

Research paper

Gender Differences in Perceptions of Pedagogical Competence and Student Achievement: A Study of Iranian Junior High School EFL Teachers and Their Students

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Abstract

This study explored the impact of gender on the perceived pedagogical competences of Iranian EFL teachers and the academic achievements of junior high school students. Specifically, it examined differences between male and female English teachers' pedagogical skills and their students' performance. A total of 30 English teachers (15 males and 15 female) participated in the study. They completed a self-report questionnaire consisting of 53 items to assess their perceptions of perceived pedagogical competence. In addition, 744 ninth-grade students (379 males and 365 female) from various high schools in Kazerun, Fars, Iran, were selected. Their academic achievements were evaluated using standardized test scores from their final English exams, retrieved from school records. The findings, analyzed using an Independent Sample T-Test, indicated a significant difference in pedagogical competence between male and female teachers, with male teachers scoring higher. However, the results of the Mann-Whitney U test revealed no significant difference in the academic achievement test scores between male and female students. The study concludes by discussing the implications of these findings. For EFL learners, these implications indicate that teacher gender may not directly influence academic achievement, emphasizing the need for students to focus on developing effective learning strategies, independent of teacher characteristics.

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Introduction

Pedagogical competence is vital for the teaching-learning process and significantly affects students' language learning achievements (Safin et al., 2020). This competence encompasses educational credentials and the effective use of both tangible and intangible resources (Gess-Newsome et al., 2019; Madhavaram & Laverie, 2010; Rychen & Salganik, 2003). According to Rahman (2014), it involves managing learning through planning, execution, and assessment. Abdel-Halim (2008) and Noora (2008) stress that enhancing pedagogical competence is essential for overcoming challenges and improving teaching effectiveness.

Teachers are classified as unskilled or skilled based on their pedagogical abilities (Muhammad Channa & Sahito, 2022). Effective teaching requires exceptional skills related to instructional methods, academic experience, professional development, and student engagement (Bachmann, 2018; Rodrigues et al., 2021). Pedagogical competence includes both subject matter knowledge and effective teaching methods (Murkatik et al., 2020). Planning and adaptability are also crucial for classroom effectiveness (Syahrudin et al., 2013; Fernandes, 2019).

Competent teachers exhibit subject knowledge, pedagogical skills, resourcefulness, motivation, and assessment capabilities (Kenny et al., 2017). They participate in professional development and employ diverse teaching strategies to enhance the learning environment (McCune, 2018). Strong pedagogical skills are linked to increased student engagement and improved learning outcomes (Green, 2014; Darling-Hammond & Berry, 2006). Effective pedagogical practices are essential for advancing students' language proficiency and academic performance (Hasiara et al., 2018; Akhyak, 2013; Ellahi & Zaka, 2015; Dancy & Henderson, 2010).

Language achievement, including vocabulary, grammar, and reading comprehension, reflects teaching effectiveness (Deringöl, 2019). Payant and Kim (2019) distinguish between general and diagnostic achievement, highlighting their implications for teachers and syllabus designers.

The problem statement underscores the importance of high pedagogical standards for improving educational quality and teacher effectiveness (Lacang, 2007). Traditional views focus on practical teaching, but expanded perspectives also include management, preparation, and assessment (Thomas, 1987; Olsson et al., 2010). Kolb's model and Suciú and Mata's taxonomy illustrate the evolving understanding of pedagogical competence, which now includes cognitive, managerial, psychological, personal, and social aspects (Kolb, 1984; Suciú & Mata, 2011).

Recent awareness of the impact of teachers' self-perceptions on student outcomes highlights the need for research in this area, particularly within the context of Iranian junior high school English language education. This study aims to address this gap by investigating how Iranian male and female junior high school English teachers perceive their pedagogical competence.

The education administration must prioritize evaluating and enhancing English language teacher competence. Establishing a national framework for teacher competences would guide professional development, improve quality, foster a shared understanding of necessary competences, and encourage teachers' career advancement.

The theoretical framework for teachers' pedagogical competence is grounded in Pedagogical Content Knowledge (PCK), a concept introduced by Shulman in 1986. PCK combines a teacher's deep understanding of the subject matter with effective teaching methods, allowing them to present content in a way that meets students' needs and interests. It encompasses three key components: content knowledge, pedagogical skills, and an understanding of students' abilities and misconceptions. For students' achievement tests, the framework is based on Classical Test Theory (CTT). CTT focuses on assessing student performance through observed scores, with core concepts including the true score (a student's actual ability), error score (the difference between observed and true scores), reliability (consistency of test results), and validity (how well a test measures what it is intended to measure).

Ghavidel and Valipour (2020) investigated the relationship between Iranian English language instructors' pedagogical competences and their personal and professional backgrounds. Initially, they established the construct validity of a 33-item closed-ended questionnaire, comprising four constructs of pedagogical competence: teaching attitudes, teaching skills, assessment strategies, and knowledge mastery. This was achieved through exploratory factor analysis after administering the questionnaire to 175 university instructors in Gilan, Iran. Following this, the newly validated questionnaire was administered to 48 practicing university instructors at Islamic Azad and State universities to measure the relationship between instructors' personal and occupational characteristics (such as age, gender, fields of study, and university degrees) and the constructs of pedagogical competence. The results revealed positive correlations among the constructs of teaching attitudes, teaching skills, assessment strategies, and knowledge mastery. Additionally, significant positive correlations (strong, moderate, or low) were found among these constructs concerning the instructors' gender, age, fields of study, and degree. Given the crucial role of teaching quality in promoting effective learning, understanding instructors' perceptions of pedagogical competence is essential for educational development.

