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# WOMEN EMPOWERMENT THROUGH MICRO FINANCE (A CASE STUDY OF N.G.O. IN PRAKASAM DISTRICT OF ANDHRA PRADESH)

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## ABSTRACT

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*The present paper refers to women empowerment through Micro finance (A case study of N.G.O. in Prakasam district of Andhra Pradesh state. The main objective of this paper is to portray the profile of voluntary organization under study area. Micro finance and also SHGs are successful in reducing poverty, empowering women and providing awareness which results in development which is sustainable to the nation and also the next generation. Women have been the most deprived and discriminated strata of society not only in our country but all over the world. In spite of all the efforts of Government and Non-Government organizations they have fallen prey to the financial sector and offer themselves to surrender. The origin of the women empowerment movement could be traced back to the nineteenth century during the harsh conditions in which women had to work in and the substantially lower wages they earned in comparison to men. Further, the issues of anti-slavery, restraint, and women's suffrage, combined with the exploitation of women and children in the Industrial Revolution era further raised the movement. More than 90 per cent women respondents are married who are in need of microfinance and empowerment, so that they can support their families economically through running various small sector units or businesses. The present study can be inferred that nearly 80 per cent of the respondents are in the productive age-group of between (30-40years). This group of people can withhold courage, innovation, creativity and ability to take risk. There is a need to encourage more number of middle aged as well as above 50 years age group women also to form SHGs in order to achieve the objectives of the SHGs.*

**KEY WORDS:** *Non-Governmental Organization (NGO), Women Empowerment, Self-Help Groups, Micro Financing, Suffrage.*

## INTRODUCTION

Micro finance and also SHGs are successful in reducing poverty, empowering women and providing awareness which results in sustainable development to the nation. Women have been the most deprived and discriminated strata of society not only in our country but all over the world. In spite of all the efforts of Government and Non-Government, they have fallen prey to the financial sector and offer themselves to surrender.

Initially, microfinance has been evolving to be a powerful tool for women empowerment, specifically, the rural women and their socio-economic empowerment. The formal and semi formal sectors like commercial banks, Non-Government Organizations etc. are taking considerable emphasis as it is proven to be a profitable commercial activity in providing microfinance to women.

In availing the services women are also participating in the microfinance movement by which are being sculpted by various financial channels. Microfinance is to enable empowerment to women. Microfinance is the provision of financial services to economically backward people for those who are difficult to reach, either directly through banks or other institutions. There is a considerable lack towards the banking and other services which include consumers and self employed. The unbankables, bringing credit, savings and other essential financial services are provided by microfinance which is reachable to millions of people who are extremely poor and those who are to be served by banks because of their financial status. This in turn gives them confidence, scope to improve their status and makes them more energetic in decision making, thus leading to gender equality.

### Definition of Microfinance

The definition of the Microfinance could be defined as a broad range of financial services viz., deposits, loans, money transfers and insurance to the poor people or low income households and micro-enterprises. In 1999, one of the teams working on micro finance set up by National Bank for Agriculture and Rural Development (NABARD) came up with a definition which has become the definitive one. In order not to equate micro-finance merely as credit for micro-enterprises which includes savings, consumption loans, housing loans and insurance services. This is a condition of thrift, credit, and other financial services and products of very little amounts to the low level of income households in rural areas, semi-urban or urban areas for facilitating them to elevate their income levels and improving their living standards". The term "micro credit" generally refers to little loans provided to low of income householders and enterprises owned by them. In the developing countries, this term has been regularly substituted by these institutions which are very much wider and refers for improving to the diversity of services that even the rural people.

### Women Empowerment in India

The origin of the women empowerment movement could be traced back to the nineteenth century during the harsh conditions in which women had to work in and the substantially lower wages they earned in comparison to men. Further the issues of anti-slavery, restraint, and women's suffrage, combined with the exploitation of women and children in the Industrial Revolution era further raised the movement. This movement has also produced a dynamic set of women leaders in Europe and North America in the late nineteenth century and at the turn of the 20th century and this has led to the establishment of the "protective" laws by the governments in a number of industrialized countries. By the 1970s, more and more evidence with regard to the subordinate status and position of women started coming in and women's issues were vociferously raised by women's movements all over the world. Since then, the women's movements have increasingly sought to influence state policy with a view to include women issues and perspectives in the developmental agenda.

### Progress of saving linked SHGs with Banks (2015-16 TO 2016-17)

The banks have reported addition of 12.70 lakh savings linked SHGs at all India level registering a growth of 14.05 percent during the year 2016-17. Among the different regions, Western Region registered the highest growth of 26.55 percent followed by Eastern Region (24.06 percent), Central Region (17.08 percent), Northern Region (14.06 percent) and North Eastern Region (7.08 percent). The lowest growth of 5.01 percent was registered in the Southern Region. Among the states, Rajasthan, Assam, Bihar, Orissa, West Bengal, Chattisgarh, Uttar Pradesh, Maharashtra, Kerala, Karnataka and Telangana registered a good growth of SHGs while states like Andhra Pradesh, Puducherry, Tripura, Arunachal Pradesh, Nagaland, Sikkim registered a negative growth of SHGs leading to decline in absolute number of SHGs in such states over the year 2015-16. The decline in savings accounts of SHGs is mainly due to data sanitization, closure of dormant accounts, under reporting for certain states, and change in the SHG Bank Linkage model for example like SHGs have shifted to linkage through Banking Correspondents.

As regards, the regional share of SHGs during the year 2016-17, Southern Region accounted for major share of 38.03 per cent, followed by Eastern Region (26.05 per cent), Western Region (13.09 per cent), Central Region (10.06 per cent) and Northern Region (5.05 per cent). The North Eastern Region had the lowest share of 5.02 % of total SHGs in the country. The share of Southern Region in terms of number of SHGs declined to 38.03% in 2016-17 from almost half (48.03%) in 2014-15.

**Table No.1 : Region-Wise Progress of Saving Linked SHGs with Banks (2014-15 To 2016-17)**

(Amt. in RLakh)

| Sl. No. | Region | 2014-15 | | 2015-16 | | 2016-17 | |
|---|---|---|---|---|---|---|---|
| | | No. of SHGs | Savings – Amount | No. of SHGs | Savings – Amount | No. of SHGs | Savings – Amount |
| 1 | Northern Region | 457199 | 49676.28 | 478883 | 49293.91 | 548624 | 62452.83 |
| 2 | North Eastern Region | 452887 | 22955.70 | 485591 | 32207.59 | 523469 | 40407.05 |
| 3 | Eastern Region | 1953076 | 336538.57 | 2130997 | 441803.18 | 2654358 | 601154.88 |
| 4 | Central Region | 848514 | 83898.12 | 902222 | 95385.11 | 1062759 | 133230.00 |
| 5 | Western Region | 1140601 | 138696.27 | 1097448 | 124694.93 | 1388615 | 205275.15 |
| 6 | Southern Region | 3724598 | 979657.70 | 3649296 | 1215826.80 | 3836418 | 1289928.25 |
| | Total | 8576875 | 1611422.64 | 8744437 | 1959211.52 | 10014243 | 2332448.15 |

*Source: Various NABARD Reports 2016-17.*

## Review of literature

Swapanadip Sarkar, Iswar Chandra Malik (2019)[1], "Self Help Group in West Bengal - PEST Analysis", The outcome of the study delivers that there is a strong impact of SHGs in the core factor of the societal environment i.e. political, economic social and technological. The Government of India and Government of West Bengal have truly concentrated and nurtured this SHG movement and are taking adequate steps for further improvement. The Government of West Bengal has a keen interest in the development of small, medium and cottage industries (MSME), so many subsidized schemes are initiated for their upliftment. During the study we have also noticed various problems which required strong focus and immediate solution and hence this will extend a path of further research.

Selvi R (2019)[2], Conceptual Framework of Women Self help Groups", the development of a nation depends on the improvement of the rural economy. Poverty and unemployment are the key evils faced by developed countries, to which India is no exemption. In India, most of the people are living in the rural areas below the poverty line. So, providing finance to these people has been considered as an important issue for the Government of India. The financial responsibility is one of the basic needs of the poorer section of the society for socio-economic development. The more attractive scheme with less effort is "Self-Help Group". Women are rendering a major role in the formal economies regulated by society and are continuing to be a large part of the informal economies.

## Objectives

In order to study them the following objectives have been formulated:

1. To portray the profile of voluntary organization under study area.
2. To assess the activities and functioning of self-help groups in terms of operations, activities, strategies, problems and further perspectives.
3. To study the need and the dimension of linkages of self-help groups (SHGs) with banks/financial institutions.
4. To examine the impact of Self-Help Groups (SHGs) in empowerment of rural women in the study area.
5. To suggest the necessary for better measures better performance of the SHGs.

## METHODOLOGY

In order to study the above objectives, one of the Assist voluntary organizations in Prakasam district of Andhra Pradesh has been selected. A multi-stage random sampling procedure has been adopted to select the voluntary organization in the district, the activities that have been undertaken by the selected voluntary organization, the research aims outline the functioning of 60 Self-help Groups (SHGs) out of 1019. The researcher has selected a total sixty self-help groups from four villages based on a simple random sampling method. From each group 5 members were selected by the following same method. The total sample size is 300.

## Tools of Data Collection

The study was carried out in the Prakasam districts of Andhra Pradesh. Both primary and secondary data has been collected for the study. The primary data has been collected by the sample respondents and to assess the impact of self-help groups such as involvement of voluntary organization, changes in their income and employment aspect have been covered, the secondary data has been obtained from the official records, besides published and unpublished reports. The collected data are analyzed by classifying and tabulating. The percentage tool is used to examine women empowerment through SHGs.

## Primary data

In order to collect primary data, an interview schedule on various aspects of the SHG members is canvassed. The primary data was collected from these 300 sample respondents using a pre-tested questionnaire. The interview schedule is divided into various parts, viz., personal details of the respondent, Socio-economic conditions of the respondents, perception on SHGs and its impact and other relevant information needed for the analysis.

### Sampling

Regarding sample size considered in this study, the selected sample of 300 is not too small, as the selected Prakasam district of Andhra Pradesh is very backward in socio-economic grounds, followed by the spread of SHG activities are also considerably limited among the women households in the study area. Due to these constraints the researcher has selected a considerable sample of 300 Women SHG members in the study area during the year 2016-17.

### Frame work of Data Analysis

In order to simplify the data, the present research study has incorporated both quantitative and qualitative analysis, however, quantitative analysis was the major technique used for analysis. After collecting the data, it was entered into the computer to analyze through SPSS (Statistical Package for Social Sciences) Software. Descriptive statistical methods were applied to analyze the data. Cross tables are drawn to analyze the data. The frequencies and percentages were calculated to interpret findings. Chi-square test is used to test the significance of the data. A Chi-square test statistic is computed to test whether there is any association between various activities chosen and the reasons behind selecting a particular activity.

## DATA ANALYSIS

### Age of the Respondent

Age-wise distribution of the respondents has been shown in the table no.2. Most of the respondents i.e., 99 (33.00 per cent) are in between 30 and 35 years of age, 77 are in between 35 and 40 years of age, 74 (24.07 percent) are in 40 years of age and above, 33 (11.00 per cent) are in between 25 and 30 years and 17 (5.07 per cent) are in between 20 and 25 years. On the whole it can be inferred that nearly 80 per cent of the respondents are in the productive age-group (30-40years). This group of people can withhold courage, innovation, creativity and ability to take risk. There is a need to encourage more number of middle aged as well as above 50 years age group women also to form SHGs in order to achieve the objectives of the SHGs.

