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IT Educational Scenario of Marginalized Girls in Kolhapur District: Opportunities and Challenges

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Abstract

Education for women is an essential determinant of their enhanced confidence and self-esteem, constructing a positive image, building up their capacity to think critically, encouraging better decision making and helping them settle on more informed decisions about wellbeing, employment and even the education of their children. Enabling girls in the marginalized groups through training could enhance societal improvement and personal satisfaction. IT proficiency and profession in IT can unfurl array of chances for marginalized girls. In this context, the present study portrays "IT Educational Scenario of Marginalized Girls pursuing IT education in the jurisdiction of Shivaji University Kolhapur". The result emphasizes the need of enhancing engagement of marginalized girls in IT education. This study undoubtedly a value addition to the world of women empowerment.

Keywords: Women Empowerment, IT Education, Well Being, Undergraduate Girls, Marginalized

Introduction

The empowerment of marginalized girls could be a one of the answers for taking care of marginalized girls' education challenges (Hatib, 2018). Engaging a greater number of marginalized girls in IT education can unfurl various opportunities for their growth, innovation and success. Studies propose that these girls' inconvenience is the aftereffect of the association of

a scope of components implanted in both the socialization and learning forms (Serena, 2018). Self-selection bias, when girls and women picked not to pursue studies or careers, seems to assume a key part. Marginalized girls are regularly raised to trust that higher education isn't for them and their capacity in this field is naturally second rate compared to others. This can undermine young ladies' certainty, intrigue and ability to participate in advanced education and expert courses (Naman Shukla and Jalaj, 2018). Hence the research "IT Educational Scenario of Marginalized Girls in Kolhapur District: Opportunities and Challenges" aims at undertaking study of marginalized girls pursuing IT education in the jurisdiction of Shivaji University. This study focuses on different factors affect the education of the marginalized girls, know awareness of marginalized girls regarding career opportunities in IT and hence make marginalized girls proficient with the different avenues for self-employment and career opportunities in IT.

Review of Literature

The literature review is to recognize potential information gaps in order to explain foggy zones. This study is supported by referring about 50 research articles. Few of the chose references for wide blueprint are mentioned here.

"Empowering Marginalized Girls" is a project in northern Afghanistan as an action towards girls' education challenges (Education Innovations, 2018). This project enrolled more than 15,000 girls from rural villages in safe, girl-friendly formal and informal learning environments. The Women in Technology Project financed by the Education and Training Foundation has been completed by Coralesce ltd, an educational modules advancement and task administration organization (Bev Jones and Christina, 2015). This report proposes that more girls and ladies are looks to draw in into innovation by building up a two-way street leadership program that spotlights on women pioneers in the part captivating with the innovation business. The UNESCO provide details regarding report on Girls' and Women's training in STEM intends to 'crack the code', or to decipher the elements that encourage young ladies' and women's participation, accomplishment and continuation in STEM education, and what should be possible by the education sector to advance girls' and ladies' enthusiasm for, and engagement with, STEM (UNESCO, 2017).

Suleman et al have examined the factors that affect girls' education at secondary school level in Karak District, Pakistan (Qaiser, et al, 2015). This study has identified various factors that affect girls' education such as poor financial status of the parents, lack of basic facilities, negative attitudes of parents about girls' education, unpunctuality of teachers, unfeasibility of school buildings and lack of proper security arrangement. The National Resource Centre for Women works as a national meeting community for all plans and projects for ladies (Mohak, 2014). It goes about as a focal archive of learning, data, research and information on all gender related issues and is the principle body overhauling the National and State Mission Authority. Accenture Research estimated the pipeline of the female computing workforce by evaluating the relative viability of activities that effect girls' enthusiasm for computing (Accenture, 2016). The report uncovers that that the offer of women in computing occupations is in decay and proposes that general access to computing in schools doesn't address the gender gap.

Literature survey reveals scope for Women Empowerment by Enhancing engagement of marginalized girls in IT Education. This study aimed at undertaking study of marginalized girls pursuing IT education at undergraduate levels in the jurisdiction of Shivaji University, Kolhapur.

