

The Effect of Video Recording in Micro-Teaching Activities on Preparing Female Students in Teacher Education Programs in the GCC Countries

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Abstract

One of the challenges facing instructors in the Gulf Cooperation Council (GCC) countries with regard to the training of female student teachers in pre-service teacher education programs using video recording in micro-teaching activities is the cultural attitude. Female students find it difficult to be video recorded for teaching purpose because of their religious beliefs and other restrictions like cultural restriction and tradition. This study aims to investigate the effect of video recording in preparing female student teachers in the practical teaching course at the Gulf Cooperation Council (GCC) countries in pre-service teacher education programs particularly in Ajman University, UAE using a quasi-experimental approach. The sample was 41 female students, who were randomly assigned to two groups, one of which used the video recording tool in their micro-teaching practical course (experimental group A, $n = 21$) and the other with non-video recording tool (control group B, $n = 20$). The list of observations and the questionnaire were used as study tools. Data analyses showed that the experimental group using the video recording tool was more effective in mastering the specified teaching skills and more motivational than trainee students in the control group which not used -video recording activities. The results suggest that within practical courses, video recording tool can be used as an effective and stimulating learning tool regardless of the conservative attitude of female students towards its use.

Keywords

Teacher Education Programs, Pre-services, Micro-teaching, Video recording, GCC countries

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Introduction

Within the last five years, women continuing with their higher education in the Gulf cooperation council countries (GCC) — United Arab Emirates (UAE), Saudi Arabia, Kuwait, Oman, Qatar, and Bahrain, “where women share the same socio-economic and cultural background” have improved by over 90 percent, allowing them to take up high positions in society. However, despite the increasing number of women enrolling in higher education, the desired disciplines by these women are still specializations in the humanities and social sciences, especially education (Albaker, Bruce, Davidson, Schlaffer, & Kropiunigg 2017). The GCC labor market has witnessed a marked increase in the ratio of females to males. This trend is expected to continue as the countries enters the next decade. However, restrictions still apply to certain professions, because of factors related to cultural and religious sensitivities (Buttorff, Al Lawati, & Welborne 2018). For instance, most UAE national's females work in the education public sector (government schools), based on the date of the Ministry of Education statistics for the Academic year 2018 / 2019 (Table 3.2), 72% of the teachers in public schools were female. In recent years, however, a number of national's females have entered the private sector, but their overall presence in this sector is still of marginal nature. The proportion of national's females has gradually increased in the education sector, which may be largely attributed to government's Emiratization policy. The government has initiated several incentive programs to encourage national's females to explore career opportunities in the educational private sector, and their proportion in the educational private sector is expected to increase in the next five to ten years (Ministry of Education 2020).

Table 1.

Distribution of teachers in UAE according to their Sex for the Academic year 2019 / 2020

	Public Schools		Private Schools		Total
	Female	Male	Female	Male	
Kindergarten	2191	0	3527	131	5849
Cycle 1	5836	537	10171	1636	18180
Cycle 2	2892	2356	3507	1305	10060
Secondary	2945	2619	4974	2769	13307
Common Cycles	1352	425	18529	4321	24627
Total	15216	5937	40708	10161	72022

The increasing demand for women working in the field of education has created many challenges for higher education institutions to apply training methods that focus on students 'acquisition of different teaching skills and competencies. Integrating video technology in micro-teaching sessions for teacher training courses is considered one of the best methods of the training student teacher in the preparation stage according to the opinion of many researchers (Elias 2018; Gurbuz 2015; Kourieos 2016; Osmanoglu 2016; Özcan & Gerçek 2019; Shaw 2017; Umeh, Mogbo, & Nsofor 2015).

Defining Micro-teaching

Micro-teaching education is one of the most prominent educational methods in the field of teaching skills training. This approach emerged from Stanford University in the United States of America by Dwight Allen and Rayan in the mid of 1960 at Stanford teacher education program (Aydin 2016; Görgeçen 2003; Saban & Çoklar 2013; Sevim, 2013). According to Aydin (2013) who pointed out that, they noticed that there is a big gap between the theory and practice, as teacher training programs focus on cognitive aspects and neglect the skill aspects that the teacher actually needs in the classroom. Which required research on the way to satisfy the teachers 'need in practical skills, so the idea of mini teaching emerged as a method that focuses on the skills aspects. Then it was widely applied and has been used to develop educators in all forms of education (Karaman & Şahin 2017). Chen, Zeng & Yang (2010) pointed out that micro-teaching is specifically designed for teacher nominees and allows them the ability to practice.

Micro-teaching is an opportunity to be conscious of the nature of the role of a teacher in terms of teacher candidates before school experience. It performs a role function between information and data learned gained at the curriculum and application (Golightly 2010).

