

## Relationship of Socioeconomic Characteristics with Level of Awareness and Adoption about Digitized Educational Resources

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### ABSTRACT

The study of Socio-economic status, try to explain the actual situation of population in particular region. It is necessary to understand the socio-economic condition of respondents in sociological studies. The present study was focused on how the socio-economic variables were related with the level of awareness and adoption of digitized educational resources. The study was conducted in Banaras Hindu University. The data further showed that majority of respondents belongs to 20-25 year age group. All the respondents were youth. In terms of educational background it was observed that out of 544 respondents 274 (50.36%) were from Post-graduation followed by 144 (26.47%) were from graduation and 126 (23.16%) were Ph.D. scholars. Results further revealed that there is association between different faculties and training as (Chi square value= 129.50,  $p=0.00$ ). In terms of possession of ICT infrastructure by students, it was revealed that almost all students had access to mobile, computer and laptop. The study recommends that there is a need to create awareness among students and their parents should play important role in educating the students and to make them adopt digitized educational resources.

**Key words:** Socio-economic variables, Awareness, Adoption, Digitized educational resources

India, after independence, has made a great advancement in its education system. There was an immense pressure on various state governments to initiate more and more educational institutions, colleges and universities. This pressure has led to rapid growth of higher education in country. But the sad thing is that this progression is more quantitative than qualitative, all because of the high demand. Therefore, an alternative methodology was required in order to ensure quality education & success, and distance education emerged as one such alternative. Digitized Educational Resources helps students to access course materials anytime anywhere, one can access these resources by their mobile or computer [1]. To know is there any impact of these resources on students' academic performance we should first enquire whether students have the appropriate infrastructure with them. Socio-economic characteristics of students will help us know about their needs and status [2].

Socio-economic status is evaluated as a combination of factors including Age, level of education, income, size of landholding, occupational structure, and other basic amenities and infrastructure facilities. It is a way of looking at how individuals or families fit into society using economic and social measures that have been shown to impact individuals' awareness and level of adoption of innovations [3]. Socio-economic characteristics help to understand students' needs. In this context, by determining the needs and expectations of students from universities, one can offer new perspectives to develop innovative strategies in educational system. Now days, literacy and education among young population has come to mean a more efficient fulfilment of the changing role and status, better quality of life as young generation is future of our nation. Individual measures of Socio-economic status such as income, education, and occupation reflect the opportunities and resources people might have [4], and are part of one's intrapersonal environment. For example, occupation might determine whether someone can afford the time and expense of participation in organized sports. Area level measures are either aggregated individual indicators or can be used to represent contextual effects of Socio-economic status [5]. For example, the average income of a neighborhood might help to explain the resources that are available or not, to that specific community [6].

Thus, education has been considered the most important factor for the empowerment of any person and particularly for women. In this study the data of educational background of girl students provides the ground situation about their level of awareness and adoption of Digitized Educational Resources.

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**MATERIALS AND METHODS**

The sample comprised to 544 female students from eight faculties of Banaras Hindu University (BHU). Purposive sampling technique was used to collect the data. Questionnaire was developed. The data was subjected to statistical analysis by computing Mean, S.D and test significance. The focus of study was on contributed girl student's pursuing graduation, Post-graduation and Ph.D. Training received by the respondents is categorized; total scores against each category were converted to frequencies and percentage for suitable inferences. Availability of ICT is categorized as available and not available and scored as 1 and 0 respectively. Educational background of respondent's mother is judged from the level of formal education achieved, and grouped into seven categories and scores were assigned to various levels of education. Mother's occupation was obtained by direct questioning method and categorized, information regarding mother's accessibility of Mobile/Computer/Laptop. The extent of association between different faculties and received training and between education and occupation of mother was measured using chi square test.

**RESULTS AND DISCUSSION***Socio personal variables*

**Age:** The findings on age of the respondents are presented in (Table 1). The data revealed that in the Agriculture faculty out of 100 respondents majority (63%) of the respondents belonged to 23-25 year age group whereas in faculty of Arts majority (74%) of respondents belonged to 20-26 year age group and in the faculty of medicine (67.94%) respondents belonged to 20-26 year age group whereas (61.53%) respondents belonged to 23-25 year age group, in the faculty of law out of 50 respondents 66% respondents belonged to 23-25 year age group whereas in the faculty of management 47.05% respondents belonged to 23-25 year age group, and in the faculty of Science and Commerce majority of respondents 67.5% and 78% belonged to 23-26 and 18-21 year age group.

