Attitude towards Information Technology and Digital Divide: A Study among Students in Universities in Kerala, India

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Abstract

The main aim of this research is to evaluate the attitude of university students' towards Information Technology (IT) and to identify whether their attitude plays any significant role in contributing digital divide among them. The study used quantitative research design and administered a pre-validated questionnaire to a sample of 644 postgraduate students selected with stratified random sampling. This study reports that about one third of the students fall under the high level attitude towards IT, while just above two thirds of them came under the medium level attitude. A significant gender divide persisted in the case of attitude towards IT among the students. Discipline-wise analysis reveals that the students from Social Science had more favourable attitude towards IT compared to those from Science and Humanities disciplines. The attitude towards IT plays a significant role in establishing the digital divide among the students evidenced by significant direct correlations with access to IT, digital competency and the frequency of use of the Internet.

1. Introduction

Digital divide is one of the important phrases of the twenty first century. The term represents a gap between those with or without access to computers, mobile phones and the Internet. Digital divide is a marked gap in the access and use of Information Technology. OECD (2001) has defined the term digital divide as "The gap between individuals, households, business and geographic areas at different socio-economic levels with regard to both their opportunities to access IT and their use of the Internet for a wide variety of activities". Singh (2010) described the digital divide as an ever increasing unequal access to IT and its use. Digital divide is the inequality between individuals or groups with reference to their access to new technologies and differences in their competency in the use of IT effectively, as a result of variations in their knowledge and technical skills.

Socio-economic factors drive information inequalities all over the world. Most studies revealed that digital divide was due to differences in social and economic status of different nations and regions and also in differences between the various demographic characteristics of citizens (Chen & Wellman, 2004; Cuervo & Menéndez, 2006; Ono and Zavodny, 2007). For acquiring additional insight into the digital divide, there is a need for intensive research that looks not only at the access level of digital devices and Internet, but also psychological factors as well. The digital divide is not only about the variations in IT access, but also about the attitudinal

differences that people possess towards IT. The mere provision of IT resources does not automatically assure digital equality but require strong motivation to reap the benefits of IT. Psychological factors can also act as a hindering element among people from embracing IT into their lives. A considerable proportion of population remains at the negative side of the digital divide due to attitudinal differences. Van Dijk (2012) remarked that there are not only 'have-nots', but also 'want-nots' considering digital technology. Anxiety towards IT and technophobia may lead to reluctance in embracing new technological advancement among old age and uneducated people and also among a large part of women population (Van Dijk, 2012; Aswathi & Haneefa, 2015).

There have been limited studies extending the role of attitude in predicting digital divide among students. Some students often exhibit a negative attitude towards digital technologies in teaching and learning. Factors like lack of interest or need influence the non use of computers and the Internet (Selwyn, 2006; Ghobadi & Ghobadi, 2015). Even though access to computers and the Internet in educational institutions has remarkably enhanced in India, some students might have failed to utilise these resources due to lack of interest, liking or confidence in the use of Internet. It is essential to know that whether digital divide continues among students even after they were imparted with free access to the technology. University students are appropriate population for the study as they are provided with free access to computer and Internet connection from their campuses. Moreno and Delgado (2013) analyzed a significant relationship between attitudes and digital skills among university students. Similarly Porter and Donthu (2006) explained the role of attitude in predicting Internet use. There is a need to analyse whether attitude towards IT plays any significant role in contributing to digital divide among the students of university level. Thus the study tries to examine whether the factors like lack of interest, anxiety, likeness, motivation and comfort towards IT are contributing to the digital divide among students in universities in Kerala state of India.

2. Related Literature

Attitude of the people can play an important role in determining their desire to accepting new technologies. Donat, Brandtweiner and Kerschbaum (2009) reported that attitudinal barriers like lack of interest and lack of perceived usefulness hinder the use of the Internet among people in Australia. Attitudes towards Internet use represent the belief and value about positive and negative effects of it. Research showed the existence of gender differences in attitude towards IT. Studies also reported the gender differences in computer and Internet use, where males have experienced a higher level of self-efficacy and expressed more positive attitudes and less anxiety than female counterparts (Chou, 2001; Losh, 2004; Broos, 2005). Studies on digital inequalities evidenced that the digital divide affected the women of all ages and across international boundaries. Chou and Shieh (2011) observed that male and the young adults were found to be more positive towards computer use. According to Cooper (2006), gender divide in technology was basically a problem of computer anxiety and deeply rooted in the socialisation pattern of boys and girls. The researcher opined that male dominance in society causes the gender differences in modern technologies and negative attitude had adverse impact on the computer performance of girls. Supporting to the statement, Huang, Hood and Yoo (2013) found that the female students experienced more anxious towards Web 2.0 applications for learning than male students.

