



# The Predictability of Turkman Students' Academic Engagement through Persian Language Teachers' Nonverbal Immediacy and Credibility

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## Abstract

Due to the crucial role of student academic engagement in learning a second language, teacher interpersonal variables which affect second language learners' engagement have gained momentum. To keep up with this line of inquiry, this study attempted to probe the role of Persian language teachers' nonverbal immediacy and credibility in their Turkman students' academic engagement. To do this, 503 Turkman students with different educational grades (i.e., 7, 8, 9, 10, 11, 12) voluntarily took part in this study from different regions of Golestan province. The sample included 282 females and 221 males ranging in age from 12 to 18. To obtain the data, Nonverbal Immediacy Scale (NIS), Source Credibility Scale (SCS), and Utrecht Work Engagement Scale for Students (UWES-S) were distributed among participants. Pearson correlation coefficient tests were run to analyze the gathered data. The results exhibited that there were significant positive correlations among Persian language teachers' nonverbal immediacy, credibility, and Turkman students' academic engagement. The findings were also approved by structural equation modeling (SEM) results: Turkman students' academic engagement was predicted significantly and positively by their Persian language teachers' nonverbal immediacy and credibility. The outcomes of the present study posit that Turkman students' academic engagement can be remarkably enhanced by their Persian language teachers' credibility and nonverbal immediacy. Finally, the pedagogical implications for teaching Persian to speakers of other languages are also discussed.

## Keywords:

Student Academic Engagement, Teacher Nonverbal Immediacy, Teacher Credibility, Turkman Students, Persian Language Teachers, Second Language Learning, Structural Equation Modeling

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## 1. Introduction

Research has corroborated that student academic engagement is an essential precursor for L2 learning (Dalunet al., 2011; Dotterer & Lowe, 2011; Ghelichli et al., 2020; Nejati et al., 2014). Academic engagement relates to “the quality of how students connect or involve themselves in educational activities” (Skinner et al., 2009, p. 495). As put forward by Van Uden et al. (2014), while student academic engagement is tied to their higher achievement at school, disengagement is associated with school dropout. In fact, student’ disengagement (burnout) is involved in the description of the dropout process. Pedagogically, school dropout is described as “the consequence of a long-term process of withdrawal and disengagement of the student from school” (Van Uden et al., 2014, p. 23). Students’ disengagement initiates during the early school years and can eventually contribute to their dropping out of higher education.

Concerning the value of academic engagement in second language learning (L2), Amiryousefi and Mirkhani (2019), for instance, have explicated that if Persian language learners do not have a sense of engagement, they appear to lose their interest and motivation in learning Persian. Based on this postulation, it is essential to probe how L2 learners’ academic engagement can be improved. Much of the previous research on student academic engagement has been conducted on the role of personal and social dimensions. For personal variables, existing research has focused on academic emotions (Kahu et al., 2015), motivation (Ghelichli et al., 2020; Wang & Eccles, 2013), and personality features (Qureshi et al., 2016). Regarding social dimensions, previous studies have concentrated primarily on English language teachers’ social support (Wang & Eccles, 2012) and their relations with their English language learners (Quin, 2017; Roorda et al., 2011). Nevertheless, there exists a research gap within this line of inquiry as to the role of Persian language teachers’ interpersonal variables, such as nonverbal immediacy and credibility in facilitating or inhibiting their Turkman students’ academic engagement.

In educational contexts, teacher nonverbal immediacy is explained in terms of a set of behaviors, creating a sense of physical or psychological intimacy between teachers and learners (Allen et al., 2006). These behaviors are some physical cues, including smiling, eye contact, direct body orientation, and close proxemics. Regarding the significance of language teachers’ nonverbal immediacy, Richmond et al. (2008) believed that language teachers’ nonverbal behaviors may enable them to minimize their language learners’ negative reactions to the use of corrective feedback. Witt et al. (2004) also expounded that language teacher nonverbal immediacy can increase the amount of students’ involvement in the language learning process. Hence, nonverbal immediacy behaviors that a language instructor exhibits in interactions with language

learners can be considered as rewarding. According to York (2013), these rewarding behaviors can encourage students to become more attentive during the whole class. As such, how students perceive their teachers' nonverbal behaviors is worthy of academic investigation.

Another essential predictor of student academic engagement can be language teacher credibility. As put forward by Banfield et al. (2006), teacher credibility refers to what extent a teacher is believable to students. It has three dimensions, including competence, trustworthiness, and caring. The competence and trustworthiness aspects are related to the capability of teachers in subject matters. Besides, caring is attributed to teachers' attention to students' interests and feelings (Pishghadam et al., 2019). According to Santilli et al. (2011), when students consider their language teachers as credible, they demonstrate increased achievement and higher levels of engagement. Similarly, Amiryousefi and Mirkhani (2019) have stated that when Persian learners perceive their language teachers as credible, their motivation to engage with language learning materials and tasks improves. Given the significance of language teacher credibility in students' overall achievement, motivation, and engagement, examining whether language teachers are credible is of high importance.

