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Perceived Satisfaction of Students, Teachers, and Parents During the Pandemic Towards Online Teaching

Pandemi Sırasında Öğrencilerin, Öğretmenlerin ve Velilerin Çevrimiçi Öğretime Yönelik Algılanan Memnuniyeti

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Abstract

With the concepts of online teaching, the study examines online teaching in light of the COVID 19 pandemic effects. Online teaching is a new and different alternative to traditional teaching which was enforced by most governments and education systems in several developing countries due to the pandemic, which in turn raised several questions for teachers, students, and their parents. To this end, the study's primary goal was to learn about the perception of teachers as well as students and parents regarding the satisfaction, merit, and challenges of online teaching. Teachers, students, and parents were all polled in this study. The findings of this study revealed that there is a difference in satisfaction with online teaching, as well as the perceptions of teachers, parents, and students, depending on gender. Along with the merits and challenges of online teaching the current study also examines the perceptions of teachers regarding the difficulties associated with online learning, which in major cases was related to the technology.

Keywords: *Satisfaction, Teaching, Online Teaching, COVID-19, Pandemic*

JEL Codes: *I21, I29, M39*

Öz

Çalışma, COVID-19 pandemisinin etkileri çerçevesinde çevrimiçi öğretim faaliyetlerini kullanıcıların memnuniyeti açısından incelemektedir. Çevrimiçi öğretim, pandemi nedeniyle birçok ülkede ve eğitim sisteminde daha da yaygın bir şekilde kullanılmaya başlayan, öğretmenler, öğrenciler ve ebeveynleri için çeşitli zorlukları beraberinde getiren geleneksel öğretim sistemine karşı yeni ve farklı bir alternatiftir. Bu çerçevede, çalışmanın temel amacı, öğretmenlerin, öğrencilerin ve velilerin çevrimiçi öğretimden memnuniyet düzeyini, avantajlı yönleri ve zorluklarına ilişkin algılarını ortaya koymaktır. Çalışmanın bulguları, çevrimiçi öğretimden memnuniyet ile öğretmen, veli ve öğrencilerin algılarında cinsiyete göre farklılık olduğunu ortaya koymuştur. Çevrimiçi öğretimin yararları ve zorluklarının yanı sıra, bu çalışma aynı zamanda öğretmenlerin, teknolojiyle ilgili olan çevrimiçi öğrenmede yaşanan zorluklarla ilgili algılarını da ortaya koymaktadır.

Anahtar Kelimeler: *Memnuniyet, Öğretim, Çevrimiçi Öğretim, COVID-19, Pandemi*

JEL Kodları: *I21, I29, M39*

1. INTRODUCTION

With varied definitions of distance education, online teaching serves the best as a mode of distance education. Online teaching has grown dramatically in recent years across the globe. The increasing need for online teaching can be attributed to various factors. Also, worth mentioning is the fact that the continuous development of information and communication technologies contributes to the smoother operation of the online teaching and learning environment. Furthermore, as a result of the COVID-19 pandemic, many teachers were forced to make an abrupt transition to online teaching. As a result, some teachers struggled and experienced obstacles as well as high levels of stress, whereas others saw this sudden shift as a positive opportunity and managed to cope well while also facilitating positive learning activities for their students (Bhat et al., 2020; Ortiz, 2020). As a result of the COVID-19 induced shift to online teaching, this was the first time that all courses needed to be taught exclusively online, resulting in a relevant learning and qualification situation in which it was equally important to perform well while also successfully supporting students. It can be considered a natural paradigm that highlights interindividual differences in the achievement context of how faculty experience and handle online teaching and learning due to their participation in the study. While much is known about the use of digital technologies in educational settings, investigations into the personal prerequisites of faculty members are particularly beneficial in understanding differences in the academic practice of online teaching and learning (Hofer, Nistor, & Scheibenzuber, 2021; Martin, Sun, & Westine, 2020). To be more specific, examining satisfaction with the transition to online teaching and the underlying benefits and challenges can provide valuable insight into interindividual differences in attitudes toward the implementation of online technologies in higher education teaching and how this can be better supported. More specifically this study focuses on following questions:

-Does the gender and area of the respondents affect the satisfaction, merits, and challenges of online teaching?

-How satisfied are the parents, teachers, and students with online teaching?

-What are the merits of online teaching as perceived by parents, teachers, and students?

-What are the challenges of online teaching as perceived by parents, teachers, and students?

2. LITERATURE REVIEW

The COVID-19 pandemic has heightened our awareness of a world marked by increasing ill-structuredness, unpredictability, complexity, and novelty. Therefore, the primary goal of Cognitive Flexibility Theory is to prepare students to deal with such a world, which necessitates the incorporation of instructional teaching and learning features that promote and support the ability to manage real-world complexity and deal adaptively with the novel, ill-defined problems (Spiro et al. 1988, 1992, 2017, 2019; Spiro and Jehng 1990). Individuals with high-order abilities can adapt cognitive processing strategies in response to the novel, unexpected, and changing circumstances. As a result, in this study, the cognitive flexibility theory was used, which is based on the theoretical work of Spiro et al. (1987), who describe instructional design guidelines for advanced learning in unstructured domains (Cheng & Koszalka, 2016).

2.1. Online Satisfaction

Even though online teaching and learning have become increasingly popular in recent years, student satisfaction with online learning experiences continues to be one of the most important indicators of the overall quality of online teaching and learning experiences (Ilgaz and Gulbahar, 2015). Furthermore, for higher education institutions, student satisfaction with online learning experiences continues to be one of the most critical factors in determining the quality of their online teaching and learning (Ilgaz and Gulbahar, 2015; Parahoo, Santally, Rajabalee & Harvey, 2016). Student satisfaction with the learning experience can have an impact on a variety of online interactions, including student-student, student-instructor, and student-content interactions. Other factors that can influence student satisfaction include course quality and assessment, computer and the internet, self-efficacy, perceived learning, and student learning. It is possible for students' learning to be influenced by how satisfied they are with their educational experience (Harsasi & Sutawijaya, 2018; Kirtman, 2009; Turhangil Erenler, 2019; Uusiautti, Maatta & Leskisenoja, 2017; Young & Norgard, 2006). When students are satisfied with their online learning experience, it will be determined whether or not they will continue to enroll in other online courses at a higher rate in the future. It is important for teachers involved in the design, development, and delivery of online courses to solicit and share the opinions and perceptions of online students about their successful learning experiences to advance their knowledge of online learning. In online learning, researchers have identified a number of factors that contribute to both student and teacher satisfaction, including academic challenge and support learning activities, timely and explanatory feedback, and regular interaction with the instructor (Kurucay & Inan, 2017; Lister, 2014; Tibi, 2015).

