

Parents Role in the Digital Learning Skills Among College-Going Students

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Abstract

The well-known truth is that parents are the first persons who intricately deeply involved and in close proximity since the beginning learning process of their children and are identifies as the first teachers of the child. The education system in the earlier days was confined to 'Gurukulas' and classroom modes of teaching. The recent inventions in the methods of teaching and learning of the modern education gradually shifting to utilize computer skills especially during the pandemic COVID-19 and lead to made many changes in the learning process through virtual classes. The mind-sets of the parents also are on continuous change moulding towards adopting more advanced learning techniques especially keen interest in increasing their child's computer skills. Based on this background, the present investigation was focussed on understanding the role of parents on the digital learning process of their children. The research was carried out randomly among 120 college-going students studying in Tirupati town of Andhra Pradesh. The study was conducted on collecting information randomly using structured questionnaire from the college-going students to express their opinion in receiving parent's support and to enhance the digital learning process. It was observed that though either or both parents might be non-technical and found it difficult to directly guide the child on digital knowledge was on the other hand encouraged children to join the new computer courses and provide the most emotional support in the digital learning process. If the time permitted and feasible financially and practical, the parents might join on their own for certain computer-based courses to improve their children basic skill and to motivate more towards digital learning. Enhancing the digital literacy of either parent played a crucial role in extending support to the students and to apply computer skills to enhance the academic and career progression.

Keywords: Role of Parents, Online, offline, College Students, Digital.

1. Introduction

The family environment occupies a significant impact on the student learning process. Parents are the first teachers of their children. Nowadays the students are motivating to inculcate digital skills to enhance their academic career and even the parents are showing interest in enhancing their children's computer skills. The parents and other members of a family as an institution create conditions for the positive development of the child. The role of parents is much crucial for not only creating better moral values, attitudes, and behaviour but also predispose their children towards the better establishment of the future life skills development and learning process [1].

The traditional model of analysing the parent's involvement commonly emphasized their support of their children in education. The recent literature

trying to explore the association and impact of the different degrees of educational status and the relationship in enhancing the performance levels of the students. Narrating the parent's involvement involves active participation of the parent in bringing of better development [2]. The education system not only in the technical and computer fields, even in the streams of science and arts are also gradually incorporating comprehensive digital skills in the refinement of the learning process. Research must be oriented even towards evaluating the parent educational status and the rate of enhancing the students' digital literacy levels.

Learning is a continuous desirable process in the right direction and typically focused as an education system in schools and which may be expelled by the academic activities of teachers,

positive support from parents, family members, and many more persons. The existing literature suggests that parent education especially mother and family income exhibits a positive relationship in the academic activities of their children and achieving academic excellence [3]. Recently, to a wider extent, the impact of parents on the student's achievement is recognized at different levels from the teacher to the higher levels of administrators and policymakers. Suitable educational reforms and initiatives become an integral part of the educational system [4]. Despite well-established theoretical and practical implications, still, the area of research is underexploited. Based on this background and the importance of digital learning, the current researched was aimed at understanding the relationship between the role of parents and the influence in the digital learning process.

2. Literature Review

The fast pace of rapid revolution in teaching and learning methods, the Internet and wireless communication systems technologies emerged with application of various interactive multimedia networks using the appliances of mobiles, tablets, desktop and laptop computers. The convenience, ease, faster and receiving information instantly using internet facility for applying digital teaching materials and achieving the objective of national competitiveness gradually become an additional added advantage in connection with the traditional teaching. The digital learning process occupied the positive impact and effectiveness than traditional teaching alone. The present scenario highlighted the beneficial impacts to combine with the current teaching trend and motivated to utilize the advantages of digital learning in turn to develop practicable teaching strategies for the teaching effectiveness [5].