As previously mentioned, a large number of empirical research has been done to date to investigate the role of personal and social factors on student academic engagement. However, the role of language teachers' nonverbal immediacy and credibility, as prime instances of teachers' interpersonal variables, has received relatively less attention. Besides, even though speaker credibility belongs to the audience, not to the speaker (Aristotle's Theory of Rhetoric); many research studies have focused on teachers' perceptions to assess teachers' credibility. The voice of students in examining teacher credibility is thus overlooked. As such, this study aims to fill this gap by focusing on students' viewpoints in examining the role of Persian language teachers' nonverbal immediacy and credibility in Turkman students' academic engagement.

## **2. Literature Review**

### **2.1. Theoretical Framework**

#### **2.1.1. Attraction Theory**

Nonverbal Immediacy is characterized as “behaviors that enhance psychological closeness between communicators and is embedded in the reinforcement model underlying interpersonal attraction theory” (Mehrabian, 1971, p. 1). Interpersonal attraction theory is a construct that applies mainly to an individual's emotional judgment of another individual (Allen et al., 2006). Generally, people are likely to move whether verbally or nonverbally toward those they like (Mehrabian, 1971).

Reinforcement is a common theme among interpersonal attraction theories. The theory of reinforcement, as one of the basic notions of psychology, argues that actions accompanied by desired outcomes tend to be reproduced. Applied to interpersonal relationships, this principle suggests that in communicating with another person, once an individual considers something rewarding, then he/she should desire further communication with that other individual. In educational contexts, nonverbal actions that teachers employ in communicating with their students if considered rewarding may contribute to an increased amount of students' classroom involvement (Witt et al., 2004).

### ***2.1.2. Aristotle's Theory of Rhetoric***

Aristotle conceptualized rhetoric as the capacity to recognize what is probably convincing in each condition. He classified the means of convincing into Ethos, Pathos, and Logos, which he assumed are capable of affecting the audience (Nayernia et al., 2020). Unlike the modern conceptions of the "self", the mode of persuasion "Ethos" highlights the public and traditional dimensions. The most tangible meaning offered for Ethos is "a habitual gathering place". "To have ethos is to manifest the virtues most valued by the culture to and for which one speaks". For Aristotle, "Ethos" is about the personality of the speaker. The speaker aims to look credible. In fact, the ethos of a speaker is a "rhetorical strategy used by an orator whose goal is to inspire trust in his audience" (Halloran, 1982, p. 60).

"Pathos", as the second form of convincing, dealing with "awakening emotion (pathos) in the audience to convince them to make the judgment desired" (Papillon, 2001, p. 76). Aristotle proposed pathos as one of the crucial forms of proof by his statement that "to understand the emotions—that is, to name them, describe them, and to know their causes and the way in which they are excited" (Bizzell & Herzberg, 2001, p. 183). He also claimed that besides pathos, speakers should deploy good ethos to establish credibility.

Aristotle also referred to "Logos" as something more complicated than the potentiality to publicize personal emotions. It helps people to understand and clarify the distinction between what is important and what is not, and between what is fair and what is unfair. Aristotle proposed that source credibility is related to ethos, which is the most effective means of convincing. He explicated that credibility consists of three factors, namely intelligence, character, and goodwill (Nayernia et al., 2020).

### ***2.1.3. Schaufeli, Salanova, Gonzalez-Rom, and Bakker's (2002) Model of Engagement***

According to Schaufeli et al. (2002), engagement can be characterized as "a fulfilling and positive study-related state of mind" that is conceptualized by three dimensions, namely "absorption", "vigor", and "dedication" (p. 73). Vigor

relates to “students’ sense of the high degree of mental resilience and energy while studying, their desire to exert and invest effort into their academic-related practices, their persistence in the face of learning barriers, and their positive approach to learning” (Alrashidi et al., 2016, p. 45). The second dimension, dedication, is defined by students’ sense of “enthusiasm, significance, inspiration, challenge, and pride for engaging in their studies”, as well as their positive attitudes towards classroom activities (Ouweneel et al., 2014, p. 41). Absorption, as the third dimension, is described as students’ feeling of being profoundly immersed and completely focused on their studies (Salmela-Aro & Upadyaya, 2014). Although three factors of student academic engagement are separate constructs, they are strongly associated with one another (Upadyaya & Salmela-Aro, 2013).

#### **2.1.4. Rhetorical-Relational Goal Theory**

Rhetorical-relational goal theory suggests that teachers have some rhetorical and relational aims that they aspire to attain in their classrooms (Myers, 2008). According to Mottet et al. (2006), teachers who employ rhetorical instructional communication behaviors do so to improve teaching quality. These behaviors, which include clarity and humor, “shape the instructional messages teachers deliberately design as a way to affect their students’ academic behaviors” (Beebe & Mottet, 2009, p. 353). Clarity is related to the process in which teachers accurately interpret information in a way that learners comprehend (Myers, 2008). Humor, as another instance of rhetorical instructional communication behavior, concerns the verbal/nonverbal behaviors teachers deliberately utilize to elicit the expected response from their pupils (Beebe & Mottet, 2009).

