

A Tale of Two Styles: Exploring the Compatibilities and Incompatibilities among Learning and Teaching Styles in Second Language Didactics

Amirreza Vakilifard¹  & Ali Akbar Joola²

Abstract

The process of teaching and learning is a complex interplay of multiple factors, including teaching and learning styles. A mismatch between these styles can lead to negative outcomes. The primary objective of this study is to investigate the learning styles of non-Iranian Persian language learners and the teaching styles of their instructors. To explore the alignment and discrepancies between these variables, a quantitative method was employed to provide a comprehensive understanding of the relationship between them. This research was conducted with a sample size of 116 Persian language learners and 25 teachers, and data on learning styles were collected using the Perceptual Learning Style Preference Questionnaire (PLSPQ). The same questionnaire was adapted and validated to collect data on teaching styles. The study revealed no significant difference in the prioritization of visual, tactile, auditory, and kinesthetic learning styles between learners and teachers. However, a notable difference was observed in group and individual learning styles. Furthermore, academic background emerged as a crucial factor affecting teaching style, with teachers who had completed a teaching Persian program (AZFA) prioritizing group-style instruction. The outcomes of this research underscored the existence of discernible disparities between the teaching styles of educators and the learning styles of students. As such, it was recommended that teachers adjust their teaching styles to align with the learning styles of their students.

Keywords: learner, learning styles, Persian language, teachers, teaching styles

Received: 6 July 2023
Received in revised form: 17 September 2023
Accepted: 1 October 2023

¹ Corresponding Author: Assistant Professor- School of Global Studies- University of Arizona, Tucson, USA, ORCID ID: <https://orcid.org/0000-0002-4280-4539>; Email: vakilifard@arizona.edu

² Master of Teaching Persian to Speakers of other languages; IKIU, Qazvin, Iran

1. Introduction

Despite findings from brain and education researchers indicating that learning and teaching are more intricate than merely aligning teaching with a student's learning style, the notion of learning and teaching styles remains one of the most prevalent and deeply ingrained myths in the field of education. The teaching-learning process is a complex and dynamic interaction between teachers and learners, with many factors influencing its effectiveness (Lawrence et al., 2020). Among these factors, teaching styles and learning styles are two key elements that play a significant role in shaping the outcomes of the educational experience (Cardino & Ortega-Dela Cruz, 2020). While Teaching styles are the leading factors that shape and ensure the success of a highly complex teaching-learning process (Ghanizadeh & Jahedizadeh, 2016), learning styles refer to the general preferences and tendencies (typically self-reported) that learners have in terms of how they acquire and process information in different ways (Cook, 2012).

Despite the potential benefits of understanding and accommodating teaching and learning styles, there are challenges associated with identifying and addressing individual differences in the classroom. For example, some researchers have questioned the validity and reliability of learning style assessments, arguing that they may not accurately capture the complexity of individual differences in learning (Lawrence et al., 2020). Additionally, teachers may face practical constraints in implementing teaching styles that cater to individual learning styles, such as large class sizes or limited resources.

Research has shown that teaching styles and learning styles are closely linked and can have a significant impact on student learning outcomes (Kasim, 2019; Li, 2022). According to Van Blerkom (2009, p. 17), students may experience feelings of discomfort in the classroom, encounter challenges in completing assignments, and exhibit subpar performance on examinations. Den Dekker and Kim (2022) found that while aligning teaching styles with learning styles did not result in significant improvements in learning outcomes, it did have a positive impact on student attitudes and motivation. In fact, some studies suggest that the opposite may be true, with students performing better when exposed to a variety of teaching styles (Ridwan et

al., 2019). Nevertheless, the mismatch between teaching styles and learning styles can still have negative consequences, such as boredom and disengagement in class, poor test results, and decreased motivation to learn (Felder, 2020). If a language learner has an individual learning style and is not interested in group work, and the teacher uses a group teaching style in class, the learner may become passive, unmotivated, and slow in their learning. This can also lead to frustration and dissatisfaction for the teacher.

The notion that each language learner possesses distinct learning preferences akin to each teacher's unique teaching style is evident. Nevertheless, according to Vakilifard (2019), employing a uniform teaching style for all students may lead to a learning gap, particularly among learners with varying educational and cultural backgrounds, despite sharing a common language. Notwithstanding the importance of identifying and accommodating learning styles in second language education, many Persian language teachers are not aware of the learning preferences of their foreign students. This lack of knowledge can lead to a mismatch between students' learning styles and teachers' teaching styles, resulting in decreased motivation, poor academic performance, and even dropout rates among second-language learners.

Identifying learners' learning styles can help teachers design more effective language learning programs that cater to the needs of different learners (Derakhshan & Shakki, 2018). This research aims not only to identify foreign learners' learning styles but also native teachers' teaching styles. In addition, it addresses the gap in understanding the relationship between teaching styles and learning styles in the context of language learning. By exploring alignment and discrepancies between educators' teaching styles and language learners' learning styles, the study sheds light on how these factors interact and affect the educational experience. By examining the theoretical underpinnings of teaching and learning styles, the study provides a foundation for understanding the potential implications and consequences of a mismatch between these styles. In addition, by capturing the perspectives of both educators and learners, the study offers empirical evidence to support its findings and conclusions. There is a pressing need for additional research to elucidate the current understanding of language teaching and learning styles, particularly in relation to their deeper implications (Sympas & Digelidis, 2022). Therefore, there is a need for

research that investigates the extent of this problem for promoting compatibility between students' learning styles and teachers' teaching styles in second language education.

