Exploring Iranian TEFL Ph.D. Candidates and Faculty Members' Attitude towards Various Research Approaches: A Qualitative Study

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Abstract

The current study explored the attitudes of Iranian Ph.D. candidates of Teaching English as a Foreign Language (TEFL) and their instructors taking and teaching a course on Research Methodology (i.e., Quantitative, Qualitative, and MMR) towards various research approaches. In addition, the researchers intended to explore which research approach (qualitative, quantitative, or MMR) the participants preferred for conducting their dissertations. To this end, 14 Ph.D. candidates of TEFL and ten faculty members from different universities across the country were selected based

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on convenience and purposive sampling. They sat a semi-structured interview designed by the researchers. The results of Strauss and Corbin's (1996) grounded theory approach to qualitative content analysis, which comprises three levels of coding (i.e., open coding, axial coding, and selective coding), indicated that both groups of participants had positive attitudes towards MMR. The findings also revealed that the participants preferred MMR (mixed-methods research) and qualitative approaches over quantitative research for dissertations. Moreover, the participants noted that depending on the purpose of the study and the nature of the issue being investigated, qualitative research and MMR could be as effective as, if not more effective than, quantitative research. The findings also revealed that MMR was the most preferred research approach for both groups of participants. The findings might be useful for novice foreign language researchers, in general, and EFL researchers in particular, in that they need to take an independent course in the Ph.D. program to deal with and master MMR effectively.

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1. Introduction
1.1 Overview

Attitudes are qualitative assessments of individuals, groups, opinions, ideas, and other elements that indicate whether a person likes or dislikes them. Investigation of these attitudes is fundamental to social psychology and education (Johnson et al., 2022). Decades of research point to the importance of attitudes for comprehending how individuals understand the world (Wolf et al., 2020). Few studies, if any, have examined the attitudes of Ph.D. candidates and their instructors towards various research approaches and researchers' preferences regarding research approaches. To the best of the authors' knowledge, there appears to be a paucity of research that directly investigates the research approach preferences of both TEFL Ph.D. candidates and faculty members in Applied Linguistics.

Moreover, no one can dispute the importance of research in the lives of humans, particularly in the social sciences, education, and humanities. The educational systems of every country have to provide suitable circumstances for conducting research. Faculty members and Ph.D. candidates are the most crucial researchers in a higher education system; therefore, they should be adequately trained to carry out various research methods. Therefore, the educational system will then be able to provide the appropriate conditions for them to conduct their research. Additionally, due to the popularity of MMR in social sciences, especially in Applied Linguistics, the system must modify its antiquated and conventional perspectives on research methods and pave the road for the researchers to conduct their research. However, more research needs to be conducted on the attitudes of TEFL Ph.D. candidates and their instructors towards various research approaches. Therefore, the present study aimed to investigate the attitudes of TEFL Ph.D. candidates and their instructors towards the Research Methodology course and their research approach preference for doing their dissertations.

2. Literature Review
2.1 Background of the Study

Several inquiries have explored the research method most commonly employed in the field of Applied Linguistics, as well as the preferable research approach. The utilization of MMR, or mixed methods research, is a recent development within the domain of Applied Linguistics. Although it has become more popular, most Ph.D. applicants still need to understand and properly grasp it. The primary objective of this study was to examine the perspectives of Iranian TEFL Ph.D. candidates and their instructors on various research methodologies, as well as their preferences for research approaches, while determining topics for their dissertations. Consequently, this part presents a theoretical framework for the study. First, this article

reviews papers examining various definitions of attitudes and research in the field. Furthermore, the perspectives of various theories in research methodologies were considered. Finally, a survey was conducted to determine the research preferences for conducting a dissertation.

2.2 What is research?

Research is employed to obtain comprehensive knowledge relating to a specific topic. According to Nazem and Tabatabaei (2013), research produces new information through in-depth investigations. Richards and Schmidt (2002) explain research as the systematic study of an event, challenge, or phenomenon to acquire a deeper understanding of it and to develop corresponding theories and guiding principles. In the words of Mackey and Gass (2005), research is a systematic procedure that involves the collection and analysis of data in order to explore a study problem or question or to support researchers in developing a deeper knowledge of a particular situation. Moreover, Borg (2010) states that research generates and analyzes novel and extensive information about a specific subject matter. The significance of research in academic settings has long been recognized, and there is a growing emphasis on its role as a key approach to advancing professional growth (Borg, 2010). As Plonsky and Gass (2011) correctly put it, the advancement of social sciences, such as applied linguistics, is dependent on the conduction of research. In Applied Linguistics, researchers have observed a growing recognition and tendency towards MMR, which involves examining its methodologies, reporting procedures, reproducibility, evaluation, and motivation (Ioannidis, 2018).

2.3 What is the researcher's attitude?

The study of attitudes is highly valued in social psychology in general and Applied Linguistics in particular. Wolf et al. (2020) suggest that the cognitive, emotional, and behavioral components constitute an essential facet

of attitudes. Alternatively, an individual can link an object of attitude to their cognitive processes or ideas, emotional reactions, desires, or prior behaviors. Various methodologies have been established to evaluate attitudes, thus demonstrating their significance as reliable behavior indicators. According to Wolf et al. (2020), a substantial body of research has been conducted on attitudes, demonstrating their considerable theoretical and practical significance.

It is important to think positively about research because it enables one to explore the elements and potential in everything in greater detail. A positive attitude can motivate an individual to explore and examine a phenomenon. Much effort, perseverance, and motivation are required to keep looking at problems. A positive outlook, in fact, functions as a driving force for persistence. Various studies on participants attitudes towards research can be found in the literature delving into their feelings, actions, and behavior regarding research (Papanastasiou, 2005), disparities in research attitudes among students of public and private universities (Butt & Shams, 2013), and differences in the perception of research attitudes between male and female students (Saleem et al., 2014).

2.4 Various Research Approaches

Academic researchers employ several methodologies to investigate a particular topic or event. One methodology that can be employed is quantitative research, which entails the collection and analysis of numerical data, as well as the utilization of statistical techniques. An alternative methodology is qualitative research, which concentrates on comprehending social phenomena by interpreting non-numerical data, including texts, images, and sounds. The final and crucial technique is mixed-methods research, which integrates quantitative and qualitative methodologies and is gaining popularity in academic settings.