Teachers employ relational instructional communication behaviors to facilitate the establishment of teacher-student relations (Myers, 2008). These behaviors, which consist of “nonverbal immediacy” and “confirmation,” help teachers and students to establish an appropriate atmosphere in classrooms (Beebe & Mottet, 2009). Teacher confirmation is conceptualized as a procedure through which instructors encourage students’ engagement in educational settings. Teachers do so through responding to students’ questions and expressing interest in their learning (Ellis, 2000). On the basis of rhetorical/relational goal theory, Myers et al. (2014) elucidated that teachers’ relational instructional communication behaviors are related positively to one another and students’ viewpoints of their teachers’ credibility.

#### **2.2. Teacher Nonverbal Immediacy**

Immediacy is described as a range of behaviors (i.e., smiling, eye contact, direct body orientation, close proxemics) which help establish a sense of physical or psychological intimacy between communicators (Richmond et al.,

2008). In an educational context, such closeness occurs between teachers and students. According to Allen et al. (2006), teacher immediacy, a behavior perceived by students, can improve students' involvement, motivation, and enthusiasm. Given the fact that the essential part of educational contexts is the interaction between teacher and student (Pogue & Ah Yun, 2006), if teachers seek to increase their students' involvement, they should improve their interaction with them (e.g., through nonverbal immediacy cues). In this regard, Mehrabian (1971) clarified that the efficacy of nonverbal immediacy behaviors is based on the model of reinforcement. As such, nonverbal immediacy behaviors that teachers employ in interactions with their students can be deemed as rewarding. It follows that these rewarding behaviors can encourage students to become more motivated, attentive, and involved during a whole class (Pogue & Ah Yun, 2006). Based on this logic, some scholars have investigated teacher nonverbal immediacy in association with students' cognitive learning, affective learning, motivation, self-actualization, self-esteem, willingness to communicate, and engagement (Comadena et al., 2007; Gholamrezaee & Ghanizadeh, 2018; Hsu, 2010; Sheybani, 2019; Violanti et al., 2018; York, 2013).

Hsu (2010), for instance, studied teachers' nonverbal immediacy behaviors in relation to students' motivation for learning English. To this aim, 303 students who enrolled in English courses in a central Taiwan technology institution were asked to complete the Nonverbal Behavior Scale and Motivation Scale. Based on the results of analyses, the researcher found that English language learners' motivation tends to be increased when teachers use nonverbal behaviors.

Subsequently, Gholamrezaee and Ghanizadeh (2018) probed the effect of EFL teachers' immediacy actions on students' self-actualization, self-esteem, stress-control, cognitive learning, and emotional exhaustion. To do this, 206 EFL students completed five inventories about themselves and their EFL teachers. Employing SEM, researchers found that teacher immediacy behaviors positively affected all student-related constructs, notably students' self-actualization.

More recently, Sheybani (2019) investigated the association between teachers' immediacy behaviors and their Iranian EFL learners' willingness to communicate (WTC). Applying a random sampling approach, he selected 256 EFL learners from the language institutes of Mashhad. Pearson's correlation was performed to examine the associations among variables. Based on the results, he reported that both verbal and nonverbal immediacy of teachers positively and significantly predicted students' WTC.

### **2.3. Teacher Credibility**

As put forward by McCroskey and Young (1981), credibility is generally defined as believability and refers to one's attitude toward a communication source. While the significance of source credibility is not controversial, the essence of this perception has become so. In fact, the components of teacher credibility have been proposed differently by various scholars. For instance, Hovland et al. (1953) established a measure of teacher credibility and identified three underlying factors, namely expertness, trustworthiness, and intention toward the receiver. In another attempt to identify the concept of credibility, McCroskey et al. (1974) classified credibility components into five categories, namely competence, extroversion, character, composure, and sociability. Finally, the previous categorizations of credibility have been refined by McCroskey and Teven (1999). They classified credibility into three components of competence, character, and caring. Competence is described as perceived teacher knowledge or expertise in the subject that she/he is teaching (McCroskey, 1998).

Teacher character relates to perceived instructor goodness and trustworthiness as a person (Frymier & Thompson, 1992). Teacher caring, as the third dimension, refers to the degree of teachers' attention to students' feelings and interests (McCroskey, 1998; Pishghadam et al., 2017).

According to Santilli et al. (2011), when students perceive their instructors as credible, they demonstrate greater motivation and achievement. In line with this statement, some researchers investigated the predictability power of teacher credibility in students' related variables, including language achievement, motivation, willingness to communicate, and engagement (Imlawi et al, 2015; Pishghadam et al., 2017; Pishghadam et al., 2019). For instance, Pishghadam et al. (2017) probed the association between EFL teachers' credibility and students' degree of achievement. To this end, 300 EFL learners voluntarily completed the questionnaires. Analyzing the gathered data, the researchers found that higher rates of teacher credibility can lead to a higher degree of students' language achievement.