Fauziyah, Yusuf, and Rejeki Andayani (2021) conducted research to examine the effect of pedagogical competence on teacher performance in inclusive schools, employing a quantitative design. The variables studied were pedagogical competence (X) and teacher performance (Y). Correlation analysis was conducted to uncover the relationship between these variables, using a questionnaire administered via Google Forms as the instrument. The study included ten teachers from inclusive schools as participants. The results indicated a high correlation between pedagogical competence and teacher performance, with an r-value of 0.808. This finding

supports the notion that good pedagogical competence positively influences teacher performance.

Purnama, Risnawati, and Lismayanti (2021) investigated the pedagogical competence of teachers in teaching English. This study used a descriptive approach with a mixed-method design, incorporating structured observations, questionnaires, and interviews. The subjects were an English teacher and 36 students from SMPN 16 Bengkulu Selatan. The findings indicated that the pedagogical competence of the teacher was rated as medium, as evidenced by data from interviews and observations. The students' perception of the teacher's pedagogical competence was scored at 27.2. The teacher demonstrated an understanding of students' qualities through a personalized approach, employing suitable learning strategies, methods, and materials to meet students' needs. However, the teacher's understanding of learning theory and principles heavily relied on manuals, and their comprehension of curriculum development principles was limited. Lesson plans and schedules were primarily based on the MGP framework. Based on these results, the researchers suggested that teachers should improve their strategies and competencies in the classroom. Key issues identified included over-reliance on book instructions, not using English during instruction, and assigning tasks without prior explanation. Proposed solutions included participating in learning seminars or teacher forums.

Muhammad Channa and Sahito (2022) investigated the pedagogical mechanisms in instructors' classrooms that lead to students achieving exceptional accomplishments concerning teacher competency. The study is based on a review of literature on teachers' pedagogical competencies and their relationship to students' academic achievement, focusing on how teachers' competencies support student learning and ultimately their performance in examinations. The findings indicate a more nuanced picture of the relationship between pedagogical competence and students' academic achievement.

Tanjung (2022) conducted a study to determine the pedagogical competence of teachers at SMA N2 SEI KANAN. The research used a descriptive qualitative method, involving English teachers as participants. Data collection techniques included observations, interviews, and documentation, utilizing observation sheets, interview sheets, and documentation as instruments. The findings showed that pedagogical competence was categorized as "pretty good" in areas such as mastering student characteristics, curriculum development competence, and communication competence. However, competencies in understanding learning theory and teaching principles, conducting educational activities, developing student potential, and performing assessment and evaluation were rated as low. Consequently, it was inferred that the overall pedagogical competence of teachers at SMA N2 SEI KANAN was still low.

Mensah (2023) assessed the pedagogical competence of Ghanaian pre-service geography teachers in their minor subjects, which included political science, economics, social studies, and history. Pedagogical competence was conceptualized using three constructs adapted from the Technological Pedagogical Content Knowledge (TPACK) framework: pedagogical knowledge, pedagogical content knowledge, and technological pedagogical knowledge. A total

of 182 pre-service geography teachers participated in the study through a survey. The empirical data were analyzed using descriptive statistics such as mean and standard deviation. Additionally, a one-way MANOVA test was conducted to explore differences in the pre-service teachers' pedagogical competencies based on minor subject classifications. The results showed that the pre-service geography teachers had relatively higher pedagogical knowledge in their minor subjects compared to pedagogical content knowledge and technological pedagogical knowledge. The minor subject classifications significantly affected pedagogical knowledge, with the economics minor group reporting higher scores.

Damayanti et al. (2023) evaluated the pedagogical proficiency of English instructors. The subjects of this research were three English teachers from MA NW Aik Bukak in Lombok. This qualitative study used observations and interviews to collect data. Findings from these methods were categorized and analyzed qualitatively. The interviews aimed to determine the teachers' pedagogical proficiency in teaching English, while the observations focused on the classroom teaching and learning process. The results indicated that the teachers' pedagogical competence was rated as good, as evidenced by 18 indicators of pedagogical competence. Additionally, the teachers' proficiency in teaching English was confirmed to be sufficient through the interviews. Researchers recommended that teachers enhance their strategies and competencies both before and during teaching. They also suggested employing engaging techniques to boost students' enthusiasm and motivation for learning English.

The present research was carried out to answer the following research questions. 1. Is there a significant difference between Iranian male and female junior high school EFL students in terms of their achievement test scores? 2. Is there a significant difference between Iranian male and female junior high school EFL teachers in terms of their pedagogical competence? Accordingly, the following null hypotheses were proposed .1. There is no significant difference between Iranian male and female junior high school EFL students in terms of their achievement test scores.2. There is no significant difference between Iranian male and female junior high school EFL teachers in terms of their pedagogical competence.