Numerous researchers have thoroughly documented research methodologies within the realm of academic papers. Creswell and Creswell (2017) extensively examined several study strategies, including quantitative, qualitative, and mixed-methods approaches. Similarly, Denzin and Lincoln (2018) offered a comprehensive examination of qualitative research, while Johnson et al. (2017) explored the benefits and limitations of mixed-methods research. The results of these studies point to the conclusion that the selection of a suitable research approach is of crucial significance for carrying out effective and relevant research. It is imperative for researchers to thoroughly decide upon their research inquiries and objectives in order to discern the most suitable method for their study so that they can conduct high-quality research that will enhance knowledge in their field of interest.

2.5 Quantitative Research Approach

Quantitative research is the systematic process of collecting and analyzing numerical data to generate findings and understanding. Data analysis involves the recognition of trends, the development of hypotheses, the investigation of causal relationships, and the application of findings to broader populations, also known as generalizability. Quantitative research is commonly employed in various scientific and social sciences disciplines, such as biology, psychology, economics, sociology, chemistry, and marketing (Bhandari, 2022). Quantitative projects often employ large sample sizes, prioritizing the number of responses rather than the complex and emotive insights that qualitative research seeks to uncover. This strategy ensures that the utilization of the quantitative research method is significantly more efficacious than the utilization of open-ended inquiries of the qualitative kind. Implementing this method is more efficient as it removes the necessity of dedicating significant time to coding a substantial quantity of open-ended responses.

However, it is common for TEFL graduate students and instructors to examine the human aspect of their research. In this regard, using qualitative and mixed methods research approaches can offer significant benefits in exploring the issues under investigation (Atai et al., 2018). It is important to note that the dominant research methodology adopted in the Iranian higher education context is characterized by a positivist and scientism-oriented quantitative philosophy (Zokaei, 2008; Atai et al., 2018). In addition, within the Iranian environment, qualitative research encounters numerous challenges with a predominant reliance on quantitative methodologies (Zokaei, 2008). He noted several challenges within the Iranian higher education context. These challenges include the predominance of quantitative research, misconceptions related to qualitative research, insufficient attention given to institutionalizing various research approach theories, disconnection between theory and methodology, restricted consideration of shared cultural factors, deficiencies in adequately describing experiences, absence of consensus on criteria for assessing qualitative research, the tendency to generalize at a macro level as a common practice, weaknesses in teaching methods for transferring social and communication abilities, and ignoring the qualitative potential inherent in quantitative information (Zokaei, 2008).

2.6 Qualitative Research Approach

The foundation of qualitative research lies in the constructivist or descriptivist paradigm, which suggests that multiple constructed realities depend on context, time, and culture. This paradigm can be explored by examining individuals' experiences and the dynamics of social situations (Ring et al., 2011). Qualitative research has emerged as a reliable approach to investigation across diverse academic study domains (Elliot et al., 1999). There has been a significant increase in the utilization of qualitative research methodologies across multiple fields and countries (Elliot et al., 1999).

McLeod (2001) argues that the tendency to prioritize qualitative research has been particularly notable in education and the social sciences. This preference stems from the unique opportunities that qualitative research provides to discover the complex nature of social interaction, often overlooked by traditional research approaches. Furthermore, as Goussinsky et al. (2011) highlighted, qualitative research is crucial in shaping one's worldview by emphasizing the intricate nature of the human experience and the social context within which individuals function. Hence, students must comprehensively understand the principles and methodologies involved in qualitative research and apply them effectively (Goussinsky et al., 2011).

Qualitative research holds significant importance in the field of Applied Linguistics as well as numerous other academic disciplines. The significance of qualitative research is of utmost significance in the field of Applied Linguistics and other academic disciplines (Soodmand Afshar & Hafez, 2021). In recent years, there has been a growing emphasis on creating qualitative research studies within the context of macro policies and their associated planning for development. Nevertheless, the pace of progress in this area is comparatively more gradual when compared to quantitative research investigations (Bakhshi et al., 2019). In light of the relatively recent emergence of the paradigm shift in research inquiry and qualitative research during the late 1960s and early 1970s, there is a pressing need to establish a clear definition for its genre (Belcher & Hirvela, 2005). Graduate students in Applied Linguistics must engage in at least one qualitative research project throughout their program. This requirement gives students a practical understanding of the nation's fundamental concepts (Soodmand Afshar & Hafez, 2021).

2.7 Mixed Methods Research Approach

The utilization of Mixed Methods Research (MMR) is gaining significant popularity as a third research methodology. This approach is supported by the most prominent methodologists in the social sciences (Timans et al., 2019). Additionally, it offers a framework for collecting and analyzing data from several sources within a singular research project. Scholars in the field of behavioral and social sciences have advocated for the utilization of both quantitative and qualitative research approaches in order to investigate various social phenomena. This perspective has been prominent since the 1960s, as evidenced by the works of Creswell and Plano Clark (2007), Onwuegbuzie and Daniel (2006), and Tashakkori and Teddlie (2003). The current synthesis stage, the mixing phase, has been utilized to characterize this novel movement (Johnson et al., 2005). The debate around integrating qualitative and quantitative components has mostly been addressed. Nevertheless, several unresolved issues concerning the quality of MMR remain that necessitate attention (Halcomb, 2019).

Amini Farsani and Mohammadi (2021) argue that in addition to the traditional mono-method quantitative and qualitative research syntheses, such as meta-analysis and meta-ethnography, there has been limited use of a Mixed Methods Research Synthesis (MMRS) approach among researchers aiming to address complicated review questions. This perspective emphasizes the pragmatic nature of conducting MMRS. According to Atai et al. (2018), researchers in English Language Teaching frequently face the complexities of studying human subjects. In order to address these challenges, the utilization of Mixed Methods Research and qualitative methodologies has been suggested as a potential solution. Furthermore, scholars in the field of Applied Linguistics exhibit a preference for employing the MMR approach as opposed to relying solely on quantitative or qualitative frameworks. Their

preference derives from their growing recognition of the advantages of adopting such an approach (Soodmand Afshar & Ranjbar, 2023). MMR has received significant interest and attention in social and behavioral sciences because of its focus on appropriateness and effectiveness in addressing specific research inquiries (Tashakkori & Teddlie, 2003). Furthermore, the concept of MMR has gained significant recognition as an academic sub-field in Teaching English to Speakers of Other Languages (Mirhosseini, 2018).