More recently, Pishghadam et al. (2019) examined the impact of teacher stroke and credibility in students' willingness to attend classes (WTAC). In so doing, the Teacher Credibility Scale, Teacher Stroke Scale, and WTAC Scale were distributed among 276 undergraduate students majoring in Teaching English as a Foreign Language (TEFL) and English Language and Literature. The results of path analysis demonstrated that students' willingness to attend classes was positively and significantly predicted by teacher credibility and stroke.

### **2.4. Student Academic Engagement**

Student academic engagement focuses mainly on students' academic experiences and their relations with school or other educational contexts

(Libbey, 2004). While its conceptualizations and coverage are relatively diverse, researchers came to an agreement regarding the multidimensionality of student academic engagement. To them, student academic engagement includes various aspects, working together to represent students' positive emotions towards learning (Carter et al., 2012; Fredricks et al., 2004; Phan, 2014). Nevertheless, scholars have often disagreed on the types and number of the components of engagement (Appleton et al., 2008; Jimerson et al., 2003; Schaufeli et al., 2002). For instance, Schaufeli et al. (2002) defined engagement as possessing three components of vigor, absorption, and dedication, as opposed to Jimerson et al. (2003), who conceptualized student academic engagement along with three factors of Affective engagement, Behavioral engagement, and Cognitive engagement (ABC). While scholars have proposed conceptualizations of engagement with two, three, and even four dimensions, the model of Schaufeli et al. (2002) has been central in comprehending the multidimensional essence of the engagement construct (Upadyaya & Salmela-Aro, 2013).

Student academic engagement has been investigated from different perspectives, including as a means of preventing dropping out of school (Janosz et al., 2008; Wang & Fredricks, 2014), as a moderator of gaps in language learning (Woolley & Bowen, 2007), and as an outward manifestation of motivation (Ghelichli et al., 2020; Skinner et al., 2009). Regarding the manifestation of motivation, Ghelichli et al. (2020), for instance, investigated the relationship between different factors of student engagement and language learning motivation among Iranian EFL learners. To this end, the Student Engagement Questionnaire and Language Learning Motivation Scale were distributed among 117 intermediate EFL learners at Iran Language Institute. Based on the results of the correlation tests, researchers found that there were significant relationships between language learning motivation and each dimension of student engagement.

Moving beyond these perspectives, some studies also examined the probable relationship between student academic engagement and language teachers' interpersonal variables (Alvandi et al., 2015; Hagenauer et al., 2015; Parsons et al., 2014, Van Uden et al., 2014). For instance, Van Uden et al. (2014) examined the role of language teachers' beliefs and interpersonal behaviors in increasing language learners' engagement. To this aim, 200 language teachers and 2288 students voluntarily took part in the process of data collection. To gather the required data, the researchers developed two questionnaires and distributed them among the participants. Analyzing data, they found interpersonal language teacher behaviors can positively and significantly predict language learners' engagement.

Similarly, Alvandi et al. (2015) studied the interrelationships among Iranian EFL teachers' critical thinking skills, emotional quotient, and their



students' engagement. To gather the data, the instruments (i.e., Critical Thinking Appraisal, Bar-On Emotional Quotient Inventory, Tinio High School Survey on Student Engagement) were distributed among 20 EFL high school teachers and 600 EFL students. The results of the study demonstrated that there was a significant correlation between EFL teachers' critical thinking skills and their students' engagement.

The present study is warranted due to the following gaps in the literature which was reviewed. First, the study of student engagement seems to be in its infancy in language learning research. Second, it appears that there is not much research on the association between language teacher interpersonal variables and student academic engagement. Last but not least, to the best of the researcher's knowledge, no research study has been conducted to explore the effect of Persian language teachers' interpersonal variables on the academic engagement of students who intend to learn Persian as a second language. The present study, thus, attempts to fill these gaps by examining the role of Persian language teachers' nonverbal immediacy and credibility in their Turkman students' academic engagement. To this end, two research questions were formulated as follows:

1. Are there any significant relationships among Persian language teachers' nonverbal immediacy, credibility, and Turkman students' academic engagement?
2. Do Persian language teachers' nonverbal immediacy and credibility significantly predict their Turkman students' academic engagement?

### **3. Method**

#### **3.1. Setting and Participants**

##### **3.1.1. Setting**

Golestan is among the northern provinces of Iran. It was a part of Mazandaran province, which became an independent province in 1997. According to the last census, conducted by Statistical Centre of Iran in 2016, 1,777,014 people live in Golestan province with different ethnicities, including Turkman, Persian, Baluch, Kazak, Turk, and Kurd. A large part of the Golestan population is made up of Turkmans (34.2 %) who live mainly in the eastern, central and northern parts of the province. Taking the large number of Turkmans into consideration, they were selected as the participants of the study.