There are many definitions of partial learning in educational literature. It was defined as a method that can be used to train pre-service students teachers who are in the last university stages of their studies, where that through this strategy mastery and development of new skills for teacher students, or modification of previously learned skills, or acquisition of new skills (Akman 2018; Arsal 2014a; Kumar 2016; Shaw 2017). On the other hand, it was also defined as a method that works to acquire and develop new skills and to improve other skills. The trainee student (teacher) educates a small group of students for a period of time (5-10) minutes. These lessons are usually recorded with a video camera and re-viewing, where the student-teachers' performance is analyzed into a set of behavioral skills and work to evaluate them by the supervisor and students Colleagues, student-teacher himself, benefit m Feedback from criticism in an attempt to improve his skills and performance (Fernandez 2010; Godek, 2016; Onwuagboke & Osuala & Nzeako, 2017).

Stages of Micro-teaching

Micro-learning takes place at a number of basic stages, as indicated by researchers, educational experts, and academic literature and the most important of these are (Al-Takhyneh 2016; Bilen 2015; Mahmud & Rawshon 2016):

- **Lesson planning:**

At this stage, the trained teacher will define a set of elements that include: Select the topic, determine the skills, lesson objectives and outcomes, activities, duration of teaching, determine the level of students, prepare the topic content, method, learning style, and assessment tools.

- **Teaching stage:**

In this stage, the trainee teacher translates and application the plan that he prepared it into practice, taking into account the implementation of what was planned in the previous stage and adhering to the time set for it.

- **The stage of observation, control, and criticism:**

This stage is considered one of the most difficult, complex and transparent stages, as it is not limited to analysis and dialogue only, but also includes criticism and expressing an opinion on the performance of the trained teacher.

- **Re-planning phase:**

how the trained teacher repeats the planning of the lessons in order to enhance the strengths and overcome and correct the weaknesses, that were not addressed skillfully while teaching on the first attempt, as the process is done Planning either on the same topic or on a new topic to develop the skills of a trained teacher.

- **Re-teaching stage:**

This stage is considered to be one of the most critical micro-teaching stages if the need arises to do so. Since the outcomes of the analysis, dialog and discussion and their benefits do not help all trainees but through re-teaching, and the aim of this stage is to try to connect all trainees to a high level of teaching skill.

- **Re-criticism / assessment stage:**

The purpose of this stage is to evaluate the performance of a trained teacher and, for the last time, this stage may include three evaluation methods, namely: the student's assessment of himself, the assessment of his colleagues and the evaluation of the supervising instructor.