2.2. Merits of Online Teaching

After all, online education is a significant phenomenon in the field of contemporary higher education. As Blumenstyk (2015) points out, "distance education, the vast majority of which takes place online, is becoming an increasingly important component of the higher-education landscape" (p. 144). Additional efforts are required to compare and contrast the relative merits of various modes of delivery in education, rather than categorising any of them as inferior or superior in the first place. Developing a constructive outlook for online education is required, rather than simplistic searches for barriers or challenges that discourage innovation in alternative teaching-learning methods (Muilenburg & Zane, 2007).

An unbiased evaluation of the benefits and drawbacks of online education is required to improve online teaching and its outcomes. It is likely that the online teaching-learning paradigm will develop in a vacuum if this ongoing focus on assessment is not maintained — without knowing which improvements are effective and which are ineffective (Bergman & Sams, 2012; Blumenstyk, 2015; Palloff & Pratt, 2007; Tallent-Runnels, Thomas, Lan, & Cooper, 2006). This study proposes a framework to examine the value of online education to better understand concepts relevant to online teaching. Through a systematic and structured methodology, we hope to uncover both the potential benefits and drawbacks of online teaching from the professionals' perspective.

2.3. Challenges of Online Teaching

Indeed, the spread of COVID-19 posed significant challenges to the world's educational systems, particularly online teaching. This was a first in technology and distance education history, as no one had previously witnessed such challenges (Liguori et al., 2020). The COVID-19 outbreak has had a significant impact on the world's education system, with many schools and universities being forced to close their doors as a result (Wang et al., 2020). Moving from traditional classroom instruction to exclusively or primarily online instruction necessitates the development of new skills for both the teacher and students, as well as their acceptance by their parents and guardians. In contrast to face-to-face instruction, online instruction does not consist of taking what we do in class and reproducing it in a virtual environment. This strategy frequently results in an inferior replica of the learning experience that occurs in the classroom (14). Furthermore, for many professors and universities, online teaching has its own set of issues and challenges that are unique to them, such as unfamiliarity with new technology and methods of dealing with unknown challenges. Online learning can also be confusing with unfamiliar options as well as a lack of self-discipline, organisational skills, and metacognition. Weak students may get even weaker when they are learning online because they lack the structure and discipline that comes from attending a traditional classroom with a teacher who knows them personally and emotionally invested in their learning, providing encouragement as well as pressure to perform. While this is possible to a certain extent online, the more distant people appear, including a teacher, the less emotionally engaged people are likely to be, which can have an impact on retention and performance in the classroom. Another significant difference between face-to-face and online learning environments is the ability to deliver an engaging and immersive environment, which can be accomplished in a variety of ways depending on the setting. The ability to engage students in the subject, find creative ways to explain concepts in different ways to students who are struggling, recognise body language and confused expressions, and use these as indicators for the need to reinforce or repeat key points throughout a teaching session are all characteristics of an effective face-to-face teacher.

3. OBJECTIVES AND METHOD

Following are the objectives of the study:

1. To study the satisfaction level of the males and females on the online teaching inventory towards
    i. Online teaching as a better mode of teaching
    ii. Teaching/Learning online
    iii. The progress (intellectual level) of the students through online teaching
2. To study the perception of the males and females towards the merits of online teaching in the online teaching inventory
3. To study the perception of the males and females towards the challenges of online teaching in the online teaching inventory
4. To study the satisfaction level of the urban and rural people towards (i) online teaching as a better mode of teaching, (ii) online teaching/learning, and (iii) progress

(intellectual level) of the students through online teaching on the online teaching inventory

5. To study the perception of the urban and rural people towards the merits of online teaching/learning in the online teaching inventory
6. To study the perception of the urban and rural people towards the challenges of online teaching/learning in the online teaching inventory between the urban and rural people
7. To study the perception of the parents, teachers, and students towards the merits of online teaching/learning in the online teaching inventory amongst the
8. To study the perception of the parents, teachers, and students towards the challenges of online teaching/learning in the online teaching inventory

A quantitative study using survey questionnaires was conducted in Gujarat during the first year of the COVID-19 programme to assess the satisfaction, benefits, and challenges of online learning. Gujarat is a rich and prosperous state of India with most facilities available in education system. Nevertheless, it is one of the foremost state of the country making much but a balanced application of the technology along with due care for infrastructure, instructional facility and human resource. The study being related to the satisfaction of the students, teachers and parents with respect to the online teaching, the sample was restricted to Gujarat state. Students, teachers, and parents from Gujarat took part in the study, which was conducted using survey questionnaires. Despite the fact that the experts or teachers are individuals with extensive knowledge, they are a mixture of selected and unselected online teaching educators, some of whom are technologically savvy and come from a variety of educational institutions in Gujarat. When it comes to students, the respondents are those who do not value online learning but who do enjoy gaming and social media platforms. Some believe academics to be a critical component of education at all levels, while others disagree. In Gujarat, the respondents are either literate or illiterate parents but have access to online education.

The population of the study is comprised of the teachers, students, and parents of Gujarat state. Of the 191 samples who responded to the questionnaire with closed-ended questions, there were teachers, students, and parents. The systematic sampling method was used. The data collected were grouped, and the analyses such as mean, standard deviation, t-test, ANOVA SNK test were conducted, and results were interpreted.

4. ANALYSIS AND INTERPRETATION OF DATA

H_{o1} There will be no significant difference in the mean scores of the satisfaction of the males and females on the online teaching inventory toward

i. Online teaching as a better mode of teaching
ii. Teaching/Learning online
iii. The progress (intellectual level) of the students through online teaching

Table 1: Independent samples t-test of the satisfaction level of the males and females on the online teaching inventory

Item Code	t-test for Equality of Means						
	t	Df	Sig. (2-tailed)	MD	SED	0.05 LoS	
						Lower	Upper
i	-.741	187	.460	-.1352	.1825	-.4952	.2249
ii	-2.074	187	.039	-.3396	.1637	-.6626	-.0167
iii	-.145	187	.885	-.0227	.1570	-.3325	.2870

As shown in Table 1, it is vivid that the t-value is significant for (ii), which refers to teaching/learning online. Thus, the hypothesis may be refuted for the (ii) that refers to teaching/learning online. Further, the t-test indicates the test is significant and that the female's satisfaction is more than that of the males. Hence, it could be said that satisfaction with online teaching/learning is dependent on gender. It could further be concluded that with respect to online teaching/learning, the males and females' perspectives differ and that the females are more satisfied with online teaching/learning than the males.

