary school (Hannum 2002).

In contemporary India, there are three factors that relate caste, tribe, and religion to socioeconomic status: location, profession, and income. For instance, Adivasi's have always lived in woods and in rural locations. Furthermore, Adivasi's often reside in states with lower educational attainment. The lack of Adivasi's from the South, which has a high educational level, might be a contributing reason in Adivasi's' lower educational achievement. Muslims, on the other hand, are predominantly concentrated in metropolitan areas. Second, the caste structure was originally based on profession. The table analysis clearly shows that higher caste Hindus and others3 are significantly more likely to be in the professional or merchant/sales/clerical group than Dalit's and Adivasi's, despite the fact that these limits were never completely fixed and may have been eased even more in recent times. Dalit's and Adivasi's are disproportionately more likely to work as manual labourers and possess less land. Third, there per capita consumer expenditure demonstrate that Dalit and Adivasi families spend much less per capita than upper caste Hindus and other religious groups, with Muslims falling somewhere in the middle.

The first question is: Has the educational gap between Dalit's and others narrowed? Much of what we know about educational disparities between Dalit's and Adivasi's comes from public census and other official statistics or cross-sectional assessments (Kulkarni 2002; Mendelsohn and Vicziany 1998; Nambissan and Sedwal 2002; Sujatha 2002). But little is known about how these disparities alter over time. Thus, this research may remind about whether the caste dynamics are at patterns in disparities.

## 2) OBJECTIVES
To review on the caste based dipartites at higher education institutes.
To review about the literature on caste dynamics.

## 3) METHOD
A systematic search of the literature was conducted in Science Direct, Springer Link, Taylor & Francis, Wiley Online Library, Directory of Open Access Journals (DOAJ), google scholar PubMed, EBSCO the search criterion was the influence of caste dynamics on higher education institutes."

## 4) FINDINGS
**I.** The study contextualises educational policy in a broader socio-historical and political context and seeks to deconstruct policy change ideologically, with a particular emphasis on India's equality–quality paradox in primary education. It investigates fundamental variations in policy rhetoric and purpose while attempting to critically interpret changes in conceptions and practises of equality and quality in national and international policy prescription, stressing features of ideological settings, power asymmetries, and state dynamics. The paper is divided into four sections. The first two volumes explore conceptions of equality and quality as expressed in texts and dialogues about the two national educational systems, as well as policy measures adopted by the Indian state under neoliberal, global hegemonic influence. In the final part of the study, the interaction influence of educational restructuring and stratification structures as evidenced in the exacerbation of important caste, class, gender, and ethnic disparities is discussed. The paper's conclusion points out the ambiguities and inconsistencies in recent policy developments, arguing that any meaningful idea of excellent education for the poor is hard to achieve in the current environment. It deconstructs quality politics. (Velaskar, P.,2010).

**ii.** Access to school and higher education has risen dramatically across all demographics during the last two decades. Since the beginning of the constitution, the focus has been on the universalization of primary education. With the implementation of economic reforms, the role of the private sector has grown dramatically, resulting in a reduction in the State's commitment to the social sector under the guise of budgetary restraint. The apparent consequence of such a policy change was an increase in the role of the private sector at the expense of the government sector. Against this backdrop of growth and privatisation, it is essential to consider whether the expansion of the preceding two decades was inclusive or not. Thus, the purpose of this article is to examine how the growth of school and higher education has impacted the access of marginalised groups such as Scheduled Castes (SCs) and Scheduled Tribes (STs) (STs). Although access at the elementary level has reached a universal level, retention remains a serious difficulty in this respect. Access to Secondary and Larger Secondary and Higher Education has grown across all socioeconomic groups, with the growth rate being higher among SCs and STs than "Others," but this increase has not been sufficient to close the existing gaps. The problem is important because of the growing proportion of private unaided institutions, a lack of financial assistance, and hence a smaller proportion of SCs and STs in private unaided institutions. As a result, there is a need to emphasise equitable opportunity while taking structural changes in higher education into account. (Khan, K. ,2018).

**iii**. The Indian caste system has had a profound impact on the jobs, duties, and values of Indian society. For ages, religion has been a steady push towards this stratification structure, starting with the Aryans and continuing down a long path of bad consequences. Discrimination, segregation, violence, and inequality are all examples of injustice. Hinduism was the backbone of the purity pollution complex, and it was the religion that affected the Indian people's everyday lives and beliefs. Folks. Even after 63 years of freedom, Indians are still enslaved by caste. Consciousness. For millennia, India has survived as a nation through closed groups. Segregated according to caste, religion, and language (Velassery, xi). Work was split, and each person was assigned a certain task. Task from birth, and occupational heredity was a rule that had a significant impact in the economy of Life in cities and on farms Occupation or caste mobility was limited, and a person leaving the It was uncommon to see a descendant of his ancestors abandoning his or her employment to pursue his or her own path. It is possible. As can be seen, caste continues to play an essential role in the social and political dynamics. inter-Indian Interactions The link between caste and hereditary vocations, on the other hand, is complex. Has diminished in importance, and there are fewer restrictions on social interaction among castes, particularly in urban areas (Sekhon,2005). The current Indian civilization is transitioning from its closed systems toward a condition of development and growth defined by human assertion spirit, regardless of castes or creeds (Velassery, sebsatain,2005). Several movements are putting the in India, the injustices connected with the caste system have motivated people to be more courteous. Towards other members of the caste Many lower castes have benefited greatly from the partial caste system. Abolition of the caste system, and India should be commended for its ongoing efforts to do so This stratification system is derived from its culture. However, it is critical to consider the significance of in today's India, how has caste position influenced the quality of life and social mobility (Manali S. Deshpande,2010).

**iv**. Higher education's goals and influence on the economy and society as a whole have evolved in a variety of ways throughout time. Higher education institutional and policy processes fluctuate not just over time, but also between

nations and political regimes, and so context must be considered. This paper examines the aim of higher education and its institutional aspects by contrasting two ostensibly competing conceptual frameworks: instrumental and intrinsic. Various educational traditions are critically examined and presented as examples, with the potential to impact current policymaking. Because higher education cannot be considered apart from all other levels of education, proper conceptual linkages are provided throughout this page. Its relevance is based on the organic synthesis of literature from many fields of social science, which suggests paths ahead based on traditions that already exist but seem to be neglected due to overdependence on market-driven procedures. This provides a fresh perspective on how theories might be used to influence policymaking via conceptual "bridging" and reconciliation. The argument over the aim of higher education is set in the context of the most recent developments in the Western world of rising socioeconomic disparities and their relationship to the mass model of higher education and the accompanying governmental choices for a continual growth in participation. According to this article, the current policy focus on labour-market-driven policies in higher education has resulted in an ever-increasing competition, transforming this social institution into a regular market-place, where attainment and degrees are viewed as a currency that can be converted to a labour-market value. Education has deviated from its initial mission of providing an environment for human growth to become a tool for economic advancement. As a consequence, higher education has become incredibly costly, and even though policies are aimed towards openness, only a few people can afford it in actuality. A transition toward a hybrid paradigm, in which the fundamental aim of higher education is recognised alongside its instrumental purpose, should be seen as the way ahead by policymakers in order to establish more inclusive educational institutions and more informed and fair societies. (Kromydas, T,2017).

**v.** In the Indian labour market, gender and social discrimination are major challenges. Despite many government initiatives, such as quota regulations in educational institutions and in government and public sector jobs, females and disadvantaged socioeconomic groups such as Scheduled Castes (SCs) and Scheduled Tribes (STs) have poor educational and occupational results. Footnote1 These groupings are linked to low-paying, dead-end, and insecure jobs. The SCs and STs have greater poverty rates and poorer educational achievement (Agrawal 2013a; Das and Dutta 2007; Deshpande 2001; Gaiha et al. 2007). Because of the greater transaction costs involved with entering the labour market, these disadvantaged populations have a more difficult time obtaining regular work (Ito 2009). The proportion of non-SCs/STs in regular employment is much larger than that of SCs/STs (Singh et al. 2013).

A major percentage of the salary disparity between men and females is attributable to discrimination, indicating that females' human capital might not be realised as fully as males'. Policies should be developed to make it easier for women to find work. Equal employment opportunities and anti-discrimination laws must be properly enforced. Policies should also boost women's education, especially in rural regions. According to Kingdon (1998), policies that discourage gender discrimination in the job market would raise the rates of return on female education and boost females' motivations to invest in education. Female education also provides additional advantages, such as decreased infant mortality and fecundity. A considerable disparity in endowments across social groups suggests that there is a need to enhance educational opportunities for socially disadvantaged segments of the population. The government should also guarantee that disadvantaged sectors of society have full participation in schools, since they have a high rate of illiteracy. As a result, policymakers should attempt to decrease inequities in educational access.

## 5. CONCLUSION

After a thorough review of the literature, researchers came to the conclusion that education in recent years had improved a lot, not due to any chance by the elite ones, but due to the force of globalisation and privatization. The education is needed and to attract them, the different policies are needed, but the problem lies in framing education policies that make it difficult for lower caste people from rural backgrounds and also wage difference from the father income to attain a good education. Any country will develop itself with free education and health, but India sees the youth's difficulty in perusing the duration. India is the greatest country that had the highest youth, and for global ranking in education, it stands at 33rd place. However, the education facilities have increased and many students are perusing education but not employment.

This can be solved by framing different policies or renewing the old ones according to global competition, making education reach poor people and stopping disparities based on caste, creed, and religion. In the coming days, India will see the lack of manpower as well as the lack of development. Without manpower, development is impossible.

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# A REVIEW ON FARMERS OF TELANGANA: WELFARE SCHEME CHANGING STATUS AND DEVELOPMENT

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## ABSTRACT
*The situation of farmers who have been improved since the Telangana government launched the finest initiatives in Telangana state is examined in this study. Farmers have benefited from a variety of farmer-related programmes that have been created and are effectively operating. The direct and indirect initiatives assist farmers in cultivating their land. In the state of Telangana, this has never occurred before. Because Telangana is located on a rock plateau, there are no rivers flowing across the state. Some rivers run from the state's boundaries, although not from all of Telangana's districts. To address this problem and attract farmers, a variety of programmes were established from the ground level to encourage farmers to farm.*

*The systematic review was done on literature on how traditional practises are carried out all over state with reference to the different papers published in different journals and government annual reports from the year 2015-2021.*

*It is noteworthy that the 'Agriculture & Allied Sectors', which are the backbone of rural Telangana, and employ more than 55% of the population on of the state, make up the major proportion of this sector. While Telangana started out with a negative 0.7% growth rate in the 'Agriculture & Allied Sectors' in 2014-15, attained growth rates of 35.9% and 18.5% even during the pandemic years of 2019-20 and 2020-21. The Gross Value of Output (GVO) for paddy in 2020-21 increased 5 times its value in 2014-15, the GVO for cotton in 2020-21 increased 3 times its value in 2014-15, the GVO for 'Meat' in 2020-21 also increased 3 times its value in 2014-15, and the GVO for 'Inland Fish and Prawns', & 'Eggs' in 2020-21increased nearly double their respective values in 2014-15. (Des.ts,2014-2021).*

**KEY WORDS**: *Rural development, farmers, Telangana farmer's schemes.*

## 1. INTRODUCTION

The situation of farmers who have been improved since the Telangana government launched the finest initiatives in Telangana state is examined in this study. Farmers have benefited from a variety of farmer-related programmes that have been created and are effectively operating. The direct and indirect initiatives assist farmers in cultivating their land. In the state of Telangana, this has never occurred before. Because Telangana is located on a rock plateau, there are no rivers flowing across the state. Some rivers run from the state's boundaries, although not from all of Telangana's districts. To address this problem and attract farmers, a variety of programmes were established from the ground level to encourage farmers to farm. Telangana State is India's 29th state. It is bordered on the north west by Maharashtra, on the west by Karnataka, and on the east and south by Andhra Pradesh. The region covers 276.96 lakh acres and has a population of 350.04 people. According to the 2011 census, there were lakhs of people. In terms of population, the state ranks 11th in the nation.

In terms of land, it is the 12th biggest, and in terms of people, it is the 12th largest. The majority of the people in the state are in rural regions, agriculture is the primary source of income. Agriculture is vital not only for the economics of the country, but also for the economy of the world. Telangana state, but also for ensuring the state's food security, and for the sake of the nation Telangana's economy is based on agriculture and related sectors. Development. Aside from assisting in food security, the industry plays an important role in the economy.

It also employs more than half of the state's workforce (about 50,000 people). Agriculture and associated industries employ 60% of the state's workforce activities). Farmer income is mostly determined by agricultural output and access to markets. Markets. Various agricultural inputs, such as fertiliser, influence yield. Water, electricity, fertiliser, seeds, labour, and automation are all necessities. As a result of its the government has placed a premium on the sector's development and farmers' livelihoods. Affluence via a number of key programmes, such as bettering irrigation to providing free of charge via the Kaleshwaram Project and Mission Kakatiya farmers have access to electricity 24 hours a day, seven days a week, as well as investment assistance. Rythu Bandhu, which facilitates access to inputs, markets, and loans, as well as offering financial services. Rythu Bima provides life insurance.

In general, government actions have reflected in agriculture. The state's expansion has been fuelled by rising agricultural output. Between the years 2019-20 and 2020-21, paddy output grew by 29.9%. As a result, the state has become the national leader in paddy production. Cotton output has grown, with 29.4 percent of seeded lands in cotton. According to the 2nd advance forecasts, the year 2020-21 will be the busiest. As a result, the state has emerged.as the country's second-largest cotton-producing state Accordingly, the state's Gross Value Added (GVA) output from agriculture and related industries in the years 2020-21, the sector (including

the whole crop) expanded by 20.9 percent. Agriculture has one of the greatest growth rates, with a production share of GVA of 42.98 percent. India's GVA agricultural growth rate is much higher than the country's overall growth rate.3% of the population Despite the COVID-19 havoc, the agricultural sector was the least affected by output growth between 2019-20 and 2020-21 (Source: Telangana's socioeconomic prognosis for the year 2021).

The state's biggest issues, however, include rising water shortages, and natural resources, such as land, are being degraded, and the availability of natural resources per capita is declining. Resources of land and water Agriculture output was not harmed, however farmers still faced several challenges in accessing markets and procuring inputs. Further, rainfed agriculture in the state is very much vulnerable to the impacts of natural calamities. (Agriculture action plan 2020-2021).

## 2. OBJECTIVES
To review the various welfare schemes in Telangana.
To review about the development of agriculture and farmer's livelihood.

## 3. METHOD
A systematic search of the literature was conducted in PubMed, Academic Source, and Science Direct, Springer Link, Taylor & Francis, Wiley Online Library, Directory of Open Access Journals (DOAJ), google scholar as well as annual reports from Telangana government the search criterion was the descriptor "welfare schemes changing status and development."

## 4. FINDINGS
### About the implemented agriculture and allied schemes from 2015-2021
Telangana state comprises of 33 districts namely Adilabad, Jagityal, Jangoan, Jayashankar Bhupalpally, Jogulamba Gadwal, Kothagudem, Mahabubabad, Mahbubnagar, Malkajgiri, Mancherial, Medak, Nagarkurnool, Nalgonda, Nirmal, Nizamabad, Peddapally, RajannaSiricilla, Rangareddy, Sangareddy, Siddipet, Suryapet, Vikarabad, Wanaparthy, Warangal (R), Warangal (U), Yadadri, Hyderabad, Narayanpet and Mulugu. Each district is subdivided into Revenue Divisions and Mandals. Altogether there are 593 Mandals in the State.

### I. Seed Subsidy Distribution
The Subsidy Seed Plan for the year 2021 is based on the government's category-by-category budget for seed supply, as well as district-by-district, season-by-season, and village-by-village seed sales and requirements. The State's District Agriculture Officer under the Green Manure Seed Program, 1.92 lakh qtl of Green Manure seed will be distributed. During the years 2021-22, there will be a subsidy. There are currently plans in place to ensure a steady supply of high-quality products. Farmers get green manure seed as a subsidy under the Normal State Plan (NSP). Telangana State Seed Development would provide the subsidised seed. (TSSDC).

## II. Seed Farms of the State
In the state of Telangana, there are ten State Seed Production Farms with the primary goal of producing Foundation Seed. fulfil the seed needs of the Seed Village Program, and then provide it. to the growers The government has designated the State Seed Farms as a priority. Breeder seed is used as a source of foundation seed production. provided by the Agricultural University's Research Institutes Crop cultivation fees for crops enrolled in the State Seed Program farms will be paid from the state Seed Farms' Revolving Fund account. It will be kept at the Commissionerate and recouped via the sale revenues from the farm's seed production.

## III. Fertilizers
**Nutrient Based Subsidy Policy (NBS Policy):**
Department of Fertilizers (DoF), Government of India communicated the Nutrient Based Subsidy Policy from 01.04.2010.

**Nutrient Based Subsidy Policy (NBS Policy):**
The Department of Fertilizers, Govt. of India implemented the Nutrient Based Subsidy Policy from 1-4-2010. Under this policy, fixed subsidy is extended on the fertilizer products (except Urea) based on the Nutrient content. The fertilizer companies will decide indicative MRPs based on the cost of the raw materials / Finished Goods (FGs) in the international market, under intimation to the Department of Fertilizers, Govt. of India. The State Government has no role regarding fixation of MRPs of fertilizers.

Subsidy applicable: The primary nutrients of N, P, K and Sulphur (S)are eligible for subsidy. (The per Kg subsidy fixed is N- Rs.18.789/-, PRs.14.888/-, K-Rs.10.116/-,S-Rs.2.374/- for the year 2020-21 was extended for the year 2021-22 also by the Department of Fertilizers, Government of India).

Additional per ton subsidy is given for fertilizers carrying other secondary and micro-nutrients. This is to encourage balanced use of fertilizers. The per MT additional subsidy on Boron is Rs.300/- and for Zinc Rs.500/-.

The Department of Fertilizers (DoF) fixes the subsidy of fertilizers and the companies will fix the MRPs reasonably, which will be monitored by Department of Fertilizers from time to time.

Sale of fertilizers through PoS machines: With the introduction of DBT and roll out of implementation of DBT pan India, the sale of fertilizers is made mandatory through PoS machines only, based on Aaddhar card of the farmers.

Printing on the Bags: The fertilizer companies are required to print the Maximum Retail Prices (MRP) along with the applicable subsidy on the fertilizer bags clearly. Any sale above the printed MRP will be punishable under EC Act.

All the Fertilizer Inspectors will ensure compliance of the above item.
The distribution and movement of fertilizers along with import of finished fertilizers, fertilizer inputs and production by indigenous units will continue to be monitored through the online web based "Integrated Fertilizer Monitoring System (iFMS), (Erstwhile mFMS)".

## IV. FARM MECHANIZATION

Agriculture is undergoing a gradual shift from dependence on human power and animal power to mechanical power because of, Increasing cost for upkeep of animals, Growing scarcity of human labour. Expanding area under the assured Irrigation in view of the completion of the new Irrigation Projects and simultaneously pro farmer support schemes being extended to the farmers, has resulted in increase of the Gross Cropped area to 203 Lakh acres as against the 121.72 Lakh acres during 2014-15.

Keeping in view the strong need for promoting farm mechanization the Government has allocated an amount of Rs.150000 Lakhs for promotion of Agricultural Mechanization during 2021-22.

