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FROM CLASSROOMS TO SCREENS: INVESTIGATING THE PERCEPTIONS AND EXPERIENCES OF PROSPECTIVE TEACHERS ABOUT MICROTEACHING

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ABSTRACT
Teaching practice is one of the most important components of teacher education programs as it allows prospective teachers to apply their conceptual and theoretical knowledge and skills in the real classroom environment. Whereas Covid-19 adversely affected the whole education system across the world, courses like teaching practice were the worst affected due to their nature and requirements. Universities tried many alternative strategies to continue teaching practice online. One of the most commonly used online teaching practice strategies was microteaching. As microteaching is a relatively new phenomenon in Pakistan, this study was carried out to investigate the perceptions and experiences of prospective teachers about it. Using a self-developed questionnaire titled QSPEM, data was gathered from 525 students belonging to an online university in Pakistan. The findings revealed that the students found the orientation session for microteaching and the role of their supervisors very effective and helpful. Although almost half of them had not even heard anything about microteaching, they found it very useful in improving their pedagogical and presentation skills. However, they thought that due to its nature, it was less effective than conventional teaching practice methods in teaching creativity and multitasking. Still, an overwhelming majority believed that microteaching should continue even after Covid-19.
Keywords: Microteaching, Teaching Practice, Covid-19, Online Education, Higher Education, Teacher Education

INTRODUCTION
Teacher education programs at higher education institutions are imperative in preparing competent teachers with updated pedagogical knowledge and skills (Mokoena, 2017). Quality education can be achieved by producing teachers who are professionally skilled and committed to their profession (Msangya, Mkoma, & Yihuan, 2016). Teacher education programs are developed in such ways that prospective teachers can get ample opportunities to gain real classroom teaching experiences. This is usually done through teaching practice. Teaching practice allows prospective teachers to implement their acquired philosophical and theoretical knowledge about the teaching-learning process in the real classroom environment.

Recently, the world has witnessed one of the biggest pandemics in human history in form of Covid-19. It affected the world in multiple ways, hampering progress in many different fields and areas (Toquero, 2020). One of the worst affected sectors was education. Whereas the developed nations had the adequate infrastructure and took prompt actions to bridge the gap and shifted to online mode; the developing countries like Pakistan had to suffer a great deal due to their traditional educational system, weak infrastructure, and technological issues (Malik, Akkaya, & Jumani, 2022). Due to Covid-19 induced lockdown, all the educational institutions in Pakistan had to convert to the online mode of education (Rehman & Khan, 2021).

The concept of online education in Pakistan at the higher education level is not new, but it was not practiced or incorporated into the traditional mode of education that often. Out of more than 180 universities in Pakistan, only two were offering online and distance education before Covid-19. As a result, most of them had to face numerous challenges and difficulties during Covid-19 (Malik, Akkaya, & Jumani, 2022). All the pre-service teacher training programs were also forced to revisit their degree requirements and propose alternative models to continue the teaching-learning process and allow the students to complete their degrees timely. The component of the teacher education programs that suffered the most was teaching practice. Before Covid-19, teaching practice was carried out using traditional models in which the prospective teachers would go to different schools and practice their pedagogical knowledge and skills; but with the pandemic, the schools also had to discontinue face-to-face classes (Farooq, Rathore & Mansoor 2020). Universities tried many alternate strategies for teaching practice. One of the more commonly used ones was microteaching (Zalavra & Makri, 2022).

Microteaching

Microteaching was first introduced by Allen and Eve in 1968 at Stanford University as part of an experimental program for teacher education (Cooper & Allen, 1970). That program was designed to develop observable teaching skills and their evaluation instruments.

Microteaching is a strategy for teaching practice "which is scaled down in terms of time and numbers of students" (Cooper, & Allen, 1970, p. 1). Allen and Eve (1968) defined micro-teaching as controlled teaching and learning process through which pre-service teachers can concentrate on specific teaching skills and behaviors under controlled conditions. Ofeofuna (1992) further explained it as a set of skills for preparing and training teachers.