Following are the objectives of the study taken up in this research:

- To analyse the status of marginalized girls' pursuing IT education in undergraduate level
- To identify various factors, affect the education of the marginalized girls
- To know the awareness of marginalized girls regarding career opportunities in IT and Stan-up India Scheme

Research Design

This study is delimited to marginalized girls pursuing Undergraduate level IT Education in the jurisdiction of Shivaji University Kolhapur, is considered as research population of the present study. Shivaji University is spread over three districts viz. Kolhapur, Sangli and Satara (Shivaji University, 2018). However, due to the large sizes of population, present study cannot test every individual in the population because it is too expensive and time-consuming. The most common solution here is following sampling techniques.

In order to obtain a representative sample from the population a researcher has employed two stage sampling given as follows:

1. There are 98 colleges providing IT education in the jurisdiction of Shivaji University. In order to ensure adequate representation of the population, the sample was confined to total 24 colleges. Colleges from each of the three districts are selected by random sampling.

2. Purposive sampling is followed in the second stage as the respondents for the present study are marginalized girls pursuing undergraduate IT education. Thus total 300 respondents are selected from 24 colleges.

In the present investigation, the survey as research tool for data collection is adopted by taking into consideration the nature of investigation, objective and scope of the inquiry, financial resources, available time and the desired degree of accuracy. The survey-based research with the questionnaire as an instrument is fitting for the undertaken study of marginalized girls pursuing IT education in the jurisdiction of Shivaji University.

The structured questionnaire has following parts:

- The first part is introduction and background of the study for motivating the students to complete their responses

- The second part seeks demographic details of the respondent such as name, college, age group, social category, background and so on.

- The third section deals with respondents' educational details such as discipline, performance, reason for joining the course

- The fourth section at the outset tries to know about students' family background, parental support, parent's expectation so on

- The fifth section seeks students' learning environment at college such as cooperation by administration, teachers, classmates followed by students' confidence in learning new technologies

- Section six seeks the awareness of the students' regarding career opportunities in IT, future goals so on

- The questionnaire ends with an open-ended question appealing the users to suggest anything which is missed in the questionnaire.

Data collection for the present study was carried out in the month February 2018. Field investigators who are having experience of data collection for social science research are appointed. Three teams were formed to visit colleges of three districts such as Kolhapur, Sangli and Satara. The members of survey team personally met respondents and collected responses.

Data Analysis and Findings of the Study

After the collection of data, data analysis was initiated. i.e. the collected data was organized, tabulated and analyzed. Further the responses were elaborated through charts and graphs. Microsoft Excel and SPSS are used for the present data analysis. This section explores the current status of marginalized girls in IT education, how the different factors affect the education of the marginalized girls and their awareness regarding career opportunities in IT. The collected data is entered into MS-EXCEL which is then exported to SPSS package for further analysis. The success of demystifying the current status of marginalized girls pursuing IT education depends on the extent of choosing the sample from different sub-groups.
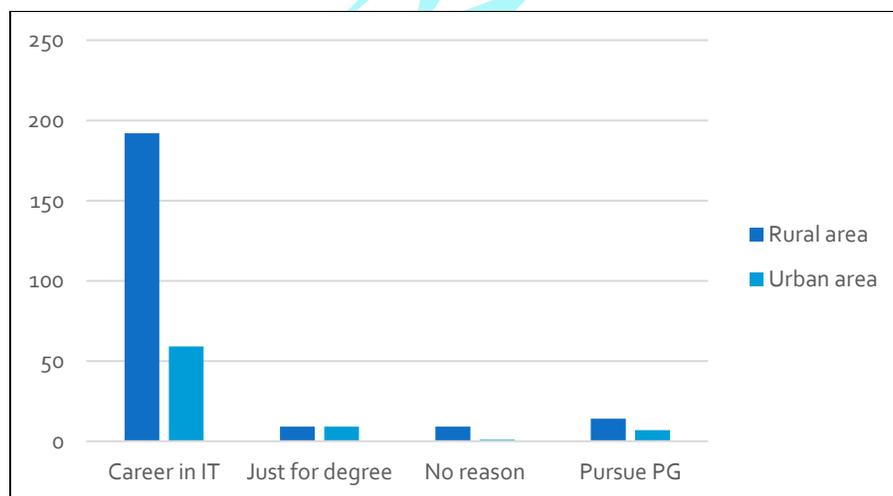