Although existing studies have examined pedagogical competence and its impact on student achievement (Ghavidel & Valipour, 2020; Fauziyah et al., 2021), few have focused on gender differences in teachers' perceived competence and the associated effects on students' academic performance, particularly in the Iranian junior high school EFL context. Previous research has not sufficiently addressed the potential gender-based disparities in pedagogical competence between male and female teachers, nor has it explored whether these disparities influence male and female students' language learning outcomes. This gap underscores the need for research that investigates these gender-based differences, providing insights into both teacher self-perceptions and student performance, with implications for teacher development programs and educational policies in Iran.

Literature Review

Gender Differences in Perceptions of Pedagogical Competence and Student Achievement

The intersection of gender, pedagogy, and student achievement has been a topic of considerable interest in educational research. As gender roles and expectations continue to evolve globally, understanding how these dynamics influence pedagogical competence and student achievement is crucial, especially in culturally unique contexts like Iran. This literature review explores the existing body of research on gender differences in perceptions of pedagogical competence and student achievement, with a specific focus on Iranian junior high school English as a Foreign Language (EFL) teachers and their students.

Pedagogical Competence and Gender

Pedagogical competence refers to a teacher's ability to effectively deliver instruction, manage classrooms, and support student learning. Research suggests that gender may play a role in shaping perceptions of pedagogical competence. Some studies have found that male and female teachers are perceived differently by students, colleagues, and even by themselves. For example, a study by Carrington and Skelton (2003) highlights that male teachers are often perceived as more authoritative, while female teachers are viewed as more nurturing and supportive. These gendered perceptions can influence how teachers are evaluated in terms of their competence and effectiveness.

In the Iranian context, traditional gender roles may further amplify these differences. The cultural expectations placed on men and women can lead to distinct teaching styles and classroom management strategies, which in turn influence how students perceive their teachers. Research by Ghazvini and Khajehpour (2011) indicates that in Iranian schools, male teachers may be viewed as more disciplined and stricter, while female teachers are seen as more empathetic and communicative. These perceptions could impact both teacher-student interactions and student outcomes.

Student Achievement and Gender

Student achievement is often measured through academic performance, standardized test scores, and overall educational outcomes. The relationship between teacher gender and student achievement has been widely debated, with mixed findings reported across different studies. Some research suggests that students may perform better when taught by teachers of the same gender, a phenomenon known as the "gender match" effect. Dee (2007) found that students tend to have higher achievement levels when their teacher shares their gender, particularly in subjects traditionally dominated by one gender, such as mathematics for boys and language arts for girls.

In contrast, other studies have shown that teacher gender has little to no effect on student achievement. A meta-analysis by Holmlund and Sund (2008) concluded that there is no consistent evidence to support the notion that teacher gender significantly impacts student performance. However, the cultural context plays a crucial role in these outcomes. In Iran, where gender norms are deeply ingrained, the impact of teacher gender on student achievement

may be more pronounced. A study by Rahimi and Naderi (2014) on Iranian EFL students found that female students taught by female teachers showed higher levels of motivation and academic performance, suggesting that gender dynamics in the classroom can influence learning outcomes.

Gender and Teacher-Student Interactions in the EFL Context

The EFL classroom presents a unique environment where language learning intersects with cultural and gender dynamics. Research on EFL teaching in Iran has shown that gender can influence teacher-student interactions, classroom dynamics, and ultimately, student achievement. According to Pishghadam and Saboori (2011), male and female EFL teachers in Iran may adopt different teaching strategies, with male teachers more likely to focus on grammar and structure, while female teachers emphasize communication and interaction. These differences in pedagogical approaches may affect how students perceive their teachers' competence and their own language learning progress.

Moreover, gender biases and stereotypes may also play a role in shaping students' attitudes toward their teachers. Studies have shown that in some cultures, including Iran, male teachers may be given more authority and respect by students, which could impact classroom behavior and learning outcomes. However, female teachers may be more successful in creating a supportive and inclusive learning environment, which can enhance student engagement and achievement, particularly for female students (Shahini & Riazi, 2011).

Cultural Context and Gender Norms in Iran

Understanding the cultural context of Iran is essential when examining gender differences in perceptions of pedagogical competence and student achievement. Iran's educational system is influenced by Islamic values and traditional gender roles, which can shape the experiences of both teachers and students. In Iranian society, men and women often have distinct roles and responsibilities, which can be reflected in their teaching styles and interactions with students. Research by Hosseini Fatemi and Sarem (2012) suggests that these cultural norms can lead to different expectations for male and female teachers, affecting how their competence is perceived by students and colleagues.

The cultural context also influences student achievement, particularly in gender-segregated schools, which are common in Iran. In these environments, the gender of the teacher may have a more significant impact on student performance, as students may feel more comfortable and motivated when taught by a teacher of the same gender. However, the impact of teacher gender on student achievement in mixed-gender classrooms remains less clear, with some studies suggesting that other factors, such as teacher experience and qualifications, may be more important determinants of student success.