**Table No.2: Age of the of the respondent**

| Age of the Respondent | Community-wise | | | | Total |
|---|---|---|---|---|---|
| | ST | SC | BC | OC | |
| 20-25 years | 6 (15.00) | 4 (11.04) | 2 (1.03) | 5 (6.08) | 17 (5.07) |
| 25-30 years | 5 (12.05) | 5 (14.03) | 17 (11.03) | 6 (8.01) | 33 (11.00) |
| 30-35 years | 11 (27.05) | 6 (17.01) | 62 (41.01) | 20 (27.00) | 99 (33.00) |
| 35-40 years | 7 (17.05) | 10 (28.06) | 38 (25.02) | 22 (29.07) | 77 (25.07) |
| 40 and above | 11 (27.05) | 10 (28.06) | 32 (21.01) | 21 (28.04) | 74 (24.07) |
| Total | 40 (100.0) | 35 (100.0) | 151 (100.0) | 74 (100.0) | 300 (100.0) |

*Source: Compiled from collected data.*

**Note: Figures in the parentheses indicate percentages.**

### Educational status of the Respondent

Table no.3 shows the educational status of the respondents in the selected area. From the total respondents, 130 (43.03 per cent) are just literates whereas secondly, 67 (22.03 per cent) are primary educated, 48 (16.00 per cent) are illiterates, 33 (11.00 per cent) are done with upper primary, 19 (6.03 per cent) are done high school studies and 3 (1.00 per cent) are completed college level. It can be concluded that more than 40 per cent are just literates as they are more in need of micro-finance and women empowerment to carry out small sector units or handicrafts or petty business etc.

**Table No.3: Educational status of the respondent**

| Educational Status | Community-wise | | | | Total |
|---|---|---|---|---|---|
| | ST | SC | BC | OC | |
| Just literate | 22 (55.00) | 11 (31.04) | 62 (41.01) | 35 (47.03) | 130 (43.03) |
| Primary education | 7 (17.05) | 14 (40.00) | 31 (20.05) | 15 (20.03) | 67 (22.03) |
| Upper primary | 3 (7.05) | 2 (5.07) | 24 (15.09) | 4 (5.04) | 33 (11.00) |
| High School | 2 (5.00) | 7 (20.00) | 7 (4.06) | 3 (4.00) | 19 (6.03) |
| College | 1 (2.05) | 1 (2.09) | 1 (0.07) | 0 (0.00) | 3 (1.00) |
| Illiterates | 5 (12.05) | 0 (0.00) | 26 (17.02) | 17 (23.00) | 48 (16.00) |
| Total | 40 (100.0) | 35 (100.0) | 151 (100.0) | 74 (100.0) | 300 (100.0) |

*Source: Compiled from collected data.*

**Note: Figures in the parentheses indicate percentages.**

## Awareness on SHGs before Joining

Table no.4 details the cross sectional analysis between Awareness of the working of SHG before joining as a member and category wise of the respondents. Out of the total sample, 295 (98.03 per cent) respondents got awareness of it and only 5 respondents (1.07 per cent) do not have awareness of it.

**Table No.4: Awareness of the working of SHGs before joining**

| Awareness of the working of SHG before joining | Community-wise | | | | Total |
|---|---|---|---|---|---|
| | ST | SC | BC | OC | |
| Aware | 39 (97.05) | 35 (100.00) | 148 (98.00) | 73 (98.06) | 295 (98.03) |
| Not aware | 1 (2.05) | 0 (0.0) | 3 (2.00) | 1 (1.04) | 5 (1.07) |
| Total | 40 (100.0) | 35 (100.0) | 151 (100.0) | 74 (100.0) | 300 (100.0) |

*Source: Compiled from collected data.*

**Note: Figures in the parentheses indicate percentages.**

When it is noticed through community wise, out of total Scheduled Tribe (STs) respondents, 39 (97.05 per cent) have awareness and only 1 respondent (2.05 per cent) do not have awareness. Among Scheduled Castes (SCs), all the respondents have awareness about the voluntary organization. While coming to Backward Class (BCs), 148 (98 per cent) respondents have awareness and only 3 (2 percent) do not have awareness. Among the Other Community (OC), 73 (98.06 per cent) respondents have awareness and only 1 (1.04 per cent) respondents do not have awareness. It is observed that there is good awareness about the organization and programmes among the respondents in the study area.

## Mode of Information

Table no.5 shows the cross sectional analysis between the mode of information about the SHGs and Community wise of the respondents. Majority of the respondents i.e199 (66.03 percent) have acquired from Non Government Organisation employees, 46 respondents (15.03 percent) from village leaders, 38 respondents (12.07 per cent) from friends or relatives, 13 respondents (4.03 per cent) from leaders or members of SHGs and only 4 respondents from radio or through newspapers.

When coming to the ST community, 35 (87.05 percent) respondents acquired from Non Government Organisation employees, 2 respondents (5.00 per cent) from radio or newspapers and friends or relatives each, and only 1 (2.05 per cent) respondents from leaders or members of SHGs. Among the SCs, 29 (82.09 percent) respondents, 5 (14.03 per cent) respondents and only 1 (2.09 percent) respondents acquired from Non Government Organisation employees, leaders/ members of SHGs and village leaders simultaneously. While in the BC community, 86 respondents (56.03 per cent) acquired from Non Government Organisation employees, 26 (17.02 per cent) respondents from friends or relatives and only 2 (1.03 per cent) respondents through radios/

newspapers and leaders or members of SHGs each. Among the OCs, 50 (67.06 per cent) respondents from Non Government Organisation employees, 10 (13.05 per cent) respondents from friends or relatives, 9 respondents (12.02 per cent) and only 5 (6.08 per cent) respondents from leaders or members of SHGs. Overall, it can be stated that half of the respondents have acquired information from Non Government Organisations. The Pearson Chi-square value is 50.511 at a high significant level.

**Table No.5: Mode of information about the SHGs**

| | | Community-wise | | | | Total |
|---|---|---|---|---|---|---|
| | | ST | SC | BC | OC | |
| Mode of information about the SHGs | Radio/Newspapers | 2 (5.0) | 0 (0.0) | 2 (1.3) | 0 (0.0) | 4 (1.3) |
| | Friends/Relatives | 2 (5.00) | 0 (0.00) | 26 (17.02) | 10 (13.05) | 38 (12.07) |
| | Village leaders | 0 (0.00) | 1 (2.09) | 36 (23.08) | 9 (12.02) | 46 (15.03) |
| | Non Government Organisation employees | 35 (87.05) | 29 (82.09) | 85 (56.03) | 50 (67.06) | 199 (66.03) |
| | Leader/member of SHG | 1 (2.05) | 5 (14.03) | 2 (1.03) | 5 (6.08) | 13 (4.03) |
| Total | | 40 (100.0) | 35 (100.0) | 151 (100.0) | 74 (100.0) | 300 (100.0) |

*Source: Compiled from collected data.*

**Note: Figures in the parentheses indicate percentages.**
*** $\chi^2$ = 50.511, df=12, Significant at 0.000 level.**

## Preference to Join in SHGs

Table no.6 describes the cross sectional analysis between the preference of SHGs to join by the respondents and community of respondents. Out of 300, 265 (88.03 per cent) preferred to join Non Government Organisation organized SHGs and remaining 35 (11.07 per cent) prefer Government / DRDA organized SHGs.

After going through the above strata, there is a community wise differentiation. Maximum number of the sample preferred Non Government Organisation organized SHGs with 26 (65.00 per cent) in STs, 30 (85.07 percent) in SCs, 143 (94.07 per cent) in BCs and 66 (89.02 per cent) in OCs. While on the other hand, remaining sample is preferred to Government/DRDA organized SHGs with 14 (35.00 per cent) in STs, 5 (14.03 per cent) in SCs, 8 (5.03 per cent) are in BCs and only 8 (10.08 per cent) are in Other Community.

**Table No.6 : Preference to join SHGs**

| | | Community-wise | | | | Total |
|---|---|---|---|---|---|---|
| | | ST | SC | BC | OC | |
| Preference of SHGs | Non Government Organisation organized SHGs | 26 (65.00) | 30 (85.07) | 143 (94.07) | 66 (89.02) | 265 (88.03) |
| | Government / DRDA organized SHGs | 14 (35.00) | 5 (14.03) | 8 (5.03) | 8 (10.08) | 35 (11.07) |
| Total | | 40 (100.0) | 35 (100.0) | 151 (100.0) | 74 (100.0) | 300 (100.0) |

*Source: Compiled from collected data.*

**Note: Figures in the parentheses indicate percentages.**
*** $\chi^2$ = 27.361, df=3, Significant at 0.000 level.**

From the above table, it is depicted that more than 88 per cent of the whole sample preferring Non Government Organisation organized SHGs. The Pearson Chi-square value is 27.361 at a high significant level.

## Support Received

The respondents received support while forming SHGs in the village by the respondents in the table no.V.7. 276 (92 per cent) received support from Non Government Organisation /NGO officials, 12 (4.00 percent) received from village leaders, 8 (2.07 per cent) received from bank officials and 4 (1.03 percent) received from DRDA staff. As part of it, all the community respondents received maximum assistance from Non Government Organisation / Non Government Organisation officials. In the Scheduled Tribe, 34 (85.00 per cent) received from Non Government Organisation /NGO officials and 6 (15.00 percent) are bank officials.

**Table No. 7 : Support received in the formation of SHGs**

| | | Community-wise | | | | Total |
|---|---|---|---|---|---|---|
| | | ST | SC | BC | OC | |
| Support received in the formation of SHGs | DRDA Staff | 0 (0.00) | 0 (0.00) | 2 (1.03) | 2 (2.07) | 4 (1.03) |
| | Bank officials | 6 (15.00) | 1 (2.09) | 1 (0.07) | 0 (0.00) | 8 (2.07) |
| | Village Leaders | 0 (0.00) | 6 (17.01) | 2 (1.03) | 4 (5.04) | 12 (4.00) |
| | Non Government Organisation / officials | 34 (85.00) | 28 (80.00) | 146 (96.07) | 68 (91.09) | 276 (92.00) |
| Total | | 40 (100.0) | 35 (100.0) | 151 (100.0) | 74 (100.0) | 300 (100.0) |

*Source: Compiled from collected data.*

**Note: Figures in the parentheses indicate percentages.**
*** $\chi^2$ =50.014, df=9, Significant at 0.000 level.**

In the Scheduled Caste, 28 (80 percent) are Non Government Organisation / NGO officials, 6 (17.01 per cent) are village leaders and 1 (2.09 percent) are bank officials. When it comes to Backward Community, 146 (96.07 per cent) are Non Government Organisation /NGO officials, 2 (1.03 per cent) are DRDA staff and bank officials. At last, 68 (91.09 per cent) are Non Government Organisation /NGO officials, 4 (5.04 per cent) are village leaders and 2 (2.07 per cent) are DRDA staff in Other Community. The Pearson Chi-square value is 50.014 at a highly significant level.

## Financial support

Table no.V.8 shows the various financial supporters for the training of respondents and community wise. Out of the total respondents 300, 254 (84.07 percent) got support from Non Government Organisation s and rest of them i.e. 28 (9.03 per cent), 16 (5.03 per cent) and 2 (0.07 per cent) do not attend training, SHGs and training institutions.

Among various community wise respondents, in the Scheduled Tribe, 32 (80.00 percent) got support from Non Government Organisation s, 6 (15.00 percent) from SHGs and 2 (5.00 percent) do not attend training. In the Scheduled Caste, 30 (85.07 percent) got support from Non Government Organisations and 2 (5.00 percent) do not attend training.