Microteaching was introduced for three purposes: to practice and gain experience in teaching methods, to explore the effects of the teacher training program under controlled conditions; and to be used as a training instrument for experienced teachers (Allen & Clark, 1967). Microteaching usually has four main elements: "a teacher, the microclass (usually four or five pupils), a short lesson of five to twenty minutes, and predetermined objectives" (Allen & Eve, 1968, p. 181). Microteaching has been used as an effective strategy for prospective teachers since the 1960s in teacher education. DeCecco (1968) said that in microteaching, the usual complexities of a regular class are reduced because of recorded lectures, a small number of students, and a shorter duration of the lesson. Spelman and John-Brooks (1972) also found microteaching simpler and easier to evaluate as it focuses on single teaching skill at a time which can further be divided into sub-skills. It can further improve the evaluation process as the feedback can be provided after every session (Bell & Mladenovic, 2008). Deneme (2020) also believed that microteaching was an effective teacher training technique in which prospective teachers could learn in the presence of the supervisor. The feedback can be provided by both the supervisor and the peers. Microteaching can also improve teachers' instructional abilities, self-assurance, and conviction (Reddy, 2019).

Students' Perceptions and Experiences of Microteaching

There have been quite a few studies about the perceptions and experiences of prospective teachers or students about microteaching. Benton-Kupper (2001) found strong students' support for microteaching. Improved lesson planning, employing relevant pedagogical techniques, and identifying the strengths and weaknesses of one's teaching technique and skills were reported as some of the benefits. In another study about nurse education, Higgins and Nicholl (2003) also found that microteaching benefited the students in improving their knowledge and skills. While conducting a study about 3rd-year Diploma in Junior Primary Education (DJPE) students, Albin and Shihomeka (2017) found that microteaching helped them in their confidence and presentation skills. The researchers suggested that the teachers should be given proper training before using microteaching for improved results

A few studies have been carried out about the experiences of ELT (English Language Teaching) students with microteaching. In 2009, Ogeyik conducted a study about the attitudes of fourth-year ELT students in a Turkish university. Collecting data through a self-developed questionnaire, the study revealed that the participants viewed microteaching positively. They believed that it helped them in their professional development, self-assessment, self-confidence, and lecture preparation. Ismail (2011) reported similar experiences while conducting a study about ELT students

from a United Arab Emirates university. The students specifically reported better time management, practical skills, lesson planning, and use of technology as some of the key benefits.

Using Microteaching with Modern Technology

In recent times, microteaching is being used with modern technology and online techniques. Ledger and Fischetti (2020) have discussed the amalgamation of existing microteaching methods and innovative simulation technologies to improve the quality of teacher training practices and programs. Microteaching 2.0 uses technology-based classrooms. Synchronous modes of learning with the help of modern technology and internet enable the prospective teachers to communicate with their students, colleagues, and supervisors without any geographical restrictions. Their study reported the positive impact of microteaching 2.0 on the self-competencies of pre-service teachers (Ledger & Fischetti, 2020).

Boz and Belge-Can (2020) studied the effects of MTLS (Microteaching Lesson Study) on pre-administration science teachers' cPCK (collective Pedagogical Content Knowledge). They gathered the data through example plans, semi-organized meetings, perceptions, and field notes. The findings showed that microteaching was an essential tool for minimizing errors and strengthening teaching skills for both beginners and experienced teachers. Furthermore, microteaching helped in improving teachers' confidence, pedagogical performance, and classroom management. Azrai, Rini and Suryanda (2020) also used microteaching with web tools to improve its efficiency. Participants also reported positive and enriched experiences due to microteaching. All of those studies found improved results when microteaching was used with modern tools and online techniques.

Microteaching during Covid-19

Microteaching for teaching practice became widespread during Covid-19. Covid-19 induced restrictions, social distancing, and closure of the schools (Malik, Akkaya, & Jumani, 2022); forced the universities to move away from traditional teaching practice methods and strategies, and go online.

