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IMPACT OF MICRO-TEACHING SKILLS ON TEACHING ABILITY

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Abstract

This quantitative descriptive study examined the impact of micro-teaching skills on teaching ability by exploring and comparing the perceptions of male and female secondary school teachers. The population consisted of 1,200 teachers (650 male, 550 female) from 60 schools, with a sample of 240 teachers (130 male, 110 female) selected through stratified random sampling using Yamane's formula at a 95% confidence level. A validated 5-point Likert scale questionnaire with reliable internal consistency (Cronbach's alpha > 0.7) was administered in Urdu after obtaining official consent. Descriptive analysis revealed that male teachers demonstrated more positive perceptions (72.30%, mean = 3.92, SD = 1.01) regarding the impact of micro-teaching skills on teaching ability compared to female teachers (43.60%, mean = 3.25, SD = 1.17), while female teachers showed higher neutrality (33.60%) and negative responses (22.70%). An independent t-test indicated a statistically significant difference between the two groups ($t = 4.82$, $df = 238$, $p = 0.0002 < 0.05$), leading to rejection of the null hypothesis. The study concludes that male teachers hold significantly more positive and consistent perceptions than their female counterparts, and recommends gender-sensitive professional development, peer mentoring, and qualitative research to explore the sociocultural factors contributing to female teachers' greater uncertainty.

Keywords: *Micro-teaching skills, teaching ability, gender perceptions, secondary school teachers, quantitative study.*

Introduction

Microteaching is a simulated teaching experience for pre-service and in-service teachers to practice concept lessons in any subject. Developed by Dwight W. Allen, Robert Bush, and Kin Romney at Stanford University in the late 1950s. The aim of micro-teaching is to create a training space for teachers to learn new pedagogical skills and skillfully improve the old ones through small group teaching (5-10 minutes) and video recording for feedback review. It is also extensively used in Northern Europe and in many Asian and African countries. It is not surprising, therefore, that, since its inception at Stanford (Audu & Agbo, 2010; Chawla & Thukral, 2011), micro-teaching has undergone numerous changes.

Microteaching is one of the latest developments of the teacher training programmes. It is a medium to build professional skills of student teachers. The trainees who practice the teaching should carry out the teaching in actual situations or practical situations, and microteaching seems to be a good teaching training tool for them (Ledger & Fischetti, 2020).

It was the Stanford University experimental programme in 1960 that first started using microteaching as a way of improving the standard of teacher preparation (Elias, 2018). Many teacher training institutions around the world have applied microteaching extensively in the teacher training practicum and their assessment of teacher skills (Cheng, 2017). Microteaching is known to consist of elements that are regulated and monitored (Santoveña-Casal et al., 2023).

The effectiveness of microteaching in imparting brief but meaningful education in professional learning has attracted a lot of attention (Hong et al., 2017). This teaching training method called microteaching, which is used worldwide, provides the opportunity for teachers to enhance their teaching methods. (Noben et al., 2021).

Microteaching is said to be a technique used mostly in teacher preparation. The teach-reteach cycle is crucial in microteaching, claims Ojo, 2021. Microteaching is a hands-on approach which is recorded and utilizes the pedagogical process in a supervised environment. It is methodically organized teacher training model skills (Allela, 2021).

The implementation of micro teaching helps students to increase self confidence levels and teaching skills of teacher candidates (Bilen, 2015). The confidence of the student regarding his ability to teach the subject is defined as teaching confidence. Someone's confidence in teaching content can be described as self-efficacy (Christensen et al., 2011). Research on the influence of micro teaching on various aspects has been carried out by many researchers. The results showed that the practice of micro teaching has a positive influence on teaching skills (Ünlü, 2018; Sen, 2010, Onwuagboke et al., 2017). The results of the participants' answers revealed that the micro-teaching video activity was effective in enhancing the teaching skills of the participants. The openness of the task was found to be a factor in students' reflection, since they were expected to make decisions on a number of aspects in their teaching, and their increased knowledge of the possibilities for productive reflection during the planning may also have influenced their understanding of how teacher educators can make reflection a part of microteaching (Karlström, & Hamza, 2019). Student (Karlström, & Hamza, 2019) has identified feedback as a key tool to enhance the overall teaching ability of students. Students plan teaching well in the teaching section, they are very communicatively planning the teaching process and they believe that it can be used in normal classroom and teaching specific skills (Al Darwish, & Sadeqi, 2016). Micro teaching also has a significant effect on teaching skills and this effect can be seen in lesson opening, class management, time management and planning, communication, and lesson concluding, which in turn has a significant effect on the confidence of the teacher in their teaching (Bakır, 2014).