Thus, it may be concluded that majority of respondents belongs to 20-25 year age group. All the respondents were youth. Similar results reported by [7] in her study on digital empowerment of digital natives" at BHU revealed that majority of the respondents belonged to 21-25 year age group. It was observed that overall average age of respondents was 22.77 years. It showed that most of the respondents were youth.

Table 1 Distribution of respondents according to their age (N=544)

Particulars	Frequency	Percentage	Average Age
A. Agriculture (n=100)			
Upto 22	27	27	23.48
23-25	63	63	
Above 25	10	10	
B. Arts (n=100)			
Upto 19	5	5	23.05
20-26	74	74	
Above 26	21	21	
C. Medical (n=78)			
Upto 19	15	19.23	23.94
20-26	53	67.94	
Above 26	10	12.82	
D. IIT (N=52)			
Upto 22	12	23.07	23.65
23-25	32	61.53	
Above 25	8	15.38	
E. Law (N=50)			
Upto 22	6	12	21.64
23-25	33	66	
Above 25	11	22	
F. Management (N=34)			
Upto 22	10	29.41	22.88
23-25	16	47.05	
Above 25	8	23.52	
G. Science (N=80)			
Up to 22	13	16.25	24.35
23-26	54	67.5	
Above 26	13	16.25	
H. Commerce (N=50)			
Upto 17	4	8	19.2
18-21	39	78	
Above 21	7	14	
Overall	22.77 years		

**Education:** The findings on education of the respondents are presented in (Table 2). The data revealed that in the faculty of Agriculture and Arts out of 100 respondents majority 80% and 42% of the respondents were from post-

graduation whereas in the faculty of medicine out of 78 respondents majority (50%) respondents were from post-graduation and in the faculty of IIT out of 52 respondents majority (59.61%) respondents were from post-graduation

whereas in the faculty of management 94.11% respondents were from post-graduation, and in the faculty of Law and Commerce majority of respondents i.e. 72% and 82% were from graduation whereas 87.5% of respondents were from Ph.D. in the faculty of science respectively. Thus, it may be concluded that the focus of study was on covering female research scholars and PG students in respective faculties. As we know there are limited seats for research scholars

compared to UG and PG students thus it was observed that majority of respondents were from post graduate, followed by graduate and research scholars. It was observed that out of 544 respondents 274(50.36%) were from Post-graduation followed by 144 (26.47%) were from graduation and 126 (23.16%) were Ph.D. scholars. The findings implied that majority of respondents were from post-graduation followed by graduation and Ph.D. scholars [8].

Table 2 Distribution of respondents based on their current level of education (N=544)

Average education of respondents	Agriculture (n=100)	Arts (n=100)	Medical (n=78)	IIT (n=52)	Law (n=50)	Management (n=34)	Science (n=80)	Commerce (n=50)	Overall (n=544)
	Percentage								
Graduation	-	37	38.46	-	72	-	-	82	26.47
Master	80	42	50	59.61	28	94.11	87.5	12	50.36
Ph.D.	20	21	11.56	40.38	-	5.88	62.5	6	23.16

#### Distribution of respondents based on training

Data from the (Table 3) revealed that the majority of the respondents from the faculty of Management followed by the faculty of Science i.e., 78.58% and 55% received training on computer, whereas 58.82% respondents from the faculty of Management participated in computer related competition. This may be because students from the faculty of management

perform most of their activities on computers, so they might be interested in learning the ways to handle software. It was observed that out of 544 respondents 205 (37.68%) were received training on computer followed by 152(27.94%) were participated in computer related competition [9]. The findings implied that majority of respondents did not had any involvement in training.

Table 3 Distribution of respondents based on their current level of education (N=544)

Training	Agriculture (n=100)	Arts (n=100)	Medical (n=78)	IIT (n=52)	Law (n=50)	Management (n=34)	Science (n=80)	Commerce (n=50)	Overall (n=544)
	Percentage								
Received training on computer	46	42	21.79	36.53	18	78.58	55	28	37.68
Participated in computer related competition	18	32	16.66	13.46	12	58.82	27.5	16	27.94

Table 4 Distribution of respondents based on ICT infrastructure at personal level (N=544)