Figure 1: Reason for joining the course and background

As per the analysis, 66% of the respondents for this study are rural background whereas 34% from urban area. Figure 1 reveals that majority i.e. 80.3% of girls wants to procure Career in IT, is the reason behind joining the current course, whereas 7% are pursuing current course only for the sake

of degree. This indicates that majority of respondents are interested in IT Career. Also, majority of respondents pursuing IT education at graduate level are from rural area.
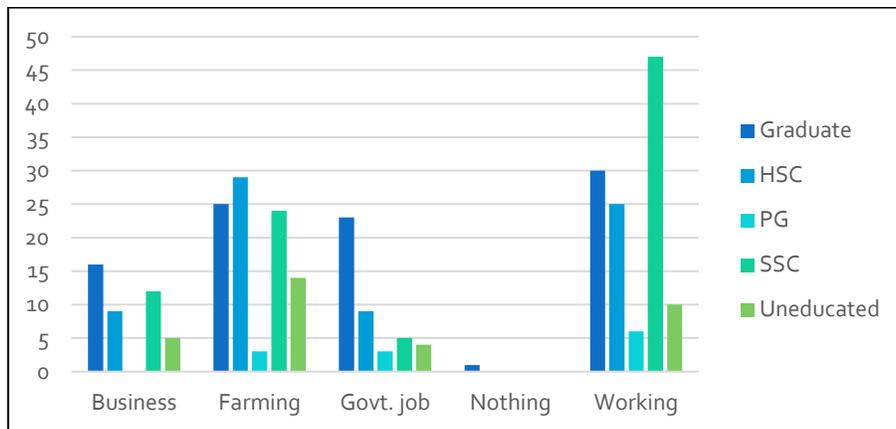

Figure 2: Education and occupation of head of the family

Figure 2 shows education level and occupation of head of the household. 33% among them are having education level only SSC, 25% of them are graduates which is appreciating one. Need to notify here that daughter of uneducated parent is pursuing IT education, implicates parental support though he/she is uneducated. Also, most of the respondents' parents are working at other places.
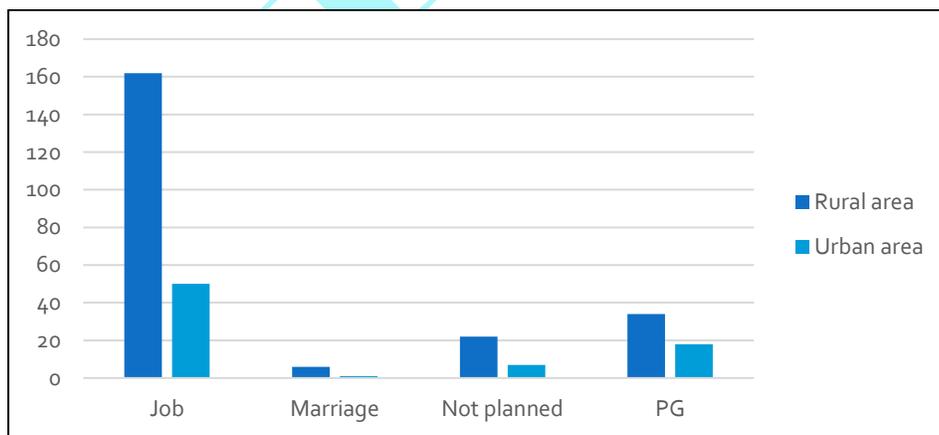
Figure 3: Parents' plan about respondents after graduation