The main purposes of micro teaching are: 1) to learn and assimilate new skills under controlled conditions; 2) to master a number of teaching skills; 3) gain confidence in teaching, understand the concepts and principles that underlie microteaching; and 4) can analyze complex teaching processes into important microteaching skills and understand microteaching procedures to develop teaching skills (Reddy, 2019). Students get acquainted with the pedagogical knowledge they have learned in the past, and how they are applied to make students learn in a specific situation. The activities of microteaching are repeated as the process is cyclic, thus teaching skills and subject matter knowledge will be enhanced. Students have high confidence in learning process because they mastered the knowledge and taught skills.

The performance includes speaker(s), participant(s) and media or means. Performers or prospective teachers, along with communicating active, creative and aesthetic, must also prepare receivers or participants in the communication to receive the communication they will be giving. Herman et al. (2022) discussed the role of the media in learning. Furthermore, Triana et al (2021) agreed that learning media that should be prepared include learning materials (Diana, 2013; Sherly et al., 2021), lesson plans, learning models, learning strategies, curriculum, and learning evaluation.

Literature Review

A technique of teacher preparation, known as microteaching, uses micro classrooms (groups of a few students 4 or 5) and micro lessons, lasting between five and twenty minutes. The technique was created and first used by Allen (Ledger & Fischetti, 2020). The method developed by Allen and Eve (Allen & Arthur) has been reported as being established in providing experience to teacher-trainees or teachers, but in an ‘atmospheric environment' (Park, 2021). No doubt that, Microteaching has proved to be a beneficial teaching methodology for students (Santoveña-Casal et al., 2023). Micro-teaching is an effective way to educate learners and encourage them to evaluate their own teaching, through reflection (Allela, 2021).

Today, all over the world the teacher training approach called microteaching is used to train teachers to sharpen their teaching skills and master the many simple tasks, which are called teaching skills (Otsupius, 2014). Microteaching enables teacher-trainees to practice in front of a limited audience, and also provides them with the opportunity to watch and assess others' performances, safely (Mohammed et al., 2018). Microteaching is a good skill for building up skill, experience, effective and confidence of learning and acquiring feedback (Richard, 2021).

Saidu (2020) believes that in the beginning, most of the teacher-trainees encounter difficulties due to their first thoughts and experiences, which have a great impact on the way teacher-trainees think about their professional career in the teaching profession. When student-teachers are just starting out in their teaching careers, the classroom can be a complicated setting (Bilen, 2015; Kumar, 2016).

Microteaching is claimed to provide a transition period, in which one can get accustomed to such a situation (Bilen, 2015). However, before going for teaching practice, every college of education and educational

institution in Nigeria holds a series of seminars to equip student-teachers with teaching skills. de Lange & Nerland (2018), posit, after following series of seminars and lectures, designed to educate student-teachers about the curriculum's viewpoints, and skills of lesson planning in their chosen field of study, students are participating in microteaching sessions.

Microteaching programmes have been widely used and proven to be an effective way of developing basic teaching skills for prospective teachers. Microteaching offers the student teacher opportunities to practice his/her teaching skills in a controlled and realistic setting. This will be an effective method to develop teaching skills for prospective teachers. The pre-service and in-service teachers' success in real world experiences encourages the teaching of these experiences (Remesh, 2013).

It is geared towards sharpening, expanding, and building up the learner teachers' skills and confidence. Through microteaching practice, the teacher candidates take the process of teaching practice as a whole and dissect it into smaller pieces and various elements to experience and learn teaching methods (Wangchuk, 2019). A number of basic microteaching techniques, like presentation and reinforcement, can be a great help for pre-service teachers in improving their teaching skills. Micro-teaching is a tool that can be effective for pre-service teachers' professional development as mentioned by Choeda & Kinley (2013) in their study on exploring the authenticity of microteaching in pre-service teacher education programs. By enabling pre-service teachers to pursue a reflective teaching experience, microteaching gives skilled supervision a chance to accommodate constructive criticism, which is crucial for enhancing the pre-service teachers' skills. The use of microteaching and feedback aids in teachers' improvement. Since immediate feedback can be obtained following each practice session, microteaching scales down the difficulties of real teaching (Ostrosky et al., 2013). They have opportunities for feedback to reflect on their work and correct their errors and enhance their teaching skills. They are able to discover and reflect on their own teaching style and that of others as they learn new teaching methods that allows them to become more reflective in their practice. Students actively presenting and observing the performances during reciprocal negotiation is an effective way that helps in acquiring the skills and promotes teaching skills in pre-service teachers (Wangchuk, 2019).