As can be seen in Table 1, it is vivid that the t-value is not significant for (i), which refers to Online teaching as a better mode of teaching, and (iii), which refers to the progress (intellectual level) of the students through online teaching. Thus, the hypothesis may not be refuted for (i) and (iii). Hence, it could be said that the satisfaction with online teaching as a better mode of teaching and the satisfaction towards the students' progress (intellectual level) through online teaching is not dependent on gender. It could further be concluded that males and females do not differ in their perspective of satisfaction with respect to online teaching as a better mode of teaching and towards the progress (intellectual level) of the students through online teaching.

Ho_2 There will be no significant difference in the mean scores of the merits of online teaching in the online teaching inventory between the males and females.

Table 2: Test of significance for the merits of online teaching with respect to gender

Items	t-test for Equality of Means						
	t	df	Sig. (2-tailed)	MD	SED	0.05 LoS	
						Lower	Upper
Learning anywhere at any time	-1.845	187	0.067	-0.114	0.062	-0.236	0.008
Savings on transport and time	-2.732	187	0.007	-0.187	0.068	-0.322	-0.052
More independence	-0.687	187	0.493	-0.045	0.066	-0.176	0.085
Less emphasis on infrastructure	0.421	186	0.674	0.019	0.045	-0.070	0.108
Expert availability	-0.404	187	0.687	-0.023	0.057	-0.136	0.090
Fresh minds	-0.950	187	0.343	-0.055	0.058	-0.169	0.059
Affordable	-0.411	187	0.682	-0.023	0.056	-0.134	0.088
Comfort of home	-1.235	187	0.219	-0.090	0.073	-0.234	0.054
Reductions in distractions	-0.478	187	0.633	-0.022	0.047	-0.115	0.070

Interactive learning using AV tools	-2.153	187	0.033	-0.129	0.060	-0.248	-0.011
Certificate courses	-2.270	187	0.024	-0.118	0.052	-0.221	-0.015
Recording of classes	0.247	187	0.805	0.017	0.070	-0.121	0.156
Administration	-1.909	187	0.058	-0.097	0.051	-0.197	0.003
Distance teaching-learning	-2.911	187	0.004	-0.194	0.067	-0.325	-0.063
Increased students learning	0.194	187	0.846	0.009	0.048	-0.085	0.104
Less intimidating	1.281	187	0.202	0.042	0.033	-0.023	0.106

As shown in Table 2, it is vivid that the t-value is significant for the merits of online teaching such as learning anywhere at any time, savings on transport and time, interactive learning using AV tools, certificate courses, administration, and distance teaching-learning. Thus, the hypothesis which claims that there will be no significant difference in the mean scores of the merits of online teaching in the online teaching inventory between the males and females may be refuted for the aforesaid merits of online teaching. Hence it could be said that difference will be in the merits of online teaching between the males and females towards the aforesaid merits of online teaching. Further from Table 2, it is vivid that the consideration of females towards the merits of online teaching such as learning anywhere at any time, savings on transport and time, interactive learning using AV tools, certificate courses, administration, and distance teaching-learning is higher than that of the males.

Ho3 There will be no significant difference in the mean scores of the challenges of online teaching in the online teaching inventory between the males and females

Table 3: Test of significance for the challenges of online teaching with respect to gender

Item Code	t-test for Equality of Means						
	t	df	Sig. (2-tailed)	MD	SED	0.05 LoS	
						Lower	Upper
Lack of skills	-1.122	187	0.263	-0.078	0.069	-0.214	0.059
Over rely on online teaching aids	-2.103	187	0.037	-0.141	0.067	-0.273	-0.009
Emotional touch	-0.209	187	0.835	-0.013	0.063	-0.138	0.112
Threat to girl child	-1.444	187	0.150	-0.065	0.045	-0.153	0.024
Lack in cyber security	-1.463	187	0.145	-0.087	0.059	-0.204	0.030
Technology threats	0.137	187	0.891	0.008	0.060	-0.111	0.127
Technology issues	-0.658	187	0.511	-0.046	0.070	-0.185	0.092
Cyberbullying	-0.539	187	0.591	-0.035	0.064	-0.161	0.092
Isolation	-1.195	187	0.234	-0.065	0.055	-0.173	0.043
Lack of self-efficacy	-0.594	187	0.553	-0.034	0.057	-0.146	0.078
Procrastinate	-1.100	187	0.273	-0.054	0.049	-0.152	0.043
Oversaturation with information	-2.446	187	0.015	-0.129	0.053	-0.233	-0.025
Lack of interaction	0.262	187	0.794	0.018	0.068	-0.117	0.152
Less exposure to practical's	-0.940	187	0.348	-0.068	0.073	-0.212	0.075
Lack of focus/attention	-1.528	187	0.128	-0.111	0.073	-0.254	0.032

Lack of control/monitoring	-1.181	187	0.239	-0.054	0.046	-0.144	0.036
Expertise knowledge	-0.398	187	0.691	-0.023	0.059	-0.139	0.092
Holistic approach	-0.256	187	0.798	-0.012	0.046	-0.102	0.079
Network issues	-0.968	187	0.334	-0.070	0.072	-0.212	0.072
Data cost	-1.529	187	0.128	-0.111	0.073	-0.255	0.032
Electricity	-3.219	187	0.002	-0.227	0.071	-0.366	-0.088
Cost of smartphones	-0.023	187	0.981	-0.001	0.043	-0.086	0.084
Home environment	-2.166	187	0.032	-0.141	0.065	-0.269	-0.013
Attention span	-2.160	187	0.032	-0.152	0.071	-0.291	-0.013
Mischief by students	-1.847	187	0.066	-0.131	0.071	-0.271	0.009
Health issues	-2.034	187	0.043	-0.130	0.064	-0.256	-0.004
Doesn't caters the students	-0.594	187	0.553	-0.034	0.057	-0.146	0.078
Difficulty in assessment	-1.713	187	0.088	-0.120	0.070	-0.259	0.018

As can be seen in Table 3, it is vivid that the t-value is significant for the challenges of online teaching such as over-rely on online teaching aids, oversaturation with information, electricity, home environment, attention span, mischief by students, and health issues. Thus, the hypothesis which claims that there will be no significant difference in the mean scores of the challenges of online teaching in the online teaching inventory between the males and females may be refuted for the challenges of online teaching like over-rely on online teaching aids, oversaturation with information, electricity, home environment, attention span, mischief by students and health issues. Hence it could be said that difference will be in the challenges of online teaching between males and females towards the aforesaid challenges of the online teaching.