**Table No.8 : Financial supporters for the trainings of respondents**

| | | Community-wise | | | | Total |
|---|---|---|---|---|---|---|
| | | ST | SC | BC | OC | |
| Financial Supporters | SGHs | 6 (15.00) | 0 (0.00) | 6 (4.00) | 4 (5.04) | 16 (5.03) |
| | Training Institution | 0 (0.00) | 0 (0.00) | 2 (1.03) | 0 (0.00) | 2 (0.07) |
| | Non Government Organisation s | 32 (80.00) | 30 (85.07) | 127 (84.01) | 65 (87.08) | 254 (84.07) |
| | Not applicable | 2 (5.00) | 5 (14.03) | 16 (10.06) | 5 (6.08) | 28 (9.03) |
| Total | | 40 (100.0) | 35 (100.0) | 151 (100.0) | 74 (100.0) | 300 (100.0) |

*Source: Compiled from collected data.*

**Note: Figures in the parentheses indicate percentages.**
*** $\chi^2$ =14.082, df=9, Significant at 0.119 level.**

In Backward Community, 127 (84.01 percent) got support from Non Government Organisation s and rest of them i.e. 16 (10.06 per cent), 6 (4.00 per cent) and 2 (1.03 per cent) do not attend training, SHGs and training institutions. As of Other Community, 65 (87.08 per cent), 5 (6.08 per cent), 4 (5.04 per cent) got support from Non Government Organizations, do not attend training and SHGs. From the above statistics, it is clear that maximum of the respondents got financial support from the Non

Government Organizations. The Pearson Chi-square value is 14.082 at 0.119 significant level.

## Support obtained to avail loan

Table no.9 describes the support obtained by the respondents in availing loans and the community wise of the respondents. Out of 300, maximum of the respondents i.e. 232 (77.03 percent) obtained Non Government Organization official support, 56 (18.07 percent) received friends/ relatives support and only 12 (4 percent) obtained bank officials support.

In the distribution of data through community wise, in the Scheduled Tribe, 28 (70 percent) obtained Non Government Organization official support, 56 9 (22.05 per cent) received friends/ relatives support and only 3 (7.05 per cent) obtained bank officials support. In the Scheduled Caste, all the members have NOG officials support while getting loans. Whereas in Backward Community, 114 (75.05 percent) have obtained Non Government Organization officials support, 29 (19.02 per cent) have obtained friends/ relatives support and only 8 (5.03 per cent) have bank officials assistance.

**Table No.9 : Support obtained by the respondents to availing loans**

| | | Community-wise | | | | Total |
|---|---|---|---|---|---|---|
| | | ST | SC | BC | OC | |
| **Support obtained** | Officials of the bank | 3 (7.5) | 0 | 8 (5.3) | 1 (1.4) | 12 (4.0) |
| | Non Government Organisation officials | 28 (70.00) | 35 (100.00) | 114 (75.05) | 55 (74.03) | 232 (77.03) |
| | Friends/Relatives | 9 (22.05) | 0 | 29 (19.02) | 18 (24.03) | 56 (18.07) |
| Total | | 40 (100.0) | 35 (100.0) | 151 (100.0) | 74 (100.0) | 300 (100.0) |

*Source: Compiled from collected data.*

**Note: Figures in the parentheses indicate percentages.**
*** $\chi^2$ =15.455, df=6, Significant at 0.017 level.**

Lastly, in Other Community, 55 (74.03 per cent) obtained Non Government Organisation official support, 18 (24.03 per cent) received friends/ relatives support and only 1 (1.04 per cent) obtained bank officials support. Finally, it is examined that more than 70 per cent of the respondents have been assisted by Non Government Organisation officials. The Pearson Chi-square value is 15.455 at 0.017 significant level.

## Observations

After due consideration of the analysis made earlier the study arrives at the following major findings.

- The study states that nearly 80 per cent of the respondents are in the productive age group, between (30-40years) and they are in more need of micro finance and women empowerment to carry out small sector units, handicrafts or ancillary industries as maximum number of respondents are mere literates.
- The study also found that the majority of the respondents have acquired information regarding SHGs from local Non Government Organizations and also those employees are involved in encouraging the respondents to join SHGs.
- There is a good awareness and motivation to join in SHGs about the organization and programmes among the respondents through Non Government Organization employees.
- It is assumed that nearly 90 per cent had a good awareness about the SHGs and they preferred to join Non Government Organization organized SHGs. The reason being organization has to improve economic conditions.
- Non Government Organization/ NGO officials have been supported during the formation of SHGs. A huge part of the respondents attends the meeting regularly to know the loan details. Being part of SHG, maximum numbers of respondents are attending meetings or training at NGO offices.
- Most likely, meetings conducted by NGO officials last up to one to three days. They receive financial assistance from Non Government Organizations.
- Through these SHGs, most of them are getting awareness on Government programs. Through these, they have improved economically which has made them skillful. Members acquired group management skills and technical skills through training from Non Government Organizations.
- Majority of them do not face market facilities problems, they get support in availing loans through Non Government Organizations and few of them lack market knowledge.

## Suggestions

Based on the above findings, the following are the various suggestions to improve the socio-economic conditions of the sample respondents.

- Majority of the SHG members are using loans for unproductive purposes which leads them to indebtedness. So there is a need to educate the members on usage of loans for productive purposes, in order to improve and empower the economic conditions and empower of the women in India.
- The ability of women to demand their rights such as fair wages and decent working conditions is often undermined due to their unfavourable position in the labour markets as well as a lack of a forum that can represent their collective grievances.
- The present methodology training, which is being given to SHGs members, needs to be changed by increasing the duration of training period and result oriented. A competent team of trainers consisting of Non Government Organizations and animators should be entrusted with the task.
- The SHGs are majorly dependent upon the Non Government Organizations in the financial decision making process. Hence, the government should encourage more Non Government Organizations for involvement in the SHGs activities.
- Skill development programmes should be launched especially for rural women.
- The sample SHGs faced the problem of inadequate loan amounts. Loan is one of the basic components to start an activity and also women can be financially sound when the loan amount provided meets their needs. Loan amount should be increased to the extent that they can take up an income generating activity.
- It is suggested that incentives may be given for prompt repayment. This will catch the attention of the groups for timely repayment of the loan. Further, suitable advice may also be given to the members of SHGs in ways for timely repayment of loan.
- It is also suggested that the governmental and non-governmental institutions should be engaged as facilitators in the process of self-help group formation so to have at test one Self Help Groups in every village.

## CONCLUSION

In conclusion, the majority of the sample respondents of the present study belongs to BCs and young in age groups in the study area. More than 90 per cent women respondents are married who are in need of microfinance to support their families economically through running various small sector units or businesses. The present study can be inferred that nearly 80 per cent of the respondents are in the productive age-group of between (30-40years). This group of people can withhold courage, innovation, creativity and ability to take risk. There is a need to encourage more number of middle aged as well as above 50 years age group women also to form SHGs in order to achieve the objectives of the SHGs.

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# ADOPTION OF INFORMATION & COMMUNICATION TECHNOLOGY AMONG THE STUDENTS AT TERTIARY LEVEL: BANGLADESH PERSPECTIVES

| | |
|---|---|
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**ABSTRACT**

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***Information and Communication Technology (ICT) is extensively being used for educational purpose because it helps to make both learning and teaching effective and meaningful. Again, it shrinks the obstacles of habitual learning systems like allowing students to access unlimited educational resources and providing required data timely. Bangladesh has made marvelous betterment in this sector in the last couple of years especially in tertiary level. Now, it is high time to justify how the tertiary level students of Bangladesh are accepting ICT for learning. The study was conducted at the Noakhali Science and Technology University (NSTU) with randomly collected data from 250 students of various departments. It has justified the perceptions, behavior and expectations of tertiary level students towards the adoption of ICT. The results of this study are expected to be useful to the educational policymakers, institutions, educators and the relevant parties.***

**KEYWORDS:** *ICT Adoption, ICT in Education, Tertiary Education, NSTU, Bangladesh.*

## 1. INTRODUCTION

Education is a must for a society because without education it is impossible to ensure economic development and primary leverage (Assar, 2015). Assimilation of ICT into the education sector is one of the vital challenges in pedagogy for a long period of time (Juuti et al., 2009). Now a day's people are introducing with the modern technology more frequently and internet connection has become a fundamental need especially for metropolitan area (Rana & Rana, 2020). In 21st century Information & Communication Technology, commonly acknowledged as ICT, is one of the most influential sources of gathering skills and knowledge. Computer based technologies and digital culture boost collaboration that made the world closer and influences on the people's life style such as how they live, learn and work. It is possible to evaluate the benefits of ICT accurately by an institution only when the ICT has been appropriately practiced and adopted in the education system of the institution (Chigona et al., 2010). The consequence of ICT is very influential in education sector both inside and outside the classroom setting particularly in tertiary level students (Basri et al., 2018). As an influential instrument, ICT should be used to enhance the educational aspiration like communication, collaboration, gathering and analyzing information and problem identification and mitigation, because these are significant for creating skills and knowledge (Drent & Meelissen, 2008). Moreover, ICT allows students to learn in an independent, dynamic and productive way to facilitate the community and it also creates an influential research and pedagogical atmosphere (Volman & van Eck, 2001). Again, it provides a variety of opportunities to formulate learning procedure as pleasant, work-oriented and up to date. It is possible to create and disseminate skills and knowledge more effectively and efficiently by using ICT tools. Chen and Wu (2020) Showed that Students learning efficiency is drastically improved by the integration of Information and communication technology and mathematics remedial instruction. Essential factors behind the assimilation of information and communication technology should be recognized and analyzed in the institution (Gellerstedt et al., 2018). In an institution the efficiency of ICT based learning may depend on various attributes such as the accessibility in equipment and resources, how the teachers and students are upheld in its utilization and the assessment of resources to the student's experiences (Al-Adwan & Smedley, 2012). Students' use frequency and knowledge level regarding computer technology have been significant for ICT based learning both in the global and nationa arena.

In Bangladesh, the prospective of the ICT sector and its effects towards the economy is officially recognized from 1997 (Sultana & Shahabul, 2018). National ICT guideline of Bangladesh, which is articulated in the year of 2009, focuses on the fundamental changes of curriculum and education systems where ICT would be an efficient apparatus (Babu & Nath, 2017). Lately, Bangladeshi educational institutions, especially the tertiary level are focusing on the online based new normal education systems. Moreover, today's cyber based generation in Bangladesh is accustoming to digital lifestyle. Therefore, it was expected that the use of ICT can be a great opportunity to disseminate the knowledge among the students and develop the education. However, the goal of this study was to accumulate the findings and the essence from a review of momentous chunk of the literature with a view to determine the approaches and expectations of tertiary level students of Bangladesh towards adoption of information and communication technology. The expected outcome of this study will facilitate policymakers, educationist and the individuals those who are functioning in the relevant field. It will also be supportive to enhance the ICT based education system and scholastic performance in Bangladesh.

## 2. LITERATURE REVIEW

Quite a lot of benefits may retain by using ICT including sophisticated learning technologies, internet and digital devices like better elucidating on a subject, accessibility to the effective resources and ability to develop a participative learning system (Williams, 2008). George et al., (2020) addressed that ICT provides huge reimbursement to the students by allowing them getting access to the huge amount of study materials that are not available in their institution. Alabi (2016) and Chaputula (2012) have shown that infrastructural conditions have a strong and positive correlation with the adoption of information and communication technology. A number of researchers have found that insufficient ICT infrastructure and personal devices, costly and weak internet connection, poor socio-economic condition, inadequate ICT related resources, lack of effective ICT governance and policy and fragile education systems are the hindrance of the expansion of ICT based education systems in developing countries (Dawadi & Shakya, 2016; Khan et al., 2012; Light, 2009; Parvin, 2013; Rana & Rana, 2020). Lim et al., (2020) in their study on the acceptance of ICT for teaching in Bangladesh and Nepal based on 76 relevant documents, argued that Bangladesh and Nepal yet thrive to optimize the benefits of ICT in education sector. Several researchers recommended that the ICT infrastructure should be cost-effective and user friendly, training program should be arranged for the stakeholders including teachers, long term strategic plan should be taken for the appropriate adoption of ICT in learning sector

(Bariu, 2020; Jana & Maiti, 2020; Phutela & Dwivedi, 2019; Teeroovengadum et al., 2017).