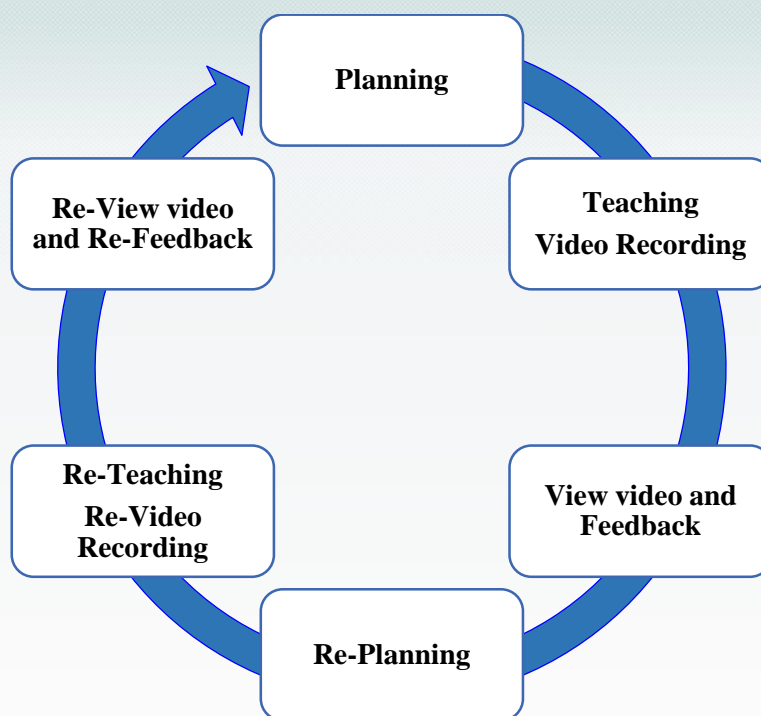


Fig. 1. The Micro-Teaching Stages

Video recording

A number of studies have confirmed the importance of video recording in teacher education, and use it as a tool for improving the student teachers' performance within micro-teaching (Arsal 2015b; Chizhik & Chizhik 2018; Koross 2016; Shaw 2017). Acheson (1964) studied television feedback after video record using two groups. One group received only verbal feedback from their instructors. However, the other group received verbal feedback and video recording feedback. He founded that the group who received both feedback produced greater effects on the student teachers' behaviors and performance. Additionally, Cyphert and Andrews (1967) used the videos for two reasons: observation and feedback. Further, Olivero (1970) announced that micro-teaching with video recording was more effective in concepts of excellent skill and teaching experiences because the teachers' student can see their mistakes during the presentation. According to Kourieos (2016) recording the video and viewing it again after the presentation allows the trained teachers the ability to identify, isolate and capture significant gestures and movements that may not have been seen. Baecher (2011) added that using video recording for trained students will improve and develop their understanding of the actual process of teaching in schools. On other hand, further research studies referred to the significance, role, and efficacy recordings of video of trained teachers' in the analysis of their microteaching via watching video recording and giving feedback from instructors and peers. Which leads to encouraging cooperative learning which finally increases their understanding of the process of teaching in the actual classroom in schools, in addition, to help them to distinguish skills that need improvement (Baecher 2011; Fernandez 2010; Kpanja 2001). Another study conducted by Ekpo-Eloma, Arikpo & Ebuta (2014) revealed that there is positive effectiveness of video recording on micro-teaching for trained students, and there is a relation between using video recording and teachers' student self- assessment without considering their gender. Moreover, other studies referring also to the use of video technology, it may be useful to enhance reflection-on-work, which refers to the kind of reflection that takes place when thinking back to practice (Kourieos 2016; Lazarus & Olivero 2009; Sherin & Han 2004). The researchers summarize that the literature points out that there is an acceptance of micro-teaching that connect with video recording as an effective way to provide trained students with real practice of a real classroom environment in order to prepare them as qualified teachers in the schools in the future after their graduation from universities.

The aim and questions of this study

The aim of this paper is to address the following questions:

RQ1: Does the use of the recording in Micro-Teaching Activities have an effect on Preparing Female Students in Teacher Education Programs in The GCC Countries with their conservative attitude of using video for cultural and religious reasons?

RQ2: What are the attitudes of female students towards the using of video recording in microteaching sessions?

RQ3: Does the attitudes of female students towards the use of video recording in microteaching sessions vary according to Age, nationality and, religion?

Significance of the study

This study is significant for two reasons:

First, several approaches have been conducted to strengthen the programs of student teachers in pre-service teacher education programs, using video recording in micro teaching sessions is one of the recent ones. Unfortunately, this important aspect of teacher-training program has not been given due attention in GCC female education system due to the conservative attitude of female students towards using video recording in micro-teaching activities.

The main reason is that female students find it difficult to be video recorded for teaching purpose because of their religious beliefs and other restrictions like cultural restriction and tradition. We could not spot any research project investigate the effect of using video recording in the training of female student teachers in pre-service teacher education programs in the GCC countries. Therefore, this is the first project on effectiveness of using video recording in microteaching sessions in the training of female student teachers in pre-service teacher education programs in GCC countries and we hope this research leads to more quantitative and qualitative research in training female student teachers in pre-service teacher education programs in all Arab states.

Second, the results of this study will provide a clear vision for decision-makers in GCC educational systems on the possibility of adopting video recording in the micro teaching sessions as essential and effective tool for preparing female students in teacher education programs.

Limitations of the study

This study has the following limitations.

- This study will deal with one of the GCC country; namely UAE.

The Gulf Cooperation Council (GCC) was founded in 1981 by Saudi Arabia, Bahrain, Kuwait, Qatar, Oman and the United Arab Emirates, all of which share similar historical, geographical, political, economic, religion, language, traditions and cultural factors.

- It will deal with female students' teachers in pre-service teacher education programs in Ajman University.

Methodology

2.1. Participants

The participants in this study are made of 41 female students who are in the micro-teaching course practically, and this is core course for all the students in Department of Education at the Humanities and Sciences College at Ajman University. These students were divided in two group with a group of 21 students and another group with 20 students. First group of 21 students were putting in the experimental group and the second one with 20 students were considered as control group. The below figure shows the geographical area of the participant.