##### **3.1.2. Participants**

Maximum variation sampling was used to gather data from 503 Turkman students (N= 503) from different regions of Golestan province (Appendix A). This purposeful sampling strategy aims to sample for heterogeneity. It begins by

identifying diverse characteristics, including age, experience, educational grade, gender, etc. This method is useful for examining range in large regional or national programs (Ary et al., 2018).

The participants were L1 Turkmen speakers who study Persian as the second language in schools. They were all students with different educational grades (i.e., 7, 8, 9, 10, 11, 12) ranging in age from 12 to 18. The sample included 221 males (43.9%) and 282 females (56.1%). Participants were informed of the study's aim and data collection procedure. Their consent was gathered via consent forms sent to them. The participants were also reassured that their information would remain confidential and be utilized only in the present study.

### **3.2. Instrumentation**

#### **3.2.1. *Nonverbal Immediacy Scale (NIS)***

Persian language teachers' nonverbal immediacy was measured by Thomas, Richmond, and McCroskey's (1994) Nonverbal Immediacy Scale (NIS). Previous versions of this scale included up to 16 items. However, Thomas et al. (1994) deleted six items dealing with touching, standing, and seating since they did not lead to the reliability or validity of the instrument when employed in classrooms. This scale uses 10 items to which participants respond on a 5-point Likert-type scale. The reliability of this scale has been reported as 0.83. Since the scale was in English, for this study, it was translated into Persian. Content validity of the scale was confirmed by five applied linguists. The reliability coefficient of the scale for the present study was estimated to be 0.71.

#### **3.2.2. *Source Credibility Scale (SCS)***

To assess Turkman students' perceptions of their Persian language teachers' credibility, the Source Credibility Scale, developed by McCroskey and Teven (2013), was employed. The scale encompasses 18 items consisting of three components, namely competence, goodwill, and trustworthiness. The reliability of the components has been reported as 0.89, 0.93, and 0.83, respectively. The questionnaire was translated into Persian, and then the content validity of items was confirmed by five applied linguists. The reliability index of SCS for this study was estimated as 0.95.

#### **3.2.3. *Utrecht Work Engagement Scale for Students (UWES-S)***

Turkman students' academic engagement was measured via Utrecht Work Engagement Scale for Students (UWES-S), developed by Schaufeli et al. (2002). The scale comprises 17 items, which consist of three subscales, including "absorption", "dedication", and "vigor". To prevent responding bias, engagement and burnout items were put randomly. For the convenience of the

participants, UWES-S was translated into Persian, and subsequently, five applied linguists confirmed the content validity of the questionnaire. The reliability of the UWES-S for this study was 0.89, which assures a good reliability estimate.

### 3.3. Data Collection Procedure

At the very beginning of the data collection process, students were asked to fill the consent forms sent to them. Then, to obtain the required data, the electronic form of the three above-mentioned scales, namely NIS, SCS, and UWES-S were sent via WhatsApp to 550 Turkman students of Golestan Province. Out of the 550 questionnaires which were sent to Turkman students, 503 of them were completed and sent back to the researcher, equating to a response rate of 0.91.

### 3.3. Data Analysis

To determine whether our data were distributed normally or not, the Kolmogorov-Smirnov test was employed (Pallant, 2016). Further, to estimate the reliability coefficient of the scales, Cronbach's alpha was performed. Then, in order to examine the associations among Persian language teachers' nonverbal immediacy, credibility, Turkman students' academic engagement, and their underlying constructs, the Pearson correlation procedure was run through SPSS software version 20. Finally, to investigate the power of Persian language teachers' nonverbal immediacy and credibility in predicting Turkman students' academic engagement, SEM was performed.

## 4. Results and Discussion

### 4.1 Results

First, to make sure that the data were distributed normally, Kolmogorov-Smirnov was run. Table 1 portrays the results of the Kolmogorov-Smirnov test.

**Table 1**

*The Results of Kolmogorov-Smirnov Test for the Nonverbal Immediacy Scale, Academic Engagement Scale, and Source Credibility Scale*

	Kolmogorov-Smirnov <sup>a</sup>		
	Statistic	df	Sig.
Academic Engagement	.06	503	.08
Nonverbal Immediacy	.03	503	.16
Source Credibility	.06	503	.06

As can be seen in Table 1, the Sig values of the Kolmogorov-Smirnov test for academic engagement, nonverbal immediacy, and source credibility are .08, .16, and .06, respectively. As all these values are greater than .05, it can be concluded that the distribution of data is normal; thus, parametric tests can be used.

Table 2 depicts the descriptive results for the three questionnaires, namely academic engagement, nonverbal immediacy, and source credibility.

**Table 2**

*Descriptive Statistics of Academic Engagement, Nonverbal Immediacy, and Source Credibility*

	N	Minimum	Maximum	Mean	Std. Deviation
Academic Engagement	503	17.00	70.00	55.69	8.87
Nonverbal Immediacy	503	18.00	50.00	34.70	4.95
Source Credibility	503	21.00	126.00	103.44	20.13

As Table 2 displays, no outliers or other abnormalities were found. The academic engagement has a mean score of 55.69, nonverbal immediacy has a mean score of 34.70, and source credibility has a mean score of 103.44.