A study conducted by Paul and Lal (2018) investigating the adoption of ICT among the tertiary level students in India, showed that maximum of the students uses digital technology in their study purpose. A large number of tertiary level students in Bangladesh are obsessive to the internet (Karim & Nigar, 2014; Soron & others, 2015). On the other hand, study shows that being addicted to mobile phone technologies often have off-putting consequences among the students that's why it appears as a matter of debate among the specialists (Islam et al., 2019). In Bangladesh, adopting learning and pedagogical practices through ICT tools is newfangled notion (Nurul Mostafa Kamal, 2019). Consequently, a lot of studies has been done in several times from different aspects of ICT in education. However, an impeccable review of the literature affirms gaps yet to fill, particularly in terms of students' perceptions in Bangladesh. We have recognized that limited studies have investigated how the students are accepting ICT towards learning in Bangladesh. According to Zainal & Zainuddin (2020), in future research would be conducted on the impact of ICT and students' perceptions within particular subject.

## 3. METHODOLOGY

### 3.1 QUESTIONNAIRE DESIGN AND DATA COLLECTION

A structured questionnaire including two parts was employed to collect data from the respondents using a survey method. The first part of the questionnaire was developed to collect the demographic data of the respondents. On the other hand, the second part of the questionnaire consists of 15 items and this section aimed at collecting the responses on measurement items. Items used in this study were adopted from different previous studies on the similar research topic. Items along with their sources are included in the appendix section. All the responses, in second part, were collected using a Five-Point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree). With a view to obtaining our research objectives we have selected tertiary level students as our target population and students from various departments of Noakhali Science and Technology University (NSTU) were taken as our sample. We have sent the questionnaire randomly to 250 students of NSTU from various departments through online within April 2020 to May 2020.

### 3.2 DATA ANALYSIS

At first, 41 unengaged data from 250 data were removed using standard deviation in Microsoft Excel. After that 209 cleaned data were imported to SPSS for further analysis. All of the data were then analyzed using frequency and percentage method with a view to justifying our assumption regarding ICT adoption in tertiary level of Bangladesh and the objective of our study. Several graphs and chart were used to represent the result of the analysis.

## 4. RESULTS AND DISCUSSIONS

### 4.1 Demographic Information of the Respondents

Table 01 represents the demographic information of the respondents and from the table it can be observed that majority percentage of the respondents was male with 54% in number and rest of the 46% was female students. Respondents of 21-25 age ranges are highest in number indicating that most of them were from regular graduation and post-graduation level.

**Table 01: Summary of the respondents' demographic information**

| Attributes | | Frequency | Percentage (%) |
|---|---|---|---|
| **Gender** | Male | 113 | 54% |
| | Female | 96 | 46% |
| **Age** | 16-20 | 18 | 9% |
| | 21-25 | 172 | 82% |
| | 26-30 | 19 | 9% |

### 4.2 Findings

This part will represent the findings on 15 items used in our structured questionnaire on a measurement scale ranging from 1 (strongly disagree) to 5 (strongly agree). Findings on each item are represented in graphs and all the graphs are represented in the **appendix *(A: Graphical representation of the Findings)***. However, each of the findings are discussed below-

At first it was asked to the respondents that whether they find it trouble-free to learn using education related ICT tools or not**. Figure 01** represents that 28% of the respondents remained neutral on that point. Successively, 26% and 23% of the respondents agreed and strongly agreed on this point indicating that the education related ICT tools are easy to learn. The scenario is almost similar in case of the ease of use of the education related ICT tools which can be seen in **figure 02**. 18% of the respondents remained neutral, 33% agreed, and 31% strongly agreed that education related ICT tools are easy to use.

The percentage of respondents disagreeing on these two questions indicates that education related ICT tools are not much complex to learn and use. However, it was also asked to them that how they feel while interacting with available education related ICT tools. Majority of the respondents (**see in figure 03**) agreed that they are clear about the operational procedure of education related ICT tools available to them and they have understandings about the usage of those tools. The findings on that point indicates that ICT tools to support educational purposes are not so much complex to understand and operate. This finding justifies the previous findings ICT tools are not much complex to learn and use from the students' perspectives. If students are given proper opportunities, they can easily discover the ways in using the ICT tools for their education purposes. Although, it was obtained from our survey that students agreed that using education related ICT tools are easy and understandable. Nevertheless, there should be proper training session for the students for making them skilled at using education related ICT tools effortlessly because majority of them disagreed on that point that being skilled at using education related ICT tools effortless (**see in figure 04**).

Respondents were also asked some questions on the points of justifying the importance of ICT tools used for educational purposes and they replied very positively as anticipated. They were asked whether the education related ICT tools are beneficial or not, whether those tools enhance their academic productivity or not, whether those tools encourages good grades or not. From the **figure 05, 06, 07** it can be observed that in almost all points they agreed positively. These indicate the universality of the importance of ICT in education once again.

In order to obtain some comparative data between conventional and e-learning methods, respondents were asked some questionnaires. On point that, whether conventional learning is better than e-learning or not we found some confusing replies from the respondents. **Figure 08** represents the scenario- the number of respondents agreed are almost similar to the number of respondents disagreed and neutral responses are majority in percentage. Almost same findings can be observed for the next point (**see in figure 09**). Students were asked about the effectiveness of e-learning platform over traditional platform in case of students' performance assessment. Majority of the responses are found neutral. These findings are justification of that point that if education related ICT tools are made available among students then their primary perception on learning and assessment mode will be changed. Unless they are common to such tools for their everyday education related purposes, they will remain confusing on the battle of argument between e-learning and conventional learning platform although they agreed that ICT related tools are beneficial to their academic productivity and they are highly interested to use education related ICT tools in their academic arena (**see in figure10**).

On next points students agreed highly that they are able to use education related ICT tools as they believe they have the minimum basic knowledge and confidence for doing so. **Figure 11** represents the case that majority of the respondents (33% agreed, and 28% strongly agreed) are confident enough that they have knowledge to run and use education related ICT tools. However, as anticipated, they lack proper resources for using such advanced and expensive educational tools (**see in figure 12**). In addition to that almost all of the agreed that owning these advanced tools are costly to them (**see in figure 13**). These two findings are the indication of the financial hurdles of the students at tertiary level.

Finally, institutional contributions were checked by asking them two questions. Replies on whether education related ICT tools and facilities provided by their institution are satisfactory for them or not indicates that students are less aware of that particular extent. Because from strongly disagree to strongly agree almost all clusters are of same value (**see in figure 14**). This means supports from their institute are perplexing in this extent. However, they are happy with the supports provided by their faculty members regarding the use of education related ICT tools indicating the willingness of the authority (**see in figure 15**).

### 4.3 Discussion

Findings of our study indicate some major insights regarding the adoption of ICT in tertiary level of education in Bangladesh. Students are highly motivated to use the education related ICT tools for their regular education purposes as they have acknowledged the benefits of these tools. They are confident enough to operate the tools for the betterment of their academic activities. They want to keep pace with the advanced world as well as the education system of the developed countries. However, they highlighted the lacking of adequate resources and expenses of owing these advanced tools. Moreover, need of increasing institutional supports are also highlighted. Government of Bangladesh is trying to cover up the overall tertiary level education system with huge investments in ICT as part of Vision 2021. Yet, the triumph is far from the reality. Respected authorities should ensure basic functioning tools for education. Training and financial facilities like- subsidies and tax-free purchase should be increased. Financial institutions should come up with student friendly EMI plans. Institutions should be more considerate while budgeting for institutional

development keeping ICT based education facilities with highest priorities. Although, students may obtain huge benefits by using ICT tools in education but never would overlook conventional systems because several researches concluded that conventional pedagogy systems is more effective then ICT based education (Banerjee et al., 2007; Barrera-Osorio & Linden, 2009; Bulman & Fairlie, 2016; Comi et al., 2017). However, it is not possible to build up a developed nation ignoring ICT in education.

## 5. IMPLICATIONS

Findings of the study may contribute both theoretically and practically. Theoretically, it may help the future researchers who are interested to conduct research on the same or related topics. Moreover, policy maker and related authorities of education system of the government will get some insight from the findings. To them, the findings will be helpful in planning and executing any further projects and investment in ICT based education at tertiary level.

## 6. CONCLUSION

In the era of 21st century, Information and Communication Technology (ICT) is one of the most influential factors affecting the development of education system. With the betterment of the education systems ICT is being adopted all over the world. This study focuses on how the students of Bangladesh, especially in tertiary level are adopting ICT for their education purposes. Most of the students' approaches positively towards ICT apart from a few issues like infrastructural facility, device cost, data charge etc. Even so, students trust and expectations leads to a positive approach to adopt with ICT. Proper financial supports and subsidies, dedicated budget, several training programs should be ensured to facilitate the orientation and adoption of education related ICT tools among the students of Bangladesh at tertiary level at a larger scale.

## 7. LIMITATION AND FUTURE RESEARCH

Although the study produces significant outcome, there might have some limitations like respondents are Tertiary level students. Therefore, overall state of country's ICT adoption in education sector cannot be justified with the same findings. Again, as the respondents are from same university, which is located in country side area, thus the study may not represent the actual outcome of urban area's student's perceptions. The study followed random sampling method but the numbers of response from all departments are not same. Future studies on similar topic may consider these issues.