The main objective of the study is to investigate the relationship between teaching styles and learning styles in language education, identify different teaching and learning styles, explore how teaching styles can be adapted to accommodate different learning styles, and examine the impact of matching teaching styles with learning styles on language learning outcomes. The study ultimately aims to provide recommendations for educators to optimize their instructional approaches based on individual learning styles, making it a valuable resource for educators and language learners looking to enhance language learning experiences.

In light of these challenges, it is important for educators to approach teaching and learning styles with a critical and evidence-based perspective. By staying up-to-date with the latest research on teaching and learning styles, teachers can make informed decisions about how to design and implement effective instructional practices that meet the diverse needs of their students. Here are five research questions based on the problem statement.

Research Questions

- 1 .What are the preferred learning styles of Persian language learners?
- 2 .What are the preferred teaching styles of Persian language teachers?
3. To what extent do variables such as field of study and gender of Persian language teachers impact their use of teaching styles?
4. To what extent do the prioritization of teaching styles among Persian language teachers align with the prioritization of learning styles among Persian language learners?

By conducting research to answer these questions, the outcomes could include the identification of the most common learning styles among second language learners and the most common teaching styles among teachers of second language learners. Additionally, any significant mismatches or incompatibilities between students' learning styles and teachers' teaching styles could be identified, and effective

strategies for promoting compatibility between them could be developed. This study holds theoretical significance by expanding our understanding of the relationship between teaching styles and learning styles in the context of language learning. Additionally, The findings of this study contribute empirically by providing concrete evidence and insights into how these factors interact in educational settings. The outcomes of this study have implications for instructional design, curriculum development, and teacher training programs, ultimately enhancing the educational experience for language learners.

2. Literature Review

The process of teaching and learning is significantly influenced by the use of teaching and learning styles. Teaching styles refer to the various methods that teachers employ to manage the teaching process more effectively. According to Marzano (2007), these styles encompass different approaches that teachers take to deliver instruction, including lecture, discussion, and hands-on activities. These styles may be influenced by a variety of factors, such as the teacher's personality, the subject matter being taught, and the needs of the students. Conversely, learning styles refer to an individual's favored approaches to studying and acquiring knowledge (Woolfolk, 2007). These styles encompass various factors that influence the way individuals learn, including their cognitive, affective, and social characteristics (Coulibaly, 2006).

Styles can be defined as the preferred approaches that individuals adopt in utilizing their cognitive abilities, reflecting how they tend to apply these abilities in their daily lives. In contrast, learning styles refer to the unique cognitive, emotional, and physical characteristics that individuals possess, which act as consistent indicators of how they perceive, engage with, and react to their learning surroundings (Rezaeinejad et al., 2015).

Numerous psychological perspectives have put forth diverse models of learning styles. One such model is Reid's (1987) model, which incorporates perceptual dimensions to assess learning styles. Within this model, perceptual learning styles are further classified into six sub-groups: visual, auditory, kinesthetic, tactile, group, and individual. According to Reid's (1987) framework, each language learner may

possess one to six primary styles, with the degree of preference for each style determined by the assigned score.

Identifying the learning style is crucial for analyzing, motivating, and helping language learners. Teachers are expected to tailor their teaching approaches to better meet the needs of their students (Oxford, 2003). The primary objective of this role is to enhance learners' independence, creativity, initiative, and responsibility by prioritizing their needs. Therefore, a teaching style is not just a collection of innovative techniques employed in the classroom but an overarching feature that significantly influences various aspects of education.

Teacher quality is a critical factor that significantly contributes to students' academic success (Sim & Mohd Matore, 2022). This assertion is premised on the notion that the impact of teachers on students' learning outcomes surpasses that of the school. Evidently, the quality of instruction and guidance that students receive from their teachers is a more potent determinant of academic achievement than any other factor within the school setting. Vukić (2018) suggests that teachers' actions and lesson organization have a significant impact on students' learning outcomes, just as learners' preferred learning styles and information processing methods influence teachers' instructional strategies.

Teaching styles are not rigid and can be adapted over time and with experience. Reid (1987) supports this notion by arguing that while teachers may have a preferred teaching style, they can modify their approach to create a more effective learning experience for their students. Similarly, learners may adjust their learning styles to enhance their academic achievements, and teachers may adapt their teaching styles to provide a positive and engaging learning environment for their students. Overall, these findings highlight the dynamic nature of teaching and learning processes and the importance of flexibility and adaptation in achieving successful educational outcomes. Recent research has continued to explore the concept of learning styles and its implications for education (e.g., Kharb et al., 2013), highlighting the need for educators to consider individual differences in learning when designing instructional strategies.

Numerous studies have examined learning styles and teaching styles either

individually or with other questionnaires and tools. However, in this section, we focus more on studies that have concurrently addressed learning styles and teaching styles using Reid's Perceptual Learning Style Preference Questionnaire (PLSPQ).