As microteaching had already been used for teaching practice, it became one of the most commonly used strategies for online teaching practice (Zalavra & Makri, 2022). However, in countries like Pakistan, where teaching practice was being carried out through traditional methods; both the supervisors and prospective teachers found it difficult to get used to it. As a result, this study was carried out to investigate the perceptions and experiences of prospective teachers about teaching practice through microteaching.

Research Questions

This study investigates the following main research questions.

1. What are students' perceptions and experiences about orientation session(s) for microteaching?
2. What are students' perceptions and experiences about the role of the supervisor in microteaching?
3. What are students' perceptions and experiences about microteaching as a teaching practice strategy?
4. Should microteaching be continued as a teaching practice strategy after Covid-19?

METHODOLOGY

Research Method

As the purpose of the study was to investigate students' perceptions and experiences about microteaching, quantitative survey method is employed. It is because microteaching is a relatively new phenomenon in Pakistan. As a baseline study, the quantitative survey method helps in finding out perceptions, experiences, and patterns from a relatively large sample.

Population and Sample

Data was gathered from one online university in Pakistan which had been using microteaching for teaching practice since the start of Covid-19. That university offered four teacher education programs with teaching practice: B.Ed. Secondary- 1.5 years (3 semesters, 1.5 years long), B.Ed (Honours) Elementary (8 semesters, 4 years long), B.Ed. Elementary- 2.5 years (5 semesters, 2.5 years long) and Associate Degree in Education (ADE) (4 semesters, 2 years long). All the teaching practice students enrolled in those programs during the Fall 2021 semester were counted as the population for this study. As none of the ADE program students was taking teaching practice during the Fall 2021 semester, it was not included in the data.

According to the university database, there were 1406 students enrolled in all teaching practice courses in Fall 2021. Krejcie and Morgan (1970) presented a table for determining sample

size from a given population. It suggests a sample size of 310 for a population from 1501 to 1600 (Krejcie & Morgan, 1970, p. 608). Due to Covid-19 and the nature of the university, it was decided to gather the data online using Google Forms. In their meta-analysis study, Wu, Zhao, and Fils-Aime (2022) reported an average response rate of 44.1% in online surveys; however, it has been observed that in Pakistan, the response rate in online surveys is even lower. As a result, it was decided to send the questionnaire to the entire population. After the given deadline, 525 questionnaires were filled and returned by the students, indicating a return rate of 37.34%. All of those 525 questionnaires were taken as the sample of the study.

Instrumentation

Although there are a few questionnaires and scales about microteaching, none of them investigated the overall perceptions and experiences of the students about it. As a result, it was decided to develop a questionnaire for this study.

The final questionnaire titled QSPEM (Questionnaire for Students' Perceptions and Experiences about Microteaching) is based on a 5-point Likert type scale with 40 items. It consists of six parts: students' background information (four items), and five factors about students' perceptions and experiences about microteaching (36 items).

Validity and Reliability of the Instrument

QSPEM was first sent to three experts in the field of teaching practice for content validity. All of those experts had been supervising teaching practice for the last five years. Six items from the first draft were excluded and some others were revised as per their suggestions. For reliability, an internal consistency test was carried out with a sample of 40 students. The internal consistency of the final QSPEM was 0.89.

Data Collection Technique

For microteaching, students were divided into small groups, and each group was allocated to a supervisor. An orientation session was conducted by the supervisor for each group to familiarize them with the microteaching. Later the supervisor created links for each microteaching session and shared them with the students through the university LMS (Learning Management System).

During the process of microteaching, one of the students acted as a teacher and the rest as students. The whole activity was carried out through Google Meet. Supervisor also joined online sessions. Later the supervisor and the students provided their feedback about the prospective teacher who had taught the class and his/her teaching method. After the microteaching sessions, they were sent QSPEM through LMS. All of them were asked to complete the questionnaires and return them within a period of two weeks. They were reminded three times during this period.