Further from Table 3, it is vivid that the consideration of females towards the challenges of online teaching such as over-rely on online teaching aids, oversaturation with information, electricity, home environment, attention span, mischief by students, and health issues is higher than that of males.

H_{o4} There will be no significant difference in the mean scores of the satisfaction level of the urban and rural people towards (i) online teaching as a better mode of teaching, (ii) online teaching/learning, and (iii) progress (intellectual level) of the students through online teaching on the online teaching inventory

Table 4: Test of significance for the satisfaction of the urban and rural people on the online teaching inventory

Item Code	t-test for Equality of Means						
	t	df	Sig. (2-tailed)	MD	SED	0.05 LoS	
						Lower	Upper
i	1.019	187	.309	.2165	.2124	-.2025	.6355
ii	.355	187	.723	.0684	.1929	-.3121	.4489
iii	.757	187	.450	.1383	.1827	-.2220	.4987

As shown in Table 4, it is vivid that the t-value is not significant for any case, namely (i) online teaching as a better mode of teaching, (ii) online teaching/learning, and (iii) progress (intellectual level) of the students through online teaching. Thus, the hypothesis may not be

refuted in any case. Hence, it could be said that the satisfaction with online teaching as a better mode of teaching, satisfaction with online teaching, and the satisfaction towards the progress (intellectual level) of the students through online teaching is not dependent on the area. It could further be concluded that urban and rural people do not differ in their perspective of satisfaction with respect to online teaching as a better mode of teaching, online teaching, and also for the progress (intellectual level) of the students through online teaching.

Ho_5 There will be no significant difference in the mean scores of the merits of online teaching/learning in the online teaching inventory between the urban and rural people.

Table 5: Test of significance for the merits of the online teaching/learning between the urban and rural people

Item Code	t-test for Equality of Means						
	t	df	Sig. (2-tailed)	MD	SED	0.05 LoS	
						Lower	Upper
Learning anywhere at any time	1.613	187	.108	.1163	.0721	-.0259	.2585
Savings on transport and time	2.494	187	.014	.1993	.0799	.0416	.3570
More independence	1.939	187	.054	.1478	.0762	-.0026	.2981
Less emphasis on infrastructure	.489	186	.625	.0257	.0526	-.0780	.1294
Expert availability	1.190	187	.235	.0794	.0667	-.0522	.2109
Fresh minds	-.849	187	.397	-.0573	.0675	-.1904	.0758
Affordable	-1.201	187	.231	-.0783	.0652	-.2069	.0503
Comfort of home	.296	187	.767	.0252	.0852	-.1428	.1933
Interactive learning using AV tools	.903	187	.368	.0638	.0707	-.0756	.2033
Certificate courses	-1.383	187	.168	-.0845	.0611	-.2051	.0360
Recording of classes	-.510	187	.611	-.0417	.0817	-.2029	.1196
Administration	1.244	187	.215	.0739	.0594	-.0433	.1910
Distance teaching-learning	-1.235	187	.218	-.0976	.0790	-.2534	.0583
Increased students learning	-1.769	187	.078	-.0978	.0553	-.2067	.0112
Less initimidating	.327	187	.744	.0125	.0381	-.0628	.0877

As can be seen in Table 5, it is vivid that the t-value is significant for the merits of online teaching like savings on transport and time. Thus, the hypothesis which claims that there will be no significant difference in the mean scores of the merits of online teaching in the online teaching inventory between the urban and rural people may be refuted for the aforesaid merit of online teaching. Hence it could be said that difference will be in the merits of online teaching between the urban and rural people for the aforesaid merit of the online teaching.

Further from Table 5, it is vivid that the consideration of urban people towards the merits of online teaching known as learning anywhere at any time, is higher than that of the rural people.

Ho_6 There will be no significant difference in the mean scores of the challenges of online teaching/learning in the online teaching inventory between the urban and rural people

Table 6: Test of significance for the challenges of the online teaching/learning between the urban and rural people

Item Code	t-test for Equality of Means						
	t	df	Sig. (2-tailed)	MD	SED	0.05 LoS	
						Lower	Upper
Lack of skills	-1.133	187	.259	-.0914	.0807	-.2505	.0678
Over rely on online teaching aids	1.227	187	.221	.0965	.0786	-.0586	.2517
Emotional touch	1.746	187	.083	.1275	.0731	-.0166	.2717
Threat to girl child	1.027	187	.306	.0537	.0523	-.0495	.1568
Lack in cyber security	1.975	187	.050	.1361	.0689	.0002	.2720
Technology threats	.811	187	.418	.0569	.0701	-.0815	.1952
Technology issues	2.704	187	.007	.2169	.0802	.0587	.3752
Cyberbullying	1.520	187	.130	.1128	.0742	-.0336	.2592
Isolation	.355	187	.723	.0227	.0639	-.1034	.1487
Lack of self-efficacy	-.209	187	.835	-.0138	.0662	-.1444	.1167
Procrastinate	.540	187	.590	.0312	.0577	-.0826	.1450
Oversaturation with information	-.322	187	.748	-.0201	.0623	-.1429	.1027
Lack of interaction	1.311	187	.191	.1035	.0790	-.0522	.2593
Less exposure to practical's	2.909	187	.004	.2419	.0831	.0778	.4059
Lack of focus/attention	1.848	187	.066	.1557	.0842	-.0105	.3218
Lack of control/monitoring	1.137	187	.257	.0607	.0534	-.0446	.1659
Expertise knowledge	.526	187	.600	.0359	.0682	-.0988	.1705
Holistic approach	-.477	187	.634	-.0255	.0535	-.1311	.0800
Network issues	.950	187	.343	.0797	.0838	-.0858	.2451
Data cost	1.657	187	.099	.1402	.0846	-.0267	.3070
Electricity	1.617	187	.107	.1355	.0837	-.0298	.3007
Cost of smartphones	1.962	187	.051	.0971	.0495	-.0005	.1948
Home environment	-.038	187	.970	-.0029	.0765	-.1539	.1481
Attention span	.004	187	.997	.0003	.0832	-.1638	.1644
Mischief by students	1.556	187	.121	.1292	.0830	-.0346	.2930
Health issues	.447	187	.655	.0336	.0751	-.1146	.1818
Doesn't caters the students	-.644	187	.521	-.0426	.0661	-.1730	.0879
Difficulty in assessment	1.855	187	.065	.1517	.0818	-.0096	.3130