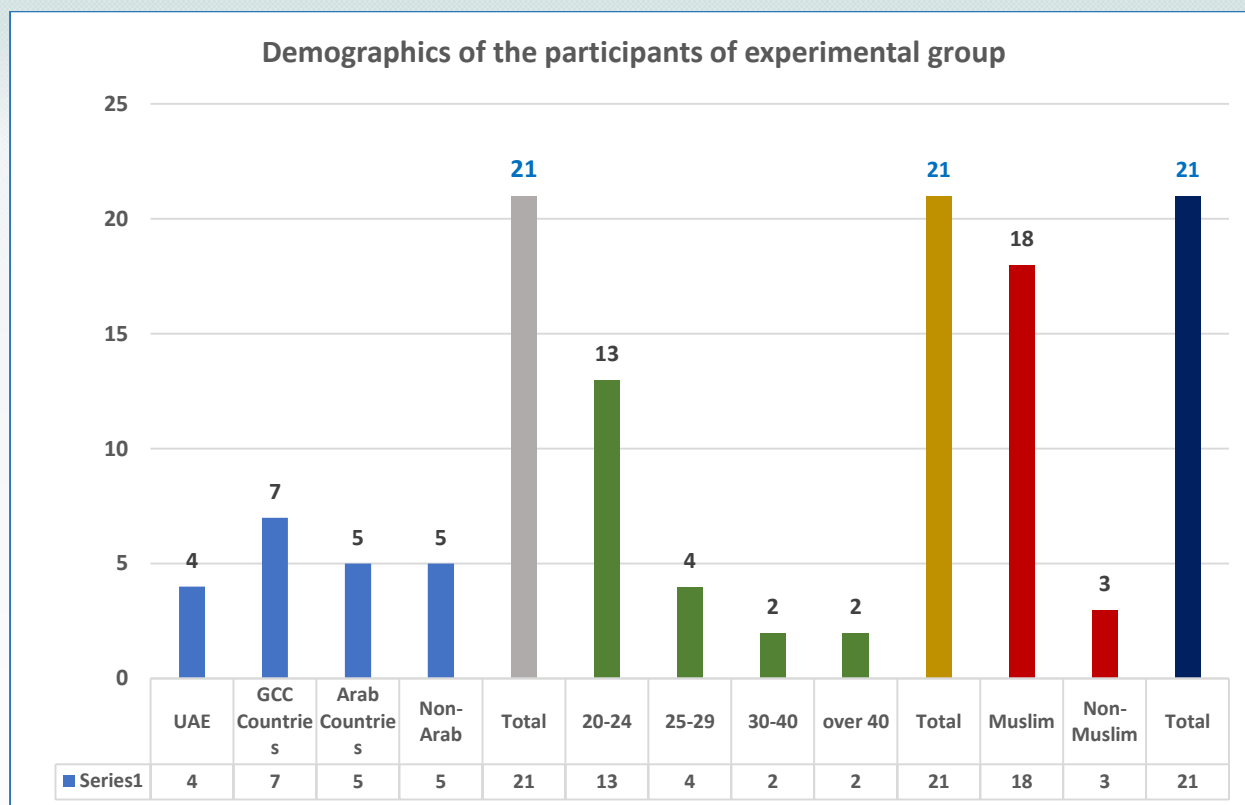


Figure 2. Demographics of the participants of experimental group.

1.2. Study Approach

A quasi-experimental approach was used due to its appropriateness to the aims of the study. In the current study, the researcher used two groups of students (Experimental group 21 students) and (control group 20 students). In the control group, the participants presented their class without using the video-recording tool in their micro-teaching sessions, but in the experimental group were learned the same topics via using the video-recording tool in their micro-teaching sessions. The course topics were taught during the first semester of the academic year of 2019/2020.

1.3. Study tools

This research paper relies on two main data collection methods, observation and questionnaire technique. This is described in more details in the following part.

- **Research instrument: Observation list (Observation card)**

Researchers reviewed educational literature and related research using the Micro-Teaching Method (Al-Takhyneh 2016; Kourieos 2016; Koross 2016). To obtain a list of the skills that a student trainee must practice as a teacher in the classroom, such as Preparation and excitement skills, explanation and presentation skills, questioning skills, teaching skills, movement and organizational skills, reinforcement skills, and teaching assessment with total skills were (20) skill. The Likert pentagon scale has been selected, which includes five scales that measure the occurrence of knowledge and skills practice in the study tool paragraphs: excellent and has five marks, very good has four marks, good and has three marks, acceptable and has two degrees, and poor and has one mark. Consequently, the total mark a student can get was 20, (After instructor supervisor converted the degree to 20 by dividing highest mark on observation list 100 On it on 5), for example, if the student gets the total mark 90, this means that his degree from 20 will be 18.

The validity and reliability of the observation list instrument

To measure the validity, multiple number of specialists in educational sector in different universities in UAE were selected to share with them the observation skills list to measure the validity. Those

specialists were given written notes relevant to the observation so that the researchers can enhance and make changes in order make sure the objective of the study is fulfilled. The criteria of the observation of those specialists were chosen from adjustment, removal, and addition. Thus, the used tool is made of 20 skills and measurement of being honest were taken in consideration for random practice for this mentioned field.

The reliability was also tested using inter-rater reliability or inter-rater agreement method between the observers. Where two of the observers were used to observe the teaching behavior of the same trainee student at the same time. The observation list was applied to eight trainee students who were taken from outside the study participants. The agreement ratio between the two observations was calculated using the Holste equation which is formulated as:

$$\text{Coefficient of Reliability} = 2M / (N1+N2)$$

The finding result by the Holste equation was 0.845, which is an appropriate percentage, which indicates the consistency of the observation form, and thus its reliability in evaluating the teaching skills of the trained student teachers covered by the study.

- **Research instrument: Questionnaire**

To discover the students' experiences of the experimental group about using recording video in micro-teaching courses.