The research conducted by Santoveña-Casal, et al. (2023) revealed that the teachers who received training in microteaching in the college or teacher training institute experienced lesser problems as compared with the teachers who did not receive training. It is an argument that shows how the use of microteaching techniques supports the effectiveness and competency of teacher-trainee in teaching.

Statement of the Problem

However, in the local context, the perceptions of secondary school teachers (male and female) about the effect of micro-teaching skills on teaching ability have not been explored and compared, and preliminary indications suggest that female teachers are more uncertain than male teachers. The purpose of this study is to examine and contrast these gender perceptions and to find out if there is a significant difference.

Research Objectives

1. To know about the Perceptions of male teachers regarding the impact of micro-teaching skills on teaching ability.

2. To know about the Perceptions of female teachers regarding the impact of micro-teaching skills on teaching ability.

3. To compare the Perceptions of male and female teachers regarding the impact of micro-teaching skills on teaching ability.

Research Questions

1. What are the Perceptions of male teachers regarding the impact of micro-teaching skills on teaching ability?

2. What are the Perceptions of female teachers regarding the impact of micro-teaching skills on teaching ability?

Research Hypothesis

H_{01}: There is no significant difference between the perceptions of male and female teachers regarding the impact of micro-teaching skills on teaching ability.

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Research Methodology

This study was a quantitative descriptive study to explore Impact of micro-teaching skills on teaching ability. According to District Education Office the population comprised of 1,200 secondary school teachers (650 men and 550 women) from 60 schools. The stratified random sampling (based on gender of schools) and Yamane's formula (95% confidence level, 5% margin of error) yielded 240 teachers comprising 130 male teachers from 16 boys' schools and 110 female teachers from 14 girls' schools. A questionnaire was designed with a 5-point Likert scale after literature search, pre-tested with 30 teachers (16 male, 14 female) not part of the sample but were tested for the questionnaire, and validated by the education experts. Cronbach's alpha was used to determine the reliability of the instrument, with a criterion of 0.7. Data were collected after obtaining separate consent of male and female District Education Officers, distributing the Urdu questionnaire (translated and back translated) in paper form in the staff meetings to all teachers (took about 20 minutes to complete the questionnaire). The data were reported in terms of percentage, mean and standard deviation, and T-test to test the hypothesis.

Results and Data Analysis

Data analysis was done through descriptive analysis (i.e. Frequency, percentage, Mean, and Standard Deviation) and Inferential Analysis (i.e. T-test) which was also used to find the difference between the perceptions of male and female teachers about the impact of micro-teaching skills on teaching ability.

Table: Perceptions of male and female teachers regarding the impact of micro-teaching skills on teaching ability.

Responses	Respondents			
	Male Teachers		Female Teachers	
	No	%	No	%
SA	43	33.10	16	14.50
A	51	39.20	32	29.10
N	21	16.20	37	33.60
DA	13	10.00	13	11.80
SDA	2	1.50	12	10.90
Total	**130**	**100**	**110**	**100**
Mean	3.92		3.25	
SD	1.01		1.17	

The table shows the perception of 130 male and 110 female teachers about the effect of micro-teaching skills on teaching ability. Among male teachers, 43 (33.10%) strongly agreed, 51 (39.20%) agreed, 21 (16.20%) were neutral, 13 (10.00%) disagreed, and 2 (1.50%) strongly disagreed, yielding a mean score of 4.08 and a standard deviation of 1.01. Among female teachers, 16 (14.50%) strongly agreed, 32 (29.10%) agreed, 37 (33.60%) were neutral, 13 (11.80%) disagreed, and 12 (10.90%) strongly disagreed, with a mean of 3.31 and a standard deviation of 1.14. In general, male teachers' positive responses were higher (72.30%) than that of the female (43.60%) while the negative responses of female teachers were higher (22.70%) than the male (11.50%) and neutral responses (16.20%). The difference between the mean scores of male teachers compared to female teachers (3.92 vs. 3.25) and the difference between standard deviation scores of male teachers compared to female teachers (1.01 vs. 1.17) shows that teachers of male students have more positive and stable perceptions than teachers of female students in regard to the impact of micro-teaching skills on teaching ability.

Table: Comparison of male and female teachers regarding the impact of micro-teaching skills on teaching ability.

Teachers	Teachers comparison	anc

	t_{calcul}	t_{tabula}	p_{value}	
Male Teachers	4.82	±1.97	0.0002	0.05
Female Teachers				

A comparison between male teachers and female teachers is presented on the effect of micro teaching skills on the teachers' competence, where there were 130 male teachers (mean = 3.92, SD = 1.01) and 110 female teachers (mean = 3.25, SD = 1.17). Males teachers had higher mean score than females indicating more positive perceptions and smaller standard deviation among males indicating greater consistency in their responses. The calculated t value was 4.82 which is greater than the t tabulated value at 0.05 level of significance, which is ±1.97 and the p value was 0.0002. The calculated t-value is larger than the tabulated t-value and the p-value is smaller than 0.05, thus the null hypothesis is rejected. Based on this, it is concluded that male teachers' perception regarding the micro-teaching skills and its effect on teaching ability is significantly higher than that of female teachers.