As shown in Table 6, it is vivid that the t-value is significant for the challenges of online teaching, especially in the dimensions of technology issues and less exposure to practical. Thus, the hypothesis claims that there will be no significant difference in the mean scores of the challenges of online teaching in the online teaching inventory between the urban and rural people may be refuted for the aforesaid challenges of online teaching. Hence it could be said that difference will be in the challenges of online teaching between the urban and rural people towards the aforesaid challenges of the online teaching. Further from Table 6, it is vivid that the consideration of urban people towards the challenges of online teaching such as technology issues and less exposure to practical's is higher than that of the rural people.

H_{o7} There will be no significant difference in the mean scores of the merits of online teaching/learning in the online teaching inventory amongst the parents, teachers, and students

Table 7.1: ANOVA test of significance for the merits of the online teaching/learning among the parents, teachers, and students

Item Code		Sum of Squares	df	Mean Square	F	Sig.
Learning anywhere at any time	Between Groups	.416	2	.208	1.143	.321
	Within Groups	33.869	186	.182		
	Total	34.286	188			
Savings on transport and time	Between Groups	.122	2	.061	.266	.767
	Within Groups	42.830	186	.230		
	Total	42.952	188			
More independence	Between Groups	.607	2	.303	1.487	.229
	Within Groups	37.964	186	.204		
	Total	38.571	188			
Less emphasis on infrastructure	Between Groups	3.103	2	1.552	19.435	.000
	Within Groups	14.769	185	.080		
	Total	17.872	187			
Expert availability	Between Groups	1.289	2	.645	4.305	.015
	Within Groups	27.853	186	.150		
	Total	29.143	188			
Fresh minds	Between Groups	.131	2	.065	.411	.664
	Within Groups	29.626	186	.159		
	Total	29.757	188			
Affordable	Between Groups	.045	2	.022	.150	.861
	Within Groups	27.839	186	.150		
	Total	27.884	188			
Comfort of home	Between Groups	.385	2	.192	.764	.467
	Within Groups	46.864	186	.252		
	Total	47.249	188			
Reductions in distractions	Between Groups	.066	2	.033	.315	.730
	Within Groups	19.374	186	.104		
	Total	19.439	188			
Interactive learning using AV tools	Between Groups	1.408	2	.704	4.188	.017
	Within Groups	31.259	186	.168		
	Total	32.667	188			
Certificate courses	Between Groups	1.504	2	.752	6.068	.003
	Within Groups	23.046	186	.124		
	Total	24.550	188			
Recording of classes	Between Groups	.131	2	.066	.281	.755
	Within Groups	43.403	186	.233		
	Total	43.534	188			
Administration	Between Groups	2.303	2	1.152	10.278	.000
	Within Groups	20.840	186	.112		
	Total	23.143	188			
Distance teaching-learning	Between Groups	.968	2	.484	2.252	.108
	Within Groups	39.984	186	.215		
	Total	40.952	188			
Increased students learning	Between Groups	.418	2	.209	1.964	.143
	Within Groups	19.783	186	.106		
	Total	20.201	188			
Less initimidating	Between Groups	.094	2	.047	.937	.394
	Within Groups	9.376	186	.050		
	Total	9.471	188			

Table 7.1 shows that the F value is significant for the merits of online teaching such as less emphasis on infrastructure, expert availability, interactive learning using AV tools, certificate

courses, and administration. Thus, the hypothesis which claims that there will be no significant difference in the mean scores of the merits of online teaching in the online teaching inventory between the parents, teachers, and students may be refuted for the aforesaid merits of online teaching. Hence it could be said that difference will be in the merits of online teaching between the parents, teachers, and students towards the aforesaid merits of the online teaching.

Table 7.2: Student-Newman-Keuls[a,b] test of the merits of the online teaching/learning among the parents, teachers and students

Item Code	Category of respondent	N	Subset for alpha = 0.05	
			1	2
Learning anywhere at any time	Parent	55	0.691	
	Student	77	0.779	
	Teacher	57	0.807	
	Sig.		0.289	
Savings on transport and time	Parent	55	0.618	
	Student	77	0.649	
	Teacher	57	0.684	
	Sig.		0.726	
More independence	Student	77	0.234	
	Parent	55	0.273	
	Teacher	57	0.368	
	Sig.		0.226	
Less emphasis on infrastructure	Parent	55	0.018	
	Student	77	0.026	
	Teacher	56		0.304
	Sig.		0.879	1
Expert availability	Student	77	0.13	
	Parent	55	0.145	
	Teacher	57		0.316
	Sig.		0.823	1
Fresh minds	Teacher	57	0.158	
	Parent	55	0.2	
	Student	77	0.221	
	Sig.		0.657	
Affordable	Teacher	57	0.158	
	Parent	55	0.182	
	Student	77	0.195	
	Sig.		0.857	
Comfort of home	Parent	55	0.436	
	Teacher	57	0.491	
	Student	77	0.545	

	Sig.		0.451	
Reductions in distractions	Student	77	0.104	
	Teacher	57	0.105	
	Parent	55	0.145	
	Sig.		0.755	
Interactive learning using AV tools	Parent	55	0.109	
	Student	77	0.221	0.221
	Teacher	57		0.333
	Sig.		0.132	0.129
Certificate courses	Parent	55	0.055	
	Student	77	0.13	
	Teacher	57		0.281
	Sig.		0.237	1
Recording of classes	Parent	55	0.327	
	Teacher	57	0.351	
	Student	77	0.39	
	Sig.		0.754	
Administration	Student	77	0.013	
	Parent	55		0.2
	Teacher	57		0.263
	Sig.		1	0.296
Distance teaching-learning	Parent	55	0.218	
	Student	77	0.325	
	Teacher	57	0.404	
	Sig.		0.071	
Increased students learning	Parent	55	0.055	
	Student	77	0.13	
	Teacher	57	0.175	
	Sig.		0.102	
Less initimidating	Student	77	0.026	
	Teacher	57	0.07	
	Parent	55	0.073	
	Sig.		0.481	

Table 7.2 shows that a significant difference exists between parents and teachers with respect to the merits of online teaching in regard to less emphasis on infrastructure, expert availability, interactive learning using AV tools, and certificate courses, and that the teachers' perception towards these merits of online teaching is higher than that of the parents.