2.8 Studies on Research Approach Preferences

Hafez and Soodmand Afshar (2023) found that mixed-methods research was preferred among TEFL instructors and Ph.D. candidates. The authors also suggest that curriculum developers for the MSRT program and the Research Methodology course instructors should prioritize end-user preferences, specifically Ph.D. candidates, by incorporating the MMR approach (Hafez & Soodmand Afshar, 2023). Furthermore, a study conducted by Borrego et al. (2009) investigated the tendency toward research approaches among professionals in the field of Engineering education. The researchers included the empirical results obtained at a prominent international conference on Engineering education research after establishing the aims and objectives of several research methodologies. Instead of presenting, the other participants allocated to the group read each article and engaged in a 45-60-minute conversation. The study results indicated that the participants expressed disappointment with qualitative approaches and preferred quantitative choices. Borrego et al. (2009) exclusively recruited scholars with a strong interest in Engineering education for their research, limiting their findings' generalizability to other academic disciplines. However, it is important to acknowledge that researchers from different domains may have distinct preferences for employing diverse research approaches.

Furthermore, Lei and Liu (2019) examined the research approach trends in Applied Linguistics, while Zhang (2020) focused on the same analysis within the domain of second language acquisition. The findings of their study demonstrated that the procedure known as MMR is extensively utilized within this particular academic discipline. In their study, Riazi et al. (2018) analyzed the prevalence rate of methodological tendencies within the entirety of the Journals of Second Language Writing from 1992 to 2016. Among the research methodologies of MMR (85, 31.3%), quantitative (76, 27.9%), and qualitative (106, 39%), they discovered that the qualitative method was the most widely used approach. Furthermore, the methodological orientations of 4000 works published in 18 esteemed applied linguistics journals from 2009 to 2018 were examined by Amini Farsani et al. (2021). The findings indicated that the research using MMR, with a sample size of 1034 (26%), and quantitative studies, with a sample size of 1701 (43%), had the highest level of interest. Among the various study orientations, it was observed that qualitative research exhibited the lowest frequency, with a total of 993 instances, accounting for 25% of the total. The research conducted by Arani et al. (2018) indicates that there has been a significant level of interest in the studies related to MMR throughout the last decade. The prevalence of research in higher education institutions in Iran has increased, leading to a potential issue of excessive emphasis on quantitative methods. This emphasis may hinder researchers from employing MMR to comprehensively understand the research subject (Arani et al., 2018).

2.9 Statement of the Problem and Significance of the Study

No one can deny the importance of research in human life, particularly in social sciences, education, and humanities. Research might be used to create thoughtful information about any particular subject, which is why research is so important. Educational systems across all nations need to establish suitable

conditions to facilitate research. Faculty members and Ph.D. candidates are the most significant researchers in a higher education system; consequently, they should be sufficiently prepared to undertake various research methodologies. Furthermore, it would be advantageous for individuals if the higher education system knew of their preferred research approach since this would enable the educational system to provide suitable settings for their research attempts.

In addition, the system can potentially address its outdated and conventional perspectives on research methodologies, thereby enabling researchers to pursue their investigations. Due to the popularity of MMR in social sciences, especially in Applied Linguistics, MMR should be taught and emphasized as the most popular approach in the field. Supporting this issue, Soodmand Afshar and Hafez (2021) maintain that a researcher in Applied Linguistics prefers using MMR over pure quantitative or qualitative frameworks as they increasingly know its benefits. In light of this argument, the primary objective of the present study is to analyze the attitudes of Iranian TEFL Ph.D. candidates and faculty members on the various research approaches. The second issue to be investigated is TEFL faculty members' and Ph.D. candidates' research approach preferences. A qualitative approach was thus employed to explore the participants' attitudes towards various research approaches and their research approach preferences for dissertations. The findings of the current study might provide valuable perspectives for faculty members in the field of English Language Teaching (ELT), Ph.D. candidates, and researchers in the context of Iran.

2.10 Research Questions

Based on what was mentioned above and in order to address the objectives of the study, the following research questions were postulated:

1. What are the attitudes of Iranian TEFL Ph.D. candidates and their instructors towards the qualitative research approach?
2. What are the attitudes of Iranian TEFL Ph.D. candidates and their instructors towards the quantitative research approach?
3. What are the attitudes of Iranian TEFL Ph.D. candidates and their instructors towards the mixed methods research approach?
4. Which approach (Quantitative, qualitative, or mixed methods research) do Iranian TEFL Ph.D. candidates and their instructors prefer to adopt for dissertations?

3. Method

3.1 Research Design

Because attitude is a dynamic and multifaceted procedure, more than a quantitative paradigm focusing on measurable and static factors was required to comprehend it effectively. Therefore, we needed to employ a qualitative approach to respond to the research questions presented in this study. Consequently, we used qualitative data collection (i.e., semi-structured interviews) and qualitative data analysis (Strauss & Corbin's 1996 grounded theory approach qualitative content analysis) to accomplish the research goals and answer our research questions.

3.2 Participants

The participants of the study included fourteen Iranian TEFL Ph.D. candidates and ten instructors from different universities across the country (i.e., Ferdowsi University of Mashhad, Bu-Ali Sina University, Isfahan University, Tarbiat Modares University, Allameh Tabatabai' University, Tehran University, Shahid Chamran University, Tabriz University, Kharazmi University, Razi University, and Hakim Sabzevari University). Eight of the participants were male and the rest (N= Six) were female. Also, their ages ranged from 28 to 67. The participants sat a semi-structured interview, and their selection was determined through purposive and convenience sampling. The criteria for participant selection were based on individuals who had

successfully passed the Research Methodology course entitled Qualitative, Quantitative, and Mixed Methods Research, specifically Ph.D. candidates and their instructors.

3.3 Instrumentation

Semi-structured interview: Interviews are commonly perceived as interactions with others (Warren & Karner, 2015). Brinkmann and Kvale (2015) suggest that the construction of knowledge occurs through the dynamic connection between the interviewer and the interviewee. To delve more deeply into the issue, interview questions were designed by the researchers to suit the purpose of the study. Because there was no specific measure in the existing literature for investigating the participants' attitudes toward research approaches, the researcher conducted an individually-based semi-structured interview containing general questions to determine their attitudes toward various research approaches and research approach preferences; thus, the interview included four questions (see Appendix A). We conducted interviews with twenty-four participants (fourteen Ph.D. candidates and ten instructors) who were chosen based on their availability to understand the topic better. The participants were informed that their involvement in the study would be voluntary and that their responses would be kept confidential. The interviews investigated the participants' attitudes toward various research methodologies as well as their preferences for them. The interviews were conducted using either Farsi or English as the communication medium, depending on the preferences of the interviewees. The interviews lasted between 15 to 30 minutes for each participant. The answers were collected through audio-recorded messages on social media like *Telegram*, *WhatsApp*, etc. To validate the semi-structured interview, three experts in the field, holding Ph.Ds.' in Applied Linguistics and interested in qualitative inquiry, viewed and commented on it.