Data Analysis Techniques

SPSS was used to analyze the data. As it was a baseline descriptive study, descriptive statistics (frequencies, mean, percentage, and standard deviation) were used.

DATA FINDINGS AND ANALYSIS

Data findings for the study is divided into six parts: students' background information and five factors of QSPEM (students' background knowledge and prerequisite skills about microteaching, perceptions and experiences about microteaching orientation session, experiences about the role of supervisor in implementing microteaching, students' perceptions and experiences about microteaching as a teaching practice strategy, and students' opinion about the continuation of microteaching for teaching practice after Covid-19).

Students' Background Information

The sample consisted of 525 students. Out of them, 238 (45.3%) were male, and 287 (54.7%) were female. 261 of them (49.7%) belonged to rural areas while 264 (50.3%) belonged to urban areas.

The students belonged to three degree programs: B. Ed 2.5 years (n=13, 2.5%), B. Ed 1.5 years (n=505, 96.2%), and B. Ed. Honours (n=7, 1.3%). As a result, there are also variations in their age. The students were divided into four age groups: Group 1 (20-25 years old), Group 2 (26-30 years old), Group 3 (31-35 years old), and Group 4 (more than 35 years old). Majority of the students belonged to Group 2 (n=212, 42.1%) and Group 1 (n=220, 41.9%). Sixty-four students (12.2%) belonged to Group 3, and twenty (3.8%) to Group 4.

Factor I: Students' Background Knowledge and Prerequisite Skills for Microteaching

The first factor of QSPEM is about students' knowledge about microteaching, availability of the required infrastructure, and prerequisite skills to use microteaching. As all of them were online university students, they all were equipped with a basic set of computer and internet skills; however, their expertise in the platform was investigated.

Table 1 shows that more than half of the students (55.4%) had not even heard about microteaching, while the rest knew about it. An overwhelming majority (93.5% and 94.5% respectively) had the required infrastructure at home and could use Google Meet.

Table No. 1 Students' Background Knowledge and Prerequisite Skills about Microteaching

Item No.	Statements	Yes f (%)	No f (%)
5	Before starting the teaching practice, I knew the term microteaching.	234 (44.6)	291 (55.4)
6	I have the required infrastructure (computer/laptop, internet connection) at home for microteaching sessions.	491 (93.5)	34 (6.5)
7	I can use Google Meet for microteaching.	496 (94.5)	29 (5.5)

Factor-II: Students' Perceptions and Experiences about Microteaching Orientation Session

The supervisors organized microteaching orientation sessions for their respective groups. The second factor was designed to find out students' perceptions and experiences about it.

Table No. 2 Students' Perceptions and Experiences about Microteaching Orientation Session

Item No.	Statements	Yes f (%)	No f (%)
8	Did you attend the orientation session for microteaching?	471 (89.7%)	54 (10.3)
9	The orientation session was arranged properly to help me understand the process of microteaching.	460(97.7)	11 (2.3)
10	The orientation session started on time.	453 (96.2)	18 (3.8)
11	I was properly informed about the orientation session through email and an announcement on LMS.	459 (97.5)	12 (2.5)
12	The orientation session helped me to understand the procedure of microteaching.	462(98.1)	9 (1.9)
13	Orientation was a waste of time as it created confusion.	37 (7.9)	434 (92.1)

Students were first inquired if they had attended the orientation session. Out of 525 students, 471 (89.7%) had attended the session. Those who had attended it were asked to answer questions 8 to 13. Table 2 shows that an overwhelming majority of the students (more than 90% for all the items) not only understood the role and importance of the orientation session but were also satisfied with it.