Partridge (2007) proved that Internet self efficacy was seen to be the significant predictor of Internet use by applying Social Cognitive Theory of Bandura (1986) among members from San Jose Community in California. Furthermore, the sensibility factors of the Internet use consisted of attitude towards Internet and Internet self efficacy had positive effect on the Internet use (Zeng, 2011). Nwokeocha (2011) identified digital gap between students and lecturers from Nigerian universities in their perceptions and interest in the use of IT and established how attitude plays a significant role in creating digital divide. As per the findings of Lebens, Graff and Mayer (2009) children from low socio-economic status were expressed feelings of threat and tension when they think about using computer applications or when they observe computer related task in general secondary schools in Germany. Chipeva et al. (2018) proved that performance expectancy remained a strong predictor of technology adoption while openness was an important predictor of behavioural intention to use IT.

Selwyn (2006) reported that non-use of computers resulted from blended effects of factors like lack of interest or need and lack of knowledge barriers among households from England and Wales. At the same time Jackson et al. (2001) found that higher cognitive factors like computer self confidence, familiarity and trust reported a higher Internet use and proved the importance of motivational factors in Internet use. They also suggested that factors like computer anxiety limited the use of the web. Theoretical frameworks to understand the diversity behind digital gap are scarce. By following the studies on digital divide, Ghobadi and Ghobadi (2015) identified a theory behind different types of access like motivational access, material access, skill access and usage access which interact together in molding the digital divide. Additionally, Donat et al. (2009) concluded that if the basic hindrance of getting online was overcome, there arise elements like feelings which lead to the second order digital divide. They opined that second level digital divide comes up as a result of variations in students' abilities and attitudes towards IT.

3. Research Design

Motivational, affective and cognitive factors relating to why students decide to use or not to use Internet are primary factors while determining the digital divide among students community. The population of the research consists of postgraduate students of state universities in Kerala namely University of Kerala, Mahatma Gandhi University, University of Calicut and Kannur University. The study adopted a questionnaire based survey with a stratified sample of 644 students by applying Krejcie and Morgan (1970) table. Pilot study was conducted to test the validity of the questionnaire, applicability of the scales and clarity of statements in the questionnaire. A total of 594 students completed the questionnaires resulting in a response rate of 84.9 per cent. The sample overwhelmingly represents female students (362) compared to male students (232). The sample has got 207 students from Social Science, 194 from Science and 193 responses from Humanities. Simple percentage, Z-test, One-way ANOVA, DMRT and correlation analysis were used for statistical analysis of the collected data.

4. Results and Discussions

4.1 Students' Attitude towards Information Technology

Loyd and Gressard (1984) constructed a scale to measure attitude towards computer which included elements like computer liking, computer anxiety, computer confidence, and perceived usefulness of the computer. The study attempted to measure the attitude towards IT with 38 statements scattered under the four constructs, by applying five point Likert scale. The table 1 depicts the responses of the students' attitude towards Information Technology.

Less comfort and more anxiety towards IT will make students reluctant to use it and less enjoyable. The analysis revealed that majority of the students (around 76%) showed favourable attitude towards the statements 1 and 3 as they marked very comfortable in the use of computer and it was clear and understandable for them. In response to the statement 'Internet is difficult to use', three-quarters of the students (75.6%) pointed disagreement. Nearly half of the students (48%) have anxiety that their personal information available on the Internet might be misused. At the same time, around 33 per cent considered that use of computer and other digital devices can assist people becoming isolated. Roughly half of the students (51.3%) were neutral towards the statement 'the information available on the Internet is trustworthy'. Similarly more than half of the students (55.4%) considered the use of computer and other digital devices can cause health problems and one fourth of them felt that Internet destroys human creativity. The findings revealed that a fully positive attitude could not be observed among the students towards the construct comfort/anxiety. A similar result was also obtained among academicians from Nigerian University. They had a medium level of computer anxiousness when using computer (Oye et al., 2012).