The literature on gender differences in perceptions of pedagogical competence and student achievement highlights the complex interplay between gender, culture, and education. While research has shown that gender can influence how teachers are perceived and how students

perform, the findings are often context-dependent, with cultural norms playing a significant role. In the case of Iranian junior high school EFL teachers and their students, traditional gender roles and expectations may shape both teaching practices and student outcomes, making it essential to consider these factors when examining educational dynamics in this context.

Future research should continue to explore the impact of gender on pedagogy and student achievement in diverse cultural settings, with a particular focus on how changing gender norms may influence educational practices and outcomes. Additionally, studies that consider the perspectives of both teachers and students can provide a more comprehensive understanding of how gender influences the educational experience, ultimately leading to more effective teaching strategies and improved student performance.

Methodology

Research Participants

Data were collected from a total of 744 ninth-grade high school students from various schools in Kazerun, Fars, Iran. The sample included both male (379) and female (365) students, aged between 14 and 15 years old. Participants were selected through a convenience sampling method, including all available students. Convenience sampling was chosen for this study due to its practicality and efficiency. Given the large number of participants (744 students and 30 teachers) spread across various high schools, selecting participants based on accessibility allowed the researchers to collect data within the constraints of time, location, and resources. Additionally, the convenience sampling method enabled the study to focus on schools and teachers who were readily available and willing to participate, which facilitated smoother coordination and data collection. The sample represented a diverse range of social, cultural, economic, and familial backgrounds. Additionally, the study involved 30 Iranian junior high school EFL teachers, comprising 15 male and 15 female teachers. Among these teachers, 12 held a master's degree (MA) in English, while the remaining 18 had a bachelor's degree (BA) in English. Notably, the students in the sample were enrolled in the classes of the selected teachers.

Research Instruments

The Perception of Pedagogical Competence Questionnaire was adapted from Aghajanzadeh's (2016) work to align with the context of Iranian EFL teachers. Key components of pedagogical competence—such as teaching strategies, content knowledge, classroom management, and assessment practices—remained central, but certain items were revised to better fit the junior high school environment and English language teaching context. The questionnaire featured 53 Likert-type items, scored on a five-point scale from "strongly disagree" to "strongly agree," with scores assigned as follows: 5 for "strongly agree," 4 for "agree," 3 for "neutral," 2 for "disagree," and 1 for "strongly disagree." The reliability of the instrument was confirmed with a Cronbach's alpha coefficient of .82, demonstrating strong internal consistency.

To ensure content validity, the questionnaire was reviewed by three English professors specializing in applied linguistics, who assessed its relevance, clarity, and appropriateness for measuring pedagogical competence in the specific educational context of Iranian EFL teachers. The experts provided feedback on the adaptation, leading to the refinement of several items to improve their cultural and contextual fit.

The Final English Exam for 9th Grade, a standardized test administered in Khordad 1403, measured students' academic achievement. This exam is regularly used within the Iranian school system, ensuring alignment with national educational standards. Its reliability was assessed using the Kuder-Richardson Formula 21 (K-R-21), which yielded a reliability coefficient of .83, indicating a high level of consistency in the exam's measurement of student achievement. Like the questionnaire, the exam was also validated by the same panel of English professors to ensure its content adequately covered the expected learning outcomes for 9th-grade English students.

Procedure

Data collection involved administering self-report questionnaires to EFL teachers and evaluating students' academic performance using standardized test scores. The procedure began with obtaining ethical approval and collaborating with selected schools. Teachers completed the self-report questionnaires in the presence of the researcher to ensure accurate responses and confidentiality. Students' final exam scores were obtained from school records with informed consent. Once data collection was complete, all gathered data were meticulously analyzed to provide insights into the relationship between teachers' pedagogical competence and students' academic achievement within the context of Iranian junior high schools.

The collected data were analyzed using Independent Sample T-Test and Mann-Whitney U test. Regarding the choice of statistical tests, the Independent Sample T-Test was used to compare the pedagogical competence scores between male and female teachers because this test is appropriate for determining differences between the means of two independent groups. Similarly, the Mann-Whitney U test was employed to analyze students' test scores since the distribution of scores did not meet the normality assumption required for parametric tests, making the non-parametric Mann-Whitney U test more suitable. These statistical tests were selected based on the nature of the data and the assumptions underlying each test.

Results

The results of data analysis are presented in this part.

Table 1
Descriptive Statistics for Teachers Perception of Pedagogical Competence Separated by Gender

	Sex	N	Valid	Missing	Mean	Median	Mode	Std. Deviation	Variance	Minimum	Maximum
Teacher	F	15	0		174.80	174.00	177	4.004	16.03	169	181
	M	15	0		178.47	178.00	177 ^a	4.897	23.98	170	186

a. Multiple modes exist. The smallest value is shown

The descriptive statistics for both genders concerning their perceptions of pedagogical competence are shown in Table 1. Female teachers have a mean score of 174.80 with a standard deviation of 4.00. In contrast, male teachers have a mean score of 178.47 and a standard deviation of 4.89.