Factor-III: Students' Experiences about the Role of Supervisor in Implementing Microteaching

Table No. 3 Students' Experiences about the Role of Supervisor in Implementing Microteaching

Item No.	Statements	SD f (%)	D f (%)	N f (%)	A f (%)	SA f (%)	M	SD
14	My supervisor was very supportive throughout the microteaching sessions.	10 (1.9)	7 (1.3)	21 (4.0)	68 (13.0)	419 (79.8)	4.67	.78
15	Lesson plans were properly checked by the supervisor during microteaching sessions.	14 (2.7)	7 (1.3)	24 (4.6)	83 (15.8)	397 (75.6)	4.60	.85
16	I have been properly guided by the supervisor about my mistakes and shortcoming in the lesson plan presentation.	13 (2.5)	7 (1.3)	32 (6.1)	89 (17.0)	384 (73.1)	4.56	.86
17	The supervisor started and ended the microteaching	11 (2.1)	10 (1.9)	20 (3.8)	75 (14.3)	409 (77.9)	4.64	.82

	sessions on time.							
18	My supervisor always provided constructive feedback regarding my microteaching sessions.	13 (2.5)	11 (2.1)	26 (5.0)	76 (14.5)	399 (76.0)	4.59	.87
19	I always received support from the supervisor regarding any issues related to microteaching sessions.	11 (2.1)	8 (1.5)	26 (5.0)	76 (14.5)	404 (77.0)	4.62	.82
20	The supervisor encouraged and engaged my peers to give feedback about my microteaching sessions.	13 (2.5)	7 (1.3)	21 (4.0)	94 (17.9)	390 (74.3)	4.60	.83

The next factor was designed to investigate the perceptions and experiences of the students about the role of the supervisor.

The students' experiences with the supervisor were positive with no mean value less than 4.59 (the supervisor always provided constructive feedback regarding my microteaching sessions). The highest mean values (4.67 and 4.64 respectively) were reported in the supervisor's support (My supervisor was very supportive throughout the microteaching sessions.), and punctuality (The supervisor started and ended the microteaching sessions on time).

Factor-IV: Students' Perceptions and Experiences about Microteaching as a Teaching Practice Strategy

Factor IV investigated both the perceptions and the experiences of the students about microteaching. This factor consists of sixteen items.

Table No. 4 Students' Perceptions and Experiences about Microteaching as a Teaching Practice Strategy

Item No.	Statements	SD f (%)	D f (%)	N f (%)	A f (%)	SA f (%)	M	SD
21	Microteaching is an effective teaching practice strategy.	16 (3.0)	7 (1.3)	31 (5.9)	114 (21.7)	357 (68.0)	4.50	.90
22	Microteaching improved my pedagogical skill.	11 (2.1)	15 (2.9)	25 (4.8)	127 (24.2)	347 (66.1)	4.49	.87
23	Microteaching requires too much time to prepare lesson plan presentations.	23 (4.4)	63 (12.0)	105 (20.0)	137 (26.1)	197 (37.5)	3.80	1.19
24	Microteaching helped me to improve my presentation skills.	14 (2.7)	13 (2.5)	50 (9.5)	161 (30.7)	287 (54.7)	4.32	.93
25	I enjoyed teaching practice through microteaching.	11 (2.1)	6 (1.1)	33 (6.3)	130 (24.8)	345 (65.7)	4.50	.83
26	Microteaching saves traveling time and effort.	10 (1.9)	16 (3.0)	34 (6.5)	108 (20.6)	357 (68.0)	4.49	.89
27	Microteaching spares the students from the issues of gaining permission from school leaders for teaching practice.	12 (2.3)	14 (2.7)	53 (10.1)	118 (22.5)	328 (62.5)	4.40	.93
28	Microteaching is more cost-effective for students.	42 (8.0)	32 (6.1)	66 (12.6)	104 (19.8)	281 (53.5)	4.04	1.27
29	Microteaching provided a better opportunity to	9 (1.7)	9 (1.7)	49 (9.3)	118 (22.5)	340 (64.8)	4.46	.86