3.4 Data Collection Procedure

The Ph.D. candidates and faculty members of TEFL attended a semi-structured interview that focused on their attitudes towards various research approaches. Moreover, the semi-structured interview was conducted with twenty-four participants who had already taken and passed the research methodology course. Three experts with the experience in publishing qualitative research approaches validated the interview questions.

3.5 Data Coding and Analysis

The data analysis procedure employed in the current study was the grounded theory approach to qualitative content analysis. The audio-recorded semi-structured interviews were transcribed, coded, and subjected to content analysis. The researchers conducted open coding by categorizing the data into chunks and assigning a category label to the segments. Next, they conducted axial coding by making a connection between different categories. The researchers completed the particular coding procedure by selecting the core categories (Strauss & Corbin's (1996) grounded theory approach content analysis) and then subjected them to frequency analysis. This act of converting qualitative data into numerical codes that can be handled statistically is known as '*quantitization*' (Dornyei, 2007). As a result, scores or scales are used to statistically express particularly distinctive qualitative themes (Dornyei, 2007). In the present study, quantitization (i.e., frequency analysis) was used to quantify the qualitative themes by recording how frequently each theme was brought up in participants' responses. According to Dornyei (2007), coding simplifies the data by making specific and lengthy information adaptable and manageable so that it may be quickly determined, evolved, and combined.

4. Results

As mentioned earlier, a semi-structured interview consisting of four questions was conducted with twenty-four participants whose responses were audio-recorded, transcribed, coded, and subjected to frequency analysis. The following main categories were extracted by analyzing the participant's responses to the interviews displayed in Tables 1, 2, 3, 4, 5, 6, 7, and 8.

The first research question of the study (i.e., the first interview question) focused on the TEFL Ph.D. candidates and faculty members' attitudes towards *the qualitative approach*, the analysis of the results of which are presented in Tables 1 and 2.

Table 1.

TEFL Faculty Members' attitude towards Qualitative Research Approach

Code	Frequency	Percentage
I have **Positive attitude towards qualitative Research Approach.**	7	70%
Because of its:		
1. Thick description and deep understanding	6	60%
2. More flexibility and fewer limitations	4	40%
3. Higher suitability for our field of study	5	50%
4. Exploratory nature	3	30%
5. Longitudinal nature	1	10%
6. Low data fabrication	1	10%
I have negative **attitude towards Qualitative Research Approach.**	3	30%
Because of its:		
1. Unclear theory and definition	1	10%
2. Low generalizability	1	10%
3. Suitability for a limited population	1	10%
Total	10	100%

Table 2.

TEFL Ph.D. Candidates' attitude towards Qualitative Research Approach

Code		Frequency	Percentage
I have p**ositive attitudes towards Qualitative Research Approach.**	*Because of its:*	11	78.57%
1. Providing me with thick descriptions and a deep understanding		8	57.14% 35.71%
2. Dealing with human relationships, human attitudes s, knowledge, cognition, and behavior		5	
3. Higher suitability for our field of study		2	14.28%

4. Dealing with natural settings and real-world situations	2	14.28%
5. Having higher flexibility and fewer limitations	1	7.14%
6. Yielding more accurate results	1	7.14%
7. Attracting the audience better	1	7.14%
8. Exploratory nature and exploring Wh-questions	1	7.14%
9. Enjoying emic perspective (insider view)	1	7.14%
10. Being easier to learn and work with qualitative software	1	7.14%
11. Giving me a new perspective and different worldview	1	7.14%
I have negative attitude towards Qualitative Research Approach Because *of its:*	3	21.42%
1. Being complicated in nature	2	14.28%
2. Having low generalizability	2	14.28%
3. Suffering from subjectivity and human errors	2	14.28%
Total	14	100%

As Tables 1 and 2 show, in response to the first research question of the study, the attitudes of 79% of Ph.D. candidates towards the qualitative research approach was positive. In contrast, 21% had negative attitudes towards this approach. Similarly, the attitudes of 70% of instructors towards the qualitative approach was positive; however, the attitudes of 30% of the instructors towards the qualitative approach were negative. As indicated in Tables 1 and 2, both groups of participants mostly had a positive attitude towards the qualitative approach. Also, as indicated in Table 1, the main reasons for the faculty members' positive attitudes towards qualitative research included "Thick description and deep understanding" (60%), "Higher suitability for our field of study" (50%), and "More flexibility and fewer limitations" (40%). Moreover, as Table 2 shows, the main reasons for the Ph.D. candidates' positive attitudes towards qualitative research included, "providing me with thick descriptions and deep understanding" (57%) and "dealing with human relationships, human attitude, knowledge, cognition, and behavior" (35%). As indicated in Table 1, the main reasons for the

faculty members' negative attitudes towards qualitative research included, "Unclear theory and definition" (10%), "Low generalizability" (10%), and "Suitability for a limited population" (10%). Furthermore, as Table 2 shows, the main reasons for the Ph.D. candidates' negative attitudes towards qualitative research included, "Being complicated in nature" (14.5), "Having low generalizability" (14.5), and "Suffering from subjectivity and human errors" (14.5). The following are excerpts from the interviewees' responses about positive attitudes towards the qualitative approach. One of the faculty members remarked,

> [Excerpt 1]: I have a positive attitude because of its depth of understanding of the phenomenon in the world and studying language, it is a more appropriate design. We can use this approach to prevent data fabrication by students in quantitative design.

And one of the Ph.D. candidates mentioned,

> [Excerpt 2]: I have a positive attitude toward this approach because I think that we can survey human and human activities only through this approach, so I think it is the most appropriate approach in human education generally and in our field (AL) primarily, we can survey a phenomenon in-depth with accurate results.

Another one said,

> [Excerpt 3]: Qualitative research provides depth and detail and analyzes thoughts, feelings, and behaviors to explore the Wh- question.

Some excerpts of the respondents regarding negative attitudes towards qualitative research are included here; as one of the instructors mentioned,

> [Excerpt 4]: Unlike quantitative research, there is no clear definition, particular theory, or distinct set

of practices for qualitative inquiry. Researchers choose their procedure according to the topic.

Similarly, one of the Ph.D. candidates mentioned:

[Excerpt 5]: Qualitative research is a practical approach, but is complicated in measurement and scoring, tools elicitation. … if the researcher is educated well in this approach, he/she can do it well.