Table 1
Students' Attitude towards Information Technology

Sl. No.	Statements	Frequency (%)				
		Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
Perception of Comfort/Anxiety						
1	I am very comfortable to use computer	226 (38)	239 (40.2)	108 (18.2)	18 (3)	3 (0.5)
2	Internet is difficult to use	9 (1.5)	29 (4.9)	107 (18)	255 (42.9)	194 (32.7)
3	Using the computer is clear and understandable	172 (29)	280 (47.1)	115 (19.4)	22 (3.7)	5 (0.8)
4	I am not bothered about security issues related to the Internet	47 (7.9)	96 (16.2)	170 (28.6)	184 (31)	97 (16.3)
5	I am anxious that my personal information available on the Internet may be misused	89 (15)	196 (33)	162 (27.3)	116 (19.5)	31 (5.2)
6	The information available on the Internet is trustworthy	47 (7.9)	134 (22.6)	305 (51.3)	94 (15.8)	14 (2.4)
7	Use of computer and other digital devices result in people becoming isolated	40 (6.7)	153 (25.8)	254 (42.8)	111(18.7)	36 (6.1)
8	Internet destroys human creativity	35 (5.9)	109 (18.4)	214 (36)	169 (28.5)	67 (11.3)
9	Use of computer and other digital devices can cause health problems	73 (12.3)	256 (43.1)	197 (33.2)	51 (8.6)	17 (2.9)
Perception of Liking						
10	I think using the Internet is enjoyable	115 (19.4)	303 (51)	158 (26.6)	14 (2.4)	4 (0.7)
11	I like to work with computer and mobile phone	137 (23.1)	271 (45.6)	138 (23.2)	47 (7.9)	1 (0.2)
12	Using the Internet makes learning fun	91 (15.3)	248 (41.8)	193 (32.5)	55 (9.3)	7 (1.2)
13	Once I start working with the Internet, I find it hard to stop	68 (11.4)	145 (24.4)	189 (31.8)	158 (26.6)	34 (5.7)
14	I am not interested in developing my skills and knowledge to use computer and the Internet.	20 (3.4)	83 (14)	123 (20.7)	260 (43.8)	108 (18.2)
15	I enjoy to use computer and other digital devices than being with my friends/relatives	51 (8.6)	163 (27.4)	135 (22.7)	169 (28.5)	76 (12.8)

16	I do not enjoy talking with others about computer and the Internet applications	31 (5.2)	69 (11.6)	193 (32.5)	223 (37.5)	78 (13.1)
17	I like to avoid reading books on Information Technology	37 (6.2)	99 (16.7)	175 (29.5)	214 (36)	69 (11.6)
18	I am not interested in a career that involves the extensive use of Information Technology	50 (8.4)	112 (18.9)	193 (32.5)	174 (29.3)	65 (10.9)
Perception of Confidence						
19	I can use the Internet effectively and efficiently	135 (22.7)	276 (46.5)	144 (24.2)	32 (5.4)	7 (1.2)
20	I am sure I can do works using computer	155 (26.1)	256 (43.1)	133 (22.4)	41 (6.9)	9 (1.5)
21	I can get high marks for Information Technology related courses	79 (13.3)	194 (32.7)	241 (40.6)	69 (11.6)	11 (1.9)
22	I can learn new software easily	70 (11.8)	169 (28.5)	226 (38)	105 (17.7)	24 (4)
23	I can select appropriate Internet based e-resources for learning	75 (12.6)	238 (40.1)	190 (32)	77 (13)	14 (2.4)
24	I am not competent enough to follow advancements in the digital world	48 (8.1)	101 (17)	242 (40.7)	165 (27.8)	38 (6.4)
25	It is not easy to become skilful at using computers	29 (4.9)	109(18.4)	175 (29.5)	215(36.2)	66 (11.1)
26	My skills and knowledge in computer and other digital devices are not adequate	39 (6.6)	152 (25.6)	215 (36.2)	154 (25.9)	34 (5.7)
27	I cannot do advanced Information Technology related work	21 (3.5)	102 (17.2)	211 (35.5)	191 (32.2)	69 (11.6)
Perceived Usefulness						
28	The Internet makes life easier	124 (20.9)	258 (43.4)	141 (23.7)	64 (10.8)	7 (1.2)
29	Knowledge of computer will widen job opportunities	192 (32.3)	285 (48)	108 (18.2)	7 (1.2)	2 (0.3)
30	I feel left behind if I do not use Information Technology.	90 (15.2)	146 (24.6)	218 (36.7)	116 (19.5)	24 (4)
31	Using the Internet enables me to accomplish tasks more quickly	150 (25.3)	304 (51.2)	125 (21)	14 (2.4)	1 (0.2)
32	Knowledge of the Internet is essential for succeeding in education	172 (29)	313 (52.7)	103 (17.3)	6 (1.0)	0 (0)