Figure 3 reveals parents' expectation about their daughters after the completion of graduation. 74% of them are planning for job whereas only 3% are planning for their daughter's marriage. This shows parental interest towards Women Empowerment, most appreciating finding of the present

study. Majority of respondents' parents expect daughters to join job after the completion of graduation.
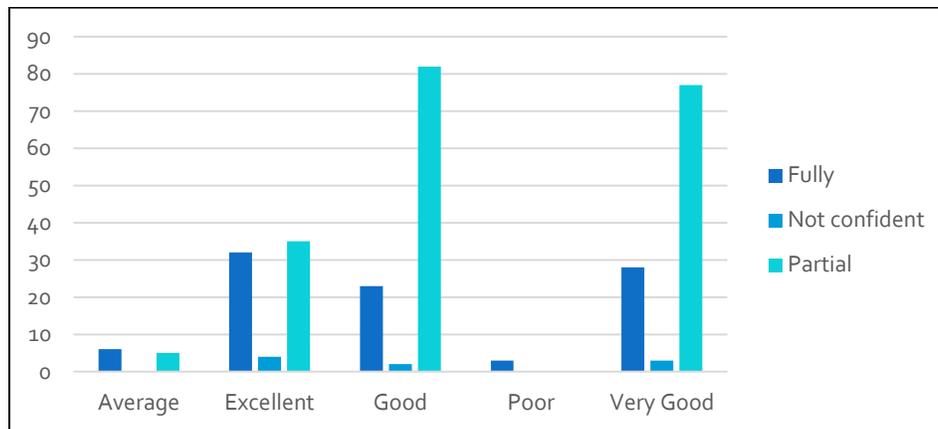

Figure 4: Teachers' support and confidence in software development

Figure 4 indicates support from teachers in case of difficulties in any subjects. While analyzing data, it is observed that 37% of students appreciate teachers support for difficulties in any subject as "Good", 35% said "Very Good", 23% of them said "Excellent" whereas only 0.3% of them said "poor". This indicates marginalized girls pursuing IT education in the jurisdiction of Shivaji University are satisfied with the support by teachers in case of difficulties in any subjects. Also, majority of the respondents are partially confident in Software/App development.
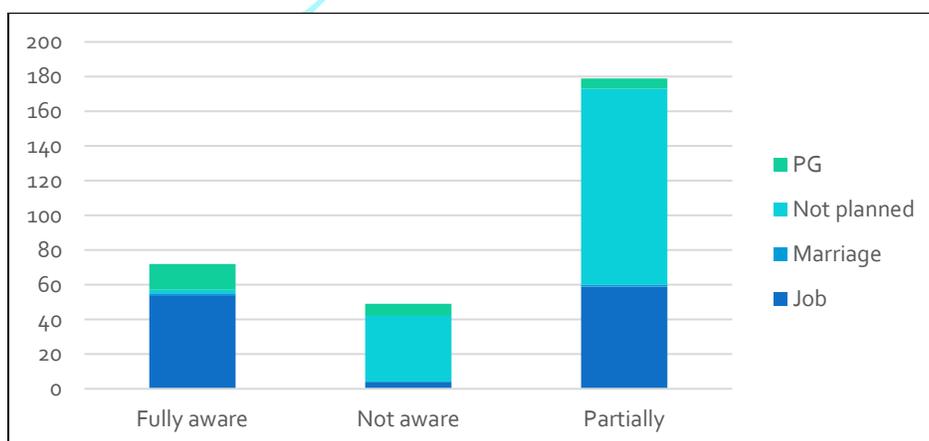