## V. PLANT PROTECTION

Plant protection needs greater attention to prevent yield loss due to incidence of pest and diseases. This can be achieved through release of new pest and disease resistant varieties development of new pesticides molecules, by adopting Integrated Pest management practices and timely communication of plant protection measures to the farmers through print and electronic media. The pesticide consumption is reduced due to increased awareness created among farmers on Integrated Pest Management practices by conducting Farmers field programs in farmers – fields, introductions of Bt. Hybrid in cotton. Usage of bio-pesticide and timely communication of Integrated Pest Management Practices to the farmers through extension programs, Print and electronic media.

## VI. TRAINING FARMERS

To meet the growing demands of the population for food grains, it is imperative that productivity has to be enhanced as land is non-expandable resource. Hence continuous trainings to farmers is essential for enhancing their knowledge and skills to increase the production with low cost technology. In view of the rapid changes occurring in agriculture sector it is necessary for upgrading skills, knowledge of the farming community. The basic objective of the Agriculture Extension being the transfer of latest agricultural technologies to farmers and thereby increasing their levels of income, capacity building in agriculture assumes an important role.

Area Identified for Trainings:

1) Seed treatment techniques and proportionate mixing up of plant protection chemicals
2) Soil sample collection and analysis of the soil testing cards (N.P.K wise), Selection of good seed, seed germination tests.
3) Identification of pests and diseases of major crops with suitable control measures (based on IPM) and Weed Management
4) Water management in important crops to increase crop productivity.
5) Awareness on entrepreneurial opportunities in agricultural and allied sectors.
6) Awareness on use of straight and complex fertilizers and integrated nutrient management.
7) Correct methods for placement of fertilizers.
8) Application of gypsum in groundnut.
9) Preparation of poison bait for rodent control (both at residence & fields).
10) Creating Awareness on Departmental schemes.

## VII. CROP LOAN WAIVER

1) The Government vide G.O Rt No.148 dt 17.03.2020 had issued the Guidelines for implementation of the Crop Loan Waiver Scheme-2018.
2) This scheme will cover short term production loans and crop loans against gold disbursed to farmers in the Telangana State by scheduled Commercial Banks, Cooperative Credit Institutions (including Urban Cooperative Banks) and Regional Rural Banks collectively called as the "lending institutions".
3) The Amount eligible for waiver will be up to Rs.1.00 lakh (principal together with applicable interest) per family. The farmer family is defined as head of family, spouse and dependent children.
4) All crop loans sanctioned/ renewed on or after 01.04.2014 and outstanding as on 11.12.2018 are eligible under the scheme.
5) Gold Loans availed from Urban and Metropolitan Banks/Bank branches as Crop Loans shall not be eligible for waiver. However, Loans availed from the Urban/Metropolitan branches, which have rural areas also as their service areas are eligible for Loan waiver.
6) The farmers who have outstanding loan up to Rs. 25,000/- only will be waived off in the 1st Phase.
7) In first phase, an amount of Rs.408.38 crores was credited into 2,95,571 farmers Loan Accounts after processing of data furnished by Bankers at NIC by Aaddhar ceding and family grouping.
8) SMS Alert messages are sent to farmers registered mobiles after successfully crediting the Loan Waiver benefit into their Loan Accounts.
9) An amount of Rs.522500.00 lakhs is allocated under the scheme for the financial year 2021-22.

## VIII. NATURAL CALAMITIES

NC Cell deals with Agriculture Crop damage due to natural calamities i.e., Heavy rains/Floods/Unseasonal / Hailstorms/ Drought/ Fire/ cyclones etc. As and when any calamity occurs, the preliminary Agricultural crop damages above33% will be obtained from all the concerned District Agricultural officers and a consolidated report of all the affected districts will be submitted to the Government i.e., Principal Secretary to Govt., A&C department and the Commissioner for Disaster Management (Rev. dept.) for according enumeration permission. The Disaster Management Department is the Nodal Department for according Enumeration permission for assessing the crop damage due to any natural calamity. The crop damage reports submitted by District Agriculture officers through the District Collectors will be consolidated and submitted to the Government for necessary action. The Department will prepare and keep ready the Contingency plans for timely supply of alternate crops seed on subsidy in case of the late onset of Monsoon/ Dry spells if the rains are not received by 15th July, 30th July and 15th August 2021.

## IX. RYTHU BANDHU – AGRICULTURE INVESTMENT SUPPORT SCHEME (AISS)

Key Features

1) Agriculture in Telangana is characterized by stagnation, low productivity and frequent occurrence of droughts and low levels of public and private investments. Therefore, it was felt that investment is the surest way to enhance agricultural productivity and also incomes of the farmers besides breaking the vicious cycle of rural indebtedness.

2) Keeping in view of the above situation, Telangana Government has initiated a new scheme- "Agriculture Investment Support Scheme- Rythu Bandhu" for implementing since 2018-19 for the farmers 'welfare.

3)The broad details of the scheme are as follows:

Relieving the farmers from debt burden and not allowing them tofall in the debt trap again.

For providing investment support to Agriculture and Horticulture crops by way of a grant@ Rs. 4000/- per acre per farmer each season for purchase of inputs like (1) Seeds (2) Fertilizers (3) Pesticides (4) towards Labour and other Investments in the field operations of farmers' choice for the crop season.

The assistance is revised to Rupees. 5000/per acre/season since 2019-20.

The updated and purified land record data base in the form of Land Records Updating Program(LRUP) will form the basis for implementing the Investment Support Scheme (Rythu Bandhu).

Rythu Bandhu assistance is being extended to the pattadars proportionate to the extents indicated against the names of the pattadars in the digitally signed data obtained from the Chief Commissioner of Land Administration.

The Rythu Bandhu assistance is also being extended to ROFR Pattadars based on the data received from the Commissioner Tribal Welfare, TS, Hyderabad.

The amounts are directly transferred through e-kuber or IFMIS platform into the bank account of the pattadars proportionate to them extents as per the data obtained from CCLA & Commissioner Tribal Welfare.

An amount of Rs.1480000 Lakhs has been allocated for the year 2021-22 pertaining to Agriculture Investment Support Scheme (Rythu Bandhu) which is sufficient to assist for an extent of 148.00 Lakh acres/season @Rs.5000/acre/season during 2021-22, as compared to147.35 Lakh acres during 2020-21 Yasangi.

## X. RYTHU BIMA - FARMERS GROUP LIFE INSURANCE SCHEME

The Government of Telangana introduced Group life insurance scheme for all the farmers in the State of Telangana from the year 2018-19. All the holders of Pattadar Pass Books issued after the land records updating programme are eligible for enrolment in this scheme. The farmers in the age group of 18–59 are eligible under this Scheme and the sum assured of Rs. 5.00 lakhs is being paid on death, due to any cause, to the nominee of the enrolled farmer, declared by him/her at the time of enrolment. Government has paid an amount of 2917.39 Crores Rupees (2472.22 Crores Premium + 445.17 Crores GST) to LIC during the three years 'scheme period. As on 7.5.2021 during the 2 years and 9 months of scheme period

49495 farmer families are benefitted under the scheme. An insurance Claim amount of 2474.75 Crores @Rs.5.00 Lakh/deceased farmer's family/nominee has been paid by the LIC.

## XI. RYTHU VEDIKA

1) The Government of Telangana has taken an initiative to construct 2601 Rythu Vedika Work Sheds in every Agriculture Extension Officer Cluster consisting of 1-3 villages with construction cost of Rs. 22,00,000/- for each Rythu Vedika with a share of Rs. 12,00,000/-from the Department of Agriculture and Rs. 10,00,000/- from MNREGS funds vide G.O Rt. No: 264, Dt: 15-06-2020 of A&C (Agri.II) Department.

2) Rythu Vedikas are the first of its kind in India where a platform is being created for the farmers to motivate and stabilize the farmers in attaining the higher returns and making the farmers Rythe Raju.

3) Rythu Vedikas will help in mobilising the farmers to organise themselves in to groups for attaining their ultimate objective of getting the remunerative prices, better marketing facilities, higher productivity and ultimately making the Agriculture profitable.

4)It will facilitate the Government to know ground level basic problems and difficulties faced by the farmers and to formulate new strategies and upgrading the existing system to make the Agriculture more

profitable and sustainable.

Rythu Vedika will serve as a platform:

5) To create awareness among the farmers to know about all the farmer's welfare schemes taken up by the Government, Subsidies available etc.

6) Can be used as skill imparting centres by the Agriculture and allied departments.

7) In stabilizing the income of farmers by providing the information on the institution finance and to ensure their continuance in farming.

8) To encourage farmers to adopt innovative and modern agriculture practices.

9) To help the farmers to interact and share the knowledge.

10) It can be used as a venue to conduct and organise trainings and awareness campaigns on the latest Agriculture know how by the Agriculture and allied departments.

## 5. CONCLUSION

**Growth of Per Capita Income**

In the 2 years prior to state formation, Telangana had an average growth rate of PCI (current prices) of 10.9%, which was 0.7% lower than the national PCI growth rate. For each year since state formation, Telangana's growth rate of Per Capita Income has exceeded that at the national level. On an average, Telangana's Per Capita Income has grown at a 4.6% higher rate than India's every year in the period post 2014-15. In fact, even during the pandemic year of 2020-21, when India's growth rate of PCI dropped to a negative 4%, Telangana still achieved a positive rate of growth of Per Capita Income, at 1.8%. With its consistently increasing Per Capita Income, Telangana improved its all-India ranking in terms of PCI with each passing year. In the year of state formation, Telangana surpassed Himachal Pradesh to move

from 11th to 10th rank. Further, it surpassed Gujarat in 2015-16, Tamil Nadu in 2016-17, Maharashtra in2017-18, and Karnataka, Kerala, & Utharakhand in 2018-19. In 2020-21, Telangana ranked 3rd in terms of PCI out of the 18 states in the country for which MoSPI released data. In terms of the average growth rate of Per Capita Income post 2014-15, Telangana outdid all Southern states to become the top-ranking state.

**Initiatives of the Government**

All these accomplishments were made possible because of the policy initiatives taken and concerted efforts put in by the state Government towards the improvement of all aspects of these sectors. The Government initiatives the Rythu Bandhu scheme to provide investment support to farmers, flagship initiatives such as the Kaleshwaram Project and Mission Kakatiya to improve irrigation infrastructure, and provides 24x7 free power and seed subsidies to agricultural consumers, and free seedlings to fish farmers. Rythu Bima, the farmer's group life insurance scheme, was initiated to provide an essential lifeline to agricultural households struck by tragedy. Credit disbursal and market access to farmers has been improved as well. Recognizing the importance of livestock for contributing to rural incomes, the Government encouraged livestock production on through programmes such as the Sheep Distribution on and incentives on milk sold to milk dairies at Rs.4 per litre. (Directorate of economics and statitics,2022)

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# A STUDY ON IMPACT OF SOCIAL MEDIA MARKETING ON CONSUMER BUYING BEHAVIOR

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## ABSTRACT

*Social Media Marketing is very important and it is among the most successful tool and technique in the field of every type of advertising. The social media have changed the power structure at the place of the where good sold and purchased online. It describes their attitude and potential role playing as part of company marketing planning and identifies different ways of managing them as marketing tools and technique. This study is based on descriptive research design and both primary and secondary data have been collected. 160 responses were collected in this study. The sampling method used in the study is convenience non- probability sampling method. The hypothesis is education is not related with the social media marketing data analyses have been done through frequency distribution, test of normality, chi – square, Kruskal- Wallis and Mann- Whitney.*

**KEY WORD:** *social media marketing, planning, tool and techniques.*

## INTRODUCTION

Social media marketing is the use of social media & social networks and website to promote company's product & services. A business that is concerned about what people are saying about its brand would monitor social media conversations and response to relevant mentions (social media listening and engagement). Another business that wants to understand how it's performing on social media would analyses its reach, engagement, and sales with an analytics tool. current and potential customers, current and potential employees, journalists, bloggers, and the general public. On a strategic level, social media marketing includes the management of a marketing campaign, governance, setting the scope and the establishment of a firm's desired social media "culture" and "tone". Gives you the chance to tell your story to all your followers and inspire them through your success or past failures.

## LITERATURE REVIEW

**(paul, 2016)**The use of social media is growing rapidly. For marketing professionals, social media is a new outlet that can potentially be used to help increase the interest in a product or service. Our analysis provides preliminary statistical evidence to help evaluate the impact of social-media usage on customer purchase. **(haji, 2014)**Results show that social media facilitate the social interaction of consumers, leading to increased trust and intention to buy. The study of social media can also identify the advantages to be gained by business. A multidisciplinary model, building on the technology acceptance model and relevant literature on trust and social media, has been devised. The end of the paper, the author discusses the implications, limitations and recommended future research directions. **(Levin, 2005)** Online Insiders are very active users on internet and highly influential online

shoppers in using different social media to buy and sell. Usually, consumers' choices are influenced heavily by online brands and consumers can influence each other. Consumers are increasingly turning to social media in order to get more information on which to base their decisions. **(Grewal, 2019)** Posting about products on social media can reduce a consumer's subsequent purchase intentions for the same and similar products, as this action allows consumers to virtually signal their identity. The authors suggest theoretically and managerially relevant moderators that attenuate this negative effect on intent to purchase. These findings have important implications for how firms can conduct social media marketing to minimize negative purchase outcomes. **(Gupta, 2016)**The rapid growth of social media and social networking sites, especially in developing countries like India is providing marketers a new avenue to contact customers. This research paper analyses the behavior of the people how their purchase decision is affected by social media. As social media generates both positive and negative comments so again how it affects the decision making.

## OBJECTIVE

- To study the impact of social media marketing on consumer buying behavior.
- To find out which are the best social media advertisement effect on consumer buying behaviors.

## RESEARCH METHODOLOGY

The research is an exploratory followed by descriptive one because the entire project is based on questionnaire and analysis which is of exploratory nature followed by the detailed description and analysis show the project is of descriptive design also. In this research primary data for the present study. Primary data were generated through

questionnaire for this study. A well-structured questionnaire was prepared and distributed to collect information. The study has been conducted in the Surat district where the population for the research was general people. For this study, the sample size taken for the survey is of 160 people from Surat district. The sampling technique used in this study is non-probability convenience sampling. In such techniques research seeks his or her own convenience to reach the ultimate target group.

## TOOLS AND TECHNIQUES
Analytical tools: Chi-square, Frequency, Man-Whitney, Kruskal-wallis

## ANALYSIS

|  |  | Frequency | Percentage |
|---|---|---|---|
| **Gender** | Male | 95 | 59.4 |
|  | Female | 65 | 40.6 |
| **Age** | 16 to 20 | 37 | 23.1 |
|  | 21 to 25 | 67 | 41.9 |
|  | 26 to 30 | 56 | 35.0 |
| **Qualification** | Student | 64 | 40.0 |
|  | Working | 33 | 20.6 |
|  | Self-employed | 44 | 27.5 |
|  | Other | 19 | 11.9 |

The study on impact of social media marketing found that 59.4% people are male and 40.6% people are female respondents. Majority of the people age group has between 21-25 years which considered highest 41.9% of sample population. Majority of the people are students which constituted highest 40% of sample population.

**Table: 2**

| Particular | Frequency | Percent |
|---|---|---|
| **Do you use social media** | | |
| Yes | 154 | 96.3 |
| No | 6 | 3.8 |
| **How active you are on social media on a daily basis** | | |
| More than 3-5 hours | 50 | 31.3 |
| 1-3 hours | 104 | 65.0 |
| 0 hours | 6 | 3.8 |
| **Social media advertisement influences your buying decisions** | | |
| Strongly Disagree | 25 | 15.6 |
| Disagree | 20 | 12.5 |
| Neutral | 38 | 23.8 |
| Agree | 53 | 33.1 |
| Strongly agree | 24 | 15.0 |
| **Have you purchased anything after viewing an advertisement on social media** | | |
| Yes | 146 | 91.3 |
| No | 14 | 8.8 |
| **Does reviews and rating of a product/service is one of the key elements in purchasing decision for you** | | |
| Yes | 148 | 92.5 |
| No | 12 | 7.5 |

**Table: 3**

Table shows relationship between gender and types of advertisement.

| DemographicFactor | Image Ads | | | | | Chi – Square | | |
|---|---|---|---|---|---|---|---|---|
|  | Strongly Not Affect | Not Affect | Neutral | Affect | Strongly Affect | $\chi^2$ | Df | P-Value |
| Male | 4 | 2 | 9 | 34 | 46 | 3.407 | 4 | 0.492 |
| Female | 2 | 3 | 11 | 18 | 31 |  |  |  |

| DemographicFactor | Video Ads | | | | | Chi – Square | | |
|---|---|---|---|---|---|---|---|---|
| | Strongly Not Affect | Not Affect | Neutral | Affect | Strongly Affect | χ2 | Df | P-Value |
| | | | | | | | | |
| Male | 3 | 2 | 10 | 36 | 44 | 5.245 | 4 | 0.263 |
| Female | 0 | 2 | 8 | 33 | 22 | | | |

| DemographicFactor | GIF Ads | | | | | Chi – Square | | |
|---|---|---|---|---|---|---|---|---|
| | StronglyNot Affect | Not Affect | Neutral | Affect | Strongly Affect | χ2 | Df | P-Value |
| Male | 9 | 13 | 18 | 22 | 33 | 7.225 | 4 | 0.124 |
| Female | 2 | 8 | 20 | 20 | 15 | | | |

| DemographicFactor | Text Ads | | | | | Chi – Square | | |
|---|---|---|---|---|---|---|---|---|
| | StronglyNot Affect | Not Affect | Neutral | Affect | Strongly Affect | χ2 | Df | P-Value |
| Male | 6 | 12 | 22 | 16 | 39 | 2.646 | 4 | 0.619 |
| Female | 3 | 8 | 16 | 17 | 21 | | | |

**H0:** The no significant relationship between Gender and Types of advertisement.
**H1:** The significant relationship between Gender and Types of advertisement.

**Interpretation**
From the above table indicate the relationship between responding view regarding purpose for Impact of social media marketing on consumer buying behavior and demographic factors like gender. Since P-value of demographic variable is greater than0.05 Thus, null hypothesis is accepted. So, it can be interpreted that there is no relationship between various variable and customer reference regarding purpose of Impact of social media marketing on consumer buying behavior. and demographic variable is less than 0.05 thus, null hypothesis is rejected. So, it can be said that there is a relationship between demographic variable and customer reference regarding purpose of Impact of social media marketing on consumer buying behavior.

| From the following advertisement which advertainment mostly affected toyour buying decision. | | | | | | |
|---|---|---|---|---|---|---|
| | Strongly Affected | Affected | Neutral | Not Affected | Stronglynot Affected | Total |
| Large pop-up ads (cover entire screen) | 38.8 | 31.9 | 16.9 | 8.8 | 3.8 | 100.0 |
| Small pop-up ads (covers a small part of the screen e.g., like on YouTube videos) | 40.0 | 31.9 | 18.8 | 5.0 | 4.4 | 100.0 |
| Adverts that play before a video starts (e.g., like on YouTube) | 31.3 | 33.1 | 21.3 | 10.0 | 4.4 | 100.0 |
| Ads that appear in news-feeds (e.g., like on Facebook) | 31.9 | 31.9 | 21.3 | 11.9 | 3.1 | 100.0 |
| Ads that appear in Stories (e.g., like on Facebook) | 32.5 | 35.0 | 20.0 | 10.0 | 2.5 | 100.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Ads that appear along the side of websites | 32.5 | 32.5 | 23.8 | 6.9 | 4.4 | 100.0 |
| Simple text ads | 26.9 | 33.1 | 30.6 | 5.0 | 4.4 | 100.0 |
| Video Ads (e.g., a trailer for a game or movie) | 41.3 | 30.6 | 20.6 | 5.6 | 1.9 | 100.0 |
| Image Ads (e.g., a trailer for a game or movie) | 48.8 | 28.7 | 13.8 | 5.0 | 3.8 | 100.0 |

H0- there is no significance between Gender, Age, Qualification and advertisement which affected to buying decision.