Table 2
Descriptive Statistics for Students' Academic Achievement Test Results Separated by Gender

	Sex	N	Valid	Missing	Mean	Median	Mode	Std. Deviation	Variance	Minimum	Maximum
Student	Female	36	0		12.75	13.0	14.0	2.792	7.79	6.75	19.0
	Male	37	0		13.10	13.0	14.0	2.968	8.81	7.00	19.2

Table 2 presents the descriptive statistics for the academic achievement test results of both male and female students. The average score for female students is 12.75, while male students have an average score of 13.10. The standard deviation for female students is 2.792, compared to 2.968 for male students. This indicates that the performance of both genders on the achievement test is quite similar.

To begin the hypothesis analysis, the data will first be assessed for normality using the Kolmogorov-Smirnov test. If the data does not follow a normal distribution, non-parametric tests, such as the Mann-Whitney U test, will be employed to obtain the final results. The first research question of the study was as follows: Is there any significant difference between Iranian male and female junior high school students' academic achievement test results? To examine this hypothesis, the non-parametric Mann-Whitney U test was used since the students' academic achievement test results do not follow a normal distribution.

Table 3
Mann-Whitney U test

	studentGrade
Mann-Whitney U	64769.000
Wilcoxon W	131564.000
Z	-1.504
Asymp. Sig. (2-tailed)	.133

a. Grouping Variable: sex

Given that the significance level is greater than 0.05, it can be concluded that there is no significant difference between Iranian male and female middle school students in terms of their academic achievement test results.

The second research question of the study was as follows: Is there a significant difference between male and female Iranian teachers' pedagogical competence? To answer this research question and to examine the research hypothesis, considering that the scores of teachers' teaching competencies have a normal distribution, an independent two-sample t-test was used.

Table 4
Independent Two Sample T-Test

	Sex	N	Mean	Std. Deviation	Std. Error Mean
TeacherGrade	Femal	15	174.80	4.004	1.034
	Male	15	178.47	4.897	1.264

In table 4, common descriptive indices are presented, and according to this table, there is a difference between the mean scores of the two groups. To determine whether this difference is significant or we refer to the second table.

Table 5
Independent Samples Test

	Levene 's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean	Std. Error
						Differenc e	Differenc e
Teacher Grade	.460	.503	-2.245	28	.033	-3.667	1.633

Given that the significance level is less than 0.05, it can be concluded that there is a significant difference between the teaching competency scores of male and female teachers.

So, there is a significant difference between male and female Iranian teachers' pedagogical competence.

Discussions and conclusions

The first research question of this study was: RQ1: Is there a significant difference between Iranian male and female junior high school students' academic achievement test results? The null hypothesis proposed was: There is no significant difference between Iranian male and female junior high school students' academic achievement test results.

The results from the Mann-Whitney U test revealed no significant difference between the academic achievement test results of male and female junior high school students. Therefore, the null hypothesis is accepted.

These findings align with previous research by Mahmoodi et al. (2022), which found no significant differences in willingness to communicate (WTC) and international posture (IP) between male and female students. Similarly, Tokhmehforoushan Khiabani and Hadidi Tamjid (2017) reported no significant differences in motivation, hardiness, and perfectionism between male and female students. Hajati Mobarhan et al. (2022) and Ansyari and Rahmi (2016) also found no significant differences in listening comprehension between genders.

However, these results contradict Keshavarz and Ashtarian (2008), who found that female EFL learners had better reading comprehension than males. They also differ from studies by Murphy (2010), which suggested that female learners generally achieve higher language proficiency. Supriyadi et al. (2019) noted that female learners are more cautious in using accurate language forms, and Zoghi et al. (2013) found that girls often achieve higher marks in EFL learning. Brantmeier (2004a) and Bratmeier (2007) also reported that females outperformed males in recalling ideas and comprehension tasks. Furthermore, Yazdanpanah (2007) found gender differences in performance on various test items, with males excelling in specific information tasks and females in context-based questions.

The lack of difference in performance between male and female students in this study might be due to several factors. Most participants attended state or public schools with similar instructional facilities. Additionally, extensive use of smartphones for internet access and social networks might have equalized academic support among students of both genders.

The second research question of the study was: RQ2: Is there a significant difference between male and female Iranian teachers' pedagogical competence? The null hypothesis proposed was: There is no significant difference between male and female Iranian teachers' pedagogical competence. The Independent Samples Test indicated a significance level below 0.05, suggesting a significant difference in pedagogical competence between male and female teachers. Therefore, the null hypothesis is rejected.

These results contrast with Taherkhani and Ghaleei (2024), who found no significant differences in digital competence between male and female in-service EFL teachers. Conversely, Rahimi and Asadollahi (2012) found that male and female teachers differed in their teaching styles, with female teachers more frequently employing activities related to extroverting, sensing, and feeling styles. Similarly, Naz (2017) found significant differences in professional competences between male and female teachers in Pakistan. However, Boset et al. (2017) reported that female EFL teachers had higher competency levels than their male counterparts.

One possible explanation for these findings is that male teachers in the study were older and had more teaching experience than female teachers. Rahimi and Asadollahi (2012) suggested that older, more experienced teachers tend to use a wider range of classroom activities. Emiliasari (2018) found that experienced teachers with higher training levels exhibited better pedagogical competence in various areas, including classroom management and curriculum development. On the other hand, less experienced teachers showed lower levels of pedagogical competence. Additionally, it was observed that male teachers were more meticulous in completing the questionnaire compared to female teachers, who were less careful in their responses. This difference in response quality may have influenced the results. The results of the present research have implications for language teachers and students as well as syllabus designers.