Sengsouliya et al. (2021) conducted a study to investigate the preferred English learning styles of secondary school students and the mismatches in teachers' English teaching styles and students' learning style preferences. The research involved a quantitative approach, with 204 students and 5 teachers of English from 5 different secondary schools in Vientiane Capital, Laos, invited to rate their agreement levels on Reid's (1987) Perceptual Learning Style Preference Questionnaire (PLSPQ). The study's findings revealed that students had more than one preferred learning style, with kinesthetic, group, and auditory learning styles being the most preferred in their English classes. The students found that learning through doing, working together with classmates, resolving challenging tasks, and listening to teachers' instructions through interaction made them learn more effectively. The study also found that mismatches in teaching and learning styles existed in four out of the five sampled schools. Teachers were more oriented towards visual styles, such as writing on the board, asking students to read from textbooks, and providing activities that required reading rather than listening to instructions. However, students were less likely to prefer the visual learning style.

Derakhshan and Shakki (2018) investigated the relationship between Iranian EFL high- and low-proficient learners and their learning styles. The researchers collected data from 180 EFL learners using a questionnaire that assessed their learning styles and proficiency levels. The results of the study showed that there was a significant relationship between learning styles and proficiency levels, with high-proficient learners favoring more analytical and reflective learning styles, while low-proficient learners favored more global and intuitive learning styles. The study concludes that identifying learners' learning styles can help teachers design more effective language learning programs that cater to the needs of different learners.

Mei Ph'ng (2018) conducted a study to investigate the learning style preferences of engineering students and the teaching style preferences of their Technical Communication lecturers. The study also examined whether students' learning style

preferences were influenced by their field of study, gender, and ethnic backgrounds. The researchers administered Felder and Solomon's Index of Learning Styles to 588 engineering students and Grasha and Riechmann-Hruska's Teaching Style Survey to 10 Technical Communication lecturers. The results showed that students had a marked preference for the visual learning style but had balanced preferences for other learning style dimensions. The students' field of study, gender, and ethnic backgrounds did not seem to affect their learning style preferences. The Technical Communication lecturers preferred a student-centered teaching approach.

Abu-Asba et al. (2014) conducted a study aimed at investigating and comparing the learning styles of science students and the teaching styles of lecturers in Yemen. The research involved the collection of quantitative data from 179 students using a survey questionnaire and from 50 lecturers using the PLSPQ. The study's findings revealed that the most preferred learning styles among students were kinesthetic, tactile, and group learning styles, followed by auditory and visual modes of learning. Conversely, the individual learning style was the least preferred by students. Additionally, the teaching styles most preferred by lecturers were visual, auditory, and group teaching styles, followed by kinesthetic teaching styles. The lecturers in this study showed the least preference for the tactile and individual teaching styles. Further analysis of the data indicated a mismatch between learning and teaching styles concerning kinesthetic, tactile, auditory, and visual styles. However, there was a match between learning and teaching styles regarding group and individual teaching styles.

3. Methodology

This study is a descriptive-analytical survey that utilized a random-access sampling method to assess the preferred perceptual learning styles of Persian learners and teachers. The simple random sampling method was utilized in this research to ensure that the selected participants are representative of the larger population. The distribution of questionnaires to both learners and teachers, who were readily available in this collection, provided a means of collecting data from a diverse range of perspectives.

3.1. Participants

The statistical sample comprised 116 Persian learners and 25 teachers. Of the learners, 45.7% were female, and 54.3% were male, while the majority of teachers were female (80.0%). Within the cohort of educators, a notable 60.0% or 15 individuals possess a commendable educational background, having completed their studies in the field of teaching Persian to speakers of other languages at the university. The participants in this research comprised Persian learners with an age range of 20 to 30 years and Persian teachers with an age range of 28 to 48 years.

3.2. Instruments

The questionnaire used to collect data was Reid's (1987) perceptual learning styles questionnaire, which consists of 30 items that characterize six learning styles. These styles include visual, tactility, auditory, kinaesthetic, group, and individual. Each of the enumerated items serves as a defining characteristic of a particular learning style. More specifically, questions 6, 10, 12, 24, and 29 contribute to the identification of the visual learning style, while questions 11, 14, 16, 22, and 25 pertain to the tactile learning style. Additionally, questions 1, 7, 9, 17, and 20 offer insight into the auditory learning style, whereas questions 6, 10, 12, 24, and 29 further highlight the kinaesthetic learning style. Furthermore, questions 3, 4, 5, 21, and 23 shed light on the group learning style, while questions 13, 18, 27, 28, and 30 assist in discerning the individual learning style.

Each item had five options on a Likert scale ranging as follows: strongly disagree (5), agree (4), undecided (3), disagree (2), and strongly agree (1). The marks related to the questions of each style were added up and multiplied by two to determine the preferred style. Scores between 38 and 50 indicated the main preferred style, scores between 25 and 37 indicated the secondary preferred style, and scores between 0 and 24 indicated a state of non-attention.