H1- there is significance between Gender, Age, Qualification and advertisement whichaffected to buying decision.

**Interpretation**

From the above table, it can be interpreted that, near to 40% respondent set that large pop-up ads (cover entire screen) as Strongly Affected. near to 40% respondent set that small pop-up ads (covers a small part of the screen e.g., like on YouTube videos) as Strongly Affected. 40% respondent set that Adverts that play before a video starts (e.g., like on YouTube) as Affected. 35% respondent set that Ads that appear in news-feeds (e.g., like on Facebook) as Strongly Affected. 35% respondent set that Ads that appear in Stories (e.g., like on Facebook) as Affected. 35% respondent set that Ads that appear along the side of websites as Strongly Affected. 35% respondent set thatSimple text ads as Affected. 45% respondent set that Video Ads (e.g., a trailer for a game or movie) as Strongly Affected. 50% respondent set thatImage Ads (e.g., a trailer for a game or movie) as Strongly Affected.

**CONCLUSION**

From the research it can concluded that buying behaviour and impact of social media marketing for consumers buying decision. It is understood that the highest preference given to Instagram compare with image ads, video, text ads and gifts. Through this study is also prove that there is no single rule to prefacing has been given to advertise benefits while purchasing as per goal and objectives of buying decision. It is conducted through this research work that consumers are try to buy a good product. The best option for advertising is social media platform or app used on highest respondents are using Instagram. Consumer believes that the product which are shows on social media are best. Consumers are well aware about social media marketing. It can be suggested to the consumers that social media marketing products are best in quality and quantity.

**FINDINGS**

- Out of 160 respondents, 59.4 % of the respondents are male instead of female, and 40.6% of the respondents are female.
- Majority of the respondents are age group has between 21 to 25 years which considered highest 41.9 % of sample population.
- 64 no. of respondents were represented done with schooling which constituted highest 40.0% of sample population.
- From respondent it can see that 96.3% of the people are active on social media, and 3.8% people are not active on social media.
- Social media platform or app used on highest responses are using Instagram 22.5 % frequently.
- 104 Respondent are more than 3 to 5 hours mostly active on social media on daily basis.
- 33.1% responded are agree with social media advertisement influence buying decisions.
- 91.3% of people purchased anything after viewing an advertisement in social media, and 8.8% of people purchased anything after viewing an advertisement in social media.
- 29.9% respondents who are using Instagram in comparison of other application, there are 48.1% respondents influence by the image ads, video ads influenced 43.1% consumers, 30.0% are affected by the GIF ads and 37.5% are influenced by text ads.
- 38.8%, 40.0%, 33.1%, 31.9%, 35.0%, 32.5%, 31.1%, 48.8% respondents who are strongly affect by the large pop-up ads, small pop-up ads, video ads, appear in news feeds ads, appear in stories, along with the websites, simple text etc.
- Here, the data was checked by the normality test and the finding of the normality the results was that the data is not normal.
- In the hypothesis are the relationship between demographic variables and types of advertisement and the relationship between demographic variables and factor affecting to buying decision.
- The result of the first hypothesis, where null hypothesis was accepted with the demographic variables expect age and qualification. They two variables are not related with the hypothesis.
- The result of second hypothesis, where null hypothesis was accepted with all demographic variables who relate with the factors are affecting buying decision.

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# THE FORMATION OF READERS' KNOWLEDGE ABOUT FIXED EXPRESSIONS ON THE BASIS OF IDIOMS IN SHORT STORIES

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## ABSTRACT

*To organize international research in the field of education quality assessment, to establish international contacts, to reform the national education system in order to support the creative abilities of students, to provide them with any text they read in their native language. The issues of understanding the lexical and phraseological units encountered in the text in order to be able to analyze them are covered in the article during various assignments.*

**KEY WORDS:** *PIRLS, idiom, fixed link, figurative meaning, phrase.*

Today, in our country, on the basis of the "Action Strategy" for the five priority areas of development of the Republic of Uzbekistan for 2017-2021, huge changes are taking place in all areas and sectors. In this regard, it is necessary to deepen the values and traditions in the life of society, in particular, to raise the spiritual and intellectual potential, consciousness and worldview of our people, especially the younger generation, to cultivate a harmoniously developed person living with love and devotion to the motherland and people and the role of the mother tongue is of paramount importance.

In this regard, the first President of our country in the Decree No. PD-4797 of May 13, 2016 "On the organization of the Tashkent State University of Uzbek Language and Literature named after Alisher Navoi" commented: In order to ensure deeper integration into the world community, a comprehensive system of teaching foreign languages, in particular English, has been created and widely implemented. Among such works, important scientific research is carried out on topical issues related to the role of the Uzbek language and literature in the spiritual development of our people, society, the development of modern science, many dictionaries and encyclopedias, pamphlets and textbooks are being published. Great attention is paid to the training of specialists in the Uzbek language and literature, research and teaching staff, retraining and advanced training of staff working in this field.

As a practical proof of the implementation of the above instructions, in order to raise the morale of young people in our country and the meaningful organization of their leisure time, President Sh. Mirziyoyev has developed 5 important initiatives, and paragraph 4 of this program is based on this goal, the main purpose of which is to raise the morale of young people, to organize systematic work to promote reading among them.

In this regard, the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated December 8, 2018 No 997 "On measures to organize international research in the field of assessing the quality of education in the public education system" and it is permissible to mention the priorities set for the task. One of them is the State Inspectorate for Education Quality Control under the Cabinet of Ministers of the Republic of Uzbekistan in order to organize international research in the field of quality assessment of education, to establish international contacts, to support the creative abilities of students. The National Center for International Quality Assessment was established. During its existence, an agreement was reached between the Organization for International Cooperation and Development to participate in the International Student Assessment Program (Agreement for participation for international student assessment PISA 2021).

PIRLS (Progress in International Reading Literacy Study) is an international assessment system that assesses the quality of reading and comprehension of 4th grade students in different countries. This process is very responsible and should be reflected in the very carefully designed test questions to determine how well the student can read and understand the text.

As a result of such reforms in our country, huge economic growth rates are being achieved, which is driving the demand for qualified personnel and advanced specialists.

Meeting this demand, in turn, creates the need to increase the interest of young people in reading and lessons, and to increase the attention of students to comprehensive education through modern social innovations.

One of the main problems encountered by primary school students in the process of reading and comprehending different texts is that they understand the meaning of the phrases they encounter in short stories - a complete understanding of their content and their semantic meaning. they have no knowledge.

Prof. Sh. In his new textbook "Modern Literary Uzbek" Rakhmatulleyev states that phrases are phraseological units belonging to the genus Phrasema, and calls the field of study of phrasal verbs phrasing and comments on the object of his research: "Phrasema belongs to the lexical stage of language construction. the second is a linguistic unit, composed of a mutual semantic-syntactic combination of more than one lexeme, hence the segment is called a unit; In terms of syntactic structure, the compound is equal to the form of speech and usually performs a nominative and signifiable function, but differs from a lexeme not only in terms of expression, but also in terms of content " [Rahmatullayev Sh., 2010: 162].

"Apart from phrases, a similar compound is used in speech. Such a compound, which is formed in speech itself, is called a free compound, and in contrast to such a compound, a phrase is called a fixed compound. Fixed links are a broad concept, divided into literal and figurative fixed links; Fixed connections are called phrases. Strictly speaking, a stable connection is a set of terms (such as crop rotation), units that are formed on the basis of a repetitive pattern (strength is added to strength, beauty is added to beauty, as from day to day)

proves the opinion of the scientist once again [Rahmatullayev Sh., 2006: 418].

Phrases and figurative expressions are an important part of a student's vocabulary. Phrases are phrases that are synonymous in meaning and usage. It is a tool that enriches, beautifies and enhances our speech. In the methodology of teaching the Uzbek language, it is advisable to use practical work, such as replacing the given words with phrases (or vice versa), interpreting their meaning, comparing the increase or decrease of levels of meaning.

1. Tadbirkor o'z ishini biladi. (Uzbek)
2. A businessman knows his work
3. A businessman hits the bull's eye
1. Onamning jahli chiqdi.
2. My mother was angry.
3. My mother feds up to the back teeth
1. U ishni yaxshi bajardi.
2. He did his job well
3. He did his job as easy as pie
1. Masalani yechishda Shahlo juda qiynaldi
2. Shakhlo had a hard time solving the problem
3. Shakhlo at her wits' end solving the problem.

In addition, teaching students to use exercises in their native language, such as composing a dictionary of phrases, choosing words that have opposite meanings, alternatives, or phrases, is also important in increasing and developing vocabulary.

Below are examples of exercises that can be done to work on phrases from short stories. Comment on the meaning of the phrases, replacing them first with synonyms and then with simple words.

1. *Gapi bir joydan chiqdi, og'iz-burun o'pishdi* — make an agreement

2. *Dimog'i chog' bo'ldi, vaqti chog', chehrasi ochildi, og'zi qulog'iga yetdi, boshi osmonga yetdi…* — was pleased

3. *Yeng shimarib, ishga tushdi, boshi bilan sho'ng'idi, g'ayrat qildi* — started earnestly

4. *Oq-qorani tanidi, do'st-dushmanni ajratdi* — gained life experience.

5. *Terisiga sig'madi, og'zining tanobi qochdi, boshi ko'kka yetdi* — happy

6. *Tili qichidi* — he/she wanted to talk.

Replace phrases with opposite alternatives.

— *Dimog'i chog'* — A heavy heart.

— *yeng shimarib* — busy bee

— *Terisiga sig'madi* — feeling blue.

— *Tili qichidi* - keeping under wraps

At the same time, group listening, correcting, analyzing, and completing exercises collected by students contribute to the formation of language sensitivity, word choice skills, and a culture of text creation.

**Tasks for working on context**

Task 1. Find out what the semantic relationship is between the parts of speech.

Task 2. Replace the given word with a phrase. Make sentences with them.

*Calm, scared, quick, clean, talked a lot, talked, rejoiced.*

*Example:* gentle – *gentle as a lamb* – being afraid- *heart missed a beat.*

Phrases can be homonym and synonym in Uzbek stories as: boshiga ko'tarmoq (respect), boshiga ko'tarmoq (to make noise) - phrases: homonym

— tegirmonga tushsa butun chiqadi — suvdan quruq chiqadi ( agile) — synonym

It is good for students to increase their vocabulary and develop their speaking skills by holding a glossary of glossaries that explain the meaning of formal, semantic, and contradictory phrases that they encounter while reading a work of art in order to get results.

In the study of lexicology, the description of the inner, lexical meaning of the word in the consolidation, repetition and generalization of knowledge, the use of lexical analysis to acquire the skills of correct and appropriate speech in this process gives good results.

It should be noted that the sense of fluent, clear, impressive style in the process of learning all areas of language, in language units (in syntactic devices such as sound, word, suffix, phrase, sentence), so It is formed only on the basis of comparing connections based on the relationship of meaning and form. The inclusion of this feature in the minds of students should be the focus of all native language teachers. Therefore, the main purpose of Uzbek language lessons is to increase the student's vocabulary, to form the skills of its correct and

appropriate use in speech, to teach language sections in connection with the methodology.

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# EXAMINING THE HYBRID CLOUD IN CLOUD COMPUTING

## Manavi N G, Nisha Mallappa Jeedi, Shailaja L K

## ABSTRACT

*Cloud computing is the recently developing innovation. Every association needs to interface with the cloud computing condition. A survey on distinctive hybrid cloud organization models and cloud benefit models accessible in the field of cloud computing is discussed. An industry pattern has been noted where the utilization of hybrid cloud design can be utilized which supports, the upcoming industry challenges by giving the effective method for putting away their information in the cloud condition by utilizing the mix of both public and private cloud, so that it gives the office to store delicate information on private cloud and less basic information on to public cloud where large storing can be made. Hybrid cloud isparticularly profitable for dynamic or extremely adjustable workloads. This paper portrays the overview, service model, traits, supplier storage and issues of cloud computing.*

**KEYWORDS:** *Cloud Computing, Private Cloud, Public Cloud, Hybrid Cloud, SaaS, PaaS, IaaS, Cloud Security*

## 1. INTRODUCTION

In Today's world, innovation is developing at a quick pace and offers the client with various services which are paperless and accessible online, for example, e-charging, email, e- message, e-transaction and so forth. All these accessible administrations require an online information exchange. Atta urRehman Khan et. has discussed on this information that might be any private or delicate data like business secret information, MasterCard detail, managing an account exchange and so on, which require more assurance as disclosure of these secret information of any unapproved client may be unsafe. The greatest advancement in the field of computing is capacity and access of information in the cloud, be that as it may, there are numerous things that need to take think about as well. Many creators disclose that cloud computing has a few advantages when contrasted with their drawbacks. Yet, this found that as

association of information builds, security of information becomes into a huge issue in spite of the fact that we have to discover a way all you require with a specific administration. Cloud computing has been rising up out of the latest advances in innovation, for example, hardware Virtualization and distributed computing. The refinement with cloud computing is that the processing methodology may continue running on one or many related PCs meanwhile, utilizing the possibility of virtualization. The advantages and disadvantages of cloud computing are described in Fig.1.The cloud model is made out of six of cloud computing fundamental qualities, three service models and four deployment models. Cloud gives different service models as, IaaS, PaaS, and SaaS. It can be sent at various deployment models, i.e., at public, private, hybrid and community cloud.
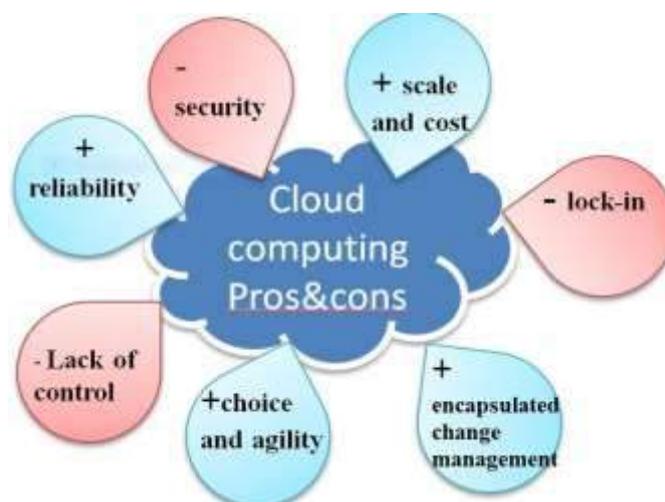


**Fig.1. Cloud Computing pros & cons**

## 2. SERVICE OF CLOUD

### 2.1 Software-as-a-Service (SaaS)

Software-as-a-Service (SaaS) displays permits for utilizing software applications as a support of end-clients. Priyadarshi S have discussed the SaaS as the most well-known type of cloud computing, which is additionally the least demanding to comprehend and utilize. These cloud application services, fundamentally utilize the utilization of the Web to deliver applications. These services are given to the concerned customer by an outside vendor Haolong Fan Since the greater part of these applications can be derived specifically from a Web program, customers' no need to install or download anything onto their very own PCs or servers. For this situation, the cloud provider manages everything viz., applications, information, runtime, servers, storage, virtualization and systems administration. Utilizing SaaS makes it simple for enterprise to keep up their frameworks, as a large portion of the information is overseen by the outside vendor.

### 2.2 Platform-as-a-Service (PaaS)

Patil Bhagyashri D, S Priyadarshi has stated that a Platform-as-a-Service (PaaS) gives the runtime condition to applications, development and arrangement tools, and so forth. This service model is the hardest to oversee from among the three. As the name proposes, the resource, here are offered through a platform. Developers then utilize this platform to make and customize applications based on the framework made accessible to them. Provided that the enterprise has an efficient development group, PaaS makes it simpler for development, testing and organization of applications on a basic server, storage, runtime, middleware and networking, however, it is up to the customer to manage applications and information.

### 2.3 Infrastructure-as–a-Service (IaaS)

The infrastructure-as-a-Service (IaaS) is the most essential level of service. The most basic level of service. The fundamental distinction amongst SaaS and PaaS, subsequently, lies in the certainty that the responsibility of dealing with the framework is shared by the client or customer and the provider also S Priyadarshi; Younis A Younis. For this situation, providers still oversee IaaS as it gives access to key resource, for example, physical machines, virtual machines, virtual capacity, and so on. This service essentially provides computing infrastructure, for example, virtualization, storage and networking. Customers can buy completely outsourced service, which are then charged as per the resource they go through. The provider in this case charges a rent to install the clients' virtual server on their own IT infrastructure. While the merchant is in charge of overseeing virtualization, servers, storage and networking, the customer needs to deal with information, applications, runtime and middleware. Customers can introduce any platform as required, in light of the kind of framework they select. Likewise, they will need to oversee updating of more up-to date forms as the necessity for accessibility arises.

## 3. DIFFERENT DEPLOYMENT MODELS

### 3.1 Public Cloud

It is the genuine portrayal of cloud hosting where the client and provider have a strong Service Level Agreement (SLA) to maintain the trust between them. Saurabh Singh has proposed a cloud framework, which provides open access to the public and the organization. Businesses, scholastics, or governmental associations possess a public cloud environment. A public cloud is run and managed by the Cloud Service Provider (CSP) and the physical foundation may introduced at off-site location of the client. Hence numerous elements may claim and work in a public cloud. This makes many issues, as it is unaware of where the resources are found or who claims them, expanding the trouble of protecting them from attack. Sahandi Reza has stated a public cloud computing as when a service provider makes a service or an application available to be used to people around the world over the world wide web and providing service to multiple organizations at a time by making use of the pay per usage system for payment of the service provided.

### 3.2 Private Cloud

Cloud computing works and manages inside the data center of an association are known as a private cloud. Numerous buyers of cloud infrastructure (e.g., business units) are including arrangement for elite use by a single association. Cearley W has stated that a private cloud is like a general public cloud, however, they are scalable and self-servicing through an appropriate structure and it delivers the service of a single association. In a private cloud, it is significantly less demanding to recognize the client and provider relationship on the grounds that the foundation possessed and worked with a similar association. In this way, security dangers are less demanding to recognize.

### 3.3 Community Cloud

Chirag Modi has discussed about community cloud. A cloud that is deployed and shared among a group of people for sharing common interest, such as mission, security policy, application and services is known as community cloud. It is owned, and managed by community organizations, an outsider, or some mix of them driven by one or many, and that might be available on or off campus Saurabh Singh. In simple words, a community cloud is being shared and controlled by various organizations. It additionally reduces the security chance in the public cloud and reduces the cost of private clouds.

### 3.4 Virtual Private Cloud

Rahul Khurana1 has stated a virtual private cloud as a semi-private cloud, which uses fewer resources, and it consists of Virtual Private Network (VPN). It is a demand configurable pool of shared resources allocated within the cloud environment.