The second research question (i.e., the second interview question) explored the attitudes of TEFL Ph.D. candidates and faculty members towards *the quantitative approach*, the results of the analysis of which are presented in Tables 3 and 4.

Table 3.

TEFL Faculty Members' attitude towards Quantitative Research Approach

Code		Frequency	Percentage
I have positive attitude towards **Quantitative Research Approach.**	*Because of its:*	7	70%
1. Objectivity and accurate measurement		5	50%
2. Higher generalizability		2	20%
3. Being interesting and a clear approach		2	20%
4. Having higher validity and reliability		1	10%
I have negative attitude towards **Quantitative Research Approach.**	*Because of its:*	3	30%
1. Being practical only in some topics		3	30%
2. Having a higher data fabrication probability		1	10%
Total		10	100%

Table 4.

TEFL Ph.D. Candidates' attitude towards Quantitative Research Approach

Code		Frequency	Percentage
I have positive attitude towards **Quantitative Research Approach.**	*Because it:*	8	57.14%
1. Is objective and yields an accurate measurement		4	28.57%
2. Deals with exact numerical data and neat statistical patterns		3	21.42%
3. Enjoys less difficulty and complexity		3	21.42%
4. Enjoys higher validity and reliability		3	21.42%
5. Enjoys higher generalizability		2	14.28%
6. Is more scientific in nature		2	14.28%
7. Shows results clearly, using figures, charts,		2	14.28%

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and tables		
8. Has a representative sample, enjoys more participants	2	14.28%
9. Is the main source of information in our field	1	7.14%
I have negative attitude towards ***Quantitative Research Approach.*** *Because it:*	6	42.85%
1. Is not appropriate for our field, we cannot describe human behavior	2	14.28%
2. Suffers higher data fabrication	1	7.14%
3. Cannot deal with the topic deeply	1	7.14%
4. It is difficult to learn and apply this approach	1	7.14%
Total	14	100%

As seen in Tables 3 and 4, in response to the second research question of the study (i.e., interview question number 2), the attitude of 70% of the instructors towards the quantitative approach was positive. In comparison, 30% had negative attitudes towards quantitative approach. In the same vein, nearly 57% of the TEFL Ph.D. candidates held positive attitudes towards quantitative approach; it is worth noting that, as the results showed, most faculty members had a positive attitude towards quantitative approach. Also, as indicated in Table 3, the main reasons for the faculty members' positive attitudes towards quantitative research included, "Objectivity and accurate measurement" (50%), "Higher generalizability" (20%), and "Being interesting and a clear approach" (20%). Moreover, as Table 4 shows, the main reasons for the Ph.D. candidates' positive attitudes towards quantitative research comprised, "Is objective and yields an accurate measurement" (28.57%), "Deals with exact numerical data, and neat statistical patterns" (21.42), "Enjoys less difficulty and complexity" (21.42), and "Enjoys higher validity and reliability" (21.42). Furthermore, as Table 4 shows, the main reasons for the Ph.D. candidates' negative attitudes towards qualitative research included, "Is not appropriate for our field, we cannot describe human behavior" (14.28%). As indicated in Table 3, the main reasons for the faculty members' negative attitudes towards qualitative research consisted of,

"Being practical only in some topics" (30%). In line with the positive attitudes, one of the faculty members, for instance, mentioned,

> [Excerpt 6]: I have a positive attitude towards quantitative research because it has high validity and reliability, so we can easily generalize it to another context.

Or another one said,

> [Excerpt 7]: This research design is appropriate and valuable for the researchers whose minds are primarily statistical and who understand numbers better than word and verbal data. Digit minded, numerically-minded, I mean.

Also, one of the Ph.D. candidates remarked,

> [Excerpt 8]: A quantitative approach is preferred over qualitative research because it is more scientific, objective, fast, focused, and acceptable.

Moreover, some excerpts of Ph.D. candidates regarding negative attitudes towards quantitative approach are presented below.

> [Excerpt 9]: I think it is inappropriate for our field, but we should use this research approach when we want to express numerical and statistical results.

Or

> [Excerpt 10]: I generally do not accept the quantitative research method alone because I feel that it is numerical; it is straightforward to manipulate the numbers or push the results towards the desired results of the researcher. The results in this research method are unreliable; in this method, the shifting of numbers and results happens a lot; we can observe lots of data fabrication here in this approach.

The third research question of the study (i.e., the third interview question) investigated the TEFL Ph.D. candidates' and faculty members' attitudes

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towards *the MMR approach*, the results of the analysis of which are presented in Tables 5 and 6.

Table 5.
TEFL Faculty Members' attitude towards MMR Approach

Code	Frequency	Percentage
I have positive attitude towards **MMR Approach**	9	90%
Because:		
1. MMR is a solution to the previous problems /the defects of the previous methods	5	50%
2. It is complementary in nature, and it is the most comprehensive approach	4	40%
3. Employing it depends on the nature of the problem	3	30%
4. It gives a more accurate picture with more details	2	20%
5. It has high generalizability	2	20%
I have negative attitude towards **MMR Approach**	1	10%
Total	10	100%

Table 6.
TEFL Ph.D. Candidates' Attitude towards MMR Approach

Code	Frequency	Percentage
I have positive attitude towards **MMR Approach**	14	100%
Because it:		
1. Is more comprehensive, useful, and practical	6	42.85%
2. Gives thick description and deep understanding	4	28.57%
3. Deals with human relationships, the discovery of nature	3	21.42%
4. Can benefit from the positive points of both paradigms	5	35.71%
5. Explores research questions from multiple viewpoints, triangulate findings from various sources	4	28.57%
6. Is more probable for human **attitudes,** knowledge, cognition, and behavior	3	21.42%
7. Yields higher generalizability, accurate results	3	21.42%
8. It has higher validity and reliability	2	14.28%
9. Enjoys a higher number of participants	1	7.14%
10. Helps me understand more complex social phenomena	1	7.14%
11. Is the most difficult approach in measuring, analyzing, implementing, and interpreting data	4	28.57%
Total	14	100%

In response to the third research question, based on Tables 5 and 6, the attitude of 100% of Ph.D. candidates towards the MMR approach was positive. However, no participants in this group had negative attitudes

towards this approach. Similarly, the attitudes of 90% of instructors towards MMR was positive; however, 10% of instructors' attitudes towards MMR were negative. As indicated in Tables 5 and 6, both groups of participants mostly had a positive attitude towards MMR. Also, as indicated in Table 5, the main reasons for the faculty members' positive attitudes towards MMR included, "MMR is a solution to the previous problems/the defects of the previous methods" (50%), "It is Complementary in nature, and it is the most comprehensive approach" (40%), and "Employing it depends on the nature of the problem" (30%). Moreover, as Table 6 shows, the main reasons for the Ph.D. candidates' positive attitudes towards qualitative research comprised, it "Is more comprehensive, useful, and practical" (42.85), "Can benefit from the positive points of both paradigms" (35.71%), "Gives thick description and deep understanding" (28.57%), and "Explores research questions from multiple viewpoints, triangulate findings from various sources" (28.57). One of the faculty members supporting MMR remarked,

> [Excerpt 11]: Because of the complementary nature of the MMR, it can have more gains and benefits; again, it refers to the researcher's taste and the nature of the problem. Here in the MMR, at the same time, we have the philosophy of both approaches and use two approaches simultaneously so we can reduce each approach's negative points and problems separately.