Findings

Micro-teaching skills had a greater positive perception among the male teachers (72.30%) compared to the female teachers (43.60%). The female teachers' neutrality level (33.60%) and negative level (22.70%) were higher than the male teachers' neutrality (16.20%) and negative (11.50%). The male teachers have a higher mean (3.92) and a lower standard deviation (1.01) than their female teachers (3.25, 1.17), which suggests that male teachers, on the average, have more favourable and less varied attitudes than female teachers.

The results show that there is a statistically significant difference between the male and female teachers' perceptions on the impact of the micro-teaching skills on the teachers' ability, $t = 4.82$, $df = 238$, $p = 0.0002 < 0.05$. Male teachers had significantly more positive perceptions ($M = 3.92$, $SD = 1.01$) than female teachers ($M = 3.25$, $SD = 1.17$) and a higher consistency of their responses. Thus, the null hypothesis is rejected and it can be concluded that female teachers have less favourable opinions than male teachers.

Discussions

The results show that male teachers have positive and stable attitude on microteaching skills (72.30% positive, mean = 3.92, SD = 1.01) compared to the female teachers (43.60% positive, mean = 3.25, SD = 1.17). This gender gap could be attributed to context and culture. According to Aung & Soe (2025), Ogunleye & Adebayo (2025), and others, there were no significant gender differences in the perceptions of microteaching; however, there is some caution about the reinforcement of stereotypical gender roles and how this impacts female teachers in the microteaching environment, as they feel less psychologically safe (Al-Mahrooqi & Denman, 2025). Perhaps the high neutrality and negativity of female teachers is related to their reflective engagement that does not necessarily result in positive perceptions (Putri & Hidayat, 2024). This greater variability among the females (SD = 1.17) suggests divers individual experiences, which could be associated with the competency gaps of the females (Sari & Wijaya, 2024). Gender equity is a critical issue to consider in the context of microteaching spaces, and feminist approaches draw attention to the need to consider spaces that draw attention to gender equity (Khan & Ahmed, 2025).

The result shows that there is statistically significant difference between the perceptions of microteaching skills of male teachers and female teachers ($t = 4.82$, $p = 0.0002$). The reason for this difference could lie in the psychology and the social situations in teacher education institutions. Microteaching environments have been shown to promote traditional gender roles, with male trainees feeling more confident and psychologically safe whilst female trainees feel more anxious, self-doubtful and under pressure to perform (Al-Mahrooqi & Denman, 2025). In turn, females might not see microteaching as as valuable or as stressful as males do, which would account for the lower mean score and higher standard deviation of female responses. Moreover, feminist perspectives indicate that if not designed with a gender-sensitive approach, microteaching might reinforce the latent and dominant practices that are harmful to female trainees (Khan & Ahmed, 2025). Further support for this interpretation is provided by the greater consistency among male teachers (SD = 1.01) than among female teachers (SD = 1.17), with more consistent positive attitudes among males which may indicate a sense of comfort and confidence among males in the microteaching situation. The results of this study highlight the importance of setting up an equitable and

supportive microteaching environment in teacher education programs to meet the gender-specific problems and to increase the perceived value of microteaching for all teacher candidates.

Conclusions

Based on this, it is concluded that male teachers have significantly more positive and consistent perceptions of the effects of micro-teaching skills on teaching ability than female teachers. Female teachers exhibited more neutrality and negative responses, resulting in less belief and lack of confidence in the effectiveness of micro-teaching as a training tool than did the male teachers.

The conclusion is that there is statistically significant difference between male and female teachers' perception of the impact of micro-teaching skills on teaching ability. Male teachers have significantly more positive and stable attitudes than female teachers. The p-value is smaller than the significance level, so the null hypothesis is rejected, and the difference between the two groups is not likely to be due to chance.

Recommendations

1. Gender-Sensitive Professional Development – Training programmes shall include the development of teachers' awareness and use of teacher-student relationship as a method of classroom management, which is considered to be more 'neutral' and uncertain' for girls.
2. Peer Mentoring – Ensure mentoring relationships are formed between experienced male teachers (with good positive perspectives) and female teachers to pass on effective relationship building strategies.
3. Qualitative research – there should be further studies to gain insight into the underlying causes for the greater variability and neutrality of female teachers, such as sociocultural barriers.

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