Again, a significant difference exists between students and teachers with respect to the merits of online teaching, less emphasis on infrastructure, expert availability, certificate courses, and administration, and the teachers' perception of these merits of online teaching is higher than that of the students, but the difference is not significant for the merit on online teaching and interactive learning using AV tools. It means both student and teacher have

nearly similar perceptions towards interactive learning using AV tools as the merit of online teaching.

Further, a significant difference exists between parents and students concerning administration as a merit of online teaching like the parents have a high perception of the same, but the difference is not significant between parents and students concerning the merits of online teaching, less emphasis on infrastructure, expert availability, interactive learning using AV tools, and certificate courses. Thus, it could be said that the parents and students have nearly similar perceptions of these merits of online teaching.

H_{O8} There will be no significant difference in the mean scores of the challenges of online teaching/learning in the online teaching inventory amongst the parents, teachers, and students

Table 8.1: Test of significance for the challenges of the online teaching/learning among the parents, teachers and students

		Sum of Squares	df	Mean Square	F	Sig.
Lack of skills	Between Groups	.554	2	.277	1.224	.296
	Within Groups	42.092	186	.226		
	Total	42.646	188			
Over rely on online teaching aids	Between Groups	1.347	2	.673	3.193	.043
	Within Groups	39.235	186	.211		
	Total	40.582	188			
Emotional touch	Between Groups	3.033	2	1.517	8.738	.000
	Within Groups	32.279	186	.174		
	Total	35.312	188			
Threat to girl child	Between Groups	.097	2	.049	.509	.602
	Within Groups	17.786	186	.096		
	Total	17.884	188			
Lack in cyber security	Between Groups	1.638	2	.819	5.094	.007
	Within Groups	29.897	186	.161		
	Total	31.534	188			
Technology threats	Between Groups	1.466	2	.733	4.450	.013
	Within Groups	30.640	186	.165		
	Total	32.106	188			
Technology issues	Between Groups	2.460	2	1.230	5.571	.004
	Within Groups	41.074	186	.221		
	Total	43.534	188			
Cyberbullying	Between Groups	1.163	2	.582	3.079	.048
	Within Groups	35.133	186	.189		
	Total	36.296	188			
Isolation	Between Groups	.063	2	.032	.222	.801
	Within Groups	26.519	186	.143		
	Total	26.582	188			
Lack of self-efficacy	Between Groups	.322	2	.161	1.062	.348
	Within Groups	28.197	186	.152		
	Total	28.519	188			
Procrastinate	Between Groups	.202	2	.101	.875	.419
	Within Groups	21.491	186	.116		
	Total	21.693	188			
Oversaturation with information	Between Groups	1.453	2	.726	5.681	.004

	Within Groups	23.785	186	.128		
	Total	25.238	188			
Lack of interaction	Between Groups	5.410	2	2.705	14.155	.000
	Within Groups	35.543	186	.191		
	Total	40.952	188			
Less exposure to practical's	Between Groups	.163	2	.081	.323	.725
	Within Groups	46.864	186	.252		
	Total	47.026	188			
Lack of focus/attention	Between Groups	.334	2	.167	.665	.515
	Within Groups	46.692	186	.251		
	Total	47.026	188			
Lack of control/monitoring	Between Groups	3.515	2	1.757	21.571	.000
	Within Groups	15.152	186	.081		
	Total	18.667	188			
Expertise knowledge	Between Groups	.940	2	.470	2.972	.054
	Within Groups	29.420	186	.158		
	Total	30.360	188			
Holistic approach	Between Groups	1.666	2	.833	9.112	.000
	Within Groups	17.001	186	.091		
	Total	18.667	188			
Network issues	Between Groups	12.489	2	6.245	34.682	.000
	Within Groups	33.490	186	.180		
	Total	45.979	188			
Data cost	Between Groups	1.964	2	.982	4.034	.019
	Within Groups	45.285	186	.243		
	Total	47.249	188			
Electricity	Between Groups	1.813	2	.906	3.791	.024
	Within Groups	44.473	186	.239		
	Total	46.286	188			
Cost of smartphones	Between Groups	4.177	2	2.088	32.077	.000
	Within Groups	12.109	186	.065		
	Total	16.286	188			
Home environment	Between Groups	4.842	2	2.421	13.526	.000
	Within Groups	33.295	186	.179		
	Total	38.138	188			
Attention span	Between Groups	.217	2	.109	.451	.638
	Within Groups	44.809	186	.241		
	Total	45.026	188			
Mischief by students	Between Groups	1.030	2	.515	2.157	.119
	Within Groups	44.409	186	.239		
	Total	45.439	188			
Health issues	Between Groups	.141	2	.071	.359	.699
	Within Groups	36.631	186	.197		
	Total	36.772	188			
Doesn't caters the students	Between Groups	.416	2	.208	1.378	.255
	Within Groups	28.102	186	.151		
	Total	28.519	188			
Difficulty in assessment	Between Groups	3.043	2	1.522	6.856	.001
	Within Groups	41.285	186	.222		
	Total	44.328	188			

Table 8.1 shows that the F value is significant for the challenges of online teaching such as over-rely on online teaching aids, emotional touch, lack of cyber security, technology threats,

technology issues, oversaturation with information, lack of interaction, lack of control/monitoring, holistic approach, network issues, data cost, electricity, cost of smartphones, home environment, and difficulty in assessment. Thus, the hypothesis claims that there will be no significant difference in the mean scores of the challenges of online teaching in the online teaching inventory between the parents, teachers, and students may be refuted for the aforesaid challenges of online teaching. Hence it could be said that the difference will be the challenges of online teaching between the parents, teachers, and students towards the aforesaid challenges of the online teaching.