## 4. OVERVIEW OF HYBRID CLOUD

Shandi Reza has proposed a hybrid cloud as a blend of both public cloud and private cloud, as it can provide service to various organizations with a legitimate structure of the model, versatility and appropriate coordination between both platforms, for example, public cloud and private clouds. When people talk in terms of cloud computing, they are generally referring to public clouds, such as Rackspace, which is shared by several thousands of customers from all over the world. Rahul Khurana1 has discussed about
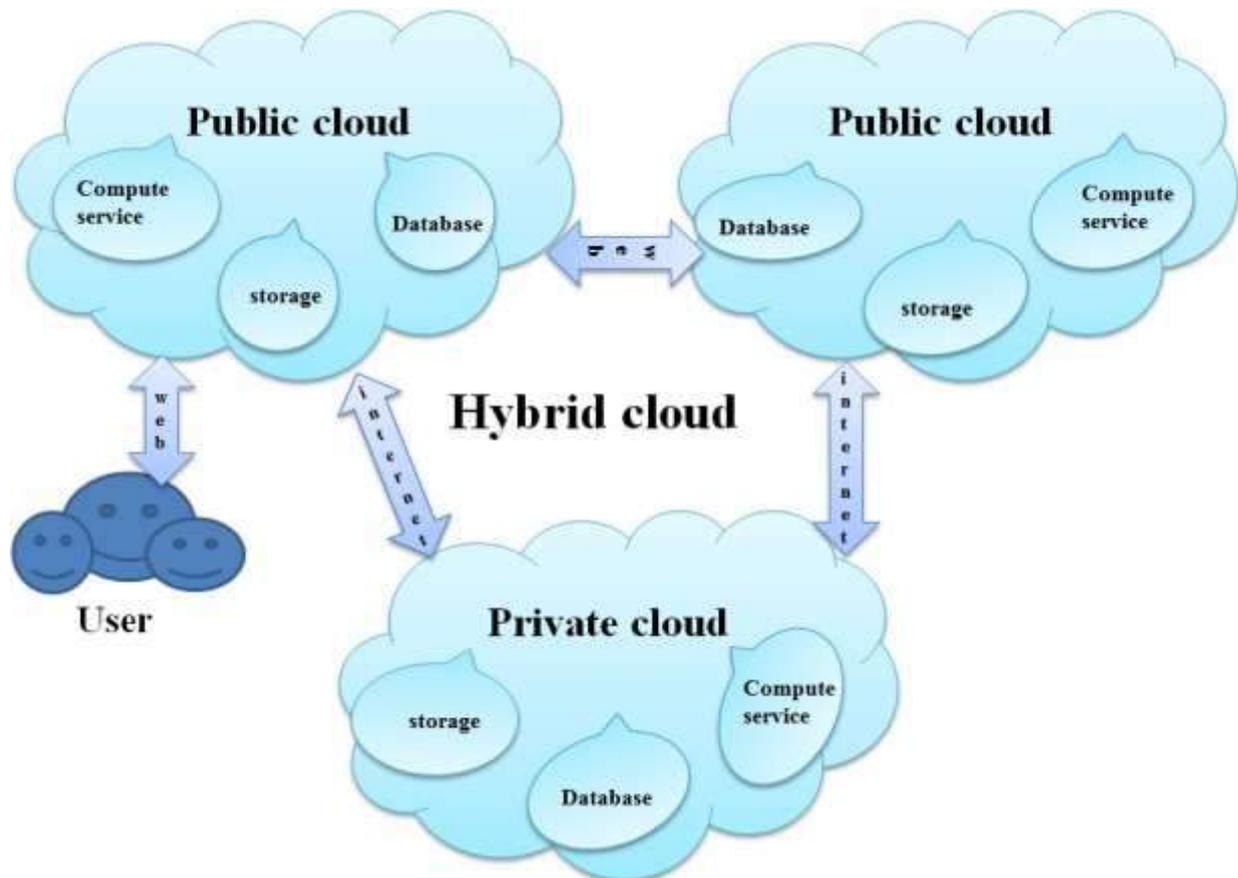
**Fig.2. Hybrid cloud Services Model**

a cloud provider that offers storage space, data transfer capacity and computing energy to organizations at substantially less expensive rates than those of actual, physical servers. While this saves the organization a tremendous chunk of investment, it could likewise bring about concerns over accessibility, availability and security. Most organizations would reconsider before porting delicate information onto a public cloud. Fig.2. shows the Hybrid cloud service model.

This kind of speculation got a few organizations working on setting up their own cloud-like computing procedures, which in turn, made what is known as the private cloud. While these mists work in an indistinguishable route from open mists, they are implied only for the organization and can be firewalled far from whatever is left of the Internet. This gives the private cloud greater security and better execution too. With the hybrid cloud demonstrate, IT leaders have an extra administration over each, the private and public components, then utilizing a pre-packed public cloud platform, especially for big business content administration Rahul Khurana1. These pre- packed programming Software -as-a-service (SaaS) makes frequent redesigns and change without past notice or content and, if ineffectively composed, will break similarity with previous content. This hybrid approach will allow an organization to exploit the measurability and cost- effectiveness of cloud storage while not uncovering mission- basic data. The test is to incorporate and represent such a system, in a perfect world, without fixing the present on- premise infrastructure or the applications. Hybrid cloud provides regular data and software

system management devices. Different providers attempt to solve this in a few routes, together with getting to everything through a web computing system Interface, coordination is essential for storage within the cloud or by means of a cloud gateway of some sort, for instance.

## 5. ADVANTAGE OF HYBRID CLOUD
(1) It is more versatile in wording that it contains both private and public cloud.
(2) Rahul Khurana1; Saurabh Singh has outlined a hybrid cloud in a way as to rapidly scale the organization's needs. Since a few

standardized procedures run together to accomplish synchronization between different type of cloud, it makes the perfect answer for load heavy projects, which can't be effectively handled by an organization's in-house server. Utilizing the hybrid cloud would likewise save the organization the additional cost of buying elite server hardware which would some way or another is vital.

(3) Hybrid cloud can be worked whenever and wherever from any part of the world. This gives them a worldwide reach for organizations that need to spread their range past geographic limits. It offers both secure resource and versatile public resource.

It gives dependably a most level of security as it has assigned private cloud. It can diminish and deal with the cost based on the requirement.

(4) Hybrid cloud could turn out to be exceptionally costly for an organization to put resources into hosting suppliers or outsourcing the same. This innovation, then again, is accessible for exceptionally sensible rates and consequently, works out considerably less expensive for the foundation.

## 6. TRAITS OF HYBRID CLOUD

(1) *Security:* Security is regularly a common threat. Guaranteed safety efforts are set up when data is exchanged amongst storage and on-premises areas, furthermore as access- control measures once the data is stored Saurabh Singh. Documents should be secure, whereas in storage as well.

(2) *Reliability:* Data integrity is also a touch of the hybrid cloud condition. The data received from person A to person B must keep up its integrity. Cloud provider would index the data. Its honesty also should stay in place once it's away. For example, if indexes are corrupted it prompts lose the data.

(3) *Business coherence:* Planned and even unplanned downtime will bring about issues for the business. The Capacity provider must embody snapshots, reflecting, and reinforcements, moreover as quick recuperation so if the supplier's framework goes down, it's secured.

(4) *Reporting and charge-back:* Rahul Khurana1 has stated that a cloud storage might be a compensation pay-you-pay model, bill is toward the end of the charge cycle. This can exemplify any value- based charges the provider would conceivably charge what's more as capacity costs.

(5) *Management:* In a hybrid cloud environment, if the client selects to store some of client's data on-premises and a few inside the cloud, they should be prepared to deal with the conditions together.

## 7. SUPPLIER STORAGE FOR HYBRID CLOUD

A few of the fundamental unusual providers and cloud providers have the particular item focused on building anagent cross hybrid cloud. Fig.3. shows some of hybrid cloud storage Vendors.



**Fig. 3. Hybrid Cloud Storage Vendors**

## 8. ISSUES IN CLOUD COMPUTING

There are different issues required in the field of Cloud Computing. These issues incorporate Cloud Compatibility, Compliance of the Cloud, Standardizing Cloud Technology, Monitoring while on the Cloud, and Cloud Security Rahul Khurana1. These issues are depicted beneath quickly.

(1) R Charnya has discussed a Role based model where Data owner before storing the data in the cloud, they first encrypt the data in local system and then store the encrypted data in the cloud. Data users can't directly access the data from cloud. Each user is assigned with roles and responsibility. The roles are assigned based on the responsibilities and qualification. The authenticate users have privileges to access the data with specific roles. The users are assigned with different roles and each of them are having a set of permissions. A role manager responsibility is to assign a role to the user, and if the user is going out, then revoke a role from the user. Cloud Provider, users and others are not able to see the data if they are not assigned with proper roles. Data owner can revoke the role if they found as unauthorized user.

(2) Zheng Yan has stated the most difficult issue in the development of cloud computing, the trust management. Information privacy and security was a vital perspective. On account of the dynamic nature of cloud condition trust management was extremely testing.

(3) Chirag Modi has proposed the issues encompassing towards the difficulty of the web clients to trust the cloud service. This has been finished by doing customer criticism overview and after that proposal has been given to the cloud service provider. They proposed that if security is not taken care properly, the whole zone of cloud computing would come up short since cloud computing for the most part includes managing personal delicate data in a public network. Customer input study has been done on the basis of taking after targets, i.e., is there a purchaser with absence of trust or is there a route for cloud service providers to acquire consumer trust.

(4) There is a work process scheduling algorithm which concentrates on execution time and cost of cloud services. Be that as it may, it is not free from attacks and threats so a trust service-oriented model is required. A trust services oriented work process scheduling algorithm has been proposed in SanaeiZohreh. This algorithm works, to

calculate trust metric and gives approaches to enable clients to choose from various services accessible as indicated by the requirement.

*(5)* Albert has proposed a trusted agent which will produce public key and master keys for the client. The role of the information proprietor is to encode the information with client public key and the client willdecode the information with possessing private key.IT suggests two focal points in this plan 1) it reduces communication overhead in the web, and 2) it provides fine grained access control. The issue behind in this method is the information owner needs to utilize the approved client public key for encryption. According to (ABE) Attribute Based Encryption, the access policy is grouped into two types: Key Policy Attributed Based Encryption (KP-ABE) and Ciphertext-Policy Attributed Based Encryption (CP-ABE).

*(6)* Kan Yang has proposed a Multi-authority Multi- specialist CP-ABE which is more reasonable for information access control. Various authorities issued the attributes to clients and utilizing access policy. The information owner shares the information characterized over attributes from various authorities. In this procedure, clients attribute can be changed dynamically. If a client has assigned with new attributes or denied some present attributes, then information access should be changed appropriately. Every information owner before encoding the information, they partition the information into various parts and each part is encrypted with contents keys by utilizing symmetric encryption system.

## 9. TECHNIQUES FOR CLOUD COMPUTING
### Table 1. Techniques and its Advantage & Disadvantage

| S.NO | Technique Name | Advantage | Disadvantage |
|---|---|---|---|
| 1 | Control Data Access(2015) | A structure was made for securing cloud computing by applying a different algorithm. The cloud administrations can be secured default as the cryptographic keys were produced based on trust models. | Cryptographically stored information sometimes creates a problem as some other common application access it. |
| 2 | Security and Trust(2015) | Trust management was presented. | It considers only client input. Different parameters were not considered. |
| 3 | Trust based Reputation model(2015) | A few methods have been shown detecting attacks | Very little accurate outcomes were obtained |
| 4 | Multi Authority(2014) | The specialists are working independent of each other. Therefore, the failure or working of one authority won't affect the working of different authorities. | Overhead occurs in managing with the distributed authorities. |
| 5 | A trust service scheduling (2014) | The outcomes demonstrated by the approach were effective and feasible and clients can choose workflow services from different cloud services | It was hard to manage dynamic changes in cloud computing condition |
| 6 | Attribute based encryption(2013) | Decrease the communication overhead. Provide a fine-grained access control. Collusion-resistance is a significant security highlight of Attribute-Based Encryption(ABE) | The information owner needs to utilize each approved client's public key to encrypt information |
| 7 | Hierarchical Attribute-set based encryption(2013) | Lower maintenance cost and operational costs. Easier disaster recovery | Data owners are controlled by domain authority |
| 8 | CP-ABE(2012) | The detriment of key policy-Attributed Base Encryption (KP-ABE) is overcome in CP-ABE and it support the access control in the real condition. | The client consolidates all attributes in a single set issued in their keys to fulfill approaches. |

## 10. CONCLUSION

Protection and security of information is a prime concern in cloud computing information storage. Despite the fact that cloud gives flexibility and ease public information storage and management, yet there are chances for any intruder interaction and malicious activity. Information stored at cloud server might be secret along with greater security. In this paper, we have discussed about the fundamental components of the cloud computing and the security issues that begin due to the fertilized, shared, public, private and hybrid nature of the cloud. Therefore, the paper proposed various counter measures to address the security issues and various method in the cloud computing.

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# THE INFLUENCE OF SCHOOL CULTURE ON TEACHERS' JOB SATISFACTION AT SOME SELECTED SECONDARY SCHOOLS IN MOGADISHU, SOMALIA

**Raqia Ahmed Mohamed**

## ABSTRACT

*In today's economic world, human resources are the most valuable resource that organizations have. As a result, in order to improve teacher satisfaction, it is necessary to conduct research on what factors can affect teacher job satisfaction. The purpose of this study is to analyze the influence of teamwork, reward, and training and development on teacher job satisfaction. A quantitative approach was used in this study. The convenient sampling technique was employed in the study to collect 120 teachers from secondary schools in Mogadishu, Somalia. A questionnaire technique was used to collect data. Using the SPSS version 26 application, the researcher conducted a technical analysis of the data employing multiple linear regression. According to the findings of the study, teamwork, reward, and training and development all have an 85.9 percent positive effect on teacher job satisfaction. The conclusion is that the three variables play a role in increasing teacher job satisfaction.*

**KEY WORDS:** *School culture and teachers' job satisfaction*

## INTRODUCTION

Organizational theorists asserted that organizational culture exists. They acknowledged that organizations, like people, have personalities. Organizations, for example, can be flexible or rigid, friendly or unfriendly, innovative or conservative. Organization theorists have documented the importance of culture in the lives of organization members.

An organization's culture is defined as all of the beliefs, feelings, behaviors, and symbols that are unique to that organization. In other words, the collective effect of a company's employees' shared philosophies, ideologies, beliefs, feelings, behaviors, assumptions, expectations, attitudes, norms, and values is defined as organizational culture. These norms govern how employees perform and serve customers, how they collaborate with one another, whether they are motivated to meet goals, and whether they are sincerely committed to the overall mission of the company. What methods do employees use to complete their tasks? Independently or collaboratively? Are they inspired, committed, and engaged, not irritated, overworked, and underappreciated.**?( 30)**

When we talk about organizational culture, we're referring to the employee experience, or the internal perspective. What are the employees' thoughts? How does it feel to work here? How can leaders keep their employees engaged, loyal, and devoted? The employee experience, or organizational culture is a consistent setting for every organization's daily operations, and it refers to the characteristics that unite and integrate employees of an organization and distinguish them from employees of other institutions. According to (Serinkan & Kiziloglu, 2021), human resources are the most valuable resources that organizations have in today's business world. Nonetheless, it makes no

difference if the organization develops a high-quality product/service or if there is an underlying attitude of unpleasantness, resentment, or boredom, the organization's long-term outlook will be poor. Everything else happens through the filter of organizational culture. (31)

Satisfaction is one of the factors that contribute to the overall efficiency of work performed, and it is defined as the relationship between what individuals actually get from work (in terms of salary, status, appreciation, and so on) and their projected results. This construct can be defined as events that cause a subjective feeling of relief or pleasure, which can be expressed or described by the person experiencing it but cannot be seen from the outside by another person.

However, Job satisfaction is multidimensional, whether it is about job satisfaction alone or about wages, workplace safety, promotion opportunities, recognition and appreciation, decision-making power and influence, and, of course, a sense of productivity and useful, well-done work (Bota, 2013). To varying degrees, each of these dimensions may play a role in shaping their sense of job satisfaction. In addition, according to Bota (2013), job satisfaction is determined by a number of factors, some of which are of individual order: age, education, skills, work experience, other organizational arrangements such as organizational climate, working conditions, policy and organizational management, and last but not the least, personality factors.

As stated by (Fujimoto et al., 1981), a number of factors influence job satisfaction, including the nature of the work, salary, advancement possibilities, management, workgroups, and working circumstances. Furthermore, consistent with (Lopes & Oliveira, 2020), data from the Teaching and Learning

International Survey (TALIS) 2013 was also used to conduct a study on job satisfaction characteristics in a Portuguese sample of lower secondary school teachers (2010). According to this study, the most significant predictors of job satisfaction, are factors connected to interpersonal connections.

Likewise, the study (Tien, 2018), investigates the determinants of teachers' job satisfaction in Lam Dong Province, Vietnam, and examines the feasibility of applying Herzberg's Two-Factor Theory in the Vietnamese educational setting using a mixed research approach that includes a survey questionnaire, in-depth interviews, group discussions, and observations. The findings supported the application of Herzberg's theory in the educational setting of Vietnam, with the exception of recognition. The findings revealed that the factors satisfying a teaching career were overwhelmingly phenomena intrinsic to teaching tasks. These include career accomplishment, work itself, advancement, responsibility, job security, and parental support for students. On the other hand, dissatisfiers were those that were extrinsic to the teaching core and beyond the ability of teachers, such as promotion, pay, supervision, student behavior, job pressure, teacher status, teacher training, working conditions, recognition, school policies, coworker relationships, school reputation, and career support from the school.

Furthermore, (Nyamubi, 2017) carried out a study in Tanzania to investigate teacher job satisfaction. The study focused on a single research question: what factors influence secondary school teachers' job satisfaction? Teachers were satisfied by both monetary and non-monetary incentives, such as community support, according to the findings. Teachers' satisfaction in the classroom was also influenced by their friendship and cooperation with coworkers and students, as well as their respect for community members. The success of their students both in and out of school was also important to their satisfaction because it demonstrated the teachers' sense of duty and responsibility.

Moreover, formulating research aim and objectives in an appropriate manner is one of the most important aspects of the study. This is because research aim and objectives determine the scope, depth and the overall direction of the research.

**General Objective**
To explore the influence of school culture on teachers' job satisfaction

## SPECIFIC OBJECTIVES OF THE STUDY
1. To determine the influence of teamwork on teachers' job satisfaction at some selected secondary schools in Mogadishu, Somalia.
2. To identify the influence of reward on teachers' job satisfaction at some selected secondary schools in Mogadishu, Somalia.
3. To investigate the influence of training and development on teachers' job satisfaction at some selected secondary schools in Mogadishu, Somalia

## LITERATURE REVIEW
The paper considered several recent studies that show a clear link between healthy and sound school cultures and greater student achievement and motivation, as well as teacher satisfaction.

(Febriantina et al., 2020) surveyed 142 teachers to investigate the impact of school culture and teacher stress on teacher satisfaction at vocational high schools in Greater Jakarta, Indonesia. The effects of variables on the data were determined using path analysis, which was then processed using SPSS 24. The findings indicate that a teacher's job satisfaction is directly influenced by classroom pressure, with a dominant influence. Physical condition is the most important factor in developing a teacher's job satisfaction skills for school policy-making as well as individual teaching. Similarly, school culture and teacher stress have a 52.3 percent and a 47.7 percent impact on teachers' satisfaction skills, respectively. In accordance with the data in this article, school culture has a greater impact on teacher satisfaction than stress. It's also been discovered that instructors' satisfaction skills are influenced by the physical condition of the classroom, which might be a part of the school culture.