## APENDIX A. Graphical Representation of the Findings

**Figure 01: Q.1: I find it trouble-free to learn using education related ICT tools.**

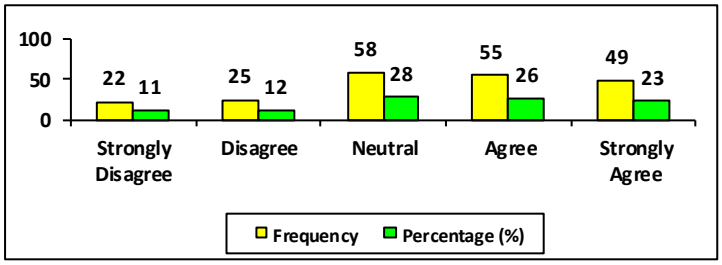



**Figure 02: Q.2: I find it easier to use education related ICT tools.**

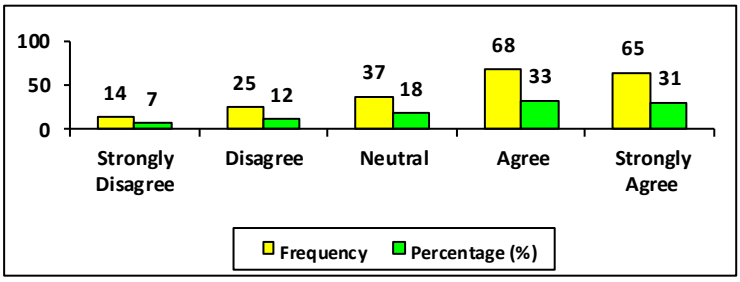


**Figure 03: Q.3: My interaction with available education related ICT tools is apparent and understandable.**

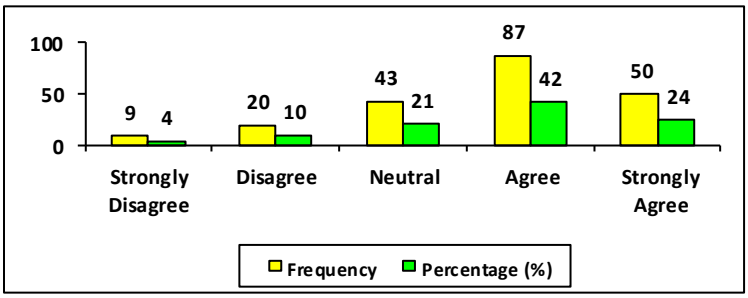



**Figure 04: Q.4: Being skilled at using education related ICT tools is effortless.**

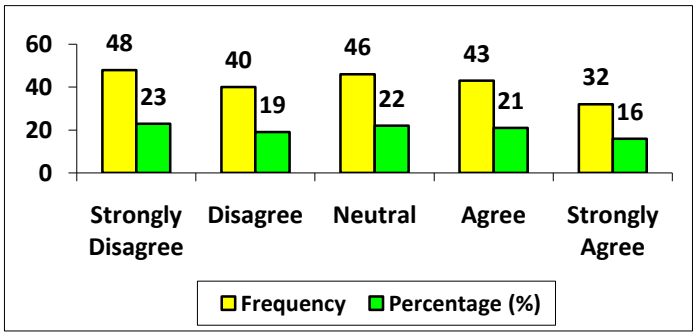



**Figure 05: Q.5: Education related ICT tools are beneficial for my academic activities.**

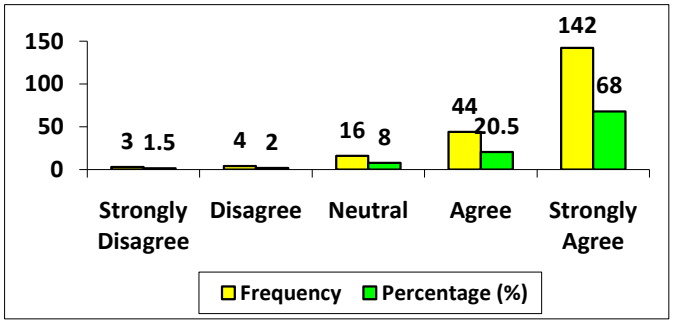



**Figure 06: Q.6: Education related ICT tools enhance my productivity in academic activities.**

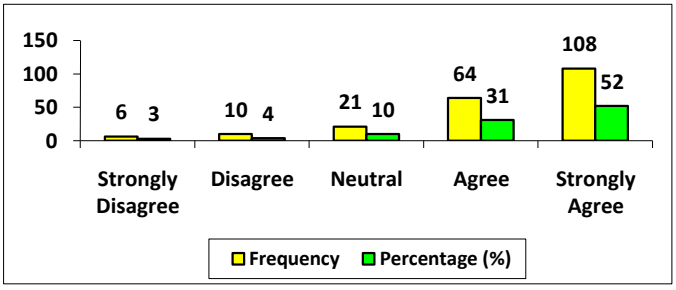


**Figure 07: Q.7: Education related ICT tools are encouraging in ensuring good grades in academic arena.**

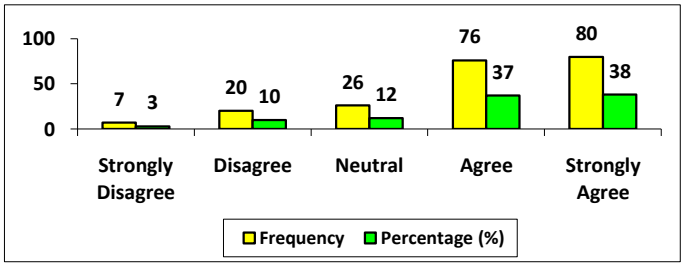



**Figure 08: Q.8: E-learning is effective than conventional learning.**

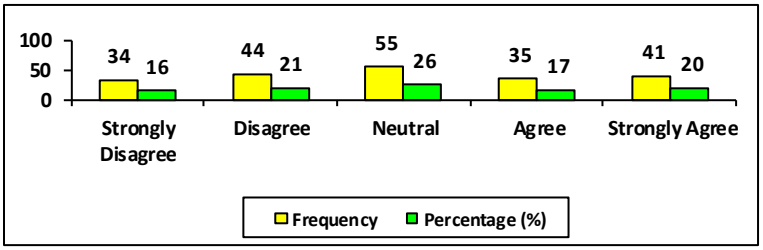



**Figure 09: Q.9: Students performance assessment through e-learning platform is effective than through traditional learning.**

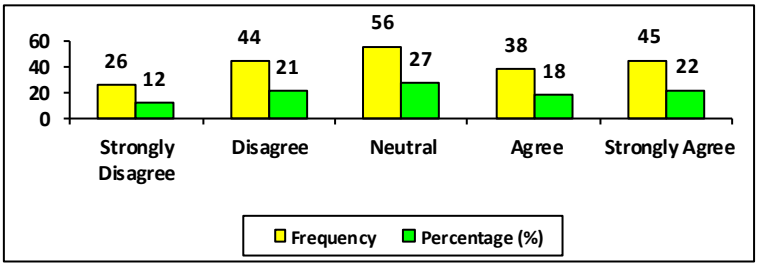



**Figure 10: Q.10: I am interested in using education related ICT tools in my academic arena.**

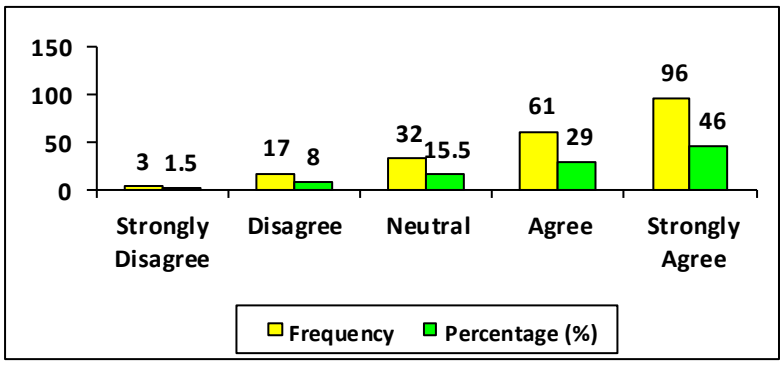


**Figure 11: Q.11: I have adequate knowledge to use education related ICT tools.**

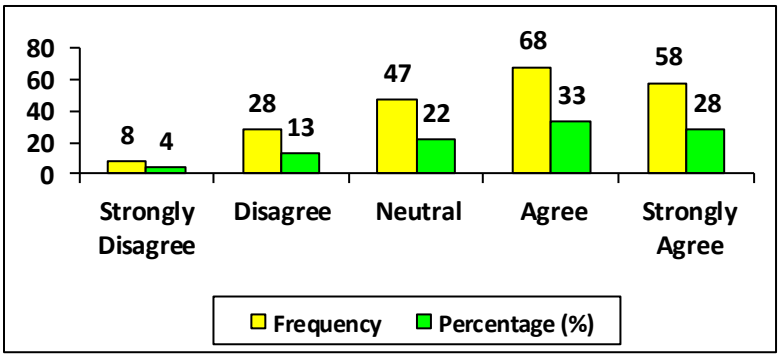



**Figure 12: Q.12: I have adequate resources to use education related ICT tools.**

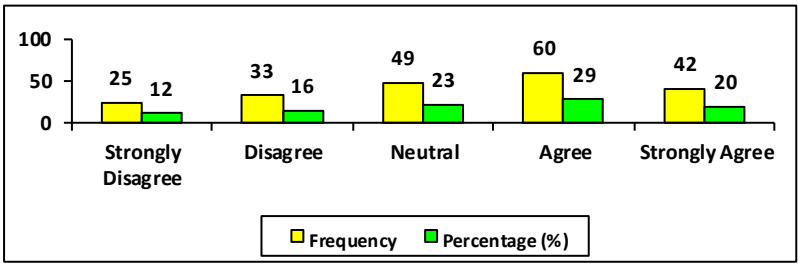



**Figure 13: Q.13: I find education related ICT tools expensive to own.**

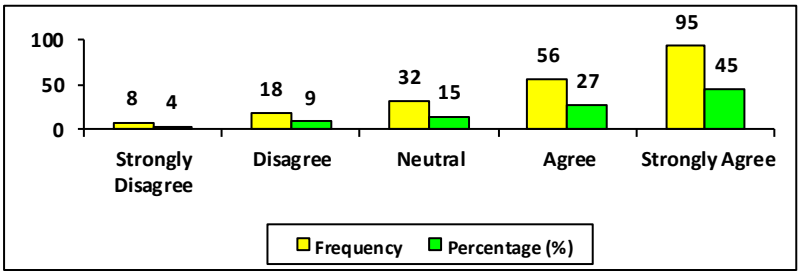



**Figure 14: Q.14: Education related ICT tools and facilities provided by my institution are satisfactory for me**

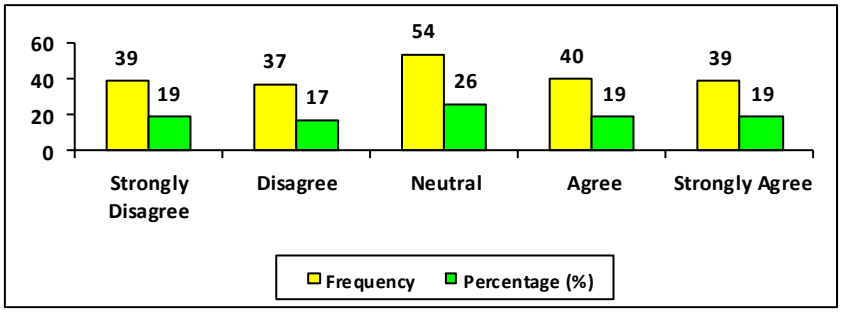
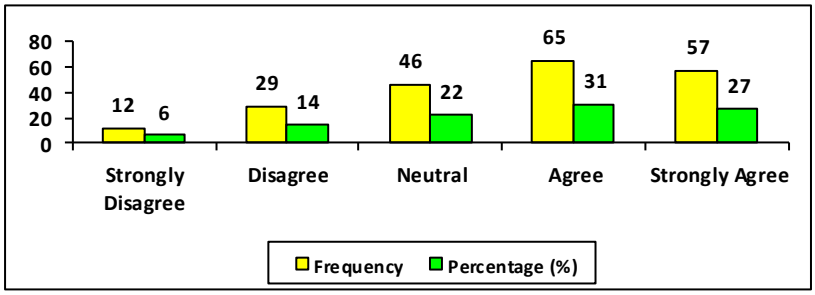


**Figure 15: Q.15: Faculty members provide proper instructions regarding the use of education related ICT tools.**




**APENDIX B. Items with adopted Sources**

| SL | Items | Sources |
|---|---|---|
| 01 | I find it trouble-free to learn using education related ICT tools. | (Alabi, 2016; Assar, 2015; Chen & Wu, 2020; Gellerstedt et al., 2018; Islam et al., 2019; Jana & Maiti, 2020; Obiri-Yeboah et al., 2013; Paul & Lal, 2018) |
| 02 | I find it easier to use education related ICT tools. | |
| 03 | My interaction with available education related ICT tools is apparent and understandable. | |
| 04 | Being skilled at using education related ICT tools is effortless. | |
| 05 | Education related ICT tools are beneficial for my academic activities. | |
| 06 | Education related ICT tools enhance my productivity in academic activities. | |
| 07 | Education related ICT tools are encouraging in ensuring good grades in academic arena. | |
| 08 | E-learning is effective than conventional learning. | |
| 09 | Students performance assessment through e-learning platform is effective than through traditional learning. | |
| 10 | I am interested in using education related ICT tools in my academic arena. | |
| 11 | I have adequate knowledge to use education related ICT tools. | |
| 12 | I have adequate resources to use education related ICT tools. | |
| 13 | I find education related ICT tools expensive to own. | |
| 14 | Education related ICT tools and facilities provided by my institution are satisfactory for me. | |
| 15 | Faculty members provide proper instructions regarding the use of education related ICT tools. | |