Table 8.2: Student-Newman-Keuls[a,b] test of significance for the challenges of the online teaching/learning among the parents, teachers and students

Item Code	Category of respondent	N	Subset for alpha = 0.05	
			1	2
Lack of skills	Teacher	57	0.263	
	Parent	55	0.364	
	Student	77	0.39	
	Sig.		0.305	
Over rely on online teaching aids	Parent	55	0.236	
	Student	77	0.273	
	Teacher	57		0.439
	Sig.		0.661	1
Emotional touch	Student	77	0.117	
	Parent	55	0.255	
	Teacher	57		0.421
	Sig.		0.068	1
Threat to girl child	Parent	55	0.091	
	Student	77	0.091	
	Teacher	57	0.14	
	Sig.		0.649	
Lack of cyber security	Parent	55	0.127	
	Student	77	0.169	
	Teacher	57		0.351
	Sig.		0.566	1
Technology threats	Student	77	0.156	
	Parent	55	0.164	
	Teacher	57		0.351
	Sig.		0.915	1
Technology issues	Parent	55	0.182	
	Student	77		0.429
	Teacher	57		0.439
	Sig.		1	0.906
Cyberbullying	Student	77	0.169	
	Parent	55	0.291	

	Teacher	57	0.351	
	Sig.		0.055	
Isolation	Parent	55	0.145	
	Student	77	0.169	
	Teacher	57	0.193	
	Sig.		0.765	
Lack of self-efficacy	Teacher	57	0.14	
	Parent	55	0.164	
	Student	77	0.234	
	Sig.		0.38	
Procrastinate	Student	77	0.104	
	Teacher	57	0.123	
	Parent	55	0.182	
	Sig.		0.413	
Oversaturation with information	Parent	55	0.036	
	Student	77		0.169
	Teacher	57		0.263
	Sig.		1	0.145
Lack of interaction	Parent	55	0.055	
	Teacher	57		0.404
	Student	77		0.442
	Sig.		1	0.63
Less exposure to practicals	Parent	55	0.436	
	Student	77	0.455	
	Teacher	57	0.509	
	Sig.		0.703	
Lack of focus/attention	Parent	55	0.4	
	Teacher	57	0.491	
	Student	77	0.494	
	Sig.		0.555	
Lack of control/monitoring	Student	77	0	
	Parent	55	0.055	
	Teacher	57		0.316
	Sig.		0.29	1
Expertise knowledge	Student	77	0.143	
	Teacher	57	0.175	
	Parent	55	0.309	
	Sig.		0.056	
Holistic approach	Student	77	0	
	Parent	55		0.164
	Teacher	57		0.211
	Sig.		1	0.391
Network issues	Parent	55	0.182	
	Student	77		0.727

	Teacher	57		0.772
	Sig.		1	0.56
Data cost	Student	77	0.39	
	Teacher	57	0.509	0.509
	Parent	55		0.636
	Sig.		0.182	0.153
Electricity	Parent	55	0.291	
	Student	77	0.442	0.442
	Teacher	57		0.544
	Sig.		0.089	0.247
Cost of smartphones	Teacher	57	0	
	Student	77	0	
	Parent	55		0.327
	Sig.		1	1
Home environment	Parent	55	0.036	
	Teacher	57		0.333
	Student	77		0.416
	Sig.		1	0.282
Attention span	Student	77	0.351	
	Parent	55	0.418	
	Teacher	57	0.421	
	Sig.		0.706	
Mischief by students	Parent	55	0.291	
	Teacher	57	0.421	
	Student	77	0.468	
	Sig.		0.114	
Health issues	Student	77	0.234	
	Parent	55	0.273	
	Teacher	57	0.298	
	Sig.		0.7	
Doesn't caters the students	Student	77	0.13	
	Teacher	57	0.211	
	Parent	55	0.236	
	Sig.		0.284	
Difficulty in assessment	Parent	55	0.182	
	Student	77		0.429
	Teacher	57		0.491
	Sig.		1	0.461

Table 8.2 shows that a significant difference exists between parents and teachers with respect to challenges of online teaching like over-rely on online teaching aids, emotional touch, lack of cyber security, technology threats, technology issues, oversaturation with information, lack of interaction, lack of control/monitoring, electricity, cost of smartphones, home

environment, and difficulty in assessment and that the teachers' perception towards these challenges of online teaching is higher than that of the parents. Simultaneously, the difference is not significant for the challenges of online teaching such as holistic approach, network issues, and data cost. It means both parents and teachers have nearly similar perceptions of these challenges of online teaching.

Again, a significant difference exists between students and teachers concerning challenges of online teaching such as over-rely on online teaching aids, emotional touch, lack of cyber security, technology threats, lack of control/monitoring, holistic approach, and network issues and that the teachers' perception towards these challenges of online teaching is higher than that of the students, but the difference is not significant for the challenges on online teaching technology issues, oversaturation with information, lack of interaction, data cost, electricity, cost of smartphones, home environment, and difficulty in assessment. It means both students and teachers have nearly similar perceptions of these challenges of online teaching.

Further, a significant difference exists between parent and student concerning challenges of online teaching such as technology issues, oversaturation with information, lack of interaction, holistic approach, network issues, data cost, cost of smartphones, home environment, and difficulty in assessment and that the parents have a high concern for the data cost and cost of smartphones whereas the students have high concern towards technology issues, oversaturation with information, lack of interaction, home environment, and difficulty in assessment. Simultaneously, the difference is not significant between parent and student regarding the challenges of online teaching like over-rely on online teaching aids, emotional touch, lack of cyber security, technology threats, lack of control/monitoring, and electricity. Thus, it could be said that the parents and students have nearly similar perceptions of these challenges of online teaching.

5. DISCUSSION

The satisfaction with online teaching/learning depends on gender, and the females are more satisfied with online teaching/learning than the males. This result may be because the females might be overwhelmed with the idea that the activity is going on, whereas the males might be more concerned with the actual application of this learning. The satisfaction towards online teaching as a better mode of teaching and the satisfaction towards the students' progress (intellectual level) through online teaching is not dependent on gender, and thus the males and the females do not differ on this perspective. This result may be because the males and females equally use technology, and thus gender difference is not visible.