(Polatcan & Cansoy, 2019), investigated the factors that influence teachers' job satisfaction. From a total of 206 studies, 27 were chosen for review based on a variety of criteria. Relevant studies from the WOS, ERIC, SCOPUS, and ULAKBM databases were retrieved and synthesized using systematic review methods. In the analyses, the themes were administrators' behaviors, individual variables, and organizational variables. In conformity to the study's findings, a strong school culture that fosters support, trust, justice, and communication is a critical factor in ensuring teachers' job satisfaction. Besides, teachers' professional competence beliefs and psychological well-being were discovered to be important factors for job satisfaction. After analyzing 206 studies, Polatcan & Cansoy, 2019 came to the conclusion that school culture, which includes elements like support, trust, fairness, and communication, is a vital factor in assuring teachers' job happiness.

Additionally, The (Muhammad Arifin, 2015) study sought to discover and analyze the impact of competence, motivation, and organizational competence on high school teacher job satisfaction and performance in Jayapura, Papua, Indonesia. Competence and organizational culture, according to the findings, have a positive (though insignificant) impact on teacher job satisfaction. Job motivation has a significant and positive effect on teacher job satisfaction but no effect on teacher performance. Competence and job satisfaction both have a positive and significant impact on teacher performance, whereas organizational culture has a positive but minor impact on job satisfaction.

Besides, (Hosseinkhanzadeh et al., 2013) conducted a study in Tehran with the purpose of investigating the relationship between organizational culture and job satisfaction among middle school teachers. A total of 123 people were chosen through cluster sampling. The research tools were the Darabi Organizational Culture Questionnaire (2008) and the

Smith, Kandle, and Heulin Job Descriptive Index (1969). Data analysis revealed a significant relationship between organizational culture and job satisfaction.

The goal of the (Sami et al., 2011) study was to investigate the impact of organizational culture on teachers' job satisfaction in public and private higher education institutes and universities in Lahore, Pakistan's second largest city and a higher education hub. A standardized questionnaire was used to obtain data from a sample of 347 teachers. The construct validity was tested using Principal Component Analysis. To investigate the impact of organizational culture on teacher job satisfaction, regression analysis was used. Organizational culture is divided into two components, according to empirical findings: organizational culture related to managers and leaders (OCM) and organizational culture related to employees (OCE). The impact of both types of culture on job satisfaction is favorable and significant in this study.

Also, Questions about organizational culture, levels of job satisfaction, and variables influencing them were investigated in higher education institutions in Bishkek, Kyrgyzstan, as part of a study done by (Serinkan & Kiziloglu, 2021). The characteristics that influence organizational culture and job satisfaction in higher education institutions in the service sector were examined in this study. In order to explain the elements impacting university employees' organizational culture and job satisfaction, as well as to characterize the link that exists, if any, between organizational culture and job satisfaction, a questionnaire was administered. The findings showed a 47.2 percent significant linear and positive association between organizational culture and job satisfaction, which amounted to a medium strength correlation.

The purpose of the (Widhy et al., 2021) study is to investigate the impact of organizational culture and compensation on teacher job satisfaction in SD, SMP Pembangunan Jaya. The method used in this study is multiple linear regression with a quantitative approach to determine how much influence organizational culture and compensation have on job satisfaction of elementary school teachers at SMP Pembangunan Jaya. The study's findings pointed out that organizational culture and compensation have a positive influence on teacher job satisfaction in SD, SMP Pembangunan Jaya.

The goal of this study at Wachemo University was to identify the factors that influence teachers' job satisfaction. The findings indicated that the major work-related factors influencing teachers' job satisfaction were salary, stressful job, overtime work without pay, relationship with top management, opportunities for advancement, chance for promotion, and availability of teaching learning materials, as well as campus rules and regulations (Melaku & Hundii, 2020).

Furthermore,(Abdulahi, 2020) used a descriptive correlation design with a mixed data technique to conduct a study in four public secondary schools in Harari regional state, Ethiopia, on the effect of school culture factors on teachers' job satisfaction. Using questionnaires and interview guides, teachers and educational leaders were asked questions to learn more about the impact of school culture on teacher job satisfaction. The study discovered that teachers were dissatisfied with their jobs and teacher job satisfaction was linked to school culture, specifically professional development and collaborative leadership practices. This finding emphasized how obvious it is that the learning culture within a school helps improve employee satisfaction.

## SUMMERY

The aforementioned studies focused on the relationship between school culture and teacher job satisfaction using school culture surveys without taking into account specific school culture factors or only taking into account some of the factors. In addition to this gap, the findings' relevance may be limited to the specific context, and school culture in other countries may differ. Therefore, the purpose of this study was to look into the influence of school culture on teacher job satisfaction with a focus on specific school culture factors such as teamwork, reward, and training and development. On the other hand, employee job satisfaction and related issues have become hot topics in every workplace around the world, particularly in Somalia's education system.

## METHODOLOGY

The purpose of this survey study was to investigate the influence of school culture on teachers' job satisfaction in some secondary schools in Mogadishu, Somalia. To answer the research objectives, the study used multiple linear regression analysis.

The researchers collected 120 teachers from secondary schools in Mogadishu, Somalia, using convenient sampling. These respondents were given a questionnaire that contained three main constructs that measured teamwork, training and development, reward, and teachers' job satisfaction.

## RESULTS AND DISCUSSION

Many assumptions about the model are made in regression analysis, including multicollinearity, nonconsistant variance (non-homogeneity), linearity, and autocorrelation . If one or more assumptions are violated, the model is no longer reliable and cannot be used to estimate population parameters.

a. Test Multicollinearity

The regression model must be correlated with the independent variables in order to determine multicollinearity. Variables should not be connected in isolation in a well-designed regression model. The independent variables are not orthogonal if they are related to one another. The term "variable orthogonal" refers to an independent variable with a correlation coefficient of zero with respect to other independent variables (Daoud, 2018). if the VIF value is less than 10.00 and the tolerance value is not less than or greater than 0.1. This means that multicollinearity does not exist ((Daoud, 2018). Test results multicollinearity can be seen in the following table.

**Table 1: Correlation Coefficient between Independent Variables**

**Coefficients[a]**

| Model | | B | Std. Error | Beta | t | Sig. | Lower Bound | Upper Bound | Zero-order | Partial | Part | Tolerance | VIF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | | 95.0% Confidence Interval for B | | Correlations | | | Collinearity Statistics | |
| 1 | (Constant) | .284 | .172 | | 1.650 | .102 | -.057 | .626 | | | | | |
| | Teamwork | .164 | .069 | .195 | 2.389 | .019 | .028 | .301 | .597 | .217 | .146 | .558 | 1.794 |
| | Reward | .427 | .076 | .478 | 5.650 | .000 | .277 | .576 | .712 | .465 | .345 | .521 | 1.919 |
| | Training_development | .209 | .092 | .186 | 2.284 | .024 | .028 | .391 | .592 | .207 | .139 | .561 | 1.784 |

a. Dependent Variable: Job_satisfaction

b. Table 1: shows that the teamwork VIF value is 1.794 < 10.00 and the tolerance value is 0.558 > 0.25, the rewards VIF value is 1.919 <10.00 and the tolerance value is 0.521 > 0.25, and the training and development VIF value is 1.784 <10.00 and the tolerance value is 0.561 > 0.25, then multicollinearity does not occur.

c. Auto Correlation Test
The Model Summary box should be checked to verify the next assumption. The Durbin-Watson statistic is used here to test the assumption that residuals are independent (or uncorrelated). This statistic has a range of 0 to 4. Values less than one and greater than three are cause for concern and may invalidate your analysis if this assumption is not met (Luis & Moncayo, n.d.).

**Table 2: Calculated Value of Durbin Watson**

**Model Summary[b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | Durbin-Watson |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| 1 | .753[a] | .567 | .556 | .41498 | .567 | 50.701 | 3 | 116 | .000 | 1.611 |

a. Predictors: (Constant), Training_development, Teamwork, Reward

b. Dependent Variable: Job_satisfaction

Table 3 shows that Durbin Watson's arithmetic value is 1.611 greater than > 0 and less than 4, indicating that this assumption was met.

**b.** Normality test
There are several pieces of information that the researcher can use to test this assumption: The histogram and P-P plots provide this researcher with information about normalcy.
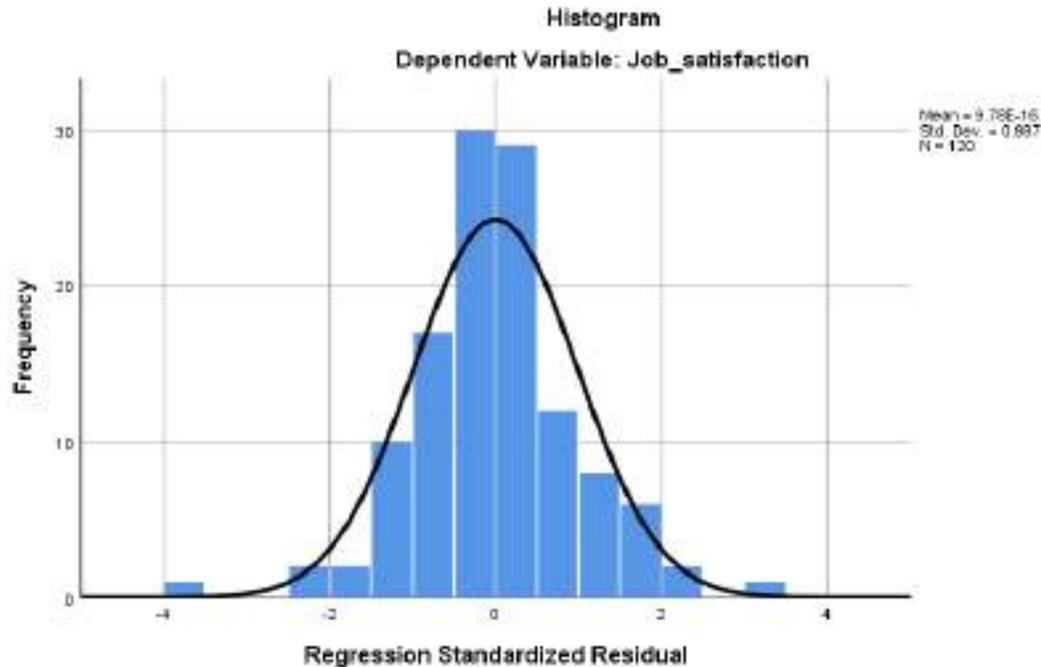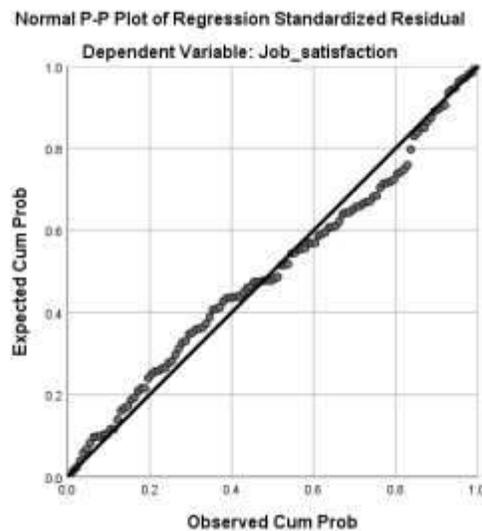
**Figure 1**



**Figure 2**



When the histogram graph is compared to the standard plot graph, it is clear that the histogram graph has a close to normal distribution pattern. While the standard plot graph shows the dots spread out around the diagonal line in the direction of the diagonal line, the standard plot graph shows the dots spread out in the other direction. These two graphs demonstrate that the regression model is possible since it adheres to the normality assumption.

## Regression Analysis Results

Regression analysis is used in a linear equation to predict a dependent variable (Y) based on a variable (X). The research findings were discussed, among other things, using an analysis of multiple linear regression based on data from 120 respondents.

Based on the output results, a regression analysis of Teamwork, reward and Training and development variables on teachers' job satisfaction variables was performed, and the following coefficient predictors and constants were determined:

a = 2.84
b1 = 0.164
b2 = 0.427
b3 = 0.209

Then the regression equation is: Y = a + b1X1 + b2X2 Y = 2.84+ 0.164X1 + 0.427X2 + 0.209 X3

Information:
A = Constant
b1 = Coefficient
b2 = Coefficient
X1 = Teamwork Variable
X2 = Reward Variable
X3 = Training and development
Y = Teachers' Job satisfaction

1. The constant value (a) is 2.84If there is no teamwork (X1), reward (X2) and training and development (X3) value, then the teacher's job satisfaction value is (Y) 2.84.
2. The value of the teamwork coefficient (X1) of 0.164 indicates if the teamwork variable changes by one unit with the assumption that the reward variable (X2) and training and development variable (X3) is fixed, it results in a change in teachers' job satisfaction of 0.164 units.
3. The value of reward (X2) of 0.427 indicates that if the reward variable changes by one unit with the assumption that the teamwork coefficient variable (X1) and training and development coefficient variable (X3) is constant, it changes teacher job satisfaction by 0.427 units.
4. The value of Training and development (X3) of 0.209 indicates that if the training and development variable changes by one unit with the assumption that the teamwork coefficient variable (X1) and reward coefficient variable (X2) is constant, it changes teacher job satisfaction by 0.209 units.

### Hypothesis Test

This study investigated the influence of school culture on teachers' job satisfaction at secondary schools in Mogadishu-Somalia. Three hypotheses were developed after reviewing the literature, to test the research hypothesis; the linear regression analyses were employed. The researchers checked regression hypothesis. H1 confirmed that there is positive relationship between teamwork and teachers' job satisfaction. H2support confirmed that there is positive relationship between reward and teachers' job satisfaction. H3 asserted positive relationship between training and development and teachers' job satisfaction.

## CONCLUSION

Based on the results of the data and research analysis, it can be concluded that: There is a significant simultaneous effect between teamwork, reward and training and development to teachers' job satisfaction at secondary schools in Mogadishu, Somalia of 85.9 % with the regression line equation Y = 2.84+ 0.164X1 + 0.427X2 + 0.209 X3. This means that the higher the teamwork, reward and training and the development, the better the teachers' job satisfaction, whereas the lower the teamwork, reward and training and the development, the less teachers' job satisfaction.

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# THE AVAILABILITY OF INFORMATION SCIENCE AND RECOMMENDATIONS TO THE DEVELOPMENT OF COMMUNITY INFORMATION SCIENCE, (WITH SPECIAL REFERENCE TO INDIAN STATES)

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## ABSTRACT
*In the modern era information science is very essential to get information and statistics of various departments like education, agriculture and the service sectors, In the Indian context, majority of Indians are living in rural areas and working in Agriculture or small scale industries. In India 74.3 percent population lives in rural areas and 25.7 percentage population lives in urban areas. The agriculture sector provides livelihood to 64 percent. For the development of the country, it is very important to emphasize on the development of rural community. Information is one of the most important factors for the process of development of any sector especially rural community. Information is birth right of a human being irrespective to the class and creed he/she belongs to. Particularly in a big country like India, information needs to be shared and disseminated to all the citizen of the country. So far, libraries and professionals have been serving the population in a closed framework which needs to be changed in the changing context beyond physical buildings to virtual environment. Anything and everything can be found over Internet and this environmental change has changed the information seeking behaviour of the users.*

**KEY WORDS:** *Community Information Science, Digitalisation Benifits In The Growth Of Library Science In India.*

## INTRODUCTION

Information centres are widely present in metro cities in India presently, but most percentage of the village and tribal population lack digital technology facilities to get online access of information science. The guidelines to establish Community Information Centre is as follows. The establishment of Community Information Centre's (CICs) has been envisaged as a means to use the benefits of Information Technology (IT) to raise the socio-economic conditions of the people of India particularly those in the remote areas of the North Eastern states including Sikkim. This proposal is planned as a major initiative from the government to utilize IT as a cutting edge tool of development for the North Eastern states including Sikkim by establishing Community Information Centres in 487 blocks of these 8 states. Out of these, 30 Blocks have already been covered under a pilot project implemented during 2000-2001. These CICs will help the region avail the benefits of global connectivity through Internet and will also help the concerned state governments to plan for IT based citizen-centric applications making govt. services available through CICs. Under the project, computers, peripherals along with VSATs for satellite communication will be placed at designated locations in each block in all the North-Eastern States including Sikkim.

## REVIEW OF LITERATURE

Oxford Companion to the English Language – Library is a collection of books, periodicals and/or other materials, primarily written and printed

Harrods's Librarian's Glossary and Reference Book defines 'Library' as:

(1) a collection of books and other literary material kept for reading, study and consultation.

(2) A place, building, room or rooms set apart for the keeping and use of a collection of books, etc.

(3) A number of books issued by one publisher under a comprehensive title as the 'Loeb Classical Library', and usually having some general characteristic, such as, subject, binding, or typography.

(4) A collection of films, photographs and other non-book materials, plastic or metal tapes, disks and programs. In view of the above definitions, a library is defined as: a. A place in which literary and artistic materials, such as books, periodicals, newspapers, pamphlets, prints, records, tapes and artefacts are kept for reading, reference, or lending. B. a collection of such materials, especially when systematically arranged. c. A room in a private home for such a collection. d. An institution or foundation maintaining such a collection.

## RESEARCH METHODOLOGY

This research output is the outcome of an overview conducted on use of digital technology and digital applications for the growth of e-resources and information science opportunities to promote e-education, activities and making India strong flexibility in availability of online e-resources in education, agriculture and service sector in the Indian context experimental approach, with special reference to Karnataka, it uses secondary data for analysis, discussion with expert part of research work.