The significant difference in pedagogical competence between male and female teachers in our study warrants a deeper examination of underlying factors. Here are some potential reasons for this finding:

1. Professional Development Opportunities: Male teachers might have had access to more targeted professional development opportunities compared to their female counterparts. Disparities in access to training workshops, seminars, and advanced degrees could impact their pedagogical skills and self-perceptions of competence.

2. Cultural and Societal Expectations: Societal norms and cultural expectations in Iran might influence the pedagogical competence of male and female teachers differently. For instance, male teachers might be perceived as more authoritative, which could affect their confidence and performance in pedagogical activities. Conversely, female teachers might face additional societal pressures that impact their professional development and classroom management.

3. Gender Roles and Biases: Gender roles and biases within the education system could contribute to differences in perceived competence. For example, if male teachers are given more leadership roles or responsibilities, this could enhance their skills and visibility, potentially leading to higher reported competence.

4. Experience and Career Advancement: Differences in career advancement opportunities and teaching experience between male and female teachers could also play a role. Male teachers might have more opportunities for leadership roles or career progression, which could enhance their pedagogical skills and perceptions of competence.

5. Support Systems: Variations in the availability and effectiveness of support systems for male and female teachers might also contribute. If male teachers receive more robust mentoring and support from peers and supervisors, it could positively influence their pedagogical skills.

Implications of the Research

1. Targeted Professional Development: The findings suggest a need for targeted professional development programs that address specific areas where female teachers may need additional support. Programs could focus on enhancing classroom management, assessment strategies, and leadership skills to ensure that all teachers, regardless of gender, have equal opportunities to develop their pedagogical competence.

2. Policy Changes: Educational policies should be reviewed to address potential biases in teacher evaluations and professional advancement opportunities. Ensuring equitable access to career development resources and leadership roles can help mitigate gender disparities in pedagogical competence.

3. Cultural Sensitivity Training: Implementing training programs that address cultural and societal biases can help create a more inclusive and supportive environment for female teachers. This can lead to more equitable evaluations of teaching effectiveness and competence.

Suggestions for Future Research

1. Longitudinal Studies: Conduct longitudinal studies to track changes in pedagogical competence over time, considering how professional development and career progression impact male and female teachers differently.

2. Qualitative Research: Perform qualitative research, including interviews and focus groups, to gain deeper insights into the experiences of male and female teachers. This can help identify specific barriers and support mechanisms affecting their pedagogical competence.

3. Comparative Studies: Explore comparative studies in different educational contexts or countries to determine if similar gender-based differences in pedagogical competence exist elsewhere and what factors contribute to these differences.

4. Impact of Professional Development: Investigate the effectiveness of targeted professional development programs in reducing gender disparities in pedagogical competence and improving overall teaching quality.

References

Abdel-Halim, S. M. (2008). *The effect of using some professional development strategies on improving the teaching performance of English language student teacher at the faculty of education, Helwan university in the light of pre-service teacher standards* (Ph.D. Dissertation). Faculty of Education, Helwan University, Egypt.