Figure 5: Awareness of career opportunities with career objective

The Awareness of students under present study regarding career opportunities after graduation is shown in figure 5. Most of the students are partially aware of career opportunities after graduation, 34.3% are fully aware of career opportunities after graduation whereas 16.7% are not aware. Majority of the students prefer to go for are aware of career opportunities.
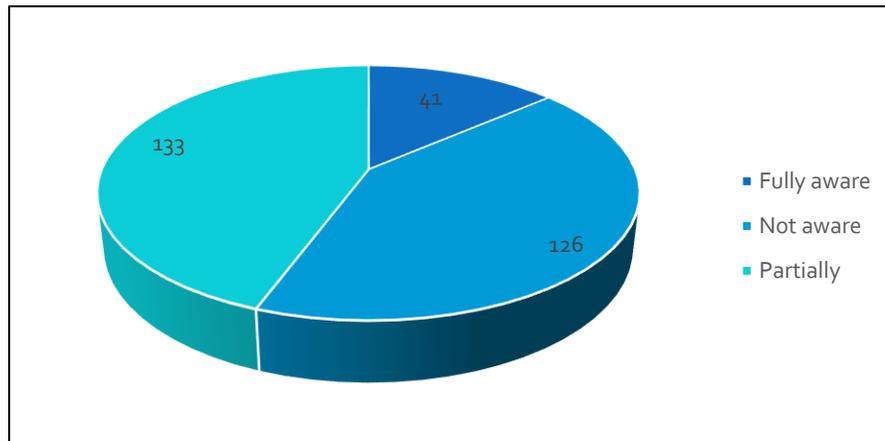

Figure 6: Awareness about Standup India scheme

Responses collected to know students' awareness about Stand-Up India Scheme launched by Govt. of India. As per the figure 6, most of the respondents are not aware of Stand-Up India Scheme.
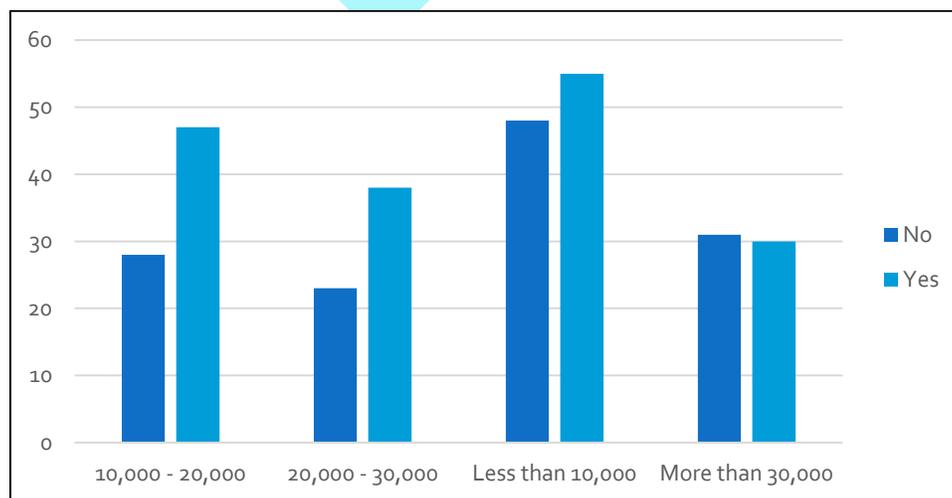

Figure 7: Family income and Willingness to join BPO

There was a question to know students' willingness towards job at Call Centre (BPO). Amongst them, more than 54% are ready to join Call Centre whereas 46% are not showing interest in joining

Call Centre as shown in figure 7. It's observed that respondents' whose family income less than Rs.30,000/- per month are willing to pursue job in BPO.
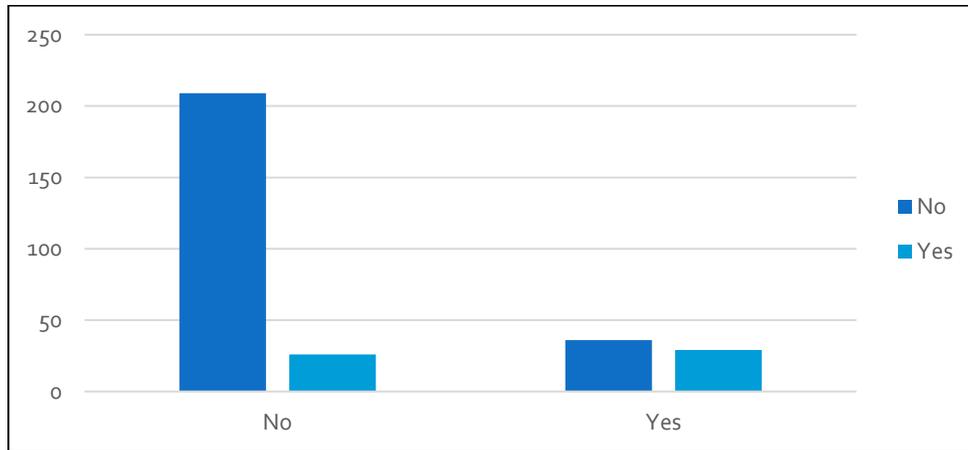