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# EMOTIONAL INTELLIGENCE IMPACT ON EMPLOYEE PERFORMANCE - CENTRIC TO SELECT PUBLIC SECTOR HOSPITALS IN COASTAL ANDHRA PRADESH

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## ABSTRACT

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***Measuring and evaluating nurses' performance are vital to identify areas for improvement in maintaining quality of service delivery and ensuring sustainability of current practices. In the present pandemic environment health care employee are working in extended shifts and worrying about safety of them as well as their family members. Because of rapid increase of corona cases, where health care employees are under heavy pressure and working in stressful environment. Government is taking initiatives but employees are still worried a lot because of different reasons. In this context understanding of their emotional status of employees is vital in ensuring employee performance. Therefore, the present article focussed on to investigate the emotional intelligence impact on employee performance.***

**KEYWORDS:** ***Emotional Intelligence, Employee Performance, Service Quality, Competencies,Pandemic Environment.***

## INTRODUCTION

Measuring the performance of hospital nursing care is crucial to facilitate policy makers in identifying organizational needs and subsequently determine appropriate strategies and initiatives to enhance quality of care in hospitals. Effective tools in measuring nurses' performance will enable health care stakeholders to better understand and monitor the degree to which nursing care influences patient safety and health care quality (Needleman, Kurtzman, & Kizer, 2007). Several studies have highlighted that validity of methods for measuring nurse's performance needs to be better defined (Mert & Ekici, 2015; Rowe et. al., 2005). Failure to understand biasness in performance measurement tools can lead to erroneous conclusions about the adequacy of performance and may result to mismatch in selections of intervention/s to improve

performance. Policy makers must assess strategy options (including single interventions and combinations) appropriate for both short- and long-term measures (i.e. over 5 years), cost to implement such strategies as well as soft/hard infrastructure requirement. Subsequently, to measure the effectiveness of such strategies, policy makers must be able to identify the correct indicators and determinant to ensure continuous improvement in deliveries of services in hospitals (Rowe et. al., 2005).

Emotional intelligence basically is the capacity to perceive and authority over our emotions and those of others, to comprehend why somebody is feeling what they are, to communicate feeling in a profitable way, to utilize the information on our and others emotions as an inspiration apparatus and a manual for building sensible connections (Wood, J.T, 2013). Building trustful relationship with the customer is the first and most significant expertise in useful consideration. These aptitudes incorporate the capacity to feel or envision another people's emotional responsiveness, comprehend and direct own emotions; recognize others' emotions, and the ability to oversee emotions of self as well as other people. These capacities knowing as emotional intelligence (EI) (Ezzatabadi et.al, 2012). At the end of the day, EI referenced as "the one's capacity to perceive individual sentiments and those of others and includes taking care of emotions phenomenally in ourselves and in our connections (Hassan H., Atwa A, 2017).

An emotional jargon is a structure square of Emotional Intelligence (EI). Examination has demonstrated that building up an emotional jargon permitting improving your correspondence with respect to feeling, which will permit you to communicate your own emotions in sound manner and better understanding the emotions of others. Lacking capability of perceiving or dealing with one's emotions cause insufficiency of getting, strife, or misery with self as well as other people. Improving abilities of EI can improve both profession and relational connections. (Sigmar et. al, 2012, Shults, A, 2015) EI is more fundamental in viable abilities than scholarly intelligence, since individuals with high EI work better inside group, set up higher cooperative aptitudes and hypothesized that for an individual to take full profit of their intellectual intelligence will needs EI first. For an individual to be emotionally savvy he ought to have the option to see one's own emotions and afterward utilize that data in meeting a far reaching medical services need of people, families and society.

## REVIEW OF LITERATURE

**Suhaila Haron, Aini Suzana Ariffin, Durrishah Idrus (2019)**, article entitled "Validating the Development of Instrument for Measuring Nurses' Performance Scale" published in *Journal of Management Info,* article demonstrates quantitative indices being used for content validity and reliability of Nurse Performance Questionnaire during design and development stage of the scale. These indices have evidently provided systematic criteria for items' reduction processes comprises two-step judgement process. Some limitations of content validity studies should be noted. First, experts' feedback is subjective; thus, the study is subject to bias that may exist among the experts. Secondly, quantification of content validity alone may results in collapse response category during computation of the index (Beckstead, 2009). Thus, the utilization of multiple content validity indices in this study provides multifaceted criteria for item's reduction process. Finally, limitation for NPQ may appear if content domain is not well identified.

**Novia Zahrah, Azelin Aziz& Siti Norasyikin Abdul Hamid (2019)**, in their article entitled "Supervisor Support and Job Performance among Nurses in Public Hospitals" published in *International Journal of Management, Accounting and Economics* found the results inconsistent with previous results due to that nurse perceived supervisors were not the first resource person to get help in regards to jobs. For them, perceived social support from co-workers is more needed in enhancing job performance compared to perceptions of social support from supervisors. Since, supervisors were not always round the clock in the ward for immediate assistance. Besides, the supervisor's leadership style and communication skills may not be suitable for all staff which in turn inhibits effective communication that leads to misunderstanding.

**Chaojie Wang et. al., (2019),** article entitled "From Artificial to Emotional Intelligence: Integrating Five Types of Intelligence to Achieve Organizational Excellence" published in*International Journal of Management, Knowledge and Learning* introduces the A2E (Artificial Intelligence to Emotional Intelligence) Integrated Intelligence Model, which blends technology and humanity to support strategic decision-making. The A2E model builds upon the Data- Information-Knowledge-Wisdom (DIKW) hierarchy and Knowledge Management (KM) concepts including tacit and explicit knowledge as its theoretical foundation to integrate five different types of intelligence into a unified and coherent framework: Artificial Intelligence (AI), Business Intelligence (BI), Competitive Intelligence (CI), Decision Intelligence (DI), and Emotional Intelligence (EI).

**Ranjbar Ezzatabadi M** et. al., **(2012),** article entitled "Nurses' Emotional Intelligence Impact on the Quality of Hospital Services" published in *Iran Red Cres Med J.* suggested that emotional intelligence competency should be overseen through a specific relevant, authoritative or administrative circumstance (29). To recommend a few

ramifications for human asset the board, we may infer that emotionally clever nursing staffs are bound to convey top notch benefits that pointed in numerous administrative activities in the wellbeing area as of late.

## OBJECTIVES

- To study the impact of emotional intelligence dimensions on employee performance.
- To put forth suggestions based on the findings of the study.

### Sample and Data Collection

A quantitative approach was followed in this exploratory study. The participants selected for this study consisted of Rangaraya Medical College, Guntur Medical College and Andhra Medical College hospital employees. 500 questionnaires were distributed among the three hospitals in the ratio of number of employees working in the hospital. Convenience sampling technique was deployed in sample selection. The respondents were solicited to complete the Employee Performance and Emotional Intelligence questionnaire. The resultant response rate of useable questionnaires was 90% (450).

## DATA ANALYSIS AND INTERPRETATIONS

**Table- 1: Regression Model of Awareness of Emotions on Employee Performance in Public Sector Hospital Employees**

| Model Summary | | | | |
|---|---|---|---|---|
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |
| 1 | .772[a] | .596 | .592 | .72906 |
| a. Predictors: (Constant), I can converse with other colleagues from the team about the emotions I experience, I can clarify the emotions I feel to colleagues, I can talk about the emotions I feel to other colleagues, On the off chance that I am down, I can tell colleagues what will cause me to feel better | | | | |

*(Source: Primary Data/ Structured Questionnaire)*

From the above table it is observed that the correlation coefficient R= .772. It indicates the relation between awareness of emotions of Emotional Intelligence and employee performance is constructive and both alter in the identical path. The coefficient of variation $R^2$ shows that 59.6% of the deviation in the dependant factor (employee performance) is explained by the independent factor (awareness of emotions). The adjusted $R^2$ mentioned in the above table shows the generalizability of the model. It enables generalising the result obtained from the public sector hospital employees to the sample universe. It is observed that the value of the adjusted $R^2$ =.592 is close to the value of $R^2$= .596. If the adjusted $R^2$ is expelled from the $R^2$ the value will be (.596-.592=.004). This sum of decrease means that if the sample universe participates in the research and the model has been fitted then, there will be 0.4% less difference in the outcome.

| ANOVA[b] | | | | | |
|---|---|---|---|---|---|
| **Model** | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| Regression | 349.035 | 4 | 87.259 | 164.168 | .000[a] |
| Residual | 236.527 | 445 | .532 | | |
| Total | 585.562 | 449 | | | |
| a. Predictors: (Constant), I can converse with other colleagues from the team about the emotions I experience, I can clarify the emotions I feel to colleagues, I can talk about the emotions I feel to other colleagues, On the off chance that I am down, I can tell colleagues what will cause me to feel better | | | | | |
| b. Dependent Variable: EP | | | | | |

*(Source: Primary Data/ Structured Questionnaire)*

The analysis of variance (ANOVA) allows researchers to test the null hypothesis statistically. The above table shows the outcome of the ANOVA test, where the F-ratio= 164.168 and the P-value<0.05, this outcome indicates that there is less than 5% change that an F-ratio of this value would be occur only coincidentally. Since the P-value is lesser than the significant level (0.05), the null hypothesis is rejected and the alternate hypothesis is accepted signifying that awareness of emotions of emotional intelligence significantly affects public sector hospital employee's performance.

| Coefficients[a] | | | | | |
|---|---|---|---|---|---|
| **Model** | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** |
| | **B** | **Std. Error** | **Beta** | | |
| (Constant) | 1.133 | .114 | | 9.949 | .000 |
| I can clarify the emotions I feel to colleagues | .194 | .059 | .241 | 3.300 | .001 |
| I can talk about the emotions I feel to other colleagues | .258 | .060 | .310 | 4.309 | .000 |
| On the off chance that I am down, I can tell colleagues what will cause me to feel better | .015 | .047 | .018 | .311 | .756 |
| I can converse with other colleagues from the team about the emotions I experience | .244 | .047 | .299 | 5.237 | .000 |
| a. Dependent Variable: EP | | | | | |

*(Source: Primary Data/ Structured Questionnaire)*

The results in the above coefficient table revealed that the awareness of emotions of emotional intelligence significantly affects public sector hospital employee's performance.