- Aghajanzadeh Kiasi, G., Maftoon, P., & Birjandi, P. (2016). An investigation of Iranian high school English language teachers' perceptions of pedagogical competence. *Iranian Journal of English for Academic Purposes*, 5(1), 1-25.
- Akhyak, M. A. (2013). Implementation of teachers' pedagogy competence to optimizing learners' development in public primary school in Indonesia. *Journal education and research*, 1(9), 113-122.
- Ansyari, M. F., & Rahmi, H. (2016). A comparison between male and female students' language learning strategies preference. *Indonesian Journal of Integrated English Language Teaching*, 2 (1), 71-87.
- Bachmann, H. (Ed.). (2018). *Competence-oriented teaching and learning in higher education: essentials*. hep, der Bildungsverlag.
- Boset, S. A. A., Asmawi, A., & Abedalaziz, N. (2017). The relationship between competency and work motivation of EFL teachers at public secondary schools in Yemen. *Arab World English Journal*, 8 (4), 212-228. <https://dx.doi.org/10.24093/awej/vol8no4.14>
- Brantmeier, C. (2004a). Building a comprehension theory of adult foreign language reading: A variety of variables and research methods. *The Southern Journal of Linguistics*, 27 (1), 1-7.
- Brantmeier, C. (2007). Adult second language reading in the USA: The effects of readers' gender and test methods. *Forum on Public Policy*, 14, 1-34.
- Carrington, B., & Skelton, C. (2003). Re-thinking 'role models': Equal opportunities in teacher recruitment in England and Wales. *Journal of Education Policy*, 18(3), 253-265. doi:10.1080/026809303005573
- Damayanti, D., Rama Suhandra, I., & Irawan, S. (2023). An analysis of teachers' pedagogical competence in teaching English: a case study at an Islamic school in Lombok. *English Language Teaching for English Foreign Language (EFL) learners (ELTIES)*, 5(1), 30-38.
- Dancy, M., & Henderson, C. (2010). Pedagogical practices and instructional change of physics faculty. *American Journal of Physics*, 78 (10), 1056-1063.
- Darling-Hammond, L., & Berry, B. (2006). Highly qualified teachers for all. *Educational Leadership*, 64(3), 14-25.
- Dee, T. S. (2007). Teachers and the gender gaps in student achievement. *Journal of Human Resources*, 42(3), 528-554. doi:10.3368/jhr.XLII.3.528
- Deringöl, Y. (2019). The relationship between reflective thinking skills and academic achievement in mathematics in fourth-grade primary school students. *International Online Journal of Education and Teaching (IOJET)*, 6(3), 613-622.
- Ellahi, A., & Zaka, B. (2015). Analysis of higher education policy frameworks for open and distance education in Pakistan. *Evaluation review*, 39(2), 255-277.
- Emiliasari, R. N. (2018). An analysis of teachers' pedagogical competence in lesson study of Mgmp Smp Majalengka. *Journal of English Language Teaching in Indonesia*, 6(1), 22-33. <https://doi.org/10.22460/eltin.v6i1.p22-33>
- Fauziyah, L., Yusuf, M., & Rejeki Andayani, T. (2021). The relationship between pedagogical competence and teacher performance in inclusive school. *Advances in Social Science, Education and Humanities Research, volume 657, International Seminar on Innovative and Creative Guidance and Counseling Service (ICGCS 2021)*
- Fernandes, C. (2019). *The Relationship between Teacher Communication, and Teacher Credibility, Student Motivation, and Academic Achievement in India*. Ph.D. Dissertation, Concordia University–Portland College of Education.
- Gess-Newsome, J., Taylor, J. A., Carlson, J., Gardner, A. L., Wilson, C. D., & Stuhlsatz, M. A. (2019). Teacher pedagogical content knowledge, practice, and student achievement. *International Journal of Science Education*, 41(7), 944-963.

- Ghavidel, M., & Valipour, V. (2020). The relationship between Iranian English language instructors' pedagogical competences and their personal and professional background. *Iranian Journal of English for Academic Purposes*, 9(4), 45-61
- Ghazvini, S. D., & Khajehpour, M. (2011). Gender differences in factors affecting academic performance of high school students. *Procedia - Social and Behavioral Sciences*, 15, 1040-1045. doi:10.1016/j.sbspro.2011.03.236
- Green, C. (2014). Education empowerment: A child's right to attend public school. *Geo. LJ*, 103, 1089-1095.
- Hajati Mobarhan, H., Khodareza, M.R., & Rahimy, R. (2022). Investigating the interplay between Iranian EFL learners' emotional intelligence, listening comprehension, and language achievement. *Iranian Journal of English for Academic Purposes*, 11(3), 69-83.
- Hasiara, L. O., Surya, M., & Mersa, N.N. (2018). Factors related to students achievement index of accounting department at Politeknik Negeri Samarinda-Indonesia. *MEC-J (Management and Economics Journal)* 1(2):49, DOI: [10.18860/mec-j.v1i2.4827](https://doi.org/10.18860/mec-j.v1i2.4827)
- Holmlund, H., & Sund, K. (2008). Is the gender gap in school performance affected by the sex of the teacher? *Labour Economics*, 15(1), 37-53. doi:10.1016/j.labeco.2006.12.002
- Hosseini Fatemi, A., & Sarem, S. N. (2012). The relationship between Iranian EFL teachers' gender and their pedagogical success. *Procedia - Social and Behavioral Sciences*, 31, 399-403. doi:10.1016/j.sbspro.2011.12.074
- Kenny, N., Berenson, C., Chick, N., Johnson, C., Keegan, D., Read, E., & Reid, L. (2017, October). A developmental framework for teaching expertise in postsecondary education. In *International Society for the Scholarship of Teaching and Learning Conference*, (pp. 14-17 October), Calgary, Canada. Available at: http://connections.ucalgaryblogs.ca/files/2017/11/CC4_Teaching-Expertise-Framework-Fall-2017.
- Keshavarz, M.H., & Ashtarian, S. (2008). The relationship between Iranian EFL learners' gender and reading comprehension of three different types of text. *IJAL*, 11(1), 87-113.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs: Prentice-Hall. doi:10.1002/job.4030080408
- Lacang, A. A. (2007). Competencies and characteristics of effective teachers. *Kinaadman*, 18(1), 136-137.
- Madhavaram, S., & Laverie, D. A. (2010). Developing pedagogical competence: Issues and implications for marketing education. *Journal of Marketing Education*, 20(10), 2-10.
- Mahmoodi, N., Ghafoori, N., & Behafarin, S.R. (2022). A comparative study of male vs. female Iranian EFL learners' willingness to communicate and their international posture. *Curriculum Research*, 3(3), 1-12.
- McCune, V. (2018). Experienced academics' pedagogical development in higher education: Time, technologies, and conversations. *Oxford Review of Education*, 44(3), 307-321.
- Mensah, B. (2023). Pedagogical competencies in minor subjects of Ghanaian pre-service geography teachers and their implications for teacher education. *Humanities and Social Sciences Communications* | <https://doi.org/10.1057/S41599-023-01713-Y>
- Muhammad Channa, W., & Sahito, Z. (2022). Pedagogical competencies of teachers and the achievement of students: Explorations of best practices through a literature review. *Webology*, 19(3), 2927-2943.
- Murkatik, K., Harapan, E., & Wardiah, D. (2020). The influence of professional and pedagogic competence on teacher's performance. *Journal of Social Work and Science Education*, 1(1), 58-69.
- Murphy, B. (2010). Foreign language learning in Irish second level schools: Gender very much on the agenda. *Irish Educational Studies*, 29, 81-95.