Another instructor commented,

> [Excerpt 12]: This research design solves the problems identified in a stand-alone qualitative and quantitative research design. The mixed-methods research provides a much better complete picture of the data we gather.

Also, one of the Ph.D. candidates, for instance, stated,

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> [Excerpt 13]: MMR allows researchers to utilize the strengths of both qualitative and quantitative approaches and to explore research questions from multiple viewpoints. It can be constructive in understanding complex social phenomena by enabling researchers to triangulate findings from various sources and analyze relationships between variables in different contexts.

And the only respondent holding a negative attitude towards this approach mentioned that,

> [Excerpt 14]: Depending on the direction of the transformation data, we can talk about 'quantizing data' and 'qualifying data.' Which one is hard to teach is hard to answer, but I found the quantitative one is easier to chase and follow.
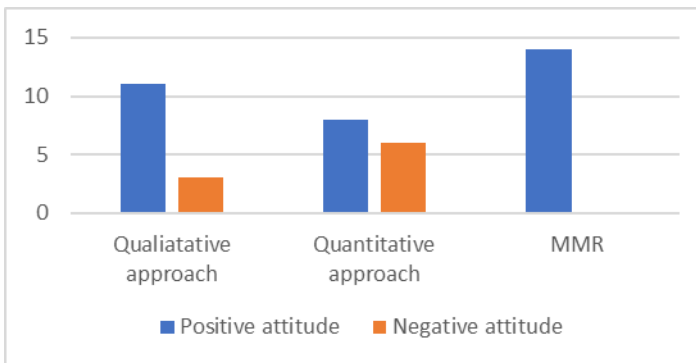

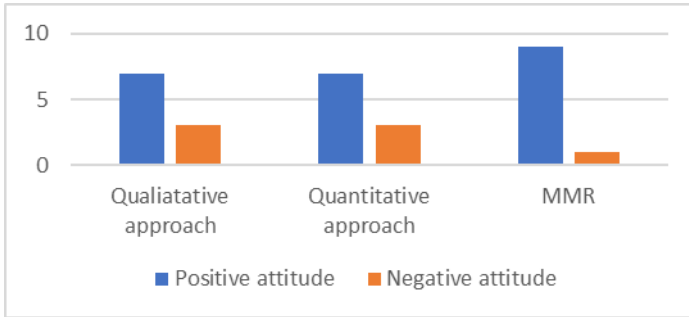*Figure 1.* TEFL Ph.D. Candidates' attitude towards Various Research Approaches

Figure 2. TEFL Faculty Members' attitude towards Various Research Approach

In Figures 1 and 2, you can see the negative and positive attitudes of Ph.D. candidates and faculty members towards various research approaches.

The last research question of the study (i.e., the fourth interview question) focused on the TEFL Ph.D. candidates' and faculty members' *research approach preferences in dissertations*, the results of the analysis of which are presented in Tables 7 and 8.

Table 7.

TEFL Faculty Members' Research Preferences for Dissertation

Code		Frequency	Percentage
I prefer MMR Approach	*Because it:*	6	60%
1. Gives me a better picture of reality		2	20%
2. Yields triangulation and accurate approach to comprehensive findings		2	20%
3. Can help generate a new theory		1	10%
I have no preference for any research methods	*Because it:*	3	30%
1. Depends on students' abilities and skills		2	20%
I prefer quantitative approach	*Because it is based on:*	1	10%
1. My own expertise and interest		1	10%
Total		10	100%

According to the data presented in Table 7, the research interests of a majority (70%) of the faculty members were identified as MMR concerning the fourth research question of the study. In contrast, it was found that 30% of the faculty members based their research selections on the abilities and capabilities of the students. In contrast, the faculty members did not favor qualitative research. Additionally, 10% of the faculty members preferred quantitative research.

Table 8.

Ph.D. Candidates' Research Preferences for Dissertation

| Code		Frequency	Percentage
I prefer MMR for dissertation	*Because it:*	6	42.85%
1. Enjoys higher generalizability		4	28.57%
2. Enjoys more reliability and yields more accurate results		3	21.42%
3. Gives ME a better picture of reality and an in-depth understanding of the phenomenon		3	21.42%
4. Benefits from the advantages of both approaches (Qualitative and quantitative)		2	14.28%
5. Enjoys Triangulation		1	7.14%
6. Is more comprehensive and enjoys an accurate approach		1	7.14%
I prefer qualitative approach for dissertation		3	21.42%
	Because it:		
1. Gives thick description and deep understanding of the phenomenon		1	7.14%
2. Enjoys emic and insider view		1	7.14%
3. Yields more accurate results		1	7.14%
4. It is suitable for my topic		1	7.14%
I prefer quantitative approach for dissertation	*Because it:*	2	14.28%
1. Was preferred by my supervisor		1	7.14%
2. Is more precise and has higher generalizability		1	7.14%
Total		14	100%
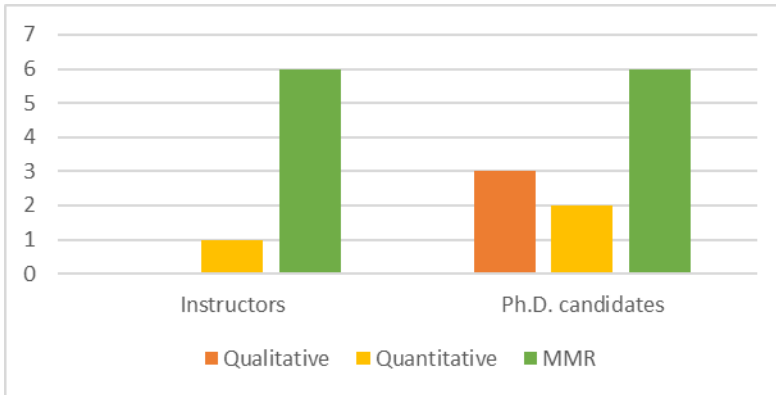
Figure 3. Ph.D. Candidates' and TEFL faculty members' research preferences for dissertation