The current COVID-19 pandemic situation has affected the education system both at school and college level and the parents do need to adopt for the suitable changes for coping up their children for virtual digital learning process. The closure of academic institutions created greater missing of social interactions among students and parents faced tough situations especially at times of working online to adjust with online learning

process of their children. The parents too had adapted quickly to address the learning gap that has emerged in their children's learning in these challenging times. The Government and institutions should provide measures to facilitate the essential learning skills to children at home. Centralized data dashboards and educational technology may be used to keep the students, parents and educational institutes updated [6].

3. Proposed Design

The investigation of the current research was conducted using a structured questionnaire among the college-going students of Tirupati town located in Andhra Pradesh, India. The study sample was selected randomly with a total sample size of 120 students. The role of parents in the digital learning process was evaluated by collecting information on parents' educational details, their digital education literacy levels and compared against mean values of students' digital confidence levels. The basic education details were collected in terms of the highest degree of father and mother as Doctoral degree, Post-Graduation, Graduation, Inter/Higher Secondary, and Primary. The nature of the study was as gathered as to whether they had undergone technical or non-technical study. The main digital literacy knowledge was arrived at by gathering information about their study as to whether they completed their basic degree in computers or any special computer courses. The levels of digital literacy were analysed as 5-Extremely Good, 4-Good, 3-Moderate, 2-Fair, and 1-Poor. A similar scale was used even for the assessment of digital literacy levels of the selected college-going students.

4. Results And Discussions

The role of parents was evaluated thoroughly by comparing each parameter of both fathers and mothers with the respective mean values of digital literacy levels of students. The results were analysed statistically through t-test and F-test value results to find out the degree of differences.

4.1. Basic Education Of Parents

The basic education of the parents in terms of the highest degree and mode of education was presented in table 1 in the form of frequency and percent distribution.

Table 1: Basic Educational details of parents of the selected college going students

S.No.	Parameter	Frequency	Percentage (%)
1.	Father's Highest Degree		
	i) Doctoral	10	8
	ii) Post Graduation	34	28
	iii) Graduation	44	37
	iv) Inter/Higher Secondary	18	15
	v) Primary	14	12
2.	Mother's Highest Degree		
	i) Doctoral	4	3
	ii) Post Graduation	18	15
	iii) Graduation	34	28
	iv) Inter/Higher Secondary	38	32
	v) Primary	26	22
3.	Father-Mode of Education		
	i) Technical	46	38
	ii) Non-Technical	74	62
4.	Mother-Mode of Education		
	i) Technical	22	18
	ii) Non-Technical	98	82

The educational details denoted that comparatively fathers' educational status was found to be far better than mothers. The maximum percent of the highest father's degree was observed as either post-graduation (28%) or graduation (37%). In the case of mothers, the majority of inter/ higher secondary school education (32%) followed by graduation (28%). A minimal percent of either fathers (8%) or mothers (3%) completed their doctoral degrees.

The mode of education was also collected on their mode of education as technical or non-technical to understand the parents' role in extending support in the digital learning process. More than half of the father's education was of non-technical nature (38%) and it seemed to be of very high percentage (82%) among mothers.

One of the studies focused on the relationship between parental education and academic achievement by focusing on the educational level of the father and mother for their children's academic achievement. The study population was composed of 10th class students of the government high schools in the District of Mardan. The study used systematic random sampling

techniques to select students to be included in the sample. The respondents were asked to complete a self-designed questionnaire. The results of the study showed that high education of fathers and mothers positively contribute to the academic achievement of their children. There was a strong correlation between parents' education and students' academic achievement. Based on the findings, the study suggested initiating adult education programs, awareness campaigns and the social media for community education [7]. This particular scenario may also being applicable to college going students with positive effect of parents education on digital learning skills in a more efficient way for their better career.

4.2. Digital Literacy Levels Of Parents

The knowledge on digital literacy education was evaluated by obtaining the information that whether they had completed their basic degree in computers or any special computer courses. The extent of knowledge levels on digital literacy was assessed through five point's hedonic scale. The observations thus obtained were presented in table 2.