- Naz, K. (2017). *Effects of teachers' professional competency on students' academic achievements at secondary school level in Muzaffarabad District* (Master's thesis) University of Preston, Pakistan. Retrieved from <http://hdl.handle.net/2123/7128>
- Noora, A. (2008). Iranian undergraduate non-English majors' language learning preferences. *GEMA Online Journal of Language Studies*, 8(2), 33-44
- Olsson, T., Martensson, K., & Roxa, T. (2010). Pedagogical competence: A development perspective from Lund University. In A. Ryegard, K. Apelgreen, & T. Olsson (Eds.), *A Swedish perspective on pedagogical competence* (pp.121-132). Stockholm: Uppsala University.
- Payant, C., & Kim, Y. (2019). Impact of task modality on collaborative dialogue among plurilingual learners: A classroom-based study. *International Journal of Bilingual Education and Bilingualism*, 22(5), 614-627.
- Pishghadam, R., & Saboori, F. (2011). A qualitative analysis of male/female EFL teachers' beliefs on grammar instruction in Iran. *Iranian EFL Journal*, 7(3), 21-43.
- Purnama, N.G., Risnawati, D., & Lismayanti, D. (2021). Teachers' pedagogic competence in teaching English at secondary school level. *Journal of Development and Innovation in Language and Literature Education*, 1(3), 362-376.
- Rahimi, M., & Asadollahi, F. (2012). Teaching styles of Iranian EFL teachers: Do gender, age, and experience make a difference? *International Journal of English Linguistics*, 2(2), 157- 164.
- Rahimi, M., & Naderi, F. (2014). The role of EFL teachers' gender in their teaching effectiveness and their students' achievement. *Journal of Language Teaching and Research*, 5(3), 662-669. doi:10.4304/jltr.5.3.662-669
- Rodrigues, M., Fernandez-Macias, E., & Sostero, M. (2021). *A unified conceptual framework of tasks, skills and competences* (No. 2021/02). JRC Working Papers Series on Labour, Education and Technology.
- Rychen, D. S., & Salganik, L. H. (Eds.) (2003). *Key competencies for a successful and well-functioning society*. Seattle, Toronto, Bern, Göttingen: Hogrefe & Huber.
- Safin, R., Korchagin, E., Vildanov, I., & Abitov, R. (2020, July). On professional and pedagogical competence development of technical university teaching staff. In *IOP Conference Series: Materials Science and Engineering* (Vol. 890, No. 1, p. 012167). IOP Publishing.
- Shahini, G., & Riazi, A. M. (2011). A qualitative analysis of male/female EFL teachers' beliefs about teaching and learning in Iran. *The Modern Language Journal*, 95(1), 50-65. doi:10.1111/j.1540-4781.2010.01147.x
- Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14. doi:10.3102/0013189x015002004
- Suciu, I., & Mata, L. (2011). Pedagogical competences: *The key to efficient education*. *International Online Journal of Educational Sciences*, 3(2), 411-423. doi:10.1016/j.sbspro.2011.02.036
- Supriyadi, A., Mayuni, I., & Lustyantje, N. (2019). The effects of learning model and cognitive style on students' English listening skill. *International Online Journal of Education and Teaching*, 6(3), 545-561
- Syahrudin, S., Ernawati, A., Ede, M. N., Rahman, M. A. B. A., Sihes, A. J., & Daud, K. (2013). Teacher's pedagogical competence in school-based management: Case study in a public secondary school. *Journal of Education and Learning*, 7(4), 213-218.
- Taherkhani, R., & Ghaleei, Sh. (2024). Examining Iranian pre-service and in-service EFL teachers' digital competence: Does gender make a difference? *Iranian Journal of Applied Language Studies*, 16(1), 89-116. <https://doi.org/10.22111/IJALS.2024.48085.2430>

- Tanjung, S. (2022). An analysis of teacher pedagogical competence in teaching English for senior high school learners. *Vision Journal, 1*, 75-83.
- Tokhmehforoushan Khiabani, N., & Hadidi Tamjid, N. (2017). The relationship between Iranian male and Female EFL learners' motivation and their identity: Perfectionism and hardiness. *The Journal of English Language Pedagogy and Practice, 10* (20), 187-207.
- Yazdanpanah, K. H. (2007). The effect of background knowledge and reading comprehension test items on male and female performance. *The Reading Matrix, 7* (2), 64-80.
- Zoghi, M., Kazemi, A., & Kalani, A. (2013). The effect of gender on language learning. *Journal of Novel Applied Sciences, 2* (4), 1124-1128.