A Likert-scale based questionnaire was administered. The structure of the questionnaire consisted of two parts. The first part of the questionnaire included the background information of the participant. In the second part of the questionnaire, there were 25 items divided into three themes to evaluate the effectiveness of video recording in micro-teaching sessions. The first theme consists of ten items to investigate participants' attitudes towards using video recording in micro-teaching sessions. The second theme consists of five items ask to determine their feeling when they presenting their class to their instructor and colleagues using video recording., The third theme consists of ten items to determine their feedback after using video-recording in their teaching sessions. The Likert scale was formulated with determining the rating period of each point. The range of the period is higher with higher points, so one point is equal to (1.00-1.80) range period, and following structure explains more about the relationship between two values (point and range period): two points equal to (1.81–2.60) which represent little range period, three points equal to (2.61-3.40) which is considered as moderated range period, four points equal to (3.41-4.20) which is considered high range period, and finally five periods equal to (4.21–5.00) which means the highest or very high range period.

- **The validity and reliability of Questionnaire**

To measure the validity, multiple number of specialists in educational sector in different universities in UAE were selected to share with them the observation skills list to measure the validity. Those specialists were given written feedback relevant to the questionnaire so that the researchers can enhance and make changes in order make sure the objective of the study is fulfilled. The criteria of the questionnaire of those specialists were chosen from adjustment, removal, and addition. Thus, the modification to the questionnaire was made of 20 skills to fulfil the objective of this study.

Table 2.

Reliability coefficients for the three themes..

NO.	Theme	NO. of items	Cronbach's Alpha
1.	Video recording	10	0.885
2.	Feelings	5	0.893
3.	Watching video	10	0.832
Total		25	0.912

To measure the reliability of the questionnaire, the internal consistency coefficient was used to measure the three questionnaire themes. To verify the consistency of the study tool, Cronbach's a was used. It was applied to an exploratory sample of Trainee students as teachers from outside

the study sample consisting of (10) students, and the reliability coefficient calculated by using the method of the coefficient of Test-retest reliability and internal consistency of the Cronbach alpha for each theme individually and for the three themes together as seen in the Table (2). Where the total the overall reliability coefficient value of the three domains as a whole was (0.912).

2.4. Equivalence of experimental and control groups

To examine the equivalence of the participants between the Trainee students of experimental and control groups. The researchers applied the observation list during the first two weeks of the beginning of the 1st term of the 2019/2020 educational year. The objective of this application was to make sure the equal balance of these two groups by having observation of the class for all the students who are enrolled for the micro-teaching course of experimental and control groups. After that, a t-test was then applied to compare the findings to ensure equivalence. The findings are listed in Table 3.

Table 3.

T-test of pre-test results: experimental and control groups.

Group	N	Mean	Standard Deviation (SD)	T. value	Sig. (tailed)	Sig. level
Experimental	21	10.23	2.35	0.542	0.590	Not Significant
Control	20	9.83	2.87			

It is shown in above table that the extracted value of P is 0.590 which is bigger than the value of 0.05 which means that it is not important or enough value at value of 0.05. This indicates that no huge changes between the two groups of study. Based on the quasi-experimental method, the investigational group of study was same as the control group prior to the implementation of this method.

2.5. Study procedures

In the present study, the Video Recording in Micro-Teaching used on Preparing Female Students in Teacher Education Programs in The GCC Countries. After the researchers designed the observation list and the questionnaire and confirmed their validity and reliability, the study has been conducted in the following steps of the micro-teaching technique defined by (Ananthakrishnan 1993; Büyükkaragöz & Çivi 1999) have been followed at the stage of readiness and delivery of the course:

- The selection of study participants, which included (41) female students, was split into two groups: (21) experimental and (20) control.
- Observation list has been used in the first two weeks of the beginning of the first semester of 2019/202020 of the academic year to ensure the equivalence of the two groups by means of a class observation for all students of the study sample.
- Students of the experimental group have been trained for four weeks.
- Trainee students were introduced to the importance of micro-teaching and how to use it for training purposes.
- Each trainee student was assigned to implement a micro-lesson, in light of the planning process he had done himself.
- All the micro-teaching lessons of the trained students have been recorded in videos.
- The micro-lesson executed by the trainee student is displayed through the Data Show projector, then the notes are recorded by the supervisor and students and the lesson analysis process is performed, in order to identify the strengths and weaknesses.
- Each trainee student performs the same micro-teaching lesson again, taking care of the feedback comments of the supervisor.
- Applying the observation list in Post- application after students were trained on the teaching skills necessary for micro-teaching by recording a score for student performance, by setting a grade for each skill according to the observation list.
- The maximum performance mark of the student was (100) the mark.
- After that, the data was entered into the computer and a statistical analysis process was conducted through the SPSS program in order to identify the impact of the use of micro-teaching

through the application of video recording on the preparation of female students teachers in practical teaching at Ajman University.

2.6. Statistical processing methods

The investigator used the SPSS software program to analyze the study data by performing a descriptive analysis, such as frequency calculation, average, and standard deviation (SD), including independent sample test (T-test) and one-way ANOVA, and the Scheffe test.

Findings

3.1 . Findings of the study attributed to Question 1.