**Table- 2: Regression Model of Management of own Emotions on Employee Performance in Public Sector Hospital Employees**

| Model Summary | | | | |
|---|---|---|---|---|
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |
| 1 | .681[a] | .463 | .459 | .84024 |
| a. Predictors: (Constant), I give a reasonable hearing to my colleagues' thoughts, I regard the assessments of colleagues regardless of whether I think they are incorrect, At the point when I am frustrated with my colleagues, I can beat my disappointment, When settling a dispute, I attempt to see all sides of a contradiction before I arrive at a conclusion | | | | |

(*Source: Primary Data/ Structured Questionnaire)*

From the above table it is observed that the correlation coefficient R= .681. It indicates the relation between management of own emotions of Emotional Intelligence and employee performance is constructive and both alter in the identical path. The coefficient of variation $R^2$ shows that 46.3% of the deviation in the dependant factor (employee performance) is explained by the independent factor (management of own emotions). The adjusted $R^2$ mentioned in the above table shows the generalizability of the model. It enables generalising the result obtained from the public sector hospital employees to the sample universe. It is observed that the value of the adjusted $R^2$ =.459 is close to the value of $R^2$= .463. If the adjusted $R^2$ is expelled from the $R^2$ the value will be (.463-.459=.004). This sum of decrease means that if the sample universe participates in the research and the model has been fitted then, there will be 0.4% less difference in the outcome.

| ANOVA[b] | | | | | |
|---|---|---|---|---|---|
| **Model** | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| Regression | 271.390 | 4 | 67.848 | 96.101 | .000[a] |
| Residual | 314.172 | 445 | .706 | | |
| Total | 585.562 | 449 | | | |
| a. Predictors: (Constant), I give a reasonable hearing to my colleagues' thoughts, I regard the assessments of colleagues regardless of whether I think they are incorrect, At the point when I am frustrated with my colleagues, I can beat my disappointment, When settling a dispute, I attempt to see all sides of a contradiction before I arrive at a conclusion | | | | | |
| b. Dependent Variable: EP | | | | | |

*(Source: Primary Data/ Structured Questionnaire)*

The analysis of variance (ANOVA) allows researchers to test the null hypothesis statistically. The above table shows the outcome of the ANOVA test, where the F-ratio= 96.101 and the P-value<0.05, this outcome indicates that there is less than 5% change that an F-ratio of this value would be occur only coincidentally. Since the P-value is lesser than the significant level (0.05), the null hypothesis is rejected and the alternate hypothesis is accepted signifying that management of own emotions of emotional intelligence significantly affects public sector hospital employee's performance.

| Coefficients[a] | | | | | |
|---|---|---|---|---|---|
| **Model** | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** |
| | **B** | **Std. Error** | **Beta** | | |
| (Constant) | 1.634 | .122 | | 13.383 | .000 |
| I regard the assessments of colleagues regardless of whether I think they are incorrect | .013 | .059 | .016 | .217 | .828 |
| At the point when I am frustrated with my colleagues, I can beat my disappointment | .172 | .059 | .215 | 2.909 | .004 |
| When settling a dispute, I attempt to see all sides of a contradiction before I arrive at a conclusion | .283 | .054 | .351 | 5.267 | .000 |
| I give a reasonable hearing to my colleagues' thoughts | .116 | .049 | .150 | 2.376 | .018 |
| a. Dependent Variable: EP | | | | | |

(*Source: Primary Data/ Structured Questionnaire)*

The results in the above coefficient table revealed that the management of own emotions of emotional intelligence significantly affects public sector hospital employee's performance.

**Table- 3: Regression Model of Awareness of Others Emotions on Employee Performance in Public Sector Hospital Employees**

| Model Summary | | | | |
|---|---|---|---|---|
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |
| 1 | .635[a] | .403 | .397 | .88649 |
| a. Predictors: (Constant), I can tell when colleagues don't mean what they say, I am ready to portray precisely the path others in the group are feeling, I can peruse my colleague's genuine emotions, regardless of whether they attempt to shroud them, At the point when I converse with a colleague, I can check their actual emotions from their non-verbal communication | | | | |

*(Source: Primary Data/ Structured Questionnaire)*

From the above table it is observed that the correlation coefficient R= .635. It indicates the relation between awareness of others emotions of Emotional Intelligence and employee performance is constructive and both alter in the identical path. The coefficient of variation $R^2$ shows that 40.3% of the deviation in the dependant factor (employee performance) is explained by the independent factor (awareness of others emotions). The adjusted $R^2$ mentioned in the above table shows the generalizability of the model. It enables generalising the result obtained from the public sector hospital employees to the sample universe. It is observed that the value of the adjusted $R^2$ =.397 is close to the value of $R^2$= .403. If the adjusted $R^2$ is expelled from the $R^2$ the value will be (.403-.397=.006). This sum of decrease means that if the sample universe participates in the research and the model has been fitted then, there will be 0.6% less difference in the outcome.

| ANOVA[b] | | | | | |
|---|---|---|---|---|---|
| **Model** | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| Regression | 235.852 | 4 | 58.963 | 75.030 | .000[a] |
| Residual | 349.710 | 445 | .786 | | |
| Total | 585.562 | 449 | | | |
| a. Predictors: (Constant), I can tell when colleagues don't mean what they say, I am ready to portray precisely the path others in the group are feeling, I can peruse my colleague's genuine emotions, regardless of whether they attempt to shroud them, At the point when I converse with a colleague, I can check their actual emotions from their non-verbal communication | | | | | |
| b. Dependent Variable: EP | | | | | |

(*Source: Primary Data/ Structured Questionnaire)*

The analysis of variance (ANOVA) allows researchers to test the null hypothesis statistically. The above table shows the outcome of the ANOVA test, where the F-ratio= 75.030 and the P-value<0.05, this outcome indicates that there is less than 5% change that an F-ratio of this value would be occur only coincidentally. Since the P-value is lesser than the significant level (0.05), the null hypothesis is rejected and the alternate hypothesis is accepted signifying that awareness of others emotions of emotional intelligence significantly affects public sector hospital employee's performance.

| Coefficients[a] | | | | | |
|---|---|---|---|---|---|
| **Model** | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** |
| | **B** | **Std. Error** | **Beta** | | |
| (Constant) | 1.854 | .125 | | 14.803 | .000 |
| I can peruse my colleague's genuine emotions, regardless of whether they attempt to shroud them | .219 | .035 | .301 | 6.200 | .000 |
| I am ready to portray precisely the path others in the group are feeling | .159 | .050 | .219 | 3.206 | .001 |
| At the point when I converse with a colleague, I can check their actual emotions from their non-verbal communication | .266 | .038 | .350 | 7.025 | .000 |
| I can tell when colleagues don't mean what they say | -.095 | .047 | -.137 | -2.013 | .045 |
| a. Dependent Variable: EP | | | | | |

(*Source: Primary Data/ Structured Questionnaire)*

The results in the above coefficient table revealed that the awareness of others emotions of emotional intelligence significantly affects public sector hospital employee's performance.

**Table- 4: Regression Model of Management of Others Emotions on Employee Performance in Public Sector Hospital Employees**

| Model Summary | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .656[a] | .430 | .425 | .86623 |
| a. Predictors: (Constant), I can give the flash to get individual colleagues eager, My energy can be infectious forcolleagues of my team, I can get individual colleagues to share my insight for a task, I am ready to brighten colleagues up when they are feeling down | | | | |

*(Source: Primary Data/ Structured Questionnaire)*

From the above table it is observed that the correlation coefficient R= .656. It indicates the relation between management of others emotions of Emotional Intelligence and employee performance is constructive and both alter in the identical path. The coefficient of variation $R^2$ shows that 43.0% of the deviation in the dependant factor (employee performance) is explained by the independent factor (management of others emotions). The adjusted $R^2$ mentioned in the above table shows the generalizability of the model. It enables generalising the result obtained from the public sector hospital employees to the sample universe. It is observed that the value of the adjusted $R^2$ =.425 is close to the value of $R^2$= .430. If the adjusted $R^2$ is expelled from the $R^2$ the value will be (.430-.425=.005). This sum of decrease means that if the sample universe participates in the research and the model has been fitted then, there will be 0.5% less difference in the outcome.

| ANOVA[b] | | | | | |
|---|---|---|---|---|---|
| **Model** | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| Regression | 251.651 | 4 | 62.913 | 83.843 | .000[a] |
| Residual | 333.911 | 445 | .750 | | |
| Total | 585.562 | 449 | | | |
| a. Predictors: (Constant), I can give the flash to get individual colleagues eager, My energy can be infectious forcolleagues of my team, I can get individual colleagues to share my insight for a task, I am ready to brighten colleagues up when they are feeling down | | | | | |
| b. Dependent Variable: EP | | | | | |

(*Source: Primary Data/ Structured Questionnaire)*

The analysis of variance (ANOVA) allows researchers to test the null hypothesis statistically. The above table shows the outcome of the ANOVA test, where the F-ratio= 83.843 and the P-value<0.05, this outcome indicates that there is less than 5% change that an F-ratio of this value would be occur only coincidentally. Since the P-value is lesser than the significant level (0.05), the null hypothesis is rejected and the alternate hypothesis is accepted signifying that management of others emotions of emotional intelligence significantly affects public sector hospital employee's performance.

| Coefficients[a] | | | | | |
|---|---|---|---|---|---|
| **Model** | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** |
| | **B** | **Std. Error** | **Beta** | | |
| (Constant) | 1.746 | .125 | | 14.011 | .000 |
| My energy can be infectious forcolleagues of my team | .057 | .040 | .077 | 1.415 | .158 |
| I am ready to brighten colleagues up when they are feeling down | .131 | .063 | .166 | 2.075 | .039 |
| I can get individual colleagues to share my insight for a task | .274 | .057 | .342 | 4.838 | .000 |
| I can give the flash to get individual colleagues eager | .097 | .045 | .128 | 2.132 | .034 |
| a. Dependent Variable: EP | | | | | |

*(Source: Primary Data/ Structured Questionnaire)*

The results in the above coefficient table revealed that the management of others emotions of emotional intelligence significantly affects public sector hospital employee's performance.

**Table- 5: Regression Model of Emotional Intelligence Competencies on Employee Performance in Public Sector Hospital Employees**

| Model Summary | | | | |
|---|---|---|---|---|
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |
| 1 | .741[a] | .548 | .535 | .77878 |
| a. Predictors: (Constant), Compassion , Self-awareness, Empathy, Self-Regulation, Dominance- the desire that drives individuals to be successful leaders, Social Skills, Emotional Stability- the emotional self-awareness and the ability to control your own emotions, Enthusiasm- to be optimistic and inspire others, Conscientiousness- to be dependable and responsible in character and self-discipline, Empathy, Motivation, Self- Assurance- confidence in own judgment fosters confidence in others, Care | | | | |

*(Source: Primary Data/ Structured Questionnaire)*

From the above table it is observed that the correlation coefficient R= .741. It indicates the relation between emotional intelligence competencies of Emotional Intelligence and employee performance is constructive and both alter in the identical path. The coefficient of variation $R^2$ shows that 54.8% of the deviation in the dependant factor (employee performance) is explained by the independent factor (emotional intelligence competencies). The adjusted $R^2$ mentioned in the above table shows the generalizability of the model. It enables generalising the result obtained from the public sector hospital employees to the sample universe. It is observed that the value of the adjusted $R^2$ =.535 is close to the value of $R^2$= .548. If the adjusted $R^2$ is expelled from the $R^2$ the value will be (.548-.535=.013). This sum of decrease means that if the sample universe participates in the research and the model has been fitted then, there will be 1.3% less difference in the outcome.

| ANOVA[b] | | | | | |
|---|---|---|---|---|---|
| **Model** | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| Regression | 321.130 | 13 | 24.702 | 40.729 | .000[a] |
| Residual | 264.432 | 436 | .606 | | |
| Total | 585.562 | 449 | | | |
| a. Predictors: (Constant), Compassion , Self-awareness, Empathy, Self-Regulation, Dominance- the desire that drives individuals to be successful leaders, Social Skills, Emotional Stability- the emotional self-awareness and the ability to control your own emotions, Enthusiasm- to be optimistic and inspire others, Conscientiousness- to be dependable and responsible in character and self-discipline, Empathy, Motivation, Self-Assurance- confidence in own judgment fosters confidence in others, Care | | | | | |
| b. Dependent Variable: EP | | | | | |