Table 3 also shows the results of Cronbach alpha analyses regarding the scales and subscales of the study.

**Table 3**

*Results of Cronbach Alpha Indices of Nonverbal Immediacy Scale, Academic Engagement Scale, and Source Credibility Scale*

Scales	Subscales	Cronbach alpha
Nonverbal Immediacy	-----	.71
Academic Engagement	Vigor	.82
	Dedication	.91
	Absorption	.83
	Total	.89
Source Credibility	Competence	.90
	Goodwill	.89
	Trustworthiness	.77
	Total	.95

As Table 3 demonstrates, the utilized scales attained acceptable indices of Cronbach alpha as a whole as well as in their components.

Then, to answer research question 1, which dealt with whether any significant relationships exist among Persian language teachers' nonverbal immediacy, credibility, and Turkman students' academic engagement, the Pearson correlation was employed (Table 4).

**Table 4**

*Results of Pearson Correlation between Persian Language Teachers' Nonverbal Immediacy, Credibility, and Turkman Students' Academic Engagement*

		Academic Engagement	Nonverbal Immediacy	Source Credibility
Academic Engagement	Pearson Correlation	1		
	Sig. (2-tailed)			
	N			
Nonverbal Immediacy	Pearson Correlation	.28**	1	
	Sig. (2-tailed)	.000		
	N	503		
Source Credibility	Pearson Correlation	.33**	.31**	1
	Sig. (2-tailed)	.000	.000	
	N	503	503	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

As Table 4 illustrates, there is a positive association between Turkman students' academic engagement and Persian language teachers' nonverbal immediacy ( $r = .28, n=503, p = .000, \alpha = 0.01$ ). Further, it is portrayed that there is a positive significant link between students' academic engagement and Persian language teachers' credibility ( $r = .33, n=503, p = .000, \alpha = 0.01$ ). Finally, it was found that Persian language teachers' credibility was significantly related to their nonverbal immediacy ( $r = .31, n=503, p = .000, \alpha = 0.01$ ).

To examine the impact of Persian language teachers' nonverbal immediacy and credibility in their Turkman students' academic engagement, SEM was employed. To determine whether our data fit the proposed model, some fit indices were measured. To have an appropriate model,  $\chi^2/df$  should be less than 3, NFI, GFI, and CFI should be above 0.90, and RMSEA should be less than 0.08. The goodness of fit indices results are represented in Table 5.

**Table 5**

*The Goodness of Fit Indices of the Proposed Model*

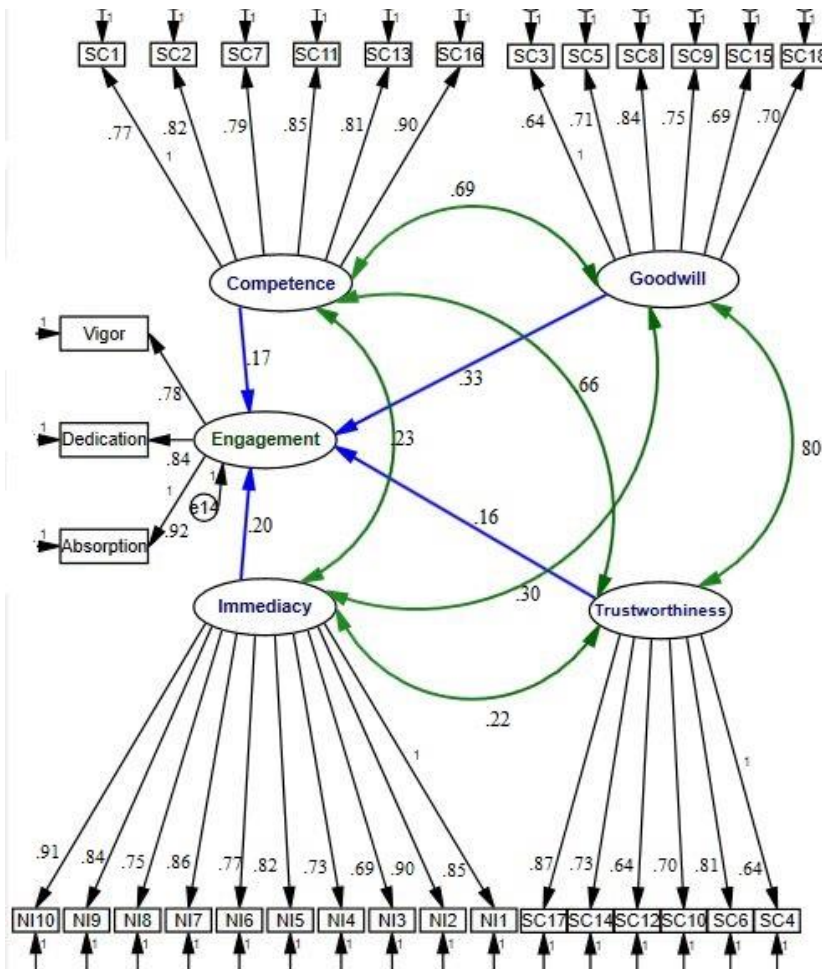
	X <sup>2</sup> /df	GFI	CFI	NFI	RMSEA
Acceptable fit Model	<3	>.90	>.90	>.90	<.08
	1.19	.98	.97	.93	.06

As indicated in Table 5, our data resulted in acceptable goodness of fit indices. As such, it can be inferred that the proposed model had an acceptable fit with the gathered data.