In order to assess the face and content validity of learning and teaching style questionnaires. The questionnaires were evaluated by five experts in Persian language teaching, who provided feedback on the relevance of the questions for

measuring the desired index and addressing any uncertainties. The feedback was used to modify the questionnaire. An initial sample of 20 pre-test questionnaires was used to calculate the reliability coefficient of the tool using Cronbach's alpha method and SPSS statistical software. The reliability coefficient for each dimension and section of the questionnaire was computed using Cronbach's alpha method. The results are as follows: visual style (0.905), tactile style (0.787), auditory style (0.787), group style (0.884), kinaesthetic style (0.781), individual style (0.807) and total questionnaire (0.831). The results indicate that all parts of the questionnaire have acceptable reliability ($\alpha < 0.7$).

3.3. Data Collection

The questionnaire was distributed to both learners and teachers, with the first part collecting data on demographics such as age, gender, mother tongue, nationality, educational level, field of study, and duration of learning Persian. The second part collected data related to teaching style based on Reid's questionnaire. The chosen questionnaire was deemed suitable due to its ability to methodically compare teachers' teaching with the learning styles of Persian learners, as well as its use in previous research studies.

4. Analysis and Results

4.1. Data Analysis

In this section, the data obtained from students' questionnaires and teachers' questionnaires are analyzed to determine their preferred learning and teaching styles.

As shown in Table 1, the perceptual learning style preferences of Persian Language learners are as follows: 69.8% prefer the visual style, 72.4% prefer the tactile style, 78.4% prefer the auditory style, and 55.2% prefer the group style. Additionally, 81.0% of Persian learners prefer the kinesthetic style, while 55.2% prefer the individual style.

Table 1*Prioritizing the Learning Styles of Persian Language Learners*

Prioritization styles	Lack of attention		secondary		Primary		Mean	Final Priority
	number	percent	number	percent	number	percent		
visual	1	0.9	34	29.3	81	69.8	39.758	Primary
tactile	3	2.6	29	25.0	84	72.4	40.172	Primary
auditory	0	0.0	25	21.6	91	78.4	40.689	Primary
group	11	9.5	41	35.3	64	55.2	36.913	Secondary
kinesthetic	2	1.7	20	17.2	94	81.0	41.724	Primary
individual	14	12.1	38	32.8	64	55.2	37.258	Primary

The study also found that the visual, tactile, auditory, kinesthetic, and individual learning styles are given priority in the main attention mode, while the group learning style is given secondary attention mode based on the average scores.

Table 2 presents Persian language teachers' perceptual teaching style preferences. The results reveal that teachers prefer the Visual and Tactile styles equally (68.0% each), while a larger percentage of teachers (88.0%) prefer the Auditory style. The Kinesthetic style is preferred by the highest percentage of teachers (92.0%), followed by the Group style (84.0%). The Individual style is the least preferred style among teachers, with only 8.0% prioritizing it.

Table 2*Prioritizing the Learning Styles of Persian Language Teachers*

Prioritization styles	Lack of attention		secondary		Primary		Mean	Final Priority
	number	percent	number	percent	number	percent		
visual	0	0.0	8	32.0	17	68.0	38.320	Primary
tactile	0	0.0	8	32.0	17	68.0	39.760	Primary
auditory	0	0.0	3	12.0	22	88.0	41.680	Primary
group	0	0.0	4	16.0	21	84.0	41.520	Primary
kinesthetic	0	0.0	2	8.0	23	92.0	44.000	Primary
individual	16	64.0	7	28.0	2	8.0	26.080	Lack of attention

Moreover, based on the average scores, the Visual, Tactile, Auditory, Group, and Kinesthetic teaching styles are the main preferences, while the Individual teaching style is not a priority.

The impact of teachers' gender and field of study on their preferred teaching styles was examined using chi-square tests, and the effect of gender and academic background on teachers' styles is presented in Table 3.

Table 3

Investigating the Effect of Gender and Field of Study on Teachers' Teaching Styles

Style	The result of chi-square tests			
	Gender		Academic background	
visual	$\chi^2 = 2.252$	Sig= 0.133	$\chi^2 = 2.252$	Sig= 0.228
tactile	$\chi^2 = 00.184$	Sig= 0.668	$\chi^2 = 00.184$	Sig= 0.228
auditory	$\chi^2 = 00.379$	Sig= 0.538	$\chi^2 = 00.379$	Sig= 0.484
kinesthetic	$\chi^2 = 1.223$	Sig= 0.269	$\chi^2 = 1.223$	Sig= 0.484
group	$\chi^2 = 1.190$	Sig= 0.275	$\chi^2 = 1.190$	Sig= 0.006
Individual	$\chi^2 = 3.516$	Sig= 0.172	$\chi^2 = 3.516$	Sig= 0.457

The analysis shows that gender does not significantly affect teachers' preferred teaching styles. However, a significant relationship is observed between teachers' academic background and their teaching styles, with the chi-square test being significant ($\text{sig} < 0.05$) for the "group style" preference. Further examination of the relationship between this demographic variable and teaching styles among teachers indicates that the preference for group style has become significant. A more detailed exploration of this relationship is presented in Table 4.