33	Using the Internet improves my academic performance	162 (27.3)	282 (47.5)	121 (20.4)	26 (4.4)	3 (0.5)
34	I find using the Internet to be easier than using library to find information	124 (20.9)	219 (36.9)	161 (27.1)	83 (14)	7 (1.2)
35	The Internet helps me better to get the latest knowledge than other resources	196 (33)	278 (46.8)	90 (15.2)	28 (4.7)	2 (0.3)
36	I can learn effectively without using the Internet.	35 (5.9)	116 (19.5)	279 (47)	132 (22.2)	32 (5.4)
37	Using the Internet wastes my time	25 (4.2)	73 (12.3)	191 (32.2)	233 (39.2)	72 (12.1)
38	Using the Internet is not important in my university life	18 (3)	39 (6.6)	115 (19.4)	240 (40.4)	182 (30.6)

Computer liking is the internal feeling of enjoyment and stimulation, or the wish to understand about and think about it (Loyd, Loyd & Gressard, 1987). Additionally, liking towards IT is implied the students' interest to use the digital devices, software and the Internet. Majority of the students enjoyed Internet very much and also liked to work with digital devices. At the same time, a considerable fraction of the students held a neutral opinion about likeness in the use of digital devices and Internet. With respect to the statement 'using the Internet makes learning fun', more than half of the respondents (57.1%) had a positive feeling. However about one third of them neither agree nor disagree with it. For the statement 'once I start working with the Internet, I find it hard to stop', over thirty per cent of the students showed disagreement and an almost similar fraction opted neutral. It is also apparent that around 17 per cent of them opined negatively for their interest to promote skill and knowledge in the use of computer and the Internet.

The result indicated that a good number of the students (41.3%) preferred the company of their friends/relatives than using digital devices. In response to the statements related to the enjoyment they get while talking about computer and Internet applications to others and regarding the avoidance of reading books related to technology, around half of the students showed negative attitude. Approximately thirty per cent of the students (27.3%) did not wish to get a job involving extensive use of IT. Shih (2004) mentioned that attitude decides the reaction of someone's like or dislike towards a thing. The analysis pointed out that most of the students have only a medium level liking towards IT.

Confidence in the use of IT indicates a belief to use it and in performing communication related activities successfully. Lack of knowledge in the use of IT can also lead to lack of confidence to handle it (Demirdag, 2016). Majority of the students (close to 70%) responded positively for the statements, 'I can use the Internet effectively and efficiently' and 'I am sure I can do works using computer'. The proportion of the students who favoured to the statement concerning selection of proper Internet based e-resources for learning was 52.7 per cent, whereas nearly 40 per cent of them showed a favourable attitude towards the statement related to learning new software.

For the statement 'I can get high marks for IT related courses' 46 per cent of the students replied positively. Among the negative statements, 'It is not easy to become skillful at using computers', close to half of the students (47.3%) disagreed. On the other hand, one quarter of the students felt that they were not proficient enough to follow the advancement in digital world. Similarly, one fifth of the students believed that they were not proficient enough to follow advanced work related to IT. The statement related to adequacy of skills and knowledge in computer and other digital devices, the feedback were divided roughly equally among the positive and negative classes. In general, the feedback highlights that the students were not fully confident in undergoing activities related to the Internet and computers. The self confidence is a major element that encourages the use of IT and the individuals with high level of confidence possess more positive approach towards technologies than those with low level (Sam, Othman & Nordin, 2005).

Perceived usefulness of IT is one of the constructs used for evaluating the attitude towards technology and the extent to which an individual feels that using a system will enhance her/his performance. (Abedalaziz, Jamaluddin, & Chin, 2013). Around 80 per cent of positive feedback were obtained for the statements like knowledge of computer will widen job opportunities, Internet knowledge is essential for succeeding in education and the Internet promotes getting latest knowledge than other resources, meanwhile about 75 per cent of the students responded positively for the statements related to the use of the Internet enables them to accomplish tasks more quickly and to improve their academic performance.