	interact with teachers and peers.							
30	Microteaching helped me to improve my presentation skills.	8 (1.5)	12 (2.3)	25 (4.8)	113 (21.5)	367 (69.9)	4.56	.81
31	I learned many modern teaching techniques and strategies through microteaching	11 (2.1)	11 (2.1)	33 (6.3)	139 (26.5)	331 (63.0)	4.46	.86
32	My peers were friendly and supportive during the microteaching sessions.	9 (1.7)	8 (1.5)	41 (7.8)	128 (24.4)	339 (64.6)	4.48	.83
33	Microteaching sessions were easy to manage and interact with.	13 (2.5)	11 (2.1)	41 (7.8)	132 (25.1)	328 (62.5)	4.43	.90
34	There are more opportunities for creativity in conventional classrooms during teaching practice.	14 (2.7)	19 (3.6)	78 (14.9)	171 (32.6)	243 (46.3)	4.16	.98
35	Microteaching sessions lack a real classroom environment.	47 (9.0)	86 (16.4)	133 (25.3)	128 (24.4)	131 (25.0)	3.40	1.26
36	Real classroom teaching requires multiple skills which are not covered in microteaching.	85 (16.2)	100 (19.0)	115 (21.9)	119 (22.7)	106 (20.2)	3.11	1.37

Table 4 shows that the students generally viewed microteaching approvingly. The highest mean was reported in improving the students' presentation skills (M=4.56, SD=0.81). The second highest mean (4.50) was reported in "I enjoyed teaching practice through microteaching" (SD=0.83) and "Microteaching is an effective teaching practice strategy" (SD=0.90).

Despite generally viewing microteaching positively, the students agreed that it lacked a real classroom environment (M=3.40, SD=1.26), did not provide an opportunity for multitasking (M=3.11, SD=1.37), and that conventional teaching practice provided more opportunities for creativity (M=4.16, SD=0.98). The students also believed that microteaching required too much time to prepare lesson plan presentations (M=3.80, SD=1.19). They also reported a low mean value about microteaching being cost-effective (M=4.04, SD=1.27), indicating that despite cutting down traveling costs, microteaching was still considered expensive.

Factor-V: Students' Opinion about the Continuation of Microteaching for Teaching Practice after Covid-19

The last factor questioned the students if microteaching should be continued after Covid-19.

Table No. 5 Students' Opinion about the Continuation of Microteaching for Teaching Practice after Covid-19

Item No.	Statements	SD f (%)	D f (%)	N f (%)	A f (%)	SA f (%)	M	SD
37	Microteaching is only an emergency plan.	62 (11.8)	100 (19.0)	157 (29.9)	96 (18.30)	110 (21.0)	3.17	1.28
38	There should only be microteaching sessions in the next semester.	40 (7.6)	48 (9.1)	111 (21.1)	113 (21.5)	213 (40.6)	3.78	1.27
39	I urge the University to continue using microteaching as a teaching practice	13 (2.5)	17 (3.2)	51 (9.7)	106 (20.2)	338 (64.4)	4.40	.96

	strategy.							
40	Micro teaching sessions should not continue after Covid-19.	163 (31.0)	101 (19.2)	84 (16.0)	74 (14.1)	103 (19.6)	2.72	1.51

The students overwhelmingly supported the idea of continuing microteaching as a teaching practice strategy (M=4.40, SD=0.96), however, when it came to continuing microteaching as the only teaching practice strategy, the numbers dropped considerably (M=3.78, SD=1.27). 206 students (39.3%) believed that microteaching was only an emergency plan (M=3.17, SD=1.28) while 162 (30.8%) disagreed to it. Only almost one-third of them (n=177, 33.7%) agreed that microteaching should be discontinued after Covid-19 while more than half of them (n=264, 50.2%) disagreed to it.

The findings show that a large majority of the students were satisfied with the orientation session and the role of their supervisors. Despite some reservations like the lack of multitasking, relatively lower level of creativity as compared to conventional classroom-based teaching practice, and lacking a real classroom environment; an overwhelming majority wanted to continue with microteaching.