Table 4

Distribution of Prioritization of Group Style Based on Teachers' Field of Study

field of study	Prioritization		
	Lack of attention	Secondary	primary
Persian Language Teaching	0 (0.0%)	0 (0.0%)	15 (100%)
Other fields	0 (0.0%)	3 (42.9%)	4 (57.1%)

Based on Table 4 and the distribution and frequency of group style preference among teachers according to their field of study, it can be concluded that teachers with an academic background in Persian language teaching (AZFA) exhibit a significantly higher inclination towards utilizing this teaching style as compared to teachers with degrees in other fields of study.

Table 5 provides a summary of the independent t-test results, comparing the prioritization of Persian Language learners and teachers. The findings reveal that there is no significant difference ($\text{sig} > .05$) in the prioritization of visual, tactile, auditory, and kinesthetic styles between the two groups. However, there is a significant difference ($\text{sig} < .05$) in prioritizing group and individual styles.

Table 5

Summary of Independent T-test Results to Compare the Styles of Teachers and Learners

Styles	Summary of independent t-test results	
visual	$t = 0.091$	Sig= 0.928
tactile	$t = 0.163$	Sig= 0.871
auditory	$t = 1.083$	Sig= 0.281
kinesthetic	$t = 1.360$	Sig= 0.176
group	$t = 2.784$	Sig= 0.006
individual	$t = 6.493$	Sig= 0.001

A comprehensive analysis and interpretation of two notable relationships between group and individual styles within the collective of teachers and Persian learners is presented in Table 6.

Table 6

Distribution of Prioritization of Individual and Group Styles among Teachers and Learners

Styles Priority	Group style			Individual style		
	Primary	Secondary	Lack of attention	Primary	Secondary	Lack of attention
Learners	64 (55.2%)	41 (35.3%)	11 (9.5%)	64 (55.2%)	38 (32.8%)	14 (12.1%)
Teachers	20 (84.0%)	4 (16.0%)	0 (0.0%)	(8.0%)	7 (28.0%)	16 (64.0%)

Table 6 presents the distribution and frequency of group and individual style

preference among Persian language learners and teachers. The findings indicate that teachers exhibit a significantly higher tendency to use the group teaching style as compared to Persian language learners. Conversely, Persian learners exhibit a significantly higher tendency to utilize the individual learning style than teachers.

5. Discussion

The primary question of this study was to determine the dominant perceptual learning style preferences of individuals studying Persian language. The results indicate that the most preferred learning style among Persian learners is Kinesthetic, followed by Auditory, Visual, and Individual styles, while Group style was ranked as a secondary learning style. The findings align with previous research conducted by Sengsouliya et al. (2021) and Abu-Asba et al. (2014), which also identified Kinesthetic style as the most preferred among language learners. The study suggests that Kinesthetic activities may not be incorporated into language classes across different countries. To enhance the quality of language education in classrooms, various techniques can be employed, such as playing video games that target the language being taught, having video conversations with native speakers, watching foreign language movies, reviewing vocabulary flashcards while multitasking, visiting locations relevant to the material being taught, playing scrabble to learn vocabulary, taking regular study breaks, using hand gestures and movements to aid in memorization, and utilizing game modes to facilitate learning.

The second most preferred learning style among Persian learners is the Auditory style. This suggests that language learners find it easier to comprehend spoken instructions than written ones, as they tend to store information based on sound. Consequently, language learners benefit from lessons that involve speaking and listening, such as audiobooks and reading aloud. However, it is worth noting that there is a lack of listening content available in Persian language in these fields.

The study also finds that Tactile is the third most preferred learning style among Persian learners, which is consistent with the findings of Abu-Asba et al. (2014). Tactile learners understand and retain information better through physical movement and prefer a more hands-on approach to learning. This learning style is often referred

to as multi-sensory learning, as tactile learners use multiple senses to learn and retain information.

Moreover, the least preferred learning style among Persian language learners is the Individual style, which is consistent with previous research conducted by Abu-Asba et al. (2014). Possible factors contributing to the preference of Persian language learners for non-individual learning styles may include the difficulty and high level of effort required for self-discipline when learning alone, as well as the challenges of staying motivated and focused without the guidance and support of a teacher or peers. Additionally, practicing the Persian language alone may not afford learners the same opportunities for interaction and communication as group learning, which some learners may prefer due to the social interaction and support it provides. The absence of feedback mechanisms in individual learning contexts may also hinder learners' ability to monitor their progress and identify areas for improvement.

Regarding the second research question, which aims to identify the main teaching styles employed by Persian language teachers, a comprehensive analysis of Table 2 uncovers significant findings. The results indicate that among the surveyed teachers, the kinesthetic style holds the highest priority, with a substantial percentage of 92%. Following closely, the auditory style ranks second with 88%, while the group style occupies the third position with 84%. In contrast, both the tactile and visual styles exhibit a lower priority, accounting for 68% of the main teaching preferences each. Notably, the individual style assumes a secondary role, representing a mere 8% of the main teaching priorities. These findings shed light on the distribution of teaching styles utilized by Persian language teachers, underscoring the prevalence of kinesthetic, auditory, and group styles as primary teaching approaches. The percentages provide valuable insights into the preferred instructional approaches among the surveyed teachers.