Relating to the statement 'the Internet makes life easier', 64.3 per cent of the students agreed. More than half (57.8%) of the students also agreed that use of the Internet is easier than the use of library, but 15 per cent stood against it. Approximately one fourth of the students responded negatively regarding the statement 'I feel left behind it I do not use Information Technology'. Over fifty per cent of them (51.3%) had a positive outlook towards the Internet as they showed disagreement with the statement 'using the Internet wastes my time'. Similarly over 70 per cent of the students did not favour that use of the Internet is not important in their university life. In general, the students had a strong belief that IT is highly useful in their education, career and also for their overall improvement in life. The responses supported the result of Ariffin, (2005) who found that secondary school students in rural areas had a favourable attitude towards the perceived usefulness of computer.

4.2 Level of Attitude towards Information Technology

The study explored overall level of attitude towards IT among the students. To get an idea about level of attitude towards IT, the study estimated the percentage score for all the constructs of comfort/anxiety, liking, confidence and perceived usefulness and made a categorization in to three equal classes. For this, in every positive statement, a weight of 4, 3, 2, 1 and 0 was given to the responses 'strongly agree', 'agree', 'neutral', 'disagree' and 'strongly disagree', respectively, whereas for the negative statements, the scoring was reversed. Then total score for all the constructs were calculated by adding the scores for all the statements in each of the constructs. This total score was divided by the maximum possible score (number of statements x 4) and multiplied by 100 to get the percentage score. The percentage score was then

divided into three equal classes. Low level with the scores less than 33.3, an average level in between 33.3 and 66.7 and high level with the score greater than 66.7.

Table 2
Level of Attitude towards Information Technology

Level of Perception	Frequency (%)
Low	2 (0.3)
Medium	415 (69.9)
High	177 (29.8)
Total	594 (100)

The result shown in table 2 discloses that about one third of the students categorized under high level attitude towards IT, while just above two thirds of them were classified under medium level attitude. The result illustrates that most of the students have moderately positive attitude towards IT. A matching finding was observed by Ariffin (2005) in a survey conducted among secondary school students in rural areas where the students had a positive attitude towards IT. Doh and Stough (2010) opined that people with a more positive IT perception may try to improve their IT usage than those with a lesser positive IT perception.

4.3 Gender-wise Comparison of Attitude towards Information Technology
Many researchers pointed out that girls felt less comfortable with the use of technologies and were less favoured to reap the advantages offered by IT than their male counterparts. Women seem to be less involved with computers and the Internet than men (Cooper, 2006; Saha, & Zaman, 2017). Cooper and Weaver (2003) noted that young women were not confident enough to handle computer applications when compared to young men. An analysis was also carried out to find out whether any attitudinal variations can be seen among male and female students towards IT and table 3 displays the result. The normality of the variable attitude towards IT was tested using Kolmogorov Smirnov test. The p-value was found to be greater than 0.05 and hence the variable is following normal distribution. Therefore, the parametric tests were carried out for the comparison of male and female students.

Table 3
Gender-wise Comparison of Attitude towards Information Technology

Gender	N	Mean	Std. Deviation	Z-value	p-value
Male	232	67.93	9.08	13.916**	< 0.001
Female	362	57.67	8.56		

*** Significant at 0.01 level*

The independent Z-test produces the Z-value which was found to be significant at 0.01 level, as the p-value was less than 0.001. The result proved a significant gender difference in the attitude towards IT and the mean score obtained for the male students (67.93) is higher than female students (57.67) specified that the males have significantly higher level of positive attitude towards IT when compared to the female students. Jones et al. (2009) realized that men had more positive attitude towards the Internet than women and they also experienced more comfort and less confusion in the Internet use. The output of the analysis support the statement of Cooper (2006), who mentioned that there existed gender stereotypes and girls were found to be less competent in the use of technology and had a negative attitude towards it.

4.4 Discipline-wise Comparison of Attitude towards Information Technology

The students from various subjects may have different levels of attitude towards IT. The research also ascertains whether any attitudinal variation can be noted among the students from different disciplines towards IT and it is given in table 4. One-way ANOVA was used for the comparison of the attitude towards IT. The F-value was found to be significant at 0.05 level as the p-value for the comparison was 0.025 and it is less than 0.05. The result illustrates that there existed significant difference in the level of attitude towards IT among the students from at least one pair of discipline groups. As the result showed significant difference between the groups, DMRT test was applied for pair-wise comparison.