RQ1: Does the use of the recording in Micro-Teaching Activities have an effect on Preparing Female Students in Teacher Education Programs in The GCC Countries with their conservative attitude of using video for cultural and religious reasons?

The difference between the mean of score of the student in the experimental group who familiarized with video recording method in their session about micro-teaching and the students who are within the control group with no use of video recording was calculated. In addition, in table 4 and 5 where two independent samples were used by t-test.

Table 4.

Means and SD of post-test results.

Group	N	Mean	SD
Experimental	21	16.43	1.72
Control	20	12.45	2.68

The above table shows the results of experimental group of the students with using video recording in practice of using micro-teaching session were varied as M is equal to 16.43 and SD is equal to 1.72 from the control group which M is equal to 12.45 and SD is equal to 2.68.

Table 5.

The independent sample t-test of post-test.

	Levene's Test for Equality of Variances		t-test			
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Equal variances assumed	1.937	0.172	5.679	39	0.000	3.979
Equal variances not assumed			5.620	32.094	0.000	3.979

It is shown in above table that the value of P is equal to 0.000 which is less than the value of 0.05 which indicates that it is observed a significant difference in the value of 0.05 which is considered as the significant value. This gives favorability to the student in the group of experiment. This indicates that using resocding in the session about micro-teaching has positive impact on preparing students of the experimental group in teacher education programs in the GCC countries with their conservative attitude of using video for cultural and religious reasons. This has been texted by using T-test.

3.2 . Findings of the study attributed to Question 2.

RQ2: What are the attitudes of female students towards the using of video recording in microteaching sessions?

- The below table shows the responses of the participants in the questionnaire (1-25 elements) which is about the experience of female students of using video recording the related sessions.

Table 6.

Descriptive statistics for the experimental group students' of responses to the items about the use of video recording in microteaching sessions

Theme	No.	Item	Mean	SD	Description
Video recording	Q1	Video recording has a positive effect on my progress as a teacher.	3.95	1.19	Agree
	Q2	Video recording assist and encouraged me to explore the strengths and weaknesses of my teaching.	4.15	1.09	Agree
	Q3	Video recording helped me to apply my learnt teaching skills.	3.90	1.12	Agree
	Q4	Video recording showed me my mistakes while teaching.	4.20	1.11	Agree
	Q5	Video recording gave me a fair assessment.	3.95	1.00	Agree
	Q6	Video recording made me conscious of what makes a good teacher.	4.20	1.11	Agree
	Q7	Preparing my first lesson and recording it helped me to improve my performance in the following lessons.	3.90	1.21	Agree
	Q8	Video recording helped me to improve my skills such as communication, critical thinking and others.	3.55	1.10	Agree
	Q9	Video recording will help me while teaching in schools.	4.15	.99	Agree
	Q10	Video recording improves the quality of teaching.	4.00	1.17	Agree
Feelings	Q11	I felt distracted while holding the microphone to record the video.	3.30	1.34	Neutral
	Q12	Video recording made me feel embarrassed.	2.85	1.46	Neutral
	Q13	Video recording made me feel nervous when presenting my class to my instructor and colleagues.	2.80	1.51	Neutral
	Q14	Video recording made me feel stressed.	2.95	1.28	Neutral
	Q15	The reinforcement that I have received from my instructor and colleagues is enough.	4.10	1.07	Agree
	Q16	I benefited from watching my video with my instructor and colleagues.	4.10	1.12	Agree
	Q17	Watching my video improved my performance as a teacher.	4.10	1.07	Agree
	Q18	Watching the video reduced my mistakes in the following lessons.	3.95	1.19	Agree
Watching video	Q19	Watching the video improved my way of thinking and teaching.	4.00	1.12	Agree

Q20	Video recording confirms the feedback from my instructor and colleagues.	4.15	1.09	Agree
Q21	Watching the video allows me to realize my way of speaking, movements and performance to improve them in the following lessons.	4.20	.77	Agree
Q22	Watching the video gave me an opportunity to improve my performance.	4.10	.91	Agree
Q23	Watching videos gave me an opportunity to learn by observing others.	4.35	.75	Strongly Agree
Q24	Watching the video enabled me to document important good/bad activities that cannot be noticed.	4.25	.72	Strongly Agree
Q25	Watching the video gave me an opportunity to assess myself.	4.30	.80	Strongly Agree
Total Mean for all items		3.90		Agree
Standard deviation		1.09		

The above table shows the questionnaire which is made of 25 questions and three subjects. The outcome in the tables shows the overall numerical mean which is 2.39 with SD value of 1.09 and this represents all the questioned about using the video recording in University of Ajman and specifically in micro-teaching courses. This falls in the level of "agree" from the point view of the student in the experimental group. Therefore, this gives positive sign of using video recording while preparing female student to be teach in education institute in GCC countries.