Table 2: Digital literacy education levels of parents of the selected college going students

S. No.	Parameter	Frequency	Percentage (%)
1.	Father Digital Literacy-Basic Degree in Computers/Special Computer Courses		
	i) Yes	24	20
	ii) No	96	80
2.	Mother Digital Literacy-Basic Degree in Computers/Special Computer Courses		
	i) Yes	10	8
	ii) No	110	92
3.	Digital Literacy Level of Father		
	5-Extremely Good	30	25
	4-Good	18	15
	3-Moderate	28	23
	2-Fair	20	17
	1-Poor	24	20
4.	Digital Literacy Level of Mother		
	5-Extremely Good	16	13
	4-Good	14	12
	3-Moderate	18	15
	2-Fair	16	13
	1-Poor	56	47

The data from the table illustrated that only 20 percent of fathers had basic digital knowledge through either computer degree or special course and it was a very nominal level for mothers (8%). But, regarding their level of digital knowledge found to be slightly above scored as extremely good both among fathers (25%) and mothers (13%) respectively. This was probably because many of the employees are required to be acquainted with the computer skills to perform

their regular job activities. It was observed that slightly lower than one-fourth of fathers (20%) and nearly half of the mothers (47%) expressed that they had poor digital knowledge.

4.3. Digital Literacy Confidence Levels Of The Students

The confidence levels on digital literacy among the college-going students were gathered using a five-point hedonic scale and denoted in table 3 as frequency and percent distribution.

Table 3: Digital literacy confidence levels of the selected college going students

Digital literacy confidence levels of students	Frequency	Percentage (%)
5-Extremely Good	18	15
4-Good	20	17
3-Moderate	23	19
2-Fair	29	24
1-Poor	30	25

The findings well demonstrated that only around half of the students had digital literacy confidence levels ranging from moderate (15%) to good (17%)

and extremely good (15%). About one-fourth of them had fair confidence levels (24%) and the striking point to be noted that one-fourth of them

found to be poor (25%) in the digital application process. The data thus indicated that suitable measures to be planned to improve their digital skills and to enhance confidence level.

The impact of digital literacy on teachers' performance and development Information and communication technologies (ICT) are pervasive in all aspects of life. As a result, there have been many shifts in the way we do our day-to-day work. The traditional idea of literacy is based on reading and writing. However, in the 1990's, the rise of digital technology transformed literacy from traditional, paper-based, and knowledge-based literacy into modern, social computer literacy. In other words, in this period, literacy redefined itself

as a collective concept in various contexts and locations. Digital literacy through multimedia sources can lead to the creation of favourite materials, alter the form of language education, sharpen critical thinking skills, and share views with others [8,9,10].

4.4. Role Of Parents In The Digital Learning Process

The role of parents in supporting their children to encourage the digital learning process was assessed by comparing the mean digital learning confidence levels against their basic and digital literacy details. The extent of influence was evaluated statistically to find out the significant differences and presented in table 4.

Table 4: Distribution of mean digital learning confidence levels of students based on basic educational details of parents: Levels of significance

S.No.	Parameter	Digital learning confidence levels of students			
		Mean	SD	F-Value/ t-Value	P-Value
1.	Father's Highest Degree				
	i) Doctoral	4.60	0.52	82.57	<0.0001*
	ii) Post Graduation	3.94	0.74		
	iii) Graduation	2.55	0.93		
	iv) Inter/Higher Secondary	1.11	0.32		
	v) Primary	1.07	0.27		
Mother's Highest Degree					
2.	i) Doctoral	4.5	0.58	94.06	<0.0001*
	ii) Post Graduation	4.44	0.51		
	iii) Graduation	3.59	0.78		
	iv) Inter/Higher Secondary	2.08	0.85		
	v) Primary	1.08	0.27		
	Father-Mode of Education				
3.	i) Technical	3.91	0.94	9.90	<0.0001*
	ii) Non-Technical	1.99	1.09		
Mother-Mode of Education					
4.	i) Technical	4.32	0.78	7.02	<0.0001*
	ii) Non-Technical	2.37	1.25		