Figure 1 offers the structural equation model of interrelationships among Persian language teachers' nonverbal immediacy, credibility, and Turkman students' academic engagement.

**Figure 1**

*The Structural Equation Model of the Interrelationships among Persian Language Teachers' Nonverbal Immediacy, Credibility and Turkman Students' Academic Engagement*



To determine how much of the variability in the dependent variable (students' academic engagement) could be accounted for by the independent

variables (teachers' nonverbal immediacy and credibility), the standardized estimates were assessed.

As Figure 1 indicates, Turkman students' engagement is predicted significantly and positively by their Persian language teachers' nonverbal immediacy ( $\beta = .20, p < 0.05$ ) and all components of credibility, namely competence ( $\beta = .17, p < 0.05$ ), goodwill ( $\beta = .33, p < 0.05$ ), and trustworthiness ( $\beta = .16, p < 0.05$ ). In addition, there exists a positive correlational path between Persian language teachers' nonverbal immediacy and credibility.

## 4.2 Discussion

The primary aim of the present research was to explore the associations between Persian language teachers' nonverbal immediacy and credibility and their Turkman students' academic engagement. The findings of correlational analyses indicated a significant and positive correlation, first, between Persian language teachers' nonverbal immediacy and Turkman students' academic engagement, and second, between Persian language teachers' credibility and Turkman students' academic engagement.

The relationship between Persian language teachers' nonverbal immediacy and Turkman students' academic engagement can be justified by the attraction theory proposed by Mehrabian (1971). Based on this theory, teachers can reinforce their students to become more engaged in the learning process through (1) using gestures in interacting with their students, (2) having a relaxed body position while communicating with students, (3) using different vocal expressions while communicating with students, and (4) looking at students while teaching (Thomas et al.'s (1994). Additionally, based on what York (2013) has elucidated, teachers' nonverbal behaviors can make students more attentive during a whole class.

The association between Persian language teachers' credibility and Turkman students' academic engagement can be explained by the fact that when students consider their language teachers as competent, trustworthy, and attentive persons (McCroskey & Teven, 2013), they demonstrate increased achievement and higher degrees of engagement (Santilli et al., 2011). In this regard, Amiryousefi and Mirkhani (2019) noted that when Persian language learners consider their teachers as credible, their motivation to engage with language learning tasks increases.

As an ancillary goal, the study also attempted to determine the power of Persian language teachers' nonverbal immediacy and credibility in predicting Turkman students' academic engagement. The results showed that Turkman students' academic engagement is predicted significantly and positively by their Persian language teachers' nonverbal immediacy. The finding can be illuminated by the fact that if teachers aim to enhance their students' involvement, they should improve their interaction with them (Pogue & Ah Yun, 2006). This result

corroborates Estep and Roberts' (2015) findings which indicated that teachers' immediacy could predict the academic engagement of their students. This is also indirectly in agreement with the findings of Gholamrezaee and Ghanizadeh (2018) which reported a significant negative relationship between teachers' immediacy and students' burnout (i.e., disengagement). Additionally, this result supports Lashkari Kalat et al.'s (2018) findings, which proposed student academic engagement as one of the positive consequences of teachers' verbal and nonverbal behaviors.

Turkman students' academic engagement is also predicted significantly and positively by their Persian language teachers' credibility. It means that being credible or not has a crucial impact on students' vigor, absorption, and dedication (Schaufeli et al., 2002). A possible explanation for this might be due to the fact that more credible teachers are more likely to improve students' performance and involvement (Santilli et al., 2011). This finding accords with Imlawi et al.'s (2015) results which demonstrated that instructors' credibility has a positive impact on students' engagement. This result is also in agreement with Trad et al.'s (2014) findings, which portrayed that teacher credibility, as a situational variable, can affect language learners' engagement with classroom activities. It is also encouraging to compare this finding with that of Gerhardt's (2016) which reported that teachers' sociability and credibility can highly affect different dimensions of student course engagement.

The SEM analysis also represented a positive correlational path between Turkman teachers' nonverbal immediacy and credibility. It implies that besides the predictive power of teachers' nonverbal immediacy and credibility, there are also valuable associations between these interpersonal variables. This finding supports the rhetorical/relational goal theory, which posits that nonverbal immediacy, as one of the relational instructional communication behavior, is positively related to students' viewpoints of their teachers' credibility (Beebe & Mottet, 2009).