The present study's prioritization of the auditory style aligns with the findings of Abu-Asba et al.'s (2014) research, placing it in second position. However, in contrast to this study's ranking of the visual style in fifth place, it occupies the top position in Sengsouliya et al. (2021), Mei Ph'ng (2018), and Abu-Asba et al.'s (2014) research.

Based on the prioritization of the five distinct teaching styles, it can be inferred

that teachers employ a combination of various teaching methods. The prominence of the kinesthetic style underscores teachers' inclination towards facilitating practical, hands-on learning experiences. Furthermore, teachers prioritize the provision of clear instructions and materials within the classroom while emphasizing group work and collaborative learning among Persian learners. The third rank is attributed to the group teaching style, indicating that Persian teachers recognize the effectiveness of learning foreign languages through social interaction, as it facilitates the learning process and enhances its appeal. The outcomes reveal a 68% predominance of tactile and visual styles, suggesting that teachers frequently utilize the blackboard, introduce projects, provide model-based assignments, and encourage Persian learners to engage with textual material.

The third research question focuses on the impact of gender and field of study of Persian language teachers on their use of teaching styles. The research findings do not demonstrate a significant effect of gender on teachers' teaching styles. However, it is crucial to interpret the results with caution, as the limited representation of male teachers in the study may have influenced the outcome. It is worth noting that the number of male teachers in the field of Persian language education is generally quite small.

The study reveals a significant association between the teachers' field of study and their teaching styles, particularly in relation to the group style. The chi-square test results, as presented in Table 3, indicate a statistically significant relationship ($\text{sig} < .05$), and the analysis of Table 4 reveals a distinct pattern in the preferences of teachers based on their field of study. Specifically, teachers specializing in teaching Persian language exhibit a prevalence of 100% in prioritizing the group style as their main teaching approach. In contrast, teachers from other fields demonstrate a lower preference, with only 57.1% considering the group style as their primary teaching approach. Graduates of teaching Persian language tend to employ group activities more frequently compared to other teachers. These findings highlight the significant influence of the teachers' field of study on their adoption of the group style as the predominant teaching style.

The fourth research question focuses on the compatibility or incompatibility

between the teaching styles that Persian language teachers prefer and the learning styles that Persian learners prefer. The study results suggest a significant difference between the preferences of teachers and learners regarding group and individual learning styles. Specifically, among Persian language teachers, the group style is ranked second as a preferred teaching style with 84%, while among Persian learners, it is the least preferred style with 55.2%, along with the individual style. Furthermore, the individual style is considered a non-preferred style among teachers, with only 8% prioritizing it, whereas among Persian learners, it is also the least preferred style with 55.2%. However, the prioritization of visual, tactile, auditory, and kinesthetic styles does not differ significantly between the two groups.

The study further reveals that a significant percentage of Persian learners do not wish to engage in group work, which is only a main priority for 8% of teachers. Thus, there exists a mismatch between the preferred styles of teachers and Persian learners, which may lead to ineffective language instruction. This incompatibility highlights the crucial importance of identifying teachers' and learners' learning styles, as emphasized by Derakhshan and Shakki (2018). It can help teachers design more effective language learning programs that cater to the needs of different learners.

6. Conclusion

The aim of this study was to investigate the relationship between teaching styles and language learning styles in the context of language education. Throughout the research, various styles were examined, such as auditory, visual, kinesthetic, tactile, group, and individual. The study sought to uncover the extent to which different teaching styles align with the diverse language learning preferences of students. By examining the interplay between teaching styles and language learning styles, this research aimed to provide insights into effective instructional practices that promote successful language acquisition.

The research reveals that Persian learners use multiple learning styles. Consequently, there is a need to diversify and pay more attention to the different methods and activities used in Persian language teaching textbooks. The textbook is the third component in the learning cycle triangle, alongside the teacher and the

student. Textbooks remain a critical element in most language programs, acting as a foundation for language input and practice in the classroom. They can either complement the teacher's instruction or act as the primary source of language contact for learners. Textbooks also provide inexperienced teachers with ideas on how to plan and teach lessons.

Based on the findings of this study, it is recommended that teachers of Persian language learners encourage their language learners to identify their preferred learning style in order to enhance their learning experience. By doing so, learners can improve their ability to process and retain information, which can ultimately lead to better academic performance. Moreover, it is still important for educators to be aware of the different learning preferences of their Persian language learners and to provide a variety of teaching approaches to accommodate these preferences. Educators can also use this information to tailor their teaching methods to better suit the needs of individual learners, thereby creating a more effective and inclusive learning environment.

Moreover, the research shows that Persian language teachers use several teaching styles similarly. This finding allows for a better understanding of the instructional methods and approaches used in Persian language classrooms. This knowledge enables educators to evaluate the effectiveness of different teaching styles in facilitating language learning and make informed decisions regarding instructional practices. Furthermore, awareness of teaching styles helps Persian language educators tailor their teaching strategies to match the needs and preferences of their foreign students. They can reflect on their own teaching styles and explore alternative approaches, fostering a continuous improvement mindset. This self-reflection and professional growth can lead to the adoption of more effective teaching practices and ultimately enhance the quality of Persian language education.