The same table regarding the answers to the question about observing others "Watching videos gave me an opportunity to learn by observing others" are set with the strongly agree and the answers of the participants are fitting with the students who have the excellent average of 4.35. Remarkably, for the last two questions with average lower than Q-23 had evaluated degree of 4.35 for Q-25 and 4.30 for Q-25.

For Q-13 with lowest mean of 2.30 considered a neutral value for the all questions, and the same thing has been observed in other questions like Q-11 with value of 3.30 , Q-12 with value of 2.85, and Q-14 with value of 2.95. the average scores for all the question meant to be in an agreement level.

- The research identified the experience of students who are female about using video in their micro-teaching courses, and also it has been explored by understanding the difference between in the experience of the students who video recording class prior of using the application and post using the application. T-test has been used to measure it before and after using the application and the results have been shown in the below table.

Table 7:

Means and SD of pre- and post-application test on attitudes towards video recording in microteaching sessions.

Experimental Group	N	Mean	SD
Post-application	21	3.90	0.67
Pre-application	21	2.69	0.38

Table 8:

Comparison of pre- and post-application scores of the questionnaire related to using the video recording in microteaching sessions attitude through the paired samples t-test.

Experimental Group	N	Mean	Differences	SD	t	df	Sig. (2-tailed)
Post-application	21	3.90	1.21	0.67	8.430	20	0.007
Pre-application	21	2.69		0.38			

The findings in above table illustrated that there has been a substantial difference ($t(20) = 8.430$,

$p < 0.05$) between the experimental group students' post-application mean (3.90) and their pre-application mean (2.69). according to these outcomes, it is verified that the students in the experimental experienced positively in using video recording in their sessions about microteaching.

3.1 . Findings of the study attributed to Question 3

RQ3: Does the attitudes of female students towards the use of video recording in microteaching sessions vary according to Age, Nationality and, Religion?

Average scores and standard deviations have been computed to the relevant questionnaire questions for the relevant details variables under consideration. T-test, one-way ANOVA tests, and LSD tests were performed to determine the significance of average differences.

Religion variable among students

T-test was utilized to assess the significance of the differences between religion in terms of using recording in microteaching sessions vary, as appearing in Table 9.

Table 9.

Means and standard deviations of the student answers based on religion.

Religion	N	Mean	SD	df	T. Value	Sig. (tailed)	Sig. level
Muslim	18	3.18	0.66	19	0.300	0.768	Not Significant
Non-Muslim	3	3.29	0.28	6.58			

The above table shows that the value of P is equal to 0.786 which is bigger than the value of 0.05 and indicates that the value is does not have bigger value (0.05) in which means there is no remarkable difference in the experience of the student using the video recording the mentioned sessions.

Age variable among Students'

The findings of the one-way ANOVA test for the answers of the students to this variable are presented in Table 10.

Table 10:

One-way ANOVA test for student Age variable.

		Sum of squares	df	Mean square	F	Sig. (tailed)	Sig. level
Student Age variable	Between Groups	2.852	3	.951	3.422	0.041	Significant
	Within Groups	4.724	17	.278			
	Total	7.576	20				

It is clear in table 10 is that the findings means a numerical remarkable difference in the experience of the female student who use video recording when it comes to their age in which the value of P is equal to 0.041. The value is fewer than the value of 0.05 which considered a required value. LSD test was brought to the implementation to understand the root of the differences by comparing and the results have been illustrated in the below table.

Table 11:

LSD test findings for variable age of the students'.

(I) Age	(J) Age	Mean Difference (I-J)	Sig.
20-24	25-29	.09154	.765
	30-40	1.08154*	.015
	over 40	-.53846	.196
25-29	20-24	-.09154	.765
	30-40	.99000*	.045
	over 40	-.63000	.185
30-40	20-24	-1.08154*	.015
	25-29	-.99000*	.045
	over 40	-1.62000*	.007
over 40	20-24	.53846	.196
	25-29	.63000	.185
	30-40	1.62000*	.007

The above table shows the focus on the root or the cause of the differences in the experience of the female student on using video recording their sessions about microteaching based of their age with starts from age 40 years old.

Nationality variable among Students'

The discoveries of the one-way ANOVA test for the answers of the students to this variable are presented in Table 12.

Table 12:

One-way ANOVA test for student Nationality variable.

		Sum squares	of df	Mean square	F	Sig. (tailed)	Sig. level
Student Nationality Variable	Between Groups	3.366	3	1.122	4.529	0.016	Significant
	Within Groups	4.211	17	0.248			
	Total	7.576	20				

It is clear in the above table is that the findings means a numerical remarkable difference in the experience of the female student who use video recording when it comes to their nationality in which the P value is 0.016. this value is less than 0.05 which considered a required value. LSD test was brought to the implementation to understand the root of the differences by comparing and the results have been illustrated in the below table.

Table 13:
LSD test findings for the variable nationality of the students'.