Table 4
Discipline-wise Comparison of Attitude towards Information Technology

Discipline	N	Mean	Std. Deviation	F-value	p-value
Science	194	60.34[b]	9.58		
Humanities	193	61.54[ab]	10.10	3.696*	0.025
Social Science	207	63.06[a]	10.41		

Significant at 0.05 level

The test revealed significant difference in the attitude towards IT among the students from Science and Social Science disciplines. Further, the students from Humanities discipline showed no significant difference with those from both Science and Social Science disciplines in the level of attitude towards IT. The students from Social Science scored higher mean value (63.06) than those from other two disciplines, which confirm that Social Science students had significantly higher level attitude towards IT. The result is interesting in the sense that the students from Science discipline might have experienced more IT applications than those from other two disciplines. Hence there was a possibility of more positive attitude conveyed by the students from Science discipline compared to those from the other disciplines. But the findings from this study conveyed that students from Social Science have more favourable attitude towards technology. Similarly Mahmood (2009) noticed by examining students from University of Punjab that Social Science students exhibited more favourable attitude towards technology than those from Science and Technology as well as Arts and Humanities.

4.5 Attitude towards Information Technology and Digital Divide

Psychological aspects covering digital divide concluded that attitude towards technology have a significant role in the IT access and use. The study made an analysis to know the relation between attitude towards IT to IT access, digital competency and frequency of use of the Internet. The study identified access to IT among the students by asking their responses about the personal level of access to various digital devices as well as various modes of Internet connections. The responses were collected using three point Likert scale with the options 'restricted access', 'limited access' and 'no access'. Further, the study measured digital competency of the students by asking their expertise to use different digital devices and to do various IT related applications in a self reported manner by using five point Likert scale. The Likert scale is ranked as 'not at all', 'not good', 'average', 'good' and 'excellent'. Finally, the researcher evaluated the differences in Internet use by examining the variations in the frequency of the Internet use for different activities/services, searching e-resources and also for various other purposes which were also analysed by using five point Likert scale with the responses 'always', 'often', 'sometimes', 'rarely' and 'never'.

Table 5
Correlations of Attitude towards Information Technology with Information Technology Access, Digital Competency and Frequency of Use of Internet

Dimensions of Attitude	Access to Information Technology	Digital competency	Frequency of Use of Internet
Comfort	0.276[**]	0.531[**]	0.338[**]
Liking	0.182[**]	0.414[**]	0.456[**]
Confidence	0.385[**]	0.665[**]	0.472[**]
Perceived Usefulness	0.268[**]	0.403[**]	0.745[**]
Overall Attitude	0.365[**]	0.654[**]	0.358[**]

*** Significant at 0.01 level*

To find out the relationship between attitude towards IT with different variables like access to IT, digital competency and the frequency of Internet use, Spearman's rank correlation was worked out and the result is presented in table 5. All correlation coefficients were seemed to be positive and significant at 0.01 level suggested that as the attitude towards IT improves, corresponding increase in the access to IT, digital competency and frequency of the Internet use can also seen among the students. These direct relationships can be seen in all the four constructs of attitude in which high correlation was obtained in the case of digital competency. Hence it can be described as better attitude significantly more influences digital competency of the students. Among the four constructs, confidence and comfort had high correlations with the digital competency when compared to the liking and perceived usefulness. Similarly a high level correlation can be seen between perceived usefulness of IT and frequency of use of the Internet among the students. The findings support Porter and Donthu (2006), who suggested that perceived usefulness

and ease of technology use significantly favour the use of IT. They mentioned that adoption and use of IT depends upon a favourable attitude towards it which in turn connected to a greater possibility of IT access. This study also proved that attitude towards IT significantly influences the digital divide among students.

5. Conclusion

The first-level digital divide is considered as the inequalities existing in the physical access to resources of IT like computer, Internet and mobile phone and second level digital divide is the differences in intensity, frequency and skills in the use of IT (Jin & Cheong, 2008: Youssef & Ragni, 2008). The study verified that students' attitude towards IT is a strong predictor in the access and also in the use of IT. Hence the result can be interpreted as attitude towards IT plays a significant role in contributing to the first and second level digital divide among students. Further, it can be concluded that a favourable attitude towards technologies assists for better adoption of IT. However, considering the level of attitude towards IT, majority of the students had a medium level attitude towards IT which points out the requirement of imparting the students with more positive approach towards the use of IT. As the gender divide still persists in the case of attitude towards IT among the students, educational authorities can organize motivational classes to female students for making them more positive towards the use of IT. A positive attitude towards technology can be promoted by introducing IT awareness and training programmes related to the constructive role of Internet in education. It is also necessary to improve the digital literacy of the students to build a favourable approach towards IT.

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