One of the important findings of this research showed that teachers who have not studied language teaching tend to adopt a more traditional approach, where they primarily explain lessons to passive learners. However, teachers who have completed teaching courses understand the importance of utilizing a student-centric teaching style, where the teacher assumes the role of an observer while students actively

participate in the learning process. The group or delegator style, which involves the use of group teaching methods, enables the teacher to foster collaboration, stimulate peer-to-peer learning, and intervene when necessary. By adopting an observer's role, the teacher can facilitate a more interactive and engaging learning environment. Furthermore, understanding the teaching styles of Persian language teachers can inform educational policies and curriculum development. By considering the findings on teaching styles, policymakers can make informed decisions about teacher training programs and, finally, their employment in the Ministry of Education and Persian Language Centers. This ultimately improves the overall quality of Persian language education at a systemic level.

According to the latest findings of this research, Persian language learners in Iran exhibit distinct preferences for various learning styles. Thus, it is advisable for instructors to take into account the learning styles of each individual when teaching the language. Similarly, Persian language teachers tend to use different teaching styles in their language instruction. The study revealed that there is a mismatch between the preferences of teachers and learners regarding group and individual styles. While teachers tend to favor a range of group methods, more than half of the learners prefer an individual style, but only 8% of the teachers prioritize this style.

Additionally, this study highlights the importance of recognizing and accommodating individual differences in learning styles among Persian language learners in Iran. Teachers should strive to incorporate a variety of teaching methods that cater to different learning styles, including individual learning styles. Additionally, future research could explore ways to bridge the gap between teachers and learners in terms of preferred learning styles, and their relationship with other psychological factors such as personality and motivation to enhance the effectiveness of language instruction.

Overall, the findings of this study contribute to our understanding of the relationship between learning styles and teaching styles among learners and teachers in language centers. The results suggest that there is a need for greater awareness among teachers of their students' preferred learning styles and a corresponding adaptation of their teaching styles to align with these preferences. The outcomes of

this research have significant implications for educators, curriculum designers, and policymakers in developing pedagogical programs and approaches that cater to the diverse learning needs and preferences of language learners.

6. 1. Limitations

The study may be subject to several limitations that could affect the generalizability and accuracy of the findings. Firstly, the small sample size used in the study could limit the ability to generalize the results to a larger population. Secondly, relying on self-reported data from participants could introduce biases and inaccuracies, which could affect the validity of the conclusions drawn from the study. Additionally, due to some cultural considerations, it was not feasible to conduct interviews or qualitative methods, which could have provided additional insights into the relationship between teaching styles and learning styles in language education.

6. 2. Educational Recommendations

In terms of educational recommendations, two suggestions are offered. Firstly, teachers are encouraged to advise Persian language learners to diligently identify their preferred learning style as a means of enhancing their learning process. Secondly, given the pronounced preference for a group learning style among Pashto speakers and Afghan Persian learners, and the comparatively lower acceptance of this style by other nationalities and language groups, particularly Arab speakers and Syrians, it is recommended that these Persian learners be placed in separate groups and be taught by teachers who are trained in teaching Persian to non-Persian speakers. This is because group teaching style is deemed a top priority by 100% of these learners, as opposed to 57.1% for other teachers.

6. 3. Research Recommendations

Future research in this area could consider the following proposals. Firstly, as the current study was limited to a single center, it is recommended that future research involve multiple active centers across the country to yield more robust and

generalizable findings. Secondly, given the likelihood of individuals from diverse linguistic and ethnic backgrounds enrolling in Persian language classes each year, future research could focus on identifying their preferred learning styles or building on existing research in this area. Finally, it is suggested that future research explore the relationship between learning styles and other psychological factors, such as personality and motivation, to gain a more comprehensive understanding of the factors that impact language learning outcomes

References

- Abu-Asba, A., Azman, H., & Mustaffa, R. (2014). A match or mismatch between learning and teaching styles in science education, *International Journal of Education and Research*, 2(3), 1–14.
- Cardino Jr., J. M., & Ortega-Dela Cruz, R. A. (2020). Understanding of learning styles and teaching strategies towards improving the teaching and learning of mathematics. *LUMAT: International Journal on Math, Science and Technology Education*, 8(1), 19–43. <https://doi.org/10.31129/LUMAT.8.1.1348>
- Coffield, F. (2004). *Learning styles and pedagogy in post-16 learning: A systematic and critical review*. Learning and Skills Research Center.
- Cook, D. A. (2012). Adaptation to learning styles. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 98–101). Springer. <https://doi.org/10.1007/978-1-4419-1428-6-842>
- Den Dekker, H., & Kim, J. A. (2022). Mechanisms of propagation and factors contributing to beliefs in neuromyths. In Robinson, D. H., Veronica X. V., & Joseph A. K. (Eds). *Learning styles, classroom instruction, and student achievement* (pp.21–39). Springer.
- Derakhshan, A., Shakki, F. (2018). An investigation into the relationship between Iranian EFL high- and low-proficient learners and their learning styles. *Sage Open*, 8(4). <https://doi.org/10.1177/2158244018809408>.
- Felder, R. M. (2020, Spring). Opinion: Uses, misuses, and validity of learning styles. *Advances in Engineering Education*, 1–16. Retrieved from

<https://advances.asee.org/wp-content/uploads/vol08/issue01/Papers/AEE-Pathways-Felder.pdf>

Ghanizadeh, A., & Jahedizadeh, S. (2016). EFL teachers' teaching style, creativity, and burnout: A path analysis approach. *Cogent. Educ.* 3:1151997. <https://doi.org/10.1080/2331186X.2016.1151997>

Juris, M. F., Ramos, V. V., & Castañeda, M. G. (2009). *Learning and teaching crossroads. Institute for Learning Styles Journal*, 1, 1–19.