*(Source: Primary Data/ Structured Questionnaire)*

The analysis of variance (ANOVA) allows researchers to test the null hypothesis statistically. The above table shows the outcome of the ANOVA test, where the F-ratio= 40.729 and the P-value<0.05, this outcome indicates that there is less than 5% change that an F-ratio of this value would be occur only coincidentally. Since the P-value is lesser than the significant level (0.05), the null hypothesis is rejected and the alternate hypothesis is accepted signifying that emotional intelligence competencies of emotional intelligence significantly affect public sector hospital employee's performance.

| Coefficients[a] | | | | | |
|---|---|---|---|---|---|
| **Model** | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** |
| | **B** | **Std. Error** | **Beta** | | |
| (Constant) | 1.075 | .131 | | 8.233 | .000 |
| Self-awareness | .234 | .048 | .283 | 4.926 | .000 |
| Empathy | .030 | .035 | .040 | .851 | .395 |
| Self-Regulation | .173 | .125 | .203 | 1.389 | .166 |
| Motivation | -.036 | .104 | -.043 | -.351 | .726 |
| Social Skills | .043 | .036 | .059 | 1.184 | .237 |
| Emotional Stability- the emotional self-awareness and the ability to control your own emotions | .099 | .089 | .122 | 1.111 | .267 |
| Dominance- the desire that drives individuals to be successful leaders | .067 | .050 | .087 | 1.335 | .183 |
| Enthusiasm- to be optimistic and inspire others | -.092 | .069 | -.115 | -1.341 | .181 |
| Conscientiousness- to be dependable and responsible in character and self-discipline | .051 | .064 | .063 | .794 | .428 |
| Self- Assurance- confidence in own judgment fosters confidence in others | .043 | .041 | .057 | 1.059 | .290 |
| Training Empathy | -.031 | .086 | -.038 | -.356 | .722 |
| Training Care | .028 | .071 | .035 | .392 | .696 |
| Training Compassion | .116 | .094 | .140 | 1.227 | .221 |
| a. Dependent Variable: EP | | | | | |

*(Source: Primary Data/ Structured Questionnaire)*

The results in the above coefficient table revealed that the emotional intelligence competencies of emotional intelligence significantly affect public sector hospital employee's performance.

## FINDINGS

- From the analysis it is found that awareness of emotions, management of own emotions, awareness of others emotion, management of others emotions and emotional intelligence competencies are significantly impacting employee performance in select public sector hospitals.
- In the select public sector hospitals awareness of emotions factors are explaining 59.6% of deviation in employee performance. From the ANOVA table it is observed that awareness of emotions is significantly impacting employee performance. Employee performance can be explained by constant value 1.133.
- In the select public sector hospitals management of own emotions factors are explaining 46.3% of deviation in employee performance. From the ANOVA table it is observed that management of own emotions is significantly impacting employee performance. Employee performance can be explained by constant value 1.634.
- In the select public sector hospitals awareness of others emotions factors are explaining 40.3% of deviation in employee performance. From the ANOVA table it is observed that awareness of others emotions is significantly impacting employee performance. Employee performance can be explained by constant value 1.854.
- In the select public sector hospitals management of others emotions factors are explaining 43.0% of deviation in employee performance. From the ANOVA table it is observed that management of others emotions is significantly impacting employee performance. Employee performance can be explained by constant value 1.746.
- In the select public sector hospitals emotional intelligence competencies are explaining 54.8% of deviation in employee performance. From the ANOVA table it is observed that emotional intelligence competencies are significantly impacting employee performance. Employee performance can be explained by constant value 1.075.

## SUGGESTIONS

From the analysis it is found that all the emotional intelligence constructs are significantly impacting employee performance. Therefore, hospital administration has to take initiatives to enhance the emotional intelligence among employee as a tool for improving employee performance in current pandemic situation.

## CONCLUSION

The current research is conducted to examine the impact of emotional intelligence on employee performance. From the research it is found that all the emotional intelligence constructs are significantly impacting employee performance. In this pandemic environment hospital staff is working under huge pressure. In this context management has to use front line managers' emotional intelligence to motive employees and improve their performance.

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# OPTIMUM ALLOCATION OF DIFFERENT SOURCES OF IRRIGATION

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|---|---|

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## DISCUSSION

Discovery of agriculture was no doubt the greatest development in the history of mankind. Irrigation, being one of the most crucial input in the process of agricultural development, has been sought to be developed. In India, although significant efforts have been made to develop the irrigation potential through major and minor irrigation, yet there has been rather inadequate awareness of the economics of irrigation. Particularly, very few comparable attempts have been made to examine the rational allocation of water between different regions, crops and over time. Most of the studies that have been made in this field, have examined the different sources of irrigation in isolation from one another. In the present study, it is intended to examine the different sources of irrigation in an integrated manner and thus provide a macro-prospective as a guide to formulation of rational policies for irrigation management. In the present study, it is proposed to study the allocation of water by regions and crops and also over time. An attempt will be made to draw out policy implications and make some specific recommendations.

The work was done during 1999-2000. Fourteen normative plans worked out are given as under:

A. Existing supply of canal water + tube-well water.
B. Existing supply of tube-well water + 10 per cent increase in canal water.
C. Existing supply of tube-well water + 20 per cent increase in canal water.
D. Existing supply of tube-well water + 30 per cent increase in canal water.
E. Ten per cent increase in tube-well water + 10 per cent increase in canal water.
F. Twenty per cent increase in tube-well water + 20 per cent increase in canal water.
G. Thirty per cent increase in tube-well water + 30 per cent increase in canal water.
H. Existing supply of canal water + 10 per cent increase in tube-well water.
I. Existing supply of canal water + 20 per cent increase in tube-well water.
J. Existing supply of canal water + 30 per cent increase in tube-well water.
K. Existing supply of canal water only.
L. Ten percent increase in canal water only.
M. Twenty percent increase in canal water only.
N. Thirty percent increase in canal water only.

These fourteen solutions were obtained for six canal zones of western and central U.P. – Bulandshahar, Aligarh, Farrukhabad, Etah, Kanpur and Etawah. An attempt was also made to obtain a global overall solution combining all these six canal zones. This global solution which was obtained by assuming the canal and tube-well water supplies at their existing levels yielded optimum water allocation among different canal zones and different months of the year.

Normative cropping pattern and thus the normative water allocation was worked out by applying the Profit-Maximising technique of Linear Programming. To study the economics of minor irrigation Cobb-Douglas and Linear Programming Functions were fitted for different crops. Best fit was judges on the basis of $R^2$ value etc. Economics for private diesel engines, electric motors and state tube-wells were also worked out on the basis of per unit investment and cost per unit of water from these sources.

A. In Bulandshahar Canal Zone, results show that there are significant changes between actual water utilization and its normative pattern over time. This is primarily due to misallocation of water between crops in the existing situation and there seems to be vast scope for improving the efficiency of water utilization by shifting the normative plan A, even without further augmentation of water from surface or ground sources. However, if canal water supply is augmented by 10, 20 and 30 per cents respectively, through saving in seepage losses, which seem possible through the undertaking of effective programmes for lining of water courses and other soil conservation measures, then normative plans B, C and D could be implemented. The MVP of canal water per acre feet in all the situations in this zone was much higher as compared to its estimated cost of Rs.8.98. In situations from K to N it is worth noting that when only canal water is available the MVP is significantly high. It varied from Rs. 1073 to Rs. 5300. The MVP of water from EM was of the order of Rs. 31.36 in all the corresponding situations as against its cost of Rs. 56.48 per acre feet. Further, MVP of water from DE could not be found to be surplus in all the situations to it's per acre feet cost of Rs. 87.84.

B. In the Aligarh Canal Zone, in situation K, due to shift in the cropping pattern in favour of crops requiring less irrigation, the surface water is utilized in full only in the month of August, September and February. In all the remaining months, a lot of water remained unutilized. By comparing the existing situation with the normative situation A, which is based on normative allocation of water in the profit maximization solution, whole of the surface water was fully utilized in all the months except January, April, May and June. Specifically in the month of April, utilization of surface water was only 181 per acre feet in Solution A, as against the adjusted canal discharge of 22436 per acre feet. By comparing the existing capacity of EM with the Normative Solution A, it was found that EM was used to its full capacity only in the months of August and October. The MVP of canal water per acre feet generally in all the solutions was much above its cost. When only surface water is available, the MVP of water was remarkably high.

C. In Farrukhabad Canal Zone, in Solution K the surface water could be used to its full capacity only in the months of July, August and December, due to drastic change in favour of crops such as urd etc. which need less irrigation. A lot of water remained unutilized in all the remaining months. But in normative solution A with the existing canal and ground water use, whole of the surface water was fully utilized except in the months of September and May. The MVP of canal water per acre feet in all the situations was phenomenally high as against its estimated cost.

D. In Etah Canal Zone, Solution K showed that like other zones, due to major change in the cropping pattern in favour of crops which require less water, surface water was fully utilized only in the months of January and June. In all the remaining months, most of the surface water remained under-utilized. However, when we shift to the Solution A and compare it with the existing canal and ground water situation, it was observed that surface water was fully utilized in all the months of the year except in July, October, November, March and April, when it was under-utilized. MVP of canal water was quite high in all the situations as against its cost per acre feet. However, The MVP of water from EM was of the order of Rs. 31.36 and Rs. 36.77 in all the situations as against its cast of Rs. 56.48. Similarly, the MVP of water from DE appeared in the month of May and which was too low, i.e. Rs. 5.41 as against its cost of Rs. 87.84 per acre feet. In other months of the year, the water from DE was found to be surplus.

E. In the Kanpur Canal Zone, in the case of Solution K, the surface water was utilized in full only in the months of January and June due to change in the cropping pattern in favour of less water consumptive crops. However, when we shift to the optimum solution A, and compare it with the existing surface and ground water situation, the whole of the available surface water was fully utilized during the months of August, September, December, January, February, March and June except for the months of July, October, November, April and May, where it remained underutilized. To maintain the existing cropping pattern, scarce canal water has to be supplemented with water from electric motors and diesel engines. In the case of electric motors in situation A, this source was fully utilized in the months of August and January only. Similar was the case with diesel engines which remained totally unutilized for the whole year except for the month of August only where it was highly

under-utilized. From situation A to J, the marginal value productivity of canal water was phenomenally high. But only when surface water is available, the MVP of canal water was considerably high as against it's per acre feet cost. The MVP of water from electric motor was even higher, which is astonishing.

F. IN Etawah Canal Zone, in the case of Solution K, the surface water is utilized only in the months of August, February, March and April. In all other months, a lot of water remained unutilized. However, by comparing the existing canal and ground water use with normative plan A, the whole of surface is fully utilized in all the months except May where water utilization is dismally low as against the adjusted canal discharge. The MVP of canal water was much above its cost. When only canal water is available, the MVP of water is very high.

Canal water utilization in the global optimum in relation to the zonal optimum increased significantly in all the months of the year except for the months of April, May and June, where utilization decreased. In March, canal water was not utilized at all in the global optimum. The utilization of EM in the global optimum in relation to zonal optimum showed an increase during the months of July, August, October and March. On the other hand, during the months of September, November, December, January and February, its use decreased considerably. And in the months of April, May and June this source remained unutilized in the global optimum too. So far as DE is considered, its utilization increased in the global optimum to the zonal optimum during the months of September only while for the rest of the year this source remained totally unutilized as in the zonal optimum also. The MVP of canal water per acre feet in all the situations of global optimum (A) was much higher as compared to its estimated cost of all the canal zones combined together.