Figure 8: MOOC Awareness – Enrolment

Figure 8 shows the students' awareness regarding Massive Open Online Courses (MOOCs) and enrolment for MOOCs. Amongst them, 78% are not aware of MOOCs, whereas only 22% of them are aware of MOOCs. Asking this question in the questionnaire made students to explore MOOCs. Most of the students with awareness have enrolled for MOOCs.
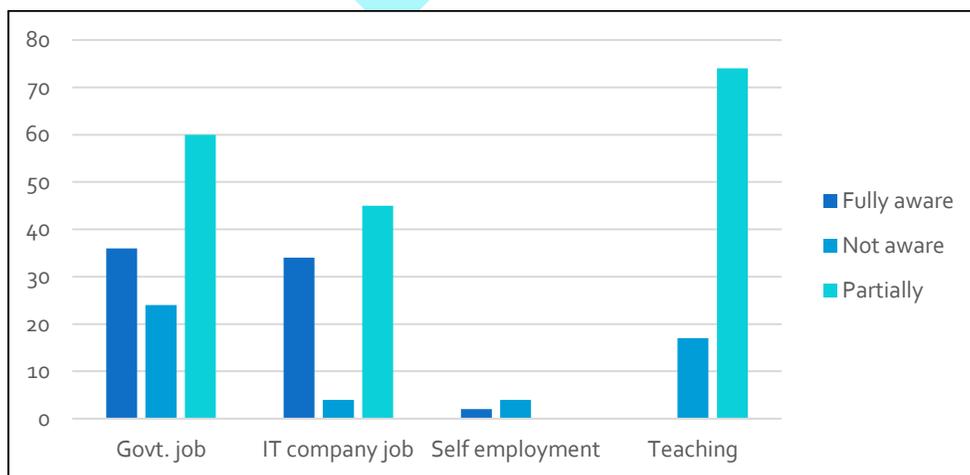

Figure 9: Pursue career in – Career opportunities

Figure 9 shows respondents' awareness towards career opportunities and career goal. Among them 34.3% are fully aware of career opportunities after graduation whereas 16.7% are not aware and