➤ **DATA AND STATISTICS**

1. Community Information Centres available in India
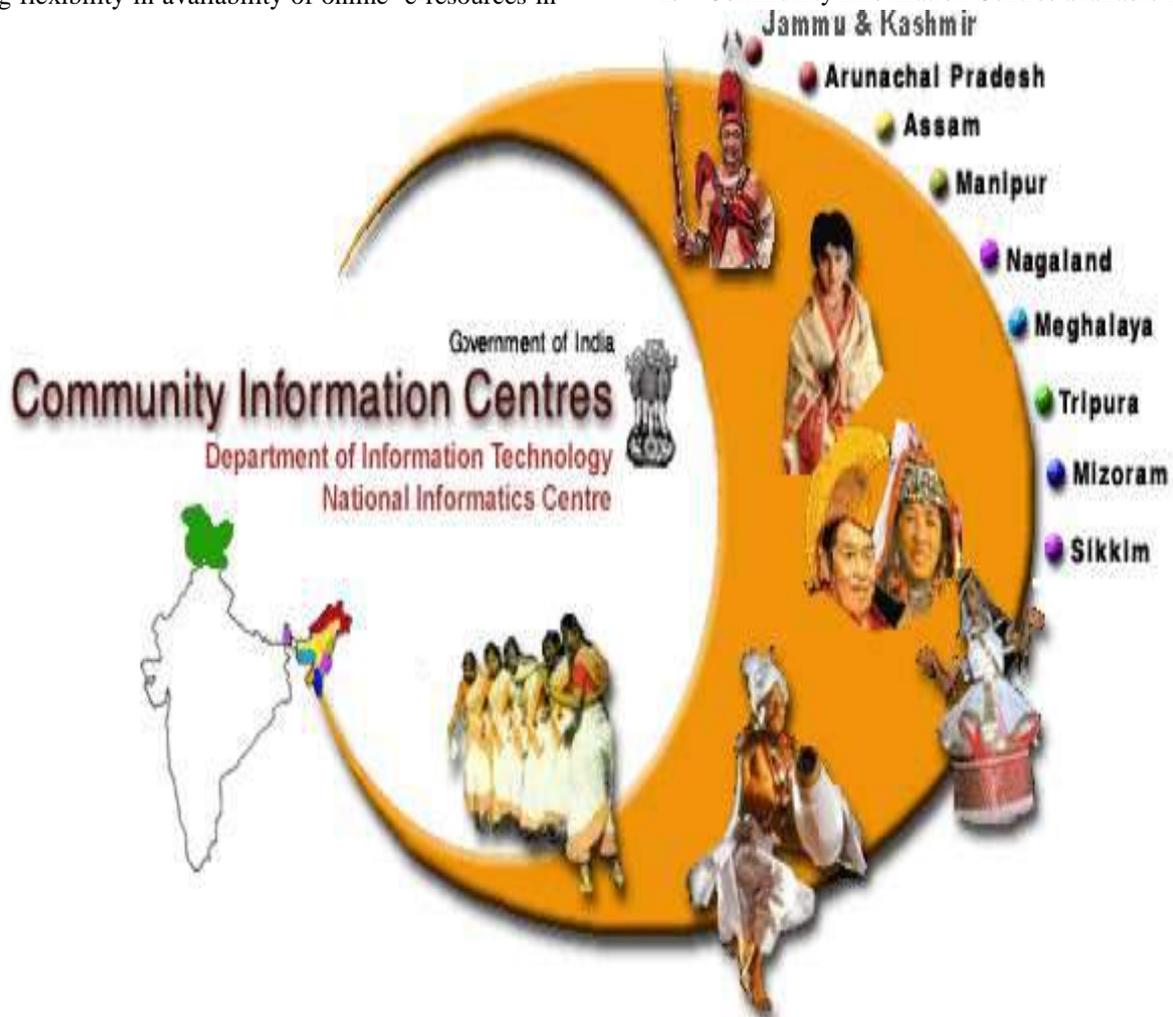


The Integrated Community Information Centre Model has to be hosted on the web with user friendly interface containing all the aforesaid information on each area. This has to be maintained purely by a Library and Information should be of high priority and this needs effective coordination and cooperation from the Government, NGO's, Local Self Government and private bodies.

## RESULTS AND DISCUSSION

The purpose of this document is to provide a detailed set of instructions to the State Government and related agencies involved in establishing the sites identified for the CICs. This would include site preparation, manpower deployment and running and maintenance of the CICs. The document includes the parameters to be considered for site selection, instructions for civil and electrical work to be executed at the site, role and responsibilities of the Custodian and criteria for manpower recruitment and deployment.

In view of the difficult terrain in some parts of the North-Eastern states it is proposed to set up smaller centre`s with basic equipment and limited facilities i.e. Type B CICs.

This will ensure that all areas are given connectivity while considering the problems of available infrastructure in remote areas. These centers will have two computer systems and a printer along with VSAT and necessary communication equipment.

## FINDINGS

1. Nearly half of the respondents covered in the study belong to Government Organization (46.8%), followed by NGOs accounting to 28.2% and Local Self Government organization (25%).
2. 33.8 of the department of organization rendering CIS services were established between years 1991 and 2000 and followed by year 1981-1990 (21.1%) and year onwards (19.8%).
3. The departments covered in the study deals with Agriculture sector (34.6%). Education (26.9%), Health and Family welfare (23.1%) and women and Child Welfare (15.4%).
4. Majority of the financial funding to the department and organizations involved in CIS comes mainly

from State Government (82.1%), 44.1% of the financial budget is from the Central Government and 26.9% from the Local Self Governments.

5. 34% of the departments are having libraries in these Community Information Services sectors and the rest 66% of the departments/ organization do not have libraries in their respective departments or organizations. Among them, 33.9% of the libraries forming part of the departments and organization involved in CIS activities are managed by purely library professionals.

6. Majority of libraries handling CIS in their respective departments / organization posess just certificate courses in Library and Information Science (66.6%) and 27.8% of them acquired Bachelor's degree in Library and Information Science.

7. All the Libraries posess books (100%), followed by Reference sources (96.2%) and News paper (84.9%).

8. Among several factors, a conscious patronization of online commerce, online education and an emergence of retail as a dominant market segment have contributed to the unprecedented growth of digitalisation in India.

## RECOMMENDATIONS

1. 1 Information science has played a vital role in India and the world from past decade, but in the modern world is very essential factor for the growth of community information centres, development & innovative phenomenon involves online availability of resources, college intuitions like digital libraries etc, as it provides benefits for the consumers, producers by saving time, students are benefited by the availability of academic resources, availability in lower cost, even free availability of online sources in universities and the educational institutions.

2. Information science has to reach facilities to the last person in the country, rural areas like in online education, to increase in efficiency of availability of online sources in the country.

## CONCLUSION

Although the Ministry of Rural Development and Information and Communication Technology has earmarked large amount for development of Information Kiosk and development of CI Centres, but based on the findings of the survey made at district, it is evident that the Government and Non-government organization Centres to cater to the information needs of the society. In this context, there is a need for systematic development of Community Information system in order to bridge the digital divide and the roles of libraries to get high significance. It is therefore, the proposed Integrated Community Information Centres Model, would serve the basic purpose of rural and urban society in meeting their timely generic, agricultural, health, women, social and child welfare information.

## LIMITATION

1. The Information sciences has not reached the rural areas of the country in India, especially the tribal areas; remote villages in India still don't have access to power, and the availability of funds to allocate computers or modern equipments to utilize information science.

2. North eastern part of India, northern Karnataka and several parts of coastal areas don't have strong economic resources to buy information science related materials, so most of the places depend on central government to get funds.

## SCOPE / SUGGESTION

➢ 15% of the libraries adopt Classification schemes for organizing information resources, while majority of the departments/organizations (94.3%) follow subject wise arrangement of information resources.

➢ 30.2% of the libraries have prepared Catalogue Cards to help the users in searching the availability of documents in the libraries and among them 56.2% of the libraries have prepared author catalogue cards.

➢ All the staffs of the libraries strongly agree that there is a need for Catalogues/ Index tools which are the indispensable retrieval tools for their organization.

➢ Majority of the libraries under study (90.5%) have not automated their libraries.

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# ON C* GENERALIZED η-CLOSED SETS IN TOPOLOGICAL SPACES

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## ABSTRACT

*The aim of this paper is to introduce the notion of c\* generalized η-closed sets in topological spaces and study their basic properties. It is the weaker form of closed and generalized c\*-closed sets. Further, we shall see that the collection of c\* generalized η-closed sets is not closed under finite intersection but it is closed under arbitrary union. Also, we establish the relationship between this new class of closed sets with other existing classes of generalized closed sets in general topology.*
**2020 AMS Subject Classification**: *54C08, 54C10, 54D10, 54D30.*
**KEYWORDS:** *η-open, c\*-open, gc\*-closed, rgη-closed, c\*gη-closed.*

## 1. INTRODUCTION

In 1937, Stone [7] introduced the notion of regular open sets. In 1965, Njastad [6] introduced the concept of α-open sets. In 1968, the notion of π-open sets were introduced by Zaitsev [10] which are weak form of regular open sets. In 1970, Levine [4] initiated the study of generalized closed (briefly g-closed) sets. In 2000, Dontchev and Noiri [2] introduced the notion of πg-closed sets. Sundaram and John [8] introduced the notion of w-closed sets. In 2017, Malathi and Nithyanantha Jothi [5] introduced the concepts of c\*-open and generalized c\*-closed sets in topological spaces. In 2019, Subbulakshmi, Sumathi and Indirani [9] introduced and investigated the notion of η-open sets. In 2021, Kumar [3] introduced the concepts of rgη-closed sets and obtained some basic properties of rgη-closed sets.

## 2. PRELIMINARIES

Throughout this paper, spaces (X, ℑ), (Y, ℘), and (Z, σ) (or simply X, Y and Z) always mean topological spaces on which no separation axioms are assumed unless explicitly stated. Let A be a subset of a space X. The closure of A and interior of A are denoted by cl(A) and int(A) respectively. A subset A is said to be **regular open** [7] (resp. **regular closed**) if A ⊂ int(cl(A)) (resp. A ⊂ cl(int(A)). The finite union of regular open sets is said to be **π-open [10]**. The complement of a π-open set is said to be **π-closed**.

**Definition 2.1**. A subset A of a topological space (X, ℑ) is said to be

(i) **α-open** [6] if A ⊂ int(cl(int(A))).

(ii) **η-open** [9] if A ⊂ in(cl(int(A))) ∪ cl(int(A)).

(iii) **η-closed** [9] if A ⊃ cl(int(cl(A))) ∪ int(cl(A)).

(iv) **c\*-open** [5] if in(cl(A)) ⊂ A ⊂ cl(int(A)).

The complement of a α-open (resp. η-open, c\*-open) set is called **α-closed** (resp. **η-closed, c\*-closed**). The intersection of all α-closed (resp. η-closed) sets containing A, is called **α-closure** (resp. **η-closure**) of A, and is denoted by **α-cl(A)** (resp. **η-cl(A)**). The η-

**interior** of A, denoted by **η-int(A)** is defined as union of all η-open sets contained in A. We denote the family of all η-open (resp. η-closed) sets of a topological space by **η-O(X)** (resp. **η-C(X)**).

**Definition 2.2.** A subset A of a space (X, $\Im$) is said to be

(1) **generalized closed** (briefly **g-closed**) [**4**] if cl(A) $\subset$ U whenever A $\subset$ U and U $\in \Im$.

(2) **πg-closed** [**2**] if cl(A) $\subset$ U whenever A $\subset$ U and U is π-open in X.

(3) **generalized η-closed** (briefly **gη-closed**) [**3**] if η-cl(A) $\subset$ U whenever A $\subset$ U and U $\in \Im$.

(4) **rgη-closed** [**3**] if η-cl(A) $\subset$ U whenever A $\subset$ U and U is regular-open in X.

(5) **w-closed** [**8**] if cl(A) $\subset$ U whenever A $\subset$ U and U is semi-open in X.

(6) **generalized c*-closed** [**5**] (briefly **gc*-closed**) if cl(A) $\subset$ U whenever A $\subset$ U and U is c*-open in X.

(7) **g-open** (resp**. πg-open**, **gη-open**, **rgη-open, w-open, gc*-open**) set if the complement of A is g-closed (resp. πg-closed, gη-closed, rgη-closed, w-closed, gc*-closed).

## 3. C* GENERALIZED η-CLOSED SETS

In this section, we introduce c* generalized η-closed sets in topological spaces. Also, we derive some of their basic properties of c* generalized η-closed sets.

**Definition 3.1.** A subset A of a topological space X is said to be c* generalized η-closed    (briefly, c*gη-closed) if η-cl(A) $\subset$ H whenever A $\subset$ H and H is c*-open in X.

**Example 3.2**. Let X = {a, b, c, d} with topology $\Im$ = {$\phi$, {a}, {c}, {d}, {a, c}, {a, d}, {c, d}, {a, c, d}, X}. Then the subsets $\phi$, {b}, {a, b}, {b, c}, {b, d}, {a, b, c}, {a, b, d}, {a, c, d}, {b, c, d}, X are c*gη-closed.

**Proposition 3.3**. Let X be a topological space. Then every closed set is c*gη-closed.

**Proof**. Let A be a closed set. Then A = cl(A). Let H be a c*-open set containing A. Then cl(A) $\subset$ H. Since η-cl(A) $\subset$ cl(A), we have η-cl(A) $\subset$ H. Therefore, A is c*gη-closed.

The converse of Proposition 3.3 is not true. This can be proved by the following example.

**Example 3.4**. Let X = {a, b, c, d} with topology $\Im$ = {$\phi$, {a}, {b}, {a, b}, {b, c}, {a, b, c}, {a, b, d}, X}. Then the subset A = {a, b} is c*gη-closed but not closed.

**Proposition 3.5**. Let X be a topological space. Then every η-closed set is c*gη-closed.

**Proof**. Let A be a η-closed set. Then A = η-cl(A). Let H be a c*-open set containing A. Then η-cl(A) $\subset$ H. Therefore, A is c*gη-closed.

The following example shows that the converse of Proposition 3.5 need not be true in general.

**Example 3.6**. In Example 3.4, A = {a, b} is c*gη-closed but not η-closed.

**Proposition 3.7**. Let X be a topological space. Then every π-closed set is c*gη-closed.

**Proof**. Let A be a π-closed set. Since every π-closed set is closed, we have A is closed. Therefore, by Proposition 3.3, A is c*gη-closed.

The converse of Proposition 3.7 need not be true which can be verified from the following example.

**Example 3.8**. In Example 3. 4, A = {a, b} is c*gη-closed but not π-closed.

**Proposition 3.9**. Let X be a topological space. Then every regular-closed set is c*gη-closed.

**Proof.** Let A be a regular-closed set. Since every regular-closed set is closed, we have A is closed. Therefore, by Proposition 3.3, A is c*gη-closed.

The converse of Proposition 3.9 need not be true as seen from the following example.

**Example 3.10**. In Example 3.4, A = {a, b} is c*gη-closed but not regular-closed.

**Proposition 3.11**. Let X be a topological space. Then every w-closed set is c*gη-closed.

**Proof**. Let A be a w-closed set. Let H be a c*-open set containing A. Since every c*-open set is semi-open, we have H is semi-open. By our assumption, $cl(A) \subset H$. Since $\eta$-$cl(A) \subset cl(A)$, we have $\eta$-$cl(A) \subset H$. Therefore, A is c*gη-closed.

The converse of Proposition 3.11 need not be true as shown in the following example.

**Example 3.12**. In Example 3.4, A = {a, b} is c*gη-closed but not w-closed.

**Proposition 3.13**. Let X be a topological space. Then every gc*-closed set is c*gη-closed.

**Proof.** Let A be a gc*-closed set. Let H be a c*-open set containing A. Then $cl(A) \subset H$. Since $\eta$-$cl(A) \subset cl(A)$, we have $\eta$-$cl(A) \subset H$. Hence A is c*gη-closed.

The following example shows that the converse of Proposition 3.13 need not be true in general.

**Example 3.14**. Let X = {a, b, c, d, e} with topology $\Im$ = {$\phi$, {a}, {b}, {a, b}, {a, b, c}, {a, b, c, d}, {a, b, c, e}, X}. Then the subset A = {c, d} is c*gη-closed but not gc*-closed.

**Proposition 3.15.** Let X be a discrete topological space. Then every πg-closed set is c*gη-closed.

**Proof.** Let A be a πg-closed set in X. Let H be a c*-open set containing A. Since X is a discrete space, we have H is open in X. By Proposition 3.15 [**1**], H is π-open. This implies, $cl(A) \subset H$. Since $\eta$-$cl(A) \subset cl(A)$, we have $\eta$-$cl(A) \subset H$. Therefore, A is c*gη-closed.

The g-closed and c*gη-closed sets are independent. For example, in Example 3.16, the subset A = {a, b} is g-closed but not c*gη-closed and the subset B = {a, d, e} is c*gη-closed but not g-closed.

**Proposition 3.16**. Let X be a topological space. Then every c*gη-closed set is rgη-closed.

**Proof**. Let A be a c*gη-closed set. Let H be a regular-open set containing A. Since every regular-open set is c*-open, so H is c*-open set. Since A is c*gη-closed set, so $\eta$-$cl(A) \subset H$. Therefore, A is rgη-closed.

The converse of Proposition 3.11 need not be true.

**Proposition 3.17**. Let X be a topological space. Then every α-closed set is c*gη-closed.

**Proof**. Let A be a α-closed set. Let H be a c*-open set containing A. Since A is α-closed set, so A = α-$cl(A) \subset H$. Since $\eta$-$cl(A) \subset \alpha$-$cl(A) \subset H$, we have $\eta$-$cl(A) \subset H$. Therefore, A is c*gη-closed.

The converse of Proposition 3.11 need not be true.

**Remark 3.18.** From the above definitions and known results the relationship between c*gη-closed sets and some other existing generalized closed sets are implemented in the following Figure:
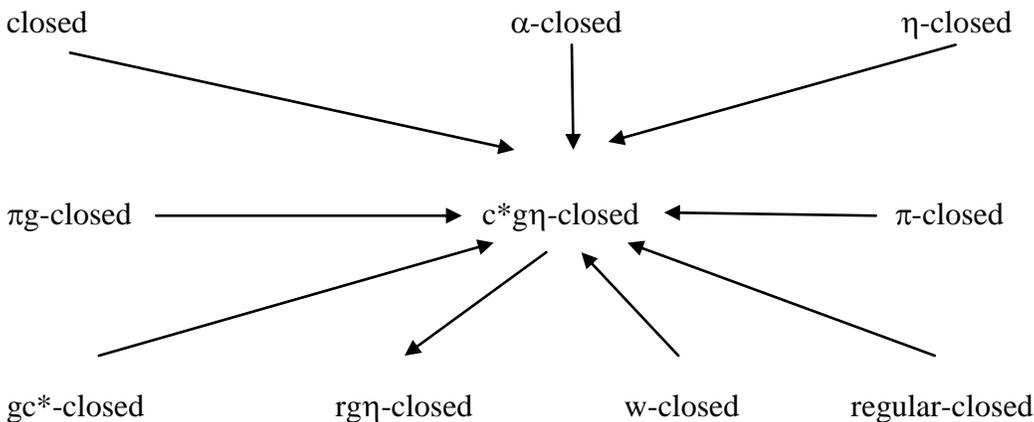


**Where none of the implications is reversible as can be seen from the above examples:**

# 4. SOME BASIC PROPERTIES OF C*Gη-CLOSED SETS

**Proposition 4.1.** In a topological space X, arbitrary union of c*gη-closed sets is c*gη-closed.

**Proof**. Let $A_1$, $A_2$,…,$A_n$,… be c*gη-closed subsets of X. Let A = $\cup$ {$A_i$ : i $\in$ I}. Let H be a c*-open set containing A. Then each $A_i \subset$ H. Since each $A_i$ is c*gη-closed, we have η-cl($A_i$) $\subset$ H. This implies $\cup$ {η-cl($A_i$) : i $\in$ I} $\subset$ H. This implies, η-cl($\cup$ {$A_i$ : i $\in$ I}) $\subset$ H. That is, η-cl(A) $\subset$ H. Therefore, A is c*gη-closed.

The intersection of two c*gη-closed subsets of a space X need not be c*gη-closed. For example, let X = {a, b, c, d, e} with topology $\Im$ = {$\phi$, {a}, {b}, {a, b}, {b, c}, {a, b, c}, {a, b, d}, X}. Then A = {a, c} and B = {a, d} are c*gη-closed sets but their intersection A $\cap$ B = {a} is not c*gη-closed set.

**Proposition 4.2** If a subset A of a space X is c*gη-closed set in X, then η-cl(A) − A does not contain any non-empty c*-open set in X.

**Proof**. Assume that A is c*gη-closed set in X. Suppose H is a c*-open set such that H $\subset$ η-cl(A) − A and H $\neq$ $\phi$. Then H $\subset$ X − A. This implies, A $\subset$ X − H. Since H is a c*-open, we have X − H is also a c*-closed set in X. Then η-cl(A) $\subset$ X − H. This implies, H $\subset$ X − η-cl(A). Also, H $\subset$ η-cl(A). Hence H $\subset$ cl(A) $\cap$ (X − η-cl(A)) = $\phi$, which contradicts H $\neq$ $\phi$. Hence η-cl(A) − A does not contain any non-empty c*-open set in X.