DISCUSSION

Teaching practice is an essential component of teacher education degree programs. It plays an important role in preparing teachers who are well-versed with content, pedagogy, and instructional skills (Gujjar et al., 2010). In Pakistan and many other countries, teaching practice was carried out using traditional models and practices in which the students would go to formal schools to observe and deliver lessons. Covid-19 forced the closure of educational institutions (Malik, Akkaya, & Jumani, 2022) which compelled the universities to change their teaching practice method. Many of them went for microteaching to continue teaching practice through online mode (Zalavra & Makri, 2022). As microteaching is a relatively new phenomenon in Pakistan, this study was carried out to investigate the perceptions and experiences of prospective teachers about microteaching. Data was collected from 525 online university students from three teacher education degree programs. A self-developed questionnaire titled QSPEM was used for this purpose.

It was essential to find out if the students had the required infrastructure and digital literacy skills for online microteaching classes. The literature points out that in many developed countries, online learning and ICT in education programs cannot meet the desired results due to these issues (Warner, Malik, & Mohammed, 2021). However, as the participants of the study belonged to an online university, most of them reported to have the required skills and infrastructure at home.

Due to the novelty of microteaching and the students being unfamiliar with it, it has been suggested by the researchers to first organize orientation session(s) about it. The second factor of QSPEM was about the perceptions and experiences of the students about those orientation sessions. A large majority of the participants (89.7%) attended orientation sessions. Generally, they expressed contentment with their relevance and effectiveness. The role of the teaching practice supervisor is of paramount importance. Khan (2015) found learning environment, feedback, peer support, and supervision to be either a great help or hindrance in the effective implementation of and learning through microteaching. The role of supervisors becomes even more important in the countries like Pakistan where the concept is relatively new. The participants of the study were greatly satisfied with the role of their supervisors. Most of them reported having received proper and constructive feedback about their lesson plans and activities.

The fourth factor of QSPEM was about the perceptions and experiences of the students about microteaching. The majority of them viewed it approvingly and supported it as an effective strategy for teaching practice. They believed that microteaching helped them in improving their presentation and pedagogical skills. These findings are aligned with the existing literature as Saban and Çoklar (2013) found that microteaching was an essential tool for making teaching skills stronger for both prospective and experienced teachers. The participants of the current study also appreciated microteaching for better interaction, ease of management, saving classroom interaction, and more opportunities to use modern technology. However, they also reported some drawbacks such as relatively less room for creativity, too much time needed to prepare presentations, limited focus and

approach, and being more costly. Overall, the students appreciated microteaching as a teaching practice strategy and believed that it helped them in multiple ways. Previous studies also support this (Putnam & Borko, 2000; Guskey, 2002; Khan, 2015).

The last factor of QSPEM was designed to investigate if microteaching should be continued after Covid-19 as a teaching practice strategy. Most of them believed that microteaching should be continued as a teaching practice strategy; however, a relatively smaller portion thought that it should be used as the only teaching practice strategy. Only one-third of them thought that it should be discontinued after Covid-19. This shows that that was overwhelming support for microteaching amongst the students as they saw it as an innovative, modern, and effective teaching practice strategy.

CONCLUSION AND RECOMMENDATIONS

Microteaching is a well-known teacher development strategy that is practiced in many countries, especially developed ones. It provides the teachers with opportunities to scale up their teaching and pedagogical skills. However, in Pakistan, it is under-utilized for various reasons.

This study found that despite microteaching being an unknown concept for almost half of the participants, they found it very helpful and effective in honing their pedagogical and presentation skills. Role of orientation sessions and the supervisors were imperative in the effective implementation of microteaching and positive students' feedback. Despite overall positive view, they had some reservations about it. They thought that traditional teaching practice models provided them with more opportunities for creativity and multitasking as microteaching lacked a real classroom environment. Despite those reservations, they were of the opinion that microteaching should be continued even after Covid-19.

The study recommends that microteaching as a teaching practice strategy should be encouraged in Pakistan as it helps in preparing the teachers for a digitalized world. Prospective teachers who use microteaching as one of the teaching practice strategies are likely to find it easier to handle a digital classroom; however, the role of supervisors and orientation sessions become imperative as they can help the students in overcoming some of the nervousness and uneasiness associated with it.