remaining students are partially aware of career opportunities after graduation. Most of the respondents are interested in Govt. related job. More number of respondents interested in teaching have partial awareness about career opportunities.
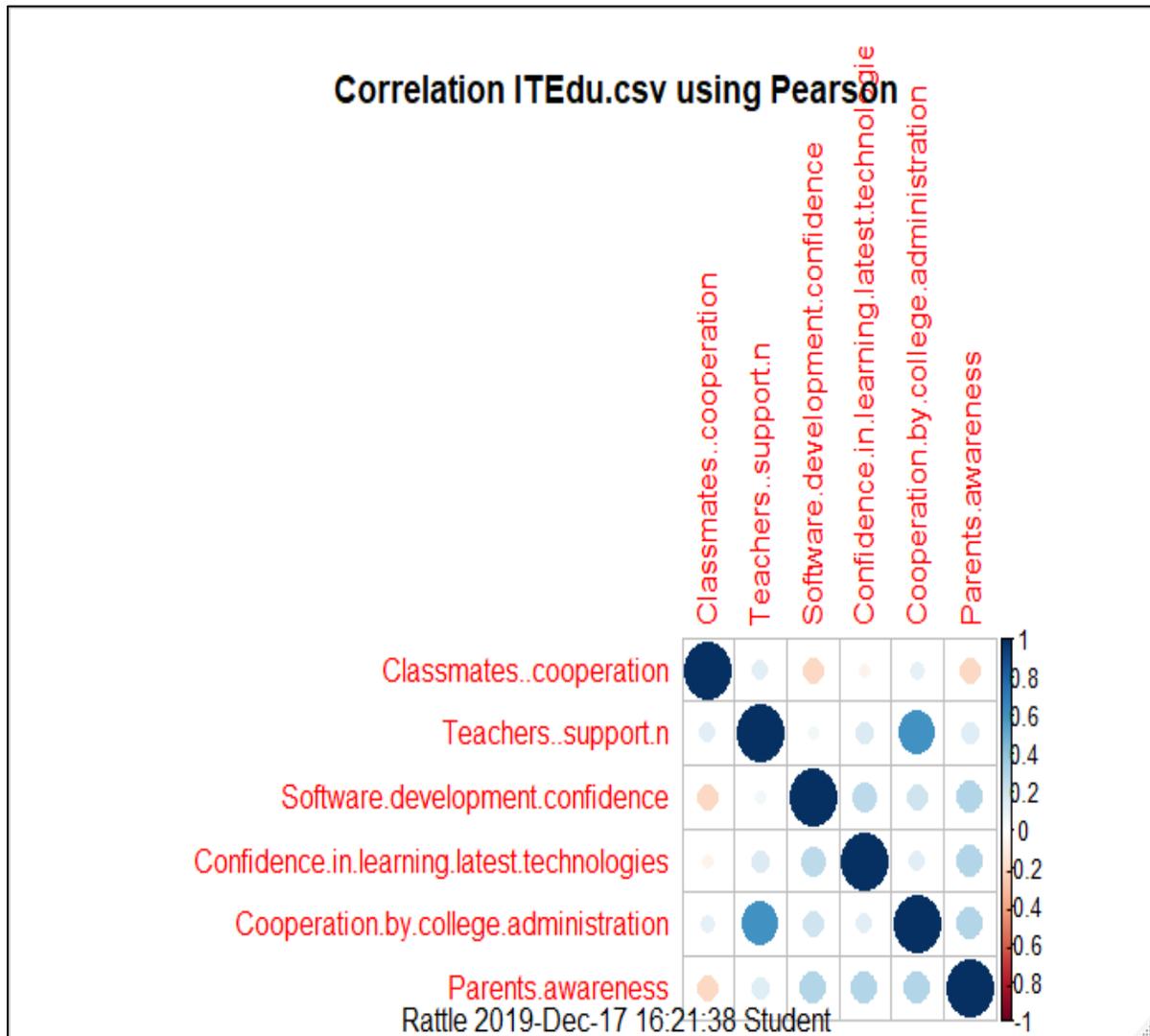

Figure 10: Correlation between variables

Figure 10 shows pairwise correlation between variables. It gives visual clue to the degree of closeness between variables. The hierarchical correlation dendrogram produced here presents a view of the variables of the dataset showing their correlations. The length of the lines in the dendrogram provide a visual indication of the degree of correlation. As per the analysis, teachers support and cooperation by college administration are 60% positively correlated.

Recommendations and Conclusion

The outcome of the research, as presented in this paper emphatically presents the need of enhancing engagement of marginalized girls in IT education. The fundamental target of the proposed research is to undertake the study of marginalized girls pursuing IT education in the jurisdiction of Shivaji University. It is observed that majority of the respondents are from rural background. This implies that the marginalized girls from rural background have goal of pursuing career in IT. Respondents have shown their confidence in learning latest technologies for better career. This reveals positive strategy of these students towards IT education and career. Regarding future goals of these girls, most of them planning for job. Very few students are enrolled for online course, it is obvious because most of them are not aware of online courses. Govt. of India has launched Stand Up India Scheme in the year 2016. These students are not aware of this scheme in detail

The concerned Government body or educational organizations should take care of organizing programs to create awareness about Self Employment, Stand Up India Scheme, Career opportunities in IT etc as additional steps towards Women Empowerment. This exploration turned out to a rich presentation for administrators in the higher education arena, policy makers and any person who is unequivocally disposed to take up research in this domain.

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