**Proposition 4.3**. Let X be a topological space. Then for any element p $\in$ X, the set X − {p} is either c*gη-closed or c*-open.

**Proof**. Suppose X − {p} is not a c*-open set. Then X is the only c*-open set containing X − {p}. This implies, η-cl(X − {p}) $\subset$ X. Hence X − {p} is a c*gη-closed set in X.

The following Proposition gives the necessary and sufficient condition for a c*gη-closed to be η-closed.

**Proposition 4.4.** Let A be a c*gη-closed set in a space X. Then A is η-closed if and only if η-cl(A) − A is c*-open.

**Proof**. Suppose A is η-closed. Then η-cl(A) = A. This implies, η-cl(A) − A = $\phi$, which is c*-open.

Conversely, suppose η-cl(A) − A is a c*-open set in X. By Proposition 4.2, η-cl(A) − A = ϕ. This implies, A = η-cl(A). Hence A is η-closed.

**Proposition 4.5**. Let X be a topological space. If A is a c*gη-closed subset of X such that A ⊂ B ⊂ η-cl(A), then B is a c*gη-closed set in X.

**Proof**. Let H be a c*-open set containing B. Then A ⊂ H. Since A is c*gη-closed, we have η-cl(A) ⊂ H. This implies, η-cl(B) ⊂ H. Hence B is c*gη-closed set in X.

**Proposition 4.6.** Let X be a topological space. If X and ϕ are the only c*-open sets then all the subsets of X are c*gη-closed.

**Proof**. Let A be a subset of X. If A = ϕ, then A is c*gη-closed. If A ≠ ϕ, then X is the only c*-open set containing A. This implies η-cl(A) ⊂ X. Hence A is c*gη-closed.

The converse of the Proposition 4.6 is not true. This can be proved by the following example.

**Example 4.7.** Let X = {a, b, c, d} with topology ℑ = {ϕ, {a}, {b}, {c}, {a, b}, {a, c}, {b, c}, {c, d}, {a, b, c}, {b, c, d}, {a, c, d}, X}. Then all the subsets of X are c*gη-closed. But the c*-open sets are ϕ, {a}, {b}, {a, b}, {c, d}, {a, c, d}, {b, c, d}, X.

Next Proposition gives the characterization for c*gη-closed.

**Proposition 4.8.** A subset A of a space X is c*gη-closed if and only if for each A ⊂ H and H is c*-open, there exists a η-closed set F such that A ⊂ F ⊂ H.

**Proof.** Suppose A is a c*gη-closed set and A ⊂ H and H is c*-open. Then η-cl(A) ⊂ H. If we put F = η-cl(A), then F is η-closed and A ⊂ F ⊂ H.

Conversely, assume that H is a c*-open set containing A. Then there exists a η-closed set F such that A ⊂ F ⊂ H. Since η-cl(A) is the smallest η-closed set containing A, we have A ⊂ η-cl(A) ⊂ F. Also, since F ⊂ H, we have η-cl(A) ⊂ H. Hence A is c*gη-closed.

**Proposition 4.9.** If A is η-closed and B is c*gη-closed subset of a space X, then A ∪ B is c*gη-closed.

**Proof**. Let H be a c*-open set containing A ∪ B. Then A ⊂ H and B ⊂ H. Since B is c*gη-closed and B ⊂ H, we have η-cl(B) ⊂ H. Then A ∪ B ⊂ A ∪ η-cl(B) ⊂ H. Since A is η-closed, we have A ∪ η-cl(B) is η-closed. Hence there exists a η-closed set A ∪ η-cl(B) such that A ∪ B ⊂ A ∪ η-cl(B) ⊂ H. Therefore, by Proposition 4.8, A ∪ B is c*gη-closed.

**Proposition 4.10.** If A is closed and B is c*gη-closed subset of a space X, then A ∪ B is c*gη-closed.

**Proof**. Since every closed set is η-closed, we have A is η-closed. Also, by Proposition 4.9, B is c*gη-closed. Therefore, by Proposition 4.9, A ∪ B is c*gη-closed.

**Proposition 4.11.** If a subset A of a topological space X is c*gη-closed, then η-cl(A) − A does not contain any nonempty regular-open (resp. regular-closed) set in X.

**Proof.** Suppose H is a regular open set contained in η-cl(A) − A and H ≠ ϕ. Since every regular open set (resp. regular-closed set) is c*-open, we have H is c*-open. Thus, H is a c*-open set contained in η-cl(A) − A. Therefore, by Proposition 4.2, H = ϕ. This is a contradiction. Therefore, η-cl(A) − A does not contain any non-empty regular-open (resp. regular-closed) set in X.

Already we proved that every η-closed set is c*gη-closed but the converse is not true in general (see Proposition 3.5). The following Proposition shows that when the reverse implication is true.

**Proposition 4.12** If a subset A of a topological space X is both c*-open and c*gη-closed, then A is η-closed.

**Proof.** Suppose A is both c*-open and c*gη-closed. Then η-cl(A) $\subset$ A. Also, A $\subset$ η-cl(A). This implies, A = η-cl(A). Therefore, A is η-closed.

**Proposition 4.13.** Let X be a topological space and A be a subset of X. If A is regular-open and c*gη-closed, then A is both η-open and η-closed.

**Proof.** Assume that A is regular-open and c*gη-closed. Since every regular-open set is c*-open, by Proposition 4.12, A is η-closed. Since regular-open set is η-open, we have A is η-open. Thus, A is both η-open and η-closed.

## CONCLUSION

In this paper, we have introduced c*gη-closed sets in topological spaces and studied some of their basic properties. Also, we have studied the relationship between c*gη-closed sets with some other existing generalized closed sets in topological spaces. The c*gη-closed set can be used to derive a new decomposition of closed map, open map, continuity, homeomorphism, and new separation axioms. This idea can be extended to topological ordered spaces, bitopological spaces, bitopological ordered spaces and fuzzy topological spaces.

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# ASSESSMENT OF SOCIAL SKILLS AMONG IMMIGRATION OFFICERS IN RIVERS STATE COMMAND

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## ABSTRACT

*This study investigated on the assessment of social skills among immigration officers in Rivers State Command. The study was guide by three research question. The study adopted the descriptive survey research design a sample of 115 immigration officers drawn using convenience sampling technique. A researcher development instrument was used for data collection. The validity and reliability of the instrument was well-established. Data analysis was done using frequency count, mean, standard deviation and result was illustrated using bar chart. The result showed that males displayed a higher prevalence of social skills in team work, integrity, time management, conflict management, and anger management, while female officers reported a higher prevalence of the social skills of flexibility and active communication. The result further showed that senior staff displayed a higher mean value than junior staff, with the exception of time management and active communication. Generally, the result showed that there is a high prevalence of social skills among immigration officers in Rivers State command. Based on the results, it was recommended that specialized training and course should be integrated into the orientation programme provided for new recruits into the immigration service.*

## INTRODUCTION

As the wind of globalization continues to blow at an alarming rate and speed, the increasing flow of people goods and services between and within regional and continental border is certain to continue. This has resulted in countries at the national, regional and continental level, to establish policies and programmes that would facilitate effective management of boarders. In most countries of the world, this responsibility is carried out jointly by security forces, but majorly the process of regulating the influx of persons, goods and services rests on the shoulder of a specific agency, in the case of Nigeria, the Nigerian Immigration Service.

The basic function of the Nigerian Immigration Service (NIS) is in the opinion of most individuals is the issuance of visas and resident permit, but the function of the NIS involves more than that as captured by the Immigration Act (Federal Republic of Nigeria, 2015) which includes the control of persons entering or leaving Nigeria, boarder surveillance and patrol, and performance of para-military duties within and outside Nigeria as may be required of officers under the authority of the act. The porosity of Nigerian boarders coupled with manpower deficiency that can appropriately address the effective control of people at the border, has proved exigent for officers. Also the unabated entry of illegal immigrants with proliferation light weapons and influx of contraband goods through criminal activities has greatly put pressure in assessing the skills of immigration of officers in combating this challenges (Musali, Harun & Zainnudin, 2015).

An intent observation of the responsibilities of officers and men of the NIS, and the challenges they face in their day-to-day indicates that it involves interaction with other individuals. However, this researcher has observed that the competency of officers in discharging their duties is often addressed from the cognitive and intellectual perspective to the neglect of social skills. It is for the purpose that the present work is centered on investigating the prevalence of social skills among immigration officers in Rivers State Command

## CONCEPT OF SOCIAL SKILLS

The concept of social skill is not new to the scientific community, especially those in education, psychology, communication and leadership, the current trend of globalization with its emphasis in international relations and networking. Furthermore the benefits of socials skills to the individual and the organization in which they work have been well documented in the literature. According to Ferris, Perrewe and Douglas (2002), social skills facilitate positive social interactions and results in higher performance ratings, increased number of promotions and salary increase. In addition when compared with other long-researched predictors such as general mental ability and conscientiousness, social skills is unique due to its malleability (Sergin & Givertz, 2003). Therefore when properly identified, promoted and enhanced, social skills can contribute to employees success and organizational growth. Despite these

seemingly obvious benefits of social skills to career and organization growth, how social skills is conceptualized and measured is inconsistent.

The discrepancy in the definition of social skills comes as a little surprising when one considers the myriads of terms that have been used as synonyms to it. To some scholars, social skills is also called soft skills (Cortez, 2014) or social competence (Ferris, Hochwarter, Douglas, Blass, & Kolodinsky, 2002) and interpersonal skills (Genc, 2016). However the interchangeability of these terms will be maintained, because differences between them is threadbare and purely theoretical.

In defining social skills, Wu (2008) sees it as comprising of three distinct skills which are social presentation (the skill that individuals use to present themselves in socially appropriate behavior), social scanning (the skills to detect and identify changing social environment) and social flexibility (the skill to adjust social presentation based on the changes observed from scanning the social environment). Schneider (1992) using the term social competence defined it as an individual difference ability in socially effective behavior that is helpful in achieving social goals. In the opinion of Rubin and Martin (1994) social skill was used synonymously with interpersonal competence and was defined as an impression or judgment formed about a person's ability to manage interpersonal relationships in communication settings. For Ferris, Davidson and Perrewe, 2005:7) social skill was conceptualized from the political skill which they defined as a multidimensional construct that refers to the "ability to understand others at work and to use that knowledge to influence others to act in ways that enhance one's personal or organizational objectives" In the opinion of Azim, Gale, Wright, Kirkham, Khan and Alam (2010), unlike technical skills, which are about a person's skill set and ability to perform a certain type of task or activity, soft skills relate to a person's ability to interact effectively with coworkers and customers.

## THEORETICAL FRAMEWORK

Providing a chronological analysis of social skill models or framework, Wu (2008) stated the earliest known conceptualization of social skills was that done by Argyle and Kendon (1967) specifically for mentally impaired individuals. To them, social skill is a goal-oriented process which starts with accurate perception of social situation, then the skill to behave according to social situation and finally the skill to adjust one's own behavior according to the changing situation. Thereafter, Riggio (1986) who synthesized the social skill training and communication literatures developed a social skill framework for use in non-clinical setting unlike Argyle and Kendon (1967). According to the author, social skills involves six learned sub-skills which allow individuals to express themselves socially, understand environmental stimuli, and fit in with the social environment. Specifically, social expressivity and emotional expressivity helps an individual to convey both verbal and non-verbal messages to communicate with others. Social sensitivity and emotional sensitivity allow individuals to understand both verbal and non-verbal messages. Finally, social control and emotional control allow individuals to manage their emotional and verbal communication to fit in with the social environment. On the basic of this framework, Riggio cited in Wu (2008) defines social skills as an individual difference in communication patterns, which allow individuals to manage their emotion and adapt their behaviors according to the social environment.

The framework developed by Ferris et al (2005) for social skills which they operationalized as political skills was made up of four sub-skills which are social astuteness (ability to sense others' emotion and hidden agenda), interpersonal influence (the ability to be flexible in order to elicit a particular response from others), networking ability (the ability to develop and use the networks created to achieve a certain goal) and apparent sincerity (the ability to demonstrate honesty and authenticity). However researchers such as Morgeson, Reider and Campion (2005:21) have highlighted the difference between political and social skills as they stated that even though social skill and political skill appear to be similar constructs, political skill is a narrower construct than social skill in that it focuses more on specific techniques to help individuals get ahead in a political or corporate arena.

A relatively recent conceptualization of social skill sees it as an individual difference in the following skills: active listening skill, speaking skill, social perceptiveness (the ability to sense other people's reaction and understand such reaction), coordination (adjusting own behavior according to other's behavior), service orientation (actively searching for ways to help others), cooperation (being pleasant and encouraging others to work together), and stress tolerance (behave in a calm manner during stressful situation and deal with criticisms well) (Morgeson, et al 2005). Although it appears that Morgeson et al.'s (2005) social skill construct is a mixed framework because it includes personality construct that are not related with the core definition of social skill, such as service orientation and stress tolerance, the remaining sub-skills are consistent with the sub-facets proposed by the social skill scholars. For example, active listening and speaking skills are related to adequate social presentation while social perceptiveness is consistent with social sensitivity skill. Finally, coordination is consistent with the skill to be socially flexible.

Generally, as asseverated by Wu (2008) the social skill literature agrees on only one thing: that social skills is a complex construct which involves multiple skills, which is distinct but related to personality variables like conscientiousness, agreeableness and openness to experience, as well as general mental ability. However, the semantic proliferation of models, frameworks and sub-skills have done little to stop the burgeoning interest in the study of this area of organization behavior. In contributing to this field, the present study will slightly deviate from previous ones by investigating the prevalence of specific social skills that are essential for the daily activities of officers in the Nigerian Immigration Service generally and those in Rivers command in more precise manner. These

skills as identified by the Human Resource Soft Skill Framework (Cortez, 2014) included communication, anger management, conflict resolution, time management, flexibility, integrity and team work

**Active Communication:** In today's globalized world the importance of communication cannot be overemphasized (John, 2009). When looked at from the job responsibility of immigration officers which basically involves the control of people, goods and services, through the territorial boarders of the country, we cannot fail to appreciate the vital essence that communication holds for effective execution of the job. While communication is generally seen as the process of transferring information/messages from one person to another (Okobia, 2011), the extent to which it is implemented and executed in formal organizations has continued to be a source of concern to organizational scientist. Generally, communication as a social skill has been broadly classified into two which are verbal and non-verbal (Ipaye, 2005), but as opined by Kayton et al (2013), there are over 300 task that are considered as vital workplace behavior when dealing with superior officers, colleagues, client or customers but the most prevalent includes active listening, asking question, discussing, sharing information, suggesting, getting feedback, answering questions and explaining.

**Anger management:** Anger is a universal experience that is common to not only humans but also other animal species such as Dogs, Bees and Cat. According to Cavney (2015), anger has an adaptive purpose which has protected organism all through the process of development and for the purpose of this study, the definition provided by the author will be adopted. According to Caveney, anger is an intense emotion typically experienced in relation to feelings of displeasure or insult to one's self or others, or by the intent to do such injury. From this definition, anger therefore originates from the belief or assumption of physical injury or emotional insult.

As individuals who work for and with people, service officials are most times confronted with individuals who are reluctant to follow directives which may result in anger. Also the possibility that someone may be denied visa often leads to altercations between service personnel or with clients. The possibility of getting angry on the job is an everyday reality for service personnel. As anger is an inevitable aspect of officers' daily responsibility, anger management becomes an imperative for successful performance of duties. Anger management according to Moyo Clinic (2016) defined anger management as the process of learning to antecedents of anger and taking action to calm down and deal with anger in a productive manner to achieve self and organizational goals. According to the Australian Psychological Society (2017) some strategies for effective anger management includes identifying the reason anger, taking a time out from the situation, communicating assertively not aggressively, adjusting expectations about people and life generally, understanding other people's point of view, changing internal dialogue, letting go of resentment.

**Conflict management:** Like anger, the potential for conflict in life is inevitable and endemic to all social life. Because of its ubiquity and pervasive nature, the concept of conflict has acquired a multitude of meanings and connotations. However for the purpose of the present study, conflict can be defined as a situation in which two or more parties have incompatible objectives and in which their perceptions and behavior are commensurate with that incompatibility (Bercovitch, cited in Tafel-Viia & Alas, 2009). From this definition, it can be deduced that even in the absence of violence, destruction, inefficiency and irrationality, it is possible for violence to still exist. Also this definition suggests that conflict is a social phenomenon that is found in personal, group, or organizational interactions. The pervasive nature of conflict, has made conflict management a prerequisite skill for effective functioning of security officers (Rinkoo, Mishra, Rahesuddin, Nabi, Chandra & Chandra (2013), including immigration personnel.

Due to the ubiquity nature of conflict, ways of managing conflict are as varied as its causes, origin and context. However, the purpose f conflict management, whether taken by the parties involved in the conflict or whether involving external parties' intervention is to affect the entire structure of a conflict situation so as to contain the destructive components of the conflict process such as the use of violence, hostility, inefficiency and irrationality. For NIS officials, this skills is vital has often at times, they are confronted with conflict situation that task their coping ability. This could arise from managing crowd at airport during flight delay, controlling smugglers at boarders, providing reasons for non-issuance of visa etc.

**Time management:** Like many other jobs, the work of officers of the NIS comes with demanding deadlines and occasionally high stakes. Job roles and specifications are regimented and the ability and competence to display a decisive attitude, an unfaltering ability to think clearly and a capacity to utilize minimum time to get function optimally is prized among officers. This because efficiency demands that officers work under pressure even when they are not inclined to work. As such, time management becomes a prerequisite social skill for getting commitment from people and organizing. According to Ojo and Olaniyan (2008) time management can be defined as the judicious use of a specific time period, either long or short to produce results that are compatible with organizational goals. According to Ezine (2008), time management brings about orderliness among colleagues and enables one to be more productive and fulfilled.

**Flexibility**: The skill set which an individual used in getting a jo is not the same that is needed in succeeding in the job (Skorstad & Ramsdal, 2009), therefore it is essential that an individual continues to adjust to the demands of the working environment as needed on the job. Flexibility is an important social skills that aids the acquisition of new technical or hard skills and encourages an open mindedness to new tasks and new challenges. Flexibility enables workers to step outside their official job description and get more accomplished by taking on more different task. The importance of this skills can be readily appreciated when the job responsibility of an NIS officer is considered. For every NIS officer including those in Rivers State, the movement around different job roles, offices and functions is an undisputed reality. According to the NIS (2017), there are six broad departments in the service which are Human

Resource Management, Finance & Accounts, Planning, Research & Statistics, Works & Procurement, Investigation, Inspectorate and Enforcement, and operations and passport. Depending on the need of personnel in any department, transfer can be made and this transfer involves dealing with a new set of clientele, colleagues and superior. Therefore the need for flexibility cannot be over-emphasized.

**Integrity:** According to C.S. Lewis (1996) integrity is doing the right thing, even when no one is looking". According to the Merriam-Webster (2014), integrity is defined as a firm adherence to a code of moral or artistic value, and is often used in a more generic term such as conscience or good character. According to Audi and Murphy (2006) integrity was ranked as the most important attribute by supervisors and employers. The question is: how is integrity a social skill and why is it important for NIS officers? Generally in the discharge of everyday duty, an officer is presented with situations that challenges the moral value of the service and the conscience of the individual. This could be in the form of financial inducements from smugglers or the presentation of kickback from travel agencies to issue travel documents to questionable persons or for illegal activities.