As shown in Table 8, in response to the fourth research question of the study, the research preferences of 43% of the Ph.D. candidates were MMR. In comparison, the research preferences of 22% of the Ph.D. candidates were qualitative research, and the research preferences of 14% of the Ph.D. candidates were quantitative research. Furthermore, as indicated in Figure 3, TEFL faculty members and Ph.D. candidates were thus approximately of the same opinion, and most of them pointed out that they preferred the MMR. They believed that MMR provided a more comprehensive and precise picture of research problems, and the results were more valid and reliable than any single approach. One of the faculty members, for instance, stated,

> [Excerpt 15]: I automatically or subconsciously prefer MMR if they have enough knowledge, ability, and familiarity with MMR. I selected this approach because I think we have two approaches that help us to have excellent and accurate results, you can triangulate your data, you can explain the phenomenon better, and you can initiate and generate some sorts of theories.

Also, one of the Ph.D. candidates remarked,

> [Excerpt 16]: I have selected MMR because I said we should use the qualitative approach to work with humans accurately. When we want

to convince other professors in our community and our university, we should use the quantitative approach besides the qualitative approach. In our university, more professors are numerically minded. So, I have chosen MMR because I want a complete, accurate, and convincing result.

4. Discussion

The present qualitative study explored the Iranian TEFL Ph.D. candidates' and faculty members' attitudes towards various research approaches, along with the preferences of TEFL faculty members and Ph.D. candidates for dissertations. As the result of the analysis of the interviewees' responses indicated, both faculty members and Ph.D. candidates held highly positive attitudes towards MMR. Also, regarding the participants' research approach preferences, the results showed that both groups highly preferred MMR.

The first research question examined the Iranian TEFL Ph.D. candidates' and faculty members' attitudes towards the qualitative research approach. Based on our qualitative findings (i.e., semi-structured interview results), most participants in both groups had a positive attitude towards *the qualitative research approach*. The findings of this study are in harmony with those of Soodmand Afshar and Hafez (2021) and Elliot et al. (2001), who concluded that in Applied Linguistics and many other academic subjects, a paradigm shift has happened, and that researchers and academicians have a positive attitude towards the qualitative research approach. Moreover, in Applied Linguistics, most researchers prefer to conduct qualitative research due to its depth of understanding of the phenomena and its thick descriptions. As one of the faculty members mentioned,

> I have a positive attitude because of the depth and deep understanding of the phenomenon significantly related to human behavior.

Thus, as the remark above indicates, the participants in both groups (i.e., both the faculty members and Ph.D. candidates) hold positive attitudes towards qualitative approach mainly because this approach lets them *explore the issues more deeply* and *go into more detail.* According to Taherdoost qualitative research approach enables them to achieve the real meanings of actions, makes it possible for the researchers to interact with the participants while collecting the required data, address complex issues, thanks to the flexible and emerging structures, and exploring individuals' experiences historically in various situations (2022).

The second research question explored the Iranian TEFL Ph.D. candidates' and faculty members' attitudes towards *the quantitative research* approach. Based on our findings, most faculty members had a positive attitude towards the quantitative research approach; however, concerning the Ph.D. candidates, the findings indicated that they held neither positive nor negative attitudes towards quantitative research approach. The findings of the current study can be supported with those of Borrego et al. (2009) who found that the researchers preferred the quantitative research method. Moreover, our findings about Ph.D. candidates' attitudes are in line with those of Rahimi et al. (2019) who also found TEFL Ph.D. candidates and their instructors mostly followed quantitative research since this approach was easier to undertake and relatively straightforward to report the results. However, our findings stand in contrast with those of Elliot et al. (1999), who maintained that since the mid-1990s, a dramatic increase had happened in the use of qualitative research methods instead of quantitative approach, the main reason for which might be the fact that this approach could not measure all features of the given phenomenon only by numbers and statistics. As one of the Ph.D. candidates remarked,

> Quantitative studies are also good, primarily for
> basic sciences, statistics, and mathematics.

Similarly, as Taherdoost (2022) maintained that the participants might not prefer quantitative research approach most plausibly because of its short comings "in providing hidden reasons, in individual feelings, acts, etc.", "time-consuming sampling processes", "failing to describe the way social realities are shaped", and "taking snapshots of phenomena and obtaining data using objective methods". As it can be seen, most faculty members held positive attitudes towards quantitative approach because this approach has *high generalizability*, *high validity, and reliability*. Also, the Ph.D. candidates held positive and negative attitudes towards quantitative approach; their negative attitudes towards quantitative approach were mainly because quantitative approach might *suffer higher data fabrication*, its lack of ability to *deal with the topic deeply*, and its lack of *appropriateness for our field for not being able to describe human behaviors*.

The third research question dealt with the Iranian TEFL Ph.D. candidates and faculty members' attitudes towards *the MMR* approach. The study results revealed that most participants in both groups demonstrated positive attitudes towards this specific approach. The results are consistent with the findings of Atai et al. (2018), who similarly observed that ELT Ph.D. candidates prioritized MMR in their efforts to address the issues and disseminate their research. Furthermore, the findings of their study indicated that participants demonstrated a preference for selecting the MMR approach over either a purely quantitative or purely qualitative method. The results are also consistent with those of Bakhshi et al. (2019), who found that most participants preferred to conduct MMR due to its higher validity and reliability. Supporting this issue, one of the Ph.D. candidates said,

> I have a positive attitude towards this approach,
> and in my opinion, this approach is more
> comprehensive with reliable results.

As the results of the third research question revealed, the participants in both groups (i.e., both the faculty members and Ph.D. candidates) held positive attitudes towards MMR mainly because this approach let them *solve the previous problems in the two last approaches* (qualitative and quantitative), it was *a comprehensive approach*, it gave a *more accurate picture of phenomena under study*, and that this approach had *high generalizability*.