Further Research

This study used a self-developed questionnaire (QSPEM) for investigating the perceptions and experiences of prospective teachers, however, some items need further probe. It is suggested to follow it up with a qualitative study to get richer and more in-depth data.

Also, as this study was about online university students, it was difficult to apply the findings to the students from conventional university students as they are likely to have a lower computer and digital literacy skills. Similar studies should be carried out about conventional university students to find their perceptions and experiences about microteaching.

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Questionnaire for Students' Perceptions and Experiences about Microteaching (QSPEM)

Students' Background Information

1. Gender: Male □1 Female □2
2. Belong to: Urban Area □1 Rural Area □2
3. Teacher Education Degree Program: Associated Degree in Education □1
   B. Ed 2.5 years □2 B. Ed Honours □3 B. Ed. 1.5 years □4
4. Age Group: Age Group 1 (20-25 years old) □1 Age Group 2 (26-30 years old) □2
   Age Group 3 (31-35 years old) □3 Age Group 4 (more than 35 years old) □4

Factor I: Students' Background Knowledge and Prerequisite Skills about Microteaching

Item No.	Statements	Yes	No
5	Before starting the teaching practice, I knew the term microteaching.		
6	I have the required infrastructure (computer/laptop, internet connection) at home for microteaching sessions.		
7	I can use Google Meet for microteaching.		

Factor-II: Students' Perceptions and Experiences about Microteaching Orientation Session

Item No.	Statements	Yes	No
8	Did you attend the orientation session for microteaching?		
9	The orientation session was arranged properly to help me understand the process of microteaching.		
10	The orientation session started on time.		
11	I was properly informed about the orientation session through email and an announcement on LMS.		
12	The orientation session helped me to understand the procedure of microteaching.		
13	Orientation was a waste of time as it created confusion.		

Factor-III: Students' Experiences about the Role of Supervisor in Implementing Microteaching

Item No.	Statements	SD	D	N	A	SA
14	My supervisor was very supportive throughout the microteaching sessions.					
15	Lesson plans were properly checked by the supervisor during microteaching sessions.					
16	I have been properly guided by the supervisor about my mistakes and shortcomings in the lesson plan presentation.					
17	The supervisor started and ended the microteaching sessions on time.					
18	My supervisor always provided constructive feedback regarding my microteaching sessions.					

19	I always received support from the supervisor regarding any issues related to microteaching sessions.					
20	The supervisor encouraged and engaged my peers to give feedback about my microteaching sessions.					

Factor-IV: Students' Perceptions and Experiences about Microteaching as a Teaching Practice Strategy

Item No.	Statements	SD	D	N	A	SA
21	Microteaching is an effective teaching practice strategy.					
22	Microteaching improved my pedagogical skill.					
23	Microteaching requires too much time to prepare lesson plan presentations.					
24	Microteaching helped me to improve my presentation skills.					
25	I enjoyed teaching practice through microteaching.					
26	Microteaching saves traveling time and effort.					
27	Microteaching spares the students from the issues of gaining permission from school leaders for teaching practice.					
28	Microteaching is more cost-effective for students.					
29	Microteaching provided a better opportunity to interact with teachers and peers.					
30	Microteaching helped me to improve my presentation skills.					
31	I learned many modern teaching techniques and strategies through microteaching					
32	My peers were friendly and supportive during the microteaching sessions.					
33	Microteaching sessions were easy to manage and interact with.					
34	There are more opportunities for creativity in conventional classrooms during teaching practice**.**					
35	Microteaching sessions lack a real classroom environment.					
36	Real classroom teaching requires multiple skills which are not covered in microteaching.					

Factor-V: Students' Opinion about the Continuation of Microteaching for Teaching Practice after Covid-19

Item No.	Statements	SD	D	N	A	SA
37	Microteaching is only an emergency plan.					

38	There should only be microteaching sessions in the next semester.					
39	I urge the University to continue using microteaching as a teaching practice strategy.					
40	Micro teaching sessions should not continue after Covid-19.					