ICT infrastructure at personal level	Agriculture (n=100)	Arts (n=100)	Medical (n=78)	IIT (n=52)	Law (n=50)	Management (n=34)	Science (n=80)	Commerce (n=50)	Overall (n=544)
	Percentage								
Go to computing lab for accessing email and other facilities	32	37	17.94	26.29	12	5.88	37.5	34	37.68
Have original antivirus package	72	49	42.30	42.30	42	67.64	66.25	38	27.94
Have personal computer at home	80	62	66.66	80.76	82	88.23	80	76	53.67
Have internet connection at home	75	65	70.51	71.15	76	100	86.25	78	75.18
Have data card for internet connectivity	70	66	55.12	48.07	52	70.58	68.75	58	75.73
Have personal mobile	100	98	100	100	100	100	100	98	62.13
Have internet connectivity in mobile	100	91	100	100	100	100	95	100	99.44
Have cable connection at home	78	67	60.25	46.15	42	38.23	68.75	78	97.61
Have DTH services at home	86	66	67.94	57.69	78	82.35	76.25	86	63.23
Have personal laptop	95	66	71.79	96.15	82	100	91.25	54	74.63
Have 4G model mobile set	94	88	89.74	88.46	84	94.11	80	98	81.25

#### Distribution of respondents based on ICT infrastructure at personal level

Data depicted in (Table 4) indicated that majority of respondents (42.20%) respondents from faculty of IIT. The reason behind this finding may be that the use and discovery of recent technologies and software in almost all fields of research are contributed by IIT and science students for which

they need personal computers to carry out their day-to-day activities. Majority of respondents did not have personal computer in chamber may be because they were from graduation and post-graduation and the respondents who had personal computer in chamber were research scholars so they had their chambers or laboratories. About 37.5% respondents from faculty of Science and 37% respondents from faculty of

Arts go to computing lab for accessing computer whereas, 72% respondents from the faculty of agriculture have original antivirus package [10].

It was observed that out of 544 respondents 152 (27.94%) were go to computing lab for accessing email and other facilities whereas 292 (53.67%) had original antivirus package, 409(75.18%) had personal computer at home, 412 (75.73%) had internet connection at home, 338 (62.13%) had data card for internet connectivity, 541 (99.44%) had personal mobile, 531 (97.61%) had internet connectivity in mobile, 344 (63.23%) had cable connection at home, 406 (74.63%) had DTH services at home, 442 (81.25%) had personal laptop, 485 (89.15%) had 4G model mobile set [11].

Majority of respondents (88.23%) from faculty of management have personal computer at home. It is found that all the students from faculty of Management had internet connection at home however 65% of respondents from faculty of arts did not possess internet facility at home. Data revealed that out of eight faculties except faculty of Arts and commerce all respondents had their personal mobile it shows that all respondents had accessed to mobile technology whereas all the respondents had internet connection in their mobile except faculty of arts and commerce, it may be because majority of respondents residing in hostel and they have free Wi-Fi connections. Majority of respondents (78%) from the faculty Agriculture and commerce had cable connection at home [12]. Majority of respondents (86%) from the faculty of Agriculture and Commerce had DTH services at home. It is found that all the respondents from the faculty of management had personal laptop and (94.11%) respondents had 4G model mobile set.

Table 5 Chi square test carried out between faculties and training

Particulars	Chi-Square value	Asymp. Sig
Faculties and training	129.50	0.00

### Chi square test

Chi square test carried out between faculties and training (Table 5) showed following results:

The value of the test statistics is 129.50 and the corresponding p-value of the test statistics is  $p = 0.00$ . Since the p-value is less than our chosen significance level ( $\alpha = 0.05$ ), we reject the null hypothesis. Rather, we conclude that there is an association between faculties and training. i.e., among eight faculties, students who enrolled in technical courses received training related to computer [13]. Thus, we can conclude that students from other faculties such as agriculture, law, and science, medical should provide training related to computer or laptop so that they can easily access the digital content.

## CONCLUSIONS

The study concluded that socio-economic characteristics of individuals play important role in creating awareness and adoption of digitized educational resources among students. Today, literacy percentage among women has increased in current times as compared to conventional times. Most of the respondents' mothers were graduated but they were engaged only in households and not in any income generating activities. This might be because of the pressure upon them from their families for early marriage and also lack of understanding in them about the importance of self-independency. But digitized technology is a way to help these women to become self-independent. This study concluded that respondents as well as their mothers are e- ready, they are ready to use digitized technologies and are getting digitalized day by day and this will certainly lead to digitalization of the entire family. They have the awareness of using recent technologies which are easy and time saving and this may help to make India digital.

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