## **6. Conclusion and Pedagogical Implications**

The findings of this study contribute to a major theme, namely Turkman students' academic engagement is predicted positively and significantly by their Persian language teachers' nonverbal immediacy and credibility. To put it differently, Persian language teachers' nonverbal immediacy and credibility can remarkably enhance the academic engagement of their Turkman students.

These findings can be beneficial for Persian language teachers who teach Persian as the second language to speakers of other languages, notably Turkman students. If Persian language learners consider their teachers as credible, their motivation to engage with language learning activities improves. Hence, Persian



language teachers are highly recommended to behave in a manner to be considered as a trustworthy and attentive instructor.

Additionally, in order to decrease the negative reactions of Turkman students against the use of teachers' corrective feedback, Persian language teachers are strongly advised to use some nonverbal actions such as smiling, moving around the classroom, and using gestures while communicating with their pupils. Employing these nonverbal actions, they can also enhance the psychological closeness between themselves and their students, which significantly lead to students' academic engagement. A higher degree of L2 learners' academic engagement can improve their ability to communicate in the target language, which is the main objective of second language learning (Amiryousefi & Mirkhani, 2019; Fallah, 2014; Khajavy et al., 2016). Additionally, the outputs of this research can be informative for Persian language teacher educators. They should put emphasis on the importance of teachers' interpersonal variables, notably nonverbal immediacy and credibility to help Persian language teachers increase the amount of their L2 learners' academic engagement.

Future studies on Persian language learners' academic engagement are expected to investigate the role of other interpersonal variables of Persian language teachers, including teacher stroke, teacher caring, and teacher resilience. Moreover, the present research can be replicated with speakers of other languages such as Baluchi, Turkish, Kurdish, and Kazakh to understand whether similar findings can be found. In addition, this research study was purely quantitative; hence, further studies are recommended to include some interviews to attain more comprehensive results.

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### Appendix A (The participants' residential area)

City	Frequency	Percentage
Bandar-e Turkmen	360	71.57%
Aq-Qala	60	11.92%
MaravehTappeh	20	3.9%
Gonbad	20	3.9%
Gorgan	14	2.7%
SiminShahr	9	1.7%
Gomishan	7	1.3%
Kalaleh	7	1.3%
Aliabad-e-Katul	6	1.1%

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## پیش‌بینی مشارکت تحصیلی دانش‌آموزان ترکمن از طریق اعتبار و رابطه دوستانه‌ی غیر کلامی معلمان زبان فارسی ایرانی (پژوهشی)

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### چکیده

با توجه به نقش اساسی مشارکت تحصیلی دانش‌آموزان در یادگیری زبان دوم، متغیرهای بین فردی که بر میزان این مشارکت تأثیر می‌گذارند، مورد توجه قرار گرفتند. بر همین اساس، این مطالعه به بررسی نقش اعتبار و رابطه دوستانه غیر کلامی معلمان زبان فارسی در مشارکت تحصیلی دانش‌آموزان ترکمن پرداخت. برای این منظور، ۵۰۳ دانش‌آموز ترکمن با پایه‌های تحصیلی متفاوت (پایه هفتم، هشتم، نهم، دهم، یازدهم و دوازدهم) از مناطق مختلف استان گلستان به صورت داوطلبانه در این مطالعه شرکت کردند. این جامعه آماری را ۲۸۲ دختر و ۲۲۱ پسر با رده سنی ۱۲ تا ۱۸ سال تشکیل دادند. برای جمع‌آوری داده‌های مورد نیاز، پرسشنامه‌های «رابطه دوستانه غیر کلامی معلمان»، «اعتبار معلمان» و «مشارکت تحصیلی دانش‌آموزان» بین شرکت‌کنندگان توزیع شد. به منظور تجزیه و تحلیل داده‌های جمع‌آوری شده، از آزمون‌های «ضریب همبستگی پیرسون» استفاده گردید. نتایج این آزمون‌ها نشان داد که بین هر سه عامل رابطه دوستانه غیر کلامی معلمان فارسی، اعتبار معلمان فارسی و مشارکت تحصیلی دانش‌آموزان ترکمن روابط مثبت و معناداری وجود دارد. این یافته‌ها همچنین توسط نتایج «مدل‌سازی معادلات ساختاری» تأیید شد. به طور کل نتایج این تحقیق حاکی از آن است که اعتبار و رابطه دوستانه غیر کلامی معلمان زبان فارسی می‌تواند به طرز چشمگیری بر میزان مشارکت تحصیلی دانش‌آموزان ترکمن بیفزاید. در پایان، پیامدها و پیشنهادات این تحقیق در ارتباط با آموزش زبان فارسی به غیر فارسی‌زبانان مورد بحث قرار گرفت.

**کلیدواژه‌ها:** مشارکت تحصیلی دانش‌آموزان، رابطه دوستانه غیر کلامی معلمان، اعتبار معلمان، دانش‌آموزان ترکمن، معلمان زبان فارسی، یادگیری زبان دوم، مدل‌سازی معادلات ساختاری.