**Team work:** Like all human activities, optimal success is achievable through the collaborative impact of more than one individual. Nowhere is the demand for team work more essential than in the execution of duties in paramilitary organizations like the NIS. According to Hackman (2002), a team is a group of individuals who interact interdependently and who are brought together or come together voluntary to achieve certain outcomes or accomplish particular task. Teams and team work are an essential part of getting work done in every organization. For an efficient running of the service, there is need for partnership of different departments and units. Also one of the basic responsibilities of the service as stated in the Immigration Act (2015) is the participation of the service in activities with other security and non-security agencies. Therefore the core values of the service and the common goals of smaller teams is needed when individuals work in teams.

As important as these social skills to the effective running of private and governmental organizations, there is a dearth of empirical works that have focused on the ascertaining the prevalence of them among employers although a few studies have been conducted investigating them. Anjum (2014) investigated the relationship between social skills of managers and job satisfaction among employees in Iran and found out that there is a positive but weak correlation. Investigating the importance of social skills to employees' success, Beheshtifar and Norozy (2013) found out that it is important for interpersonal interaction and improve job outcome. Dean (2017) conducted an extensive study to investigate the soft skills needed for the 21st century work force and found effective communication to be the most important. An observation of these studies shows a gap in the literature that no study has been conducted that shows the prevalence of social skills among officers of the Nigerian Immigration Service in Rivers State Command. It is this gap in the literature that is the major motivation behind the present study.

## RESEARCH QUESTION
The present study is guided by one overarching research question:
1. What is the prevalence of social skills among male and female immigration officers in Rivers State Command?
2. What is the prevalence of social skills among junior and senior immigration officers in Rivers State Command?
3. What is the prevalence of social skills among immigration officers in Rivers State Command?

## METHODOLOGY
The descriptive survey research design was used for the current study. While a sample of 115 immigration officers from the Rivers State Command was conveniently sampled from the 3 Area offices of the command in the state. To ascertain the prevalence of the social skills in this study a seven-item instrument was used in which respondent were required to indicate the effectiveness with which they exhibit each of the social skills. The instrument was constructed on a 4-point likert scale of Highly Effective – 4 points, Somehow Effective – 3 points, Poorly Effective – 2 points and Not Effective – 1 point. The instruments were administered to the respondents during official hours and retrieved on the spot. The rating provided by respondents were weighted and ranked to identify the prevalence of each skill. For data analysis, frequency count, mean, standard deviation were used, while the results obtained were illustrated using bar chart

## RESULT PRESENTATION
**Research Question One**: What is the prevalence of social skills among female and male immigration officers in Rivers State Command?

Research question one was answered using weighted mean and standard deviation as shown in table 1 below

| s/n | Item | Female | | | Male | | |
|-----|------|--------|-----|------|------|-----|------|
| | | Mean | SD | Rank | Mean | SD | |
| 1 | Active Communication | 3.10 | 0.87 | 4th | 3.00 | 0.82 | 6th |
| 2 | Anger Management | 2.54 | 0.99 | 7th | 2.65 | 1.03 | 7th |
| 3 | Conflict Management | 3.05 | 0.62 | 5th | 3.48 | 0.70 | 3rd |

| 4 | Time Management | 2.74 | 1.04 | 6th | 3.03 | 1.04 | 5th |
|---|---|---|---|---|---|---|---|
| 5 | Flexibility | 3.65 | 0.64 | 1st | 3.51 | 0.79 | 2nd |
| 6 | Integrity | 3.14 | 0.89 | 3rd | 3.15 | 0.89 | 4th |
| 7 | Team Work | 3.60 | 0.65 | 2nd | 3.66 | 0.65 | 1st |
| | Grand Mean | 3.11 | 0.81 | | 3.21 | 0.84 | |

From the result of the data analysis as presented in table 1, the most prevalent social skill for female immigration officers was flexibility (3.65), followed in order of decreasing prevalence by team work (3.11), integrity (3.14), active communication (3.10), conflict management (3.05), time management (2.74) and lastly anger management. For male officers, the most prevalent social skill was team work (3.66) followed by flexibility (3.51), conflict management (3.48), integrity (3.15), time management (3.08), active communication (3.00) and lastly anger management. From the grand mean value reported, it can be seen that females had a total mean value of 3.11 (SD = 0.81), while males ad a total mean value of 3.21 (SD = 0.84), indicating that males had a higher prevalence of social skills than females. A pictorial representation of the result is displayed in figure 1 below

**Figure 1. Bar chart of female and male immigration officers' social skill**
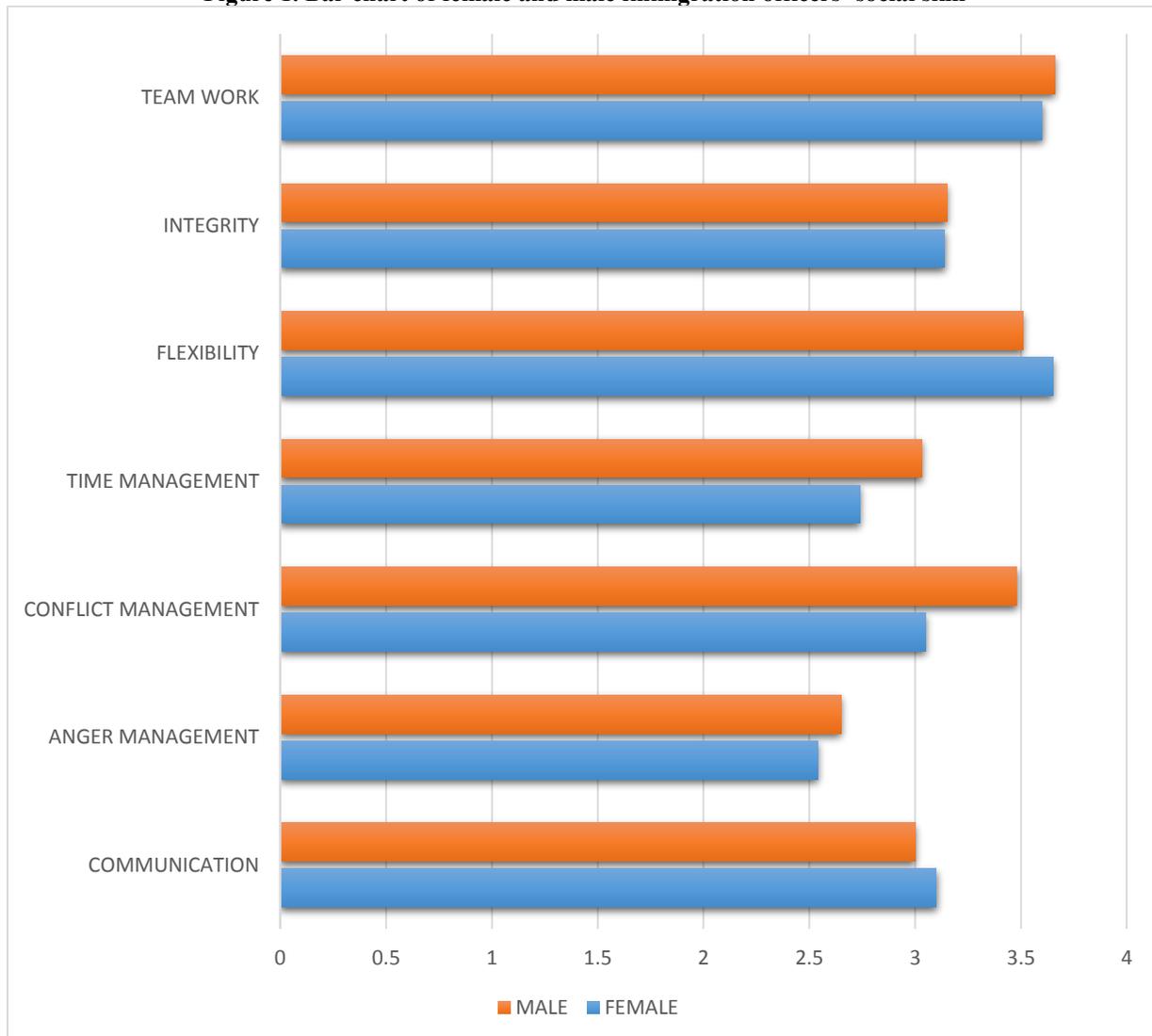


The result further shown in the bar graph above revealed that males displayed a higher prevalence of social skills in team work, integrity, time management, conflict management, and anger management, while female officers reported a higher prevalence of the social skills of flexibility and active communication.

**Research Question Two:** What is the prevalence of social skills among junior and senior immigration officers in Rivers State Command?

| s/n | Item | Junior (N = 70) | | | Senior (N = 45) | | |
|-----|------|------|-----|------|------|-----|------|
| | | Mean | SD | Rank | Mean | SD | Rank |
| 1 | Active Communication | 3.10 | 0.83 | 5th | 2.95 | 0.87 | 5th |
| 2 | Anger Management | 2.57 | 1.06 | 7th | 2.72 | 0.98 | 7th |
| 3 | Conflict Management | 3.24 | 0.67 | 4th | 3.40 | 0.66 | 3rd |
| 4 | Time Management | 2.91 | 0.97 | 6th | 2.87 | 1.15 | 6th |
| 5 | Flexibility | 3.52 | 0.75 | 2nd | 3.67 | 0.52 | 2nd |
| 6 | Integrity | 3.27 | 1.05 | 3rd | 3.35 | 0.80 | 4th |
| 7 | Team Work | 3.54 | 0.72 | 1st | 3.80 | 0.46 | 1st |
| | | 3.16 | 0.72 | | 3.25 | 0.77 | |

The result of the analysis showed that the most prevalent social skill for both junior (3.54) and senior officers (3.80) was team work. This was closely followed by flexibility which junior officers reported a mean value of 3.52 and senior staff a mean value 3.67. For junior staff, the third most prevalent social skill was integrity, while for senior staff it was conflict management. For junior staff, conflict management, was the fourth most prevalent social skill, while for senior staff, integrity was the 4th most prevalent social skill. For both junior and senior staff, active communication was the 5th prevalent social skill. For both junior and senior officers, time management and anger management occupied sixth and seventh position respectively. From the result obtained, it can be seen that the grand mean for senior officers (3.25) was higher than junior officers (3.16). This indicates that there is a greater prevalence of social skills among senior officers than junior officers. The result obtained is presented pictorial in figure 2



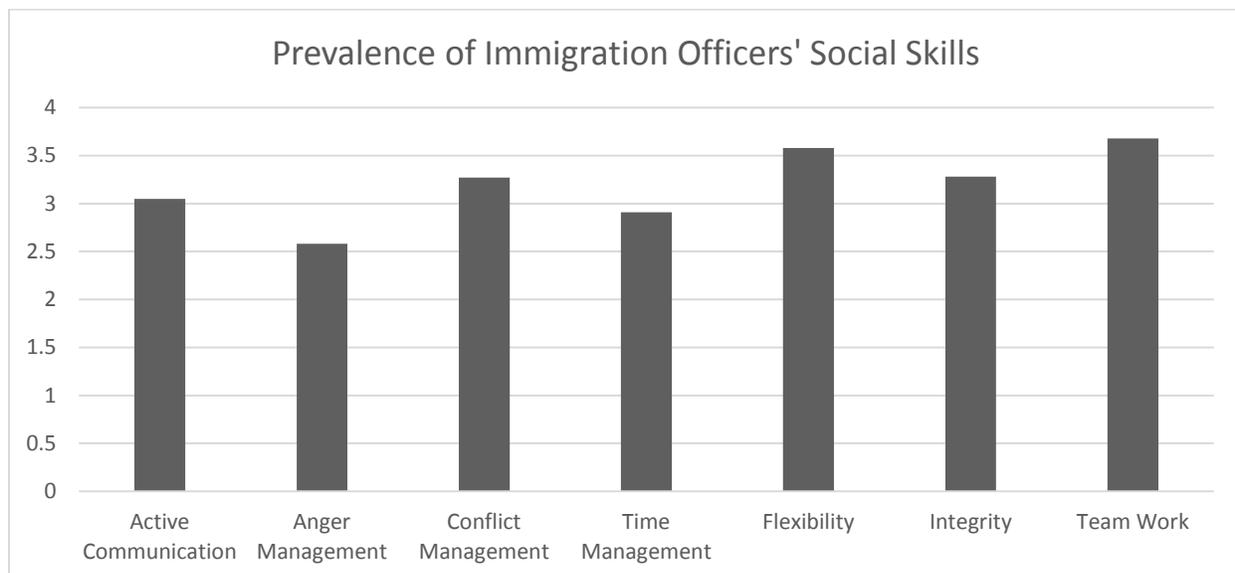Social Skills of Immigration Officers according to Rank
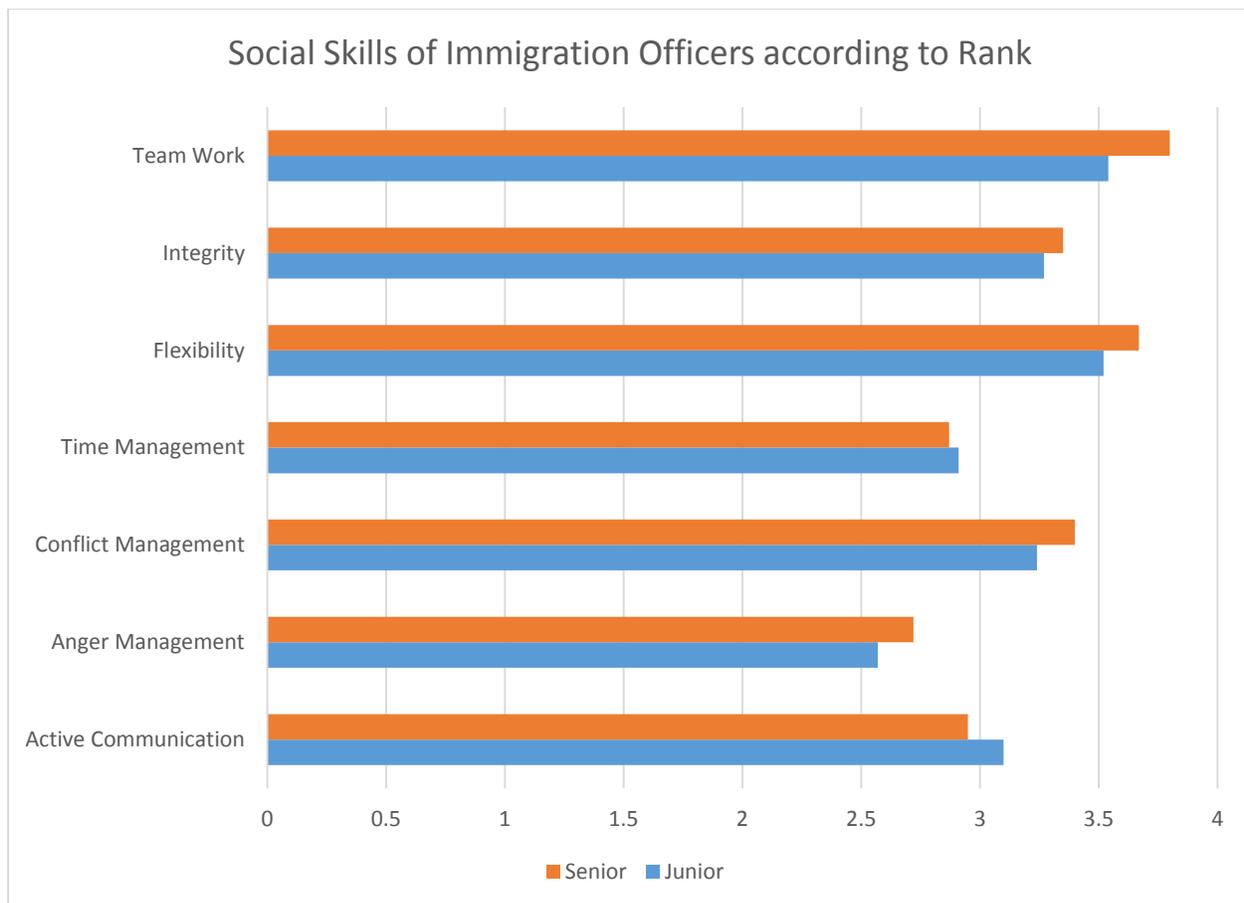
The bar graph above further shows that in all the social skills considered, senior staff displayed a higher mean value than junior staff, with the exception of time management and active communication.

**Research Question Three:** What is the prevalence of social skills among immigration officers in Rivers State Command?

Table 3: Prevalence of social skills among immigration officers

| s/n | Item | Immigration Officers (N = 115) | | |
|-----|------|------|------|------|
| | | Mean | SD | Rank |
| 1 | Active Communication | 3.05 | 0.84 | 5th |
| 2 | Anger Management | 2.58 | 1.00 | 7th |
| 3 | Conflict Management | 3.27 | 0.69 | 4th |
| 4 | Time Management | 2.91 | 1.03 | 6th |
| 5 | Flexibility | 3.58 | 0.72 | 2nd |
| 6 | Integrity | 3.28 | 0.88 | 3rd |
| 7 | Team Work | 3.68 | 0.65 | 1st |
| | | 3.19 | 0.72 | |



From the data obtained from the analysis conducted and the result displayed in figure 3, the result showed that the highest ranked social skills among immigration officers was team work (mean = 3.68, SD = 0.65), followed by flexibility (mean = 3.58, SD = 0.72), integrity (mean = 3.28, SD = 0.88), conflict management (mean = 3.27, SD = 0.69), active communication (mean = 3.05, SD = 0.84), time management (mean = 2.91, SD = 1.03) and lastly anger management (mean = 2.58, SD = 1.00). Generally, a grand mean of 3.19 (SD = 0.72) was obtained which indicates that there is a high prevalence of social skills among immigration officers in Rivers State.

## DISCUSSION OF RESULT

The result from the study showed that generally male immigration officers displayed a higher prevalence of social skills than female officers. This result suggest that in their day to day activities, male officers are more likely to utilize social skills in the execution of their duties than female immigration officers. However this was not across board as in some social skills females reported a greater prevalence of social skills than males such as in active communication, flexibility and integrity. The result from this study is similar to that obtained by Pucjak, Valencic, Jana and Cirili (2009) who found out that male students displayed a higher level of social skills than female students in primary and secondary schools in Slovenia. However, this study differ from the present one in that the assessment of social skills was done using students in schools as against the usage of immigration officers as the sample.

The result of the analysis reveal that senior officers reported a higher prevalence of social skills than junior officers. This result indicates that generally, senior officers are more inclined to utilize social skills in the execution of their daily duties and responsibilities than junior officers. This result is not surprising because those in the senior cadre have attended various courses and programmes where attention is not focused on technical skills but on the acquisition of leadership skills. Also as an individual grows in the job technical skill although important, is over taken by the need to effectively manage people therefore the increasing

importance of social skills. This result is similar to that obtained by Riggio and Reichard (2008) who found out that top level managers displayed higher social and emotional skills such as leadership, courtesy and professionalism than junior level officers.

## Recommendations

From the result obtained, the following recommendations were made:

1. The result from the study showed that social skills was highly prevalent among immigration officers. Therefore effort should be made to recognized those who are exceptionally socially skilled and rewarded in order to promote social skills among officers.
2. Social skill assessment should be an integral aspect of the recruitment procedure for the intake of immigration officers.
3. Specialized training and course should be integrated into the orientation programme provided for new recruits into the immigration service.
4. Regular assessment of social skills among immigration officers should be implemented to enable the identification of those with deficiencies in order to provide specialized training for them.

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