(I) Nationality	(J) Nationality	Mean Difference (I-J)	Sig.
UAE	GCC Countries	-.97714*	.006
	Arab Countries	-1.02400*	.007
	Non-Arab	-.43200	.213
GCC Countries	UAE	.97714*	.006
	Arab Countries	-.04686	.874
	Non-Arab	.54514	.079
Arab Countries	UAE	1.02400*	.007
	GCC Countries	.04686	.874
	Non-Arab	.59200	.077
Non-Arab	UAE	.43200	.213
	GCC Countries	-.54514	.079
	Arab Countries	-.59200	.077

The above table shows that the main cause of the difference in the experience of the female students for having video record in their sessions based on their nationality and most specifically Arabic countries.

Discussion

The outcomes of the findings of this research paper regarding the first question about the impact of using video recording on the female students are enrolled in micro-teaching for preparation for the teaching program in GCC countries based on their cultural and religious restrictions. The experimental and control group had very big difference among the students with favorability to the students in experimental group. It is shown in table 4 and 5 that the students with recording video have high mark of 16.43 than the student in the control group with no utilization of video recording with mark of 12.42. moreover, it is clear in table 5 that the value of P is zero which way less than the value of 0.05 and this means there is major difference in the level of value of 0.05 which is considered as an indication between the targeted groups. Thus, this meaning having video records in the session about preparing the female student for teaching programs in GCC countries and considering their conservative culture and religious in using video records.

The outcomes of the findings for the research paper has been achieved by relating it to the second question which was about the experience of the female student in using the video in their sessions as preparing for teaching program. The impact of using the video record in the related session illustrated that the female students in the experimental group fall under category of "agree" as shown in table 4, and this shows that the mean of the whole questions was 3.90 with SD is equal to value of 1.09. Moreover, the results of the applied questionnaire to the students in the experimental group before they began using video technology (pre-application) and re-applied it again, after 14 weeks of training (post-application). The results of applied a paired samples t-test to the pre- and post-application scores, the results were showed in Tables 7 and 8 show that the average of post-application was 3.90, compared to the pre-application scale (where the average was 2.69). Additionally, there was a significant difference ($t(20) = 8.430, p < .05$) favor for the post-application, which means that the trainee students of the experimental group have a positive attitude toward the using of using video technology in sessions during their preparation in Teacher Education Programs.

The third research question focused on determining whether the attitudes of female students towards the use of video recording in microteaching sessions vary according to Age, Nationality, and, Religion. Our findings (illustrated in Table 9, 10, 11, 12, and 13) the outcomes indicate the

student are varied based on their ages with acceptability older than 40 years and their nationalities with acceptability of the students from Arabic countries. However, for the religious factor there is not indication of major differences. This may be due to the fact that most of the trained students who represent a percentage (86%) of the experimental group are from the Muslim religion while the non-Muslim religion represents a lower percentage (14%) from students of the experimental group as seen in Figure 2. And therefore, regarding the religious restriction it did not have any differences.

These outcomes have come with aligns with previous studies (Arsal [2015b](#); Baecher [2011](#); Chizhik & Chizhik [2018](#); Ekpo-Eloma, Arikpo & Ebuta [2014](#); Fernandez [2010](#); Koross [2016](#); Kourieos [2016](#); Kpanja [2001](#); Lazarus & Olivero [2009](#); Omoniyi [2004](#); Shaw [2017](#); Sherin & Han [2004](#)). Having said that, the outcomes of the study did not match with the findings of other studies (Kurtts & Levin [2000](#); Harlin [2014](#); Ovens [2004](#); Peker [2009](#)). The outcomes from these papers showed that the students who are in the program of being teacher don't feel comfortable and are nervous when they are exposed to video recording during the session in which this will have negative impact on their performance and implementation.

Conclusions

This study focuses on investigating the effect of video recording applications on the preparation of female student teachers in practical teaching at Ajman University, which will be expected to increase in the competence of the teaching process for them in the future. The findings of this paper showed that having recording video in the relevant session will have positive impact on the achievement of the female students on their preparation of their teaching program in GCC country regardless their cultural and religious restrictions on them. Where the data analyses confirmed that the trainee students in the experimental group using the video recording tool were more effective in mastering the specified teaching skills and more motivational than trainee students in the control group which not used -video recording activities. Also, the outcomes showed that the female student's experience in the experimental group dominated with value of "agree" which indicates these students have higher potential and acceptance to use video record in their session.

Moreover, the outcomes indicate the student are varied based on their ages with acceptability older than 40 years and their nationalities with acceptability of the students from Arabic countries. However, for the religious factor there is not indication of major differences.

Recommendations

The researchers suggest the following recommendations in light of the findings:

- The introduction of the micro-teaching program using video recording within the teacher preparation programs in colleges of education in universities.
- Work to be the micro-teaching via using video recording is a compulsory course in the education colleges in the teacher preparation programs.
- Conducting further studies in the field of micro teaching, especially with regard to its various practical applications, whether in the field of teacher preparation and training programs.
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