Gender differences are observed in the perception of the merits of online teaching such as learning anywhere at any time, savings on transport and time, interactive learning using AV tools, certificate courses, administration, and distance teaching-learning whereby the consideration of females towards the aforesaid merits of online teaching is higher than that of the males which may be because of the societal norms and ideas towards females. Moreover, savings and a safe environment is always preferred by females.

The males and females differ in their perception of the challenges of online teaching like over-rely on online teaching aids, oversaturation with information, electricity, home environment, attention span, mischief by students, and health issues. Further, the consideration of females towards the aforesaid challenges of online teaching is higher than that of males. Again, this may be because of the females being more economical, more prone to threats, and thus being fearful, overloaded with work at home etc.

The satisfaction towards online teaching as a better mode of teaching, satisfaction towards online teaching, and the satisfaction towards the progress (intellectual level) of the students through online teaching is not dependent on the area. Thus, the urban and rural people do not differ in their perspectives of satisfaction with respect to online teaching as a better mode of teaching, online teaching, and also for the progress (intellectual level) of the students through online teaching. This may be because of the technological development and reach to both the rural and urban areas.

The urban and rural people differ in their perception of the merit of online teaching like learning anywhere at any time. Further, the consideration of urban people towards the same merit of online teaching is higher than that of rural people. This may be because of the limitations the rural people face as compared to the urban people.

The urban and rural people differ in their perception of the challenges of online teaching such as technology issues and less exposure to practical. Further, the consideration of urban people towards the aforesaid challenges of online teaching is higher than that of rural people. This may be due to the technological development and its easy access to the urban people only without any control.

The parents, teachers, and students differ in their perception of the merits of online teaching such as less emphasis on infrastructure, expert availability, interactive learning using AV tools, certificate courses, and administration. The parent and teacher differ with respect to the merits of online teaching like less emphasis on infrastructure, expert availability, interactive learning using AV tools, and certificate courses, and the teacher's perception of these merits of online teaching is higher than that of the parents. The student and teacher differ with respect to the merits of online teaching like less emphasis on infrastructure, expert availability, certificate courses, and administration, and that the teachers' perception towards these merits of online teaching is higher than that of the students, but the difference is not significant for the merit on online teaching such as interactive learning using AV tools. It means both students and teachers have nearly similar perceptions towards interactive learning using AV tools as the merit of online teaching. Further, the parents and students differ with respect to administration as a merit of online teaching, and the parents have a high perception of the same, but the difference is not significant between parents and students with respect to the merits of online teaching such as less emphasis on infrastructure, expert availability, interactive learning using AV tools, and certificate courses. Thus, it could be said that the parents and students have nearly similar perceptions of these merits of online teaching. These results may be because of the differences in assessment parameters amongst the teachers, parents, and students based on their personal needs, ideas, choices, priorities, background, SES, values, and preferences.

The parents, teachers, and students differ in their perception of the challenges of online teaching like over-rely on online teaching aids, emotional touch, lack of cyber security, technology threats, technology issues, oversaturation with information, lack of interaction, lack of control/monitoring, holistic approach, network issues, data cost, electricity, cost of smartphones, home environment, and difficulty in assessment. The parent and teacher differ with respect to challenges of online teaching such as over-rely on online teaching aids, emotional touch, lack of cyber security, technology threats, technology issues, oversaturation with information, lack of interaction, lack of control/monitoring, electricity, cost of smartphones, home environment, and difficulty in assessment and that the teachers' perception towards these challenges of online teaching is higher than that of the parents. Simultaneously, the difference is not significant for the challenges of online teaching like holistic approach, network issues, and data cost. It means both parents and teachers have nearly similar perceptions of these challenges of online teaching. The student and teacher differ with respect to challenges of online teaching such as over-rely on online teaching aids, emotional touch, lack of cyber security, technology threats, lack of control/monitoring, holistic approach, and network issues, and that the teachers' perception towards these challenges of online teaching is higher than that of the students, but the difference is not significant for the challenges on online teaching technology issues, oversaturation with information, lack of interaction, data cost, electricity, cost of smartphones, home environment, and difficulty in assessment. It means both students and teachers have nearly similar perceptions of these challenges of online teaching. Further, the parents and students differ with respect to challenges of online teaching like technology issues, oversaturation with information, lack of interaction, holistic approach, network issues, data cost, cost of smartphones, home environment, and difficulty in assessment and that the parents have a high concern for the data cost and cost of smartphones whereas the students have high concern towards technology issues, oversaturation with information, lack of interaction, home environment, and difficulty in assessment. Simultaneously the difference is not significant between parent and student with respect to the challenges of online teaching such as over-rely on online teaching aids, emotional touch, lack of cyber security, technology threats, lack of control/monitoring, and electricity. Thus, it could be said that the parents and students have nearly similar perceptions of these challenges of online teaching. Again, this is possible because of the differences in parameters of assessment amongst the teachers, parents, and students, which are based on their personal needs, ideas, choices, priorities, background, SES, values, and preferences.

6. CONCLUSION

Whereas the study highlights that the gender-based differences towards the satisfaction of online teaching/learning, merits and challenges of online teaching simultaneously differences are observed towards the merits and challenges of online teaching based on area. Further, the study indicates that the parents, teachers, and students differ on the merits and challenges of online teaching. Whereas the present study presents the merits and challenges of online teaching, rigorous research is required to know the impact of online teaching on the students, their academic achievement, mental health as well its impact on the parent's mental health, economy and satisfaction. Following this perspective, this study concluded that satisfaction, along with merits and challenges, must be thoroughly investigated and that a

greater role for students, teachers, and parents in online teaching should be pursued in accordance with the Cognitive Flexibility Theory. In this time of pandemic with increasing ill-structuredness, unpredictability, complexity, and novelty; online education as a mode of distance education with the same qualities has added to the merits and challenges of online teaching, which is highlighted in the study and is likely to contribute to the education and teaching-learning process. The challenges cited in the study are the cases of ill-structured domains of online teaching that demands instructional guidelines for the advancement of potential prospects, which is in concordance with the cognitive flexibility theory that propagates to prepare students to manage real-world complexity as well adapt with the novel, ill-defined problems. Although the study contributes to the rationality with respect to online teaching, it also demands further research.

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