Kasim, S. (2019). Learning styles and teaching styles determine students' academic performances. *International Journal of Evaluation and Research in Education*, 8(4), 610–615.

Kharb P, Samanta P. P., Jindal, M., & Singh, V. (2013). The learning styles and the preferred teaching-learning strategies of first year medical students. *Journal of Clinical and Diagnostic Research*, 7(6), 1089–1092. <https://doi.org/10.7860/JCDR/2013/5809.3090>

Lawrence, B., Ntelioglou, B., & Milford, T. (2020). It is complicated: Learning and teaching is not about learning styles. *Frontiers for Young Minds*. 8: 110. <https://doi.org/10.3389/frym.2020.00110>

Li, L. N. (2022). *Cultural learning styles in language education: A special reference to Asian learning styles* [1st ed.], Routledge.

Marzano, R. J. (2007). *The art and science of teaching: A comprehensive framework for effective instruction*. ASCD.

Mei Ph'ng, L. (2018). Teaching styles, learning styles and the ESP classroom. Malaysia Technical Universities Conference on Engineering and Technology (MATEC, Web of Conferences), Volume 150, 05082 (2018). <https://doi.org/10.1051/mateconf/201815005082>

Oxford, R. L. (2003). Language learning styles and strategies: An overview. *GALA Global Advances in Language and Communication*, 1(1), 1–20.

Reid, J. M. (1987). The learning style preferences of ESL students. *TESOL Quarterly*, 21 (1), 87–110.

- Rezaeinejad, M., Azizifar, A., & Gowhary, H. (2015). The study of learning styles and its relationship with educational achievement among Iranian high school students. *Procedia - Social and Behavioral Sciences*, 199, 218–224. <https://doi.org/10.1016/j.sbspro.2015.07.509>
- Ridwan, H., Sutresna, I. & Haryeti, P. (2019). Teaching styles of the teachers and learning styles of the students. *Journal of Physics: Conference Series*. 1318(2019)012028 <https://doi.org/10.1088/1742-6596/1318/1/012028>
- Sengsouliya, S., Soukhavong, S., Phonekeo, S., Sengsouliya, S., & Xaixanith, T. (2021). Mismatches in teachers' teaching and students' learning styles in English classes at a secondary school level: A case study of Laotian secondary schools. *International Journal of Research in English Education*, 6(1), 16–33.
- Sim, S. H., & Mohd Matore, M. E. E. (2022). The relationship of Grasha-Riechmann Teaching Styles with teaching experience of National-Type Chinese Primary Schools Mathematics Teacher. *Frontiers in Psychology*, 13, 1028145. <https://doi.org/10.3389/fpsyg.2022.1028145>
- Sympas, I. & Digelidis, N. (2022). Examining physical education teachers' and pre-service physical education teachers' knowledge related to reproduction and production teaching styles through the framework theory of conceptual change, In Brendan SueSee, B., Hewitt, M. & Pill, Sh. (Eds), *The spectrum of teaching styles in physical education* (pp. 139–152). Routledge
- Vakilifard, A. (2019). Perceptual learning styles preferences: A comparison between language learners in second and foreign language settings. *Two Quarterly Journal of English Language Teaching and Learning*, 11(24), 303–322.
- Van Blerkom, D. (2009). *College study skills* (6th ed.). Wadsworth Cengage.
- Vukić, S. (2018). *A match or mismatch between teaching and learning styles in teaching English as a foreign language at the primary school level* [Unpublished master's thesis]. University of Osijek.
- Woolfolk, A. E. (2007). *Educational psychology* (10th ed.), Pearson/Allyn and Bacon.

About the Authors

Amirreza Vakilifard is a distinguished scholar, language educator, and researcher specializing in Persian language pedagogy, language assessment, and teacher education. Teaching Persian since 1996, he designed Iran's first bachelor's program dedicated exclusively to Persian language teaching and established the Journal of Teaching Persian to Speakers of Other Languages. He is the creator of SAMFA (Standardized Assessment of Persian language skills), an internationally adopted proficiency framework. His research spans pragmatic assessment, test development, and curriculum design, and his scholarly output includes over 80 peer-reviewed publications, marking him as a foundational voice in Persian language education.

Ali Akbar Joola holds a Master's degree in Persian Language Didactics to Speakers of Other Languages. His research focuses on the psychology of Persian language learning, examining learners' styles and teaching styles. His work aims to support more personalized and effective approaches to Persian language instruction by aligning teaching practices with learners' individual cognitive and affective profiles.