For the last research question, namely, research approach preferences, most participants in both groups favored MMR for their studies. However, choosing a research approach is mostly determined by the nature of the study problem (Creswell, 2003), as indicated by the remarks of some of the faculty members in the interview. Overall, the participants commonly held that the utilization of MMR offers an in-depth and comprehensive understanding of the specified occurrence. The validity and reliability of the conclusions obtained through this technique of inquiry are improved due to its flexibility and richness above those of mono-method approaches. The participants also asserted that a researcher could enhance the depth of investigation by employing Mixed Methods Research. The findings of current study are consistent with those of Lei and Liu (2019) and Zhang (2020), which indicate that the MMR technique is the most commonly employed method, and that its utilization demonstrates an upward trend. It might be claimed that Applied Linguistics researchers' interests and preference for employing mixed methods research in their investigations are increasingly enhanced.

Moreover, the study findings are supported by those of Amini Farsani et al. (2021) and Riazi et al. (2018), which indicate an increase in the proportion of studies employing MMR and highlight its significant prominence in recent

years. Therefore, it can be inferred that nowadays there is a dominant tendency towards MMR, and that researchers prefer employing this research method in their investigations. Nevertheless, the results of the present study differed from the findings of Borrego et al. (2009), wherein the researchers identified the quantitative approach as the preferred research method. Based on our findings, it can be inferred that the complementary utilization of both quantitative and qualitative methods decreases their weaknesses while capitalizing on their strengths. Supporting this point, one of the faculty members, for instance, stated,

> I am positive about this design because we have two approaches simultaneously and can reduce the problem and the challenges in (the) two approaches.

Another faculty member stated that,

> Because of the complementary nature of the MMR, it can have more gains and benefits; again, it refers to the researcher's taste and the problem's nature. Here in the MMR, at the same time, we have the philosophy of both approaches and use two approaches simultaneously so we can reduce each approach's negative points and problems separately.

Furthermore, Atai et al. (2018) argue that there is a growing tendency among post-graduate students of Teaching English as a Foreign Language (TEFL) to utilize Mixed Methods Research as their preferred approach for problem investigation and article publication. Using Mixed Methods Research can be extremely effective in examining problems within Applied Linguistics, as these issues often are connected with studying human beings (Atai et al., 2018). Nevertheless, it is worth noting that the predominant approach adopted within the Iranian higher education system is characterized by a positivistic perspective emphasizing a quantitative philosophy grounded in scientism (Zokaei, 2008; Atai et al., 2018). Since research is becoming

more common in higher education in Iran (Arani et al., 2018), excessively emphasizing the quantitative method restricts researchers from doing MMR to understand the research subject comprehensively. Based on the findings of the present study, it can be argued that the prevailing research environment in Iran, characterized by a traditional perspective, presents difficulties for Ph.D. candidates in selecting MMR regardless of their personal preference. Therefore, the education system must help researchers in selecting their desired research methodology by assisting and emphasizing Mixed Methods Research within the educational settings.

Based on the information presented in Tables 7 and 8, it is apparent that the faculty members and Ph.D. candidates in the study preferred MMR approaches for their research projects. This preference can be attributed to the belief that MMR provides a more accurate representation of reality and facilitates triangulation, enabling comprehensive findings. The generation of a novel theory can be facilitated. This line of argumentation is consistent with the research findings in this domain, particularly the outcome of the study conducted by Soodmand Afshar and Ranjbar (2023), which indicates there is a growing focus on MMR. That is, their findings indicate there is a significant increase in the awareness and interest among the researchers in Applied Linguistics to adopt MMR in their studies.

5. Conclusion and Implications

The study indicated that Iranian TEFL faculty members and Ph.D. candidates had a highly positive attitudes towards MMR. Moreover, the findings showed that TEFL faculty members and Ph.D. candidates preferred to conduct MMR for their dissertations due to its flexibility, reliability, validity, strength, and comprehensiveness.

The study might have some implications. Firstly, foreign language curriculum developers, syllabus designers, and material developers might benefit from the findings of this study and concentrate on generating curricula, syllabi, and materials which encourage the use of MMR and deal with how to conduct this approach properly. Secondly, the higher education system is suggested to reconsider its viewpoints on research methodologies, specifically emphasizing MMR. This thirst for modification and paradigm shift should encompass both theoretical and practical aspects, as both faculty members and Ph.D. candidates widely favor MMR. In this regard, the education system should promote and support researchers in employing Mixed Methods Research and inform them of the limitations of a positivistic quantitative approach. This method might prevent researchers from obtaining comprehensive insights and a profound understanding of the investigated phenomena. Thirdly, the education system must employ a group of highly competent, well-informed and MMR-conscious faculty members with the necessary expertise to effectively instruct mixed methods research. Furthermore, it is crucial for doctoral students to receive comprehensive training, both in theoretical and practical aspects, that equips them with the necessary skills to undertake and disseminate MMR studies successfully.

The current study, like many others, might suffer some limitations. The first limitation was participant selection. Sampling in this study was purposive and convenient. Larger and more randomly selected samples might produce more dependable results. The second limitation was exploring the faculty members and Ph.D. candidates' attitudes towards various research approaches and their research preferences in the specific context of Iranian TEFL education. Further research could be done to examine the issue further and replicate the study in other fields, disciplines, and contexts to make the findings more generalizable. The third limitation was the design of this study,

which was qualitative in nature. Future researchers can utilize the MMR approach to have more reliable and complete findings. Finally, other instruments like focus group discussions could be used in future studies to gain more in-depth and comprehensive findings or utilize questionnaires for higher generalizability purposes. The delimitation of this study was the participants, who were selected intentionally from among the Ph.D. candidates. MA students might also be good sources for data collection.

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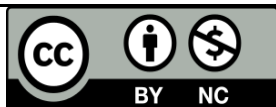
Appendix A

Semi-Structured interview sent through email, WhatsApp, and Telegram

Instructors' Questions

1. What is your attitude towards **the qualitative** research approach? Why do you think so? Please elaborate

2. What is your attitude towards **the quantitative** research approach? Why do you think so? Please elaborate

3. What is your attitude towards **the mixed methods** research approach? Why do you think so? Please elaborate

4. Which one do you think (*Quantitative, qualitative, or mixed methods* approach) is your **preference for your** Ph.D. candidates**' dissertation**? Why do you think so? Please elaborate

Ph.D. Candidates' Questions

1) What is your attitude towards **the qualitative** research approach? Why do you think so? Please elaborate

2) What is your attitude towards **the quantitative** research approach? Why do you think so? Please elaborate

3) What is your attitude towards **the mixed methods** research approach? Why do you think so? Please elaborate

4) Which approach (*Quantitative, qualitative, or mixed methods* approach) do you **prefer for your dissertation**? Why do you think so? Please elaborate