The mean confidence levels of the students were highly significantly different at 1 percent level and

noticed at proportionately higher levels with the corresponding higher degree of both parents. On

the other hand, the mean digital confidence levels of students seemed to be relatively more and a prominent role was observed for the parents who had technical knowledge among fathers (3.91) as well as mothers (4.32). Interestingly the role of

mothers was found to be predominant than their fathers.

Similar to that of the basic education levels of parents, their role was also examined against the digital literacy levels of both parents and denoted in table 5.

Table 5: Distribution of mean digital learning confidence levels of students based on Digital literacy levels of parents: Levels of significance

S.No.	Parameter	Digital learning confidence levels of students			
		Mean	SD	F-Value/ t-Value	P-Value
1.	Father Digital Literacy-Basic Degree in Computers/Special Computer Courses				
	i) Yes	3.96	1.00	5.376	<0.0001*
	ii)No	2.42	1.31		
2.	Mother Digital Literacy-Basic Degree in Computers/Special Computer Courses				
	i) Yes	4.40	0.70	4.24	<0.0001*
	ii)No	2.57	1.34		
3.	Digital Literacy of Father				
	5-Extremely Good	3.90	1.00	62.87	<0.0001*
	4-Good	3.83	0.71		
	3-Moderate	2.89	1.03		
	2-Fair	1.60	0.50		
	1-Poor	1.08	0.28		
4.	Digital Literacy of Mother				
	5-Extremely Good	4.14	0.97	79.63	<0.0001*
	4-Good	4.00	0.77		
	3-Moderate	3.56	0.98		
	2-Fair	3.69	0.79		
	1-Poor	1.46	0.50		

The interesting highlighting point needs to be considered that the digital learning competence levels students were identified at high mean values whose parents [fathers (3.96) and mothers (4.40)] had basic educational knowledge on digital literacy. It was evidenced that the digital confidence levels of students were highly significant ($P < 0.001$) on par with increasing levels of the digital literacy levels of the parents.

Teaching has been disrupted in a number of institutions by the COVID-19 pandemic. It has put academic institutions' ability to handle a sudden crisis to the test. In Jordan, the primary mode of instruction during the pandemic has shifted to

online learning. Two online surveys were given out following four months of online instruction to find out how instructors and students felt about the process of learning during that time without any in-person instruction. This study used two surveys to find out how faculty and students felt about online learning. A survey was given to 50 faculty members, and a second survey was given to 280 randomly chosen students to find out about the benefits, drawbacks, and effectiveness of online learning in Jordan. According to the study, instructors and students alike felt that online learning is helpful in light of the current pandemic. Its effectiveness is also inferior to that of in-person

instruction and learning. The difficulties in adjusting to online learning, particularly for students who are deaf or hard of hearing, lack of engagement and motivation, technical and Internet problems, data privacy, and security, were mentioned by both faculty and students. They also concurred about the benefits of online education. The main advantages were flexibility, low costs, self-learning, and convenience. Despite being a temporary fix because of COVID-19, in-person instruction cannot be replaced by online instruction. According to the study, blended learning could support the provision of a demanding learning environment [11].

5. Conclusions

The overall findings of the study well demonstrated the parents' basic and digital literacy levels were influenced highly significant at 1 percent level in improving the digital learning process of their students. The parents who had technical education background would be played a significant role in extending support to their children. Relatively fathers had higher levels of education than the mothers. Whatever the differences might be, the students of the selected members had relatively low digital confidence as evidenced by 24 percent of fair and 25 percent of them expressed poor knowledge levels. Suitable measures can be planned both at the college and domestic level to inculcate the computer skills among the students to meet the basic necessity of the recent advancing digital world.

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