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Constructing and Validating Professional Attitude Scale for Iranian TEFL Prospective Teachers

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ABSTRACT

This study was carried out to develop a new scale for measuring TEFL prospective teachers' attitudes toward the teaching profession to be used as an instrument in the admission procedure of Iranian Teacher education Universities. The participants were two groups of junior and senior prospective teachers (n= 54 & n=186) majoring in Teaching English as a Foreign Language at Farhangian University in Iran. After reviewing the literature and interviewing 54 participants, the initial draft of the scale containing 38 items using a 5-point Likert type was developed. After revising the draft based on the experts' comments and the feedback from a group of participants, the new version with 32 items was completed by 186 participants and their responses were submitted for statistical analyses. As a result of the exploratory factor analyses, the scale was reduced to 22 items across four factors, entitled economic factor, social factor, professional factor, and teacher competency factor. The reliability coefficients were found to be 0.70 for the whole scale, and 0.67, 0.69, 0.76 and 0.73 for the subscales, respectively. The results of confirmatory factor analyses indicated that the four-factor solution possessed good data-model fit across all indices, χ^2 (203, N = 186) = 356.38, $p < 0.000$, χ^2/df = 1.76, *GFI* = 0.95, *NNFI* = 0.92, *CFI* = 0.93 *SRMR* = 0.05, *RMSEA* = 0.064. The results demonstrated that the scale was valid and reliable to measure professional attitudes of TEFL prospective teachers.

Keywords: TEFL prospective teachers, factor analysis, professional attitudes, validating scale

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1. Introduction

In this rapidly changing world, education is regarded as an indispensable agency that can guarantee sustainable development in every society. Undoubtedly, among various educational elements, this is the teachers who should shoulder the heavy responsibility of implementing educational policies and principles. Since teaching is a challenging and multidimensional profession, educating high qualified teachers has received first and foremost priority over other elements. In teacher education programs, such a high priority is currently referred to as "teachers' competencies", which is defined as a combination of knowledge, skills, and attitudes, which empower teachers to perform professionally in their own situations (Koster & Dengerink, 2008).

Various models have been proposed to determine the components of teachers' competencies (Simonović, 2021). In most of these models, knowledge, skills, and attitudes have been proposed as the key components (Omar et al., 2020). Among these three components, the most important component is the attitudes toward the teaching profession (Khodamoradi & Maghsoudi, 2019). Attitude has been defined as "the emotional tendency of an individual to ideas, objects, people and places" (Papanastasiou, 2002, p. 72), and the attitudes toward the teaching profession is also defined as "a predisposition, feeling, emotion, or thought that upholds the ideals of a profession and serves as the basis for professional behavior" (Hammer, 2000, p. 456).

Teacher education programs are the first formal arena in which prospective teachers' competencies in general and professional attitudes in particular are supposed to be acquired. However, it has been proven that prospective teachers' attitudes are relatively static during pre-service teacher education (Borg, 2005) since teaching applicants enter training programs with attitudes toward the teaching profession that are quite difficult to change. It can partially be attributed to a concept known as "the apprenticeship of observation" (Lortie, 1975), which means that teaching applicants arrive for their training courses in teacher education programs while having spent thousands of hours observing the profession and forming some attitudes which cannot be modified easily (Borg, 2004).

The existence of such pre-established mental predispositions before entering teacher education universities underscores the importance of assessing candidates' attitudes in selection programs. Therefore, nearly all programs have used admission tools such as interviews and written statements to assess candidates' attitudes before entering the programs (Klassen & Kim, 2019). In spite of the importance of this admission criterion, the relevant data collected via the assessment tools such as interviews are questionable when it comes to reliability in general, and inter-rater reliability,

in particular (Thomas et al., 2015). Therefore, constructing and validating more appropriate tools for assessing the applicants' attitudes toward the profession has been among the top priorities for teacher education policy makers and administrators.

In the context of this study, teacher education programs heavily rely on academic criteria such as applicants' high school GPA and their entrance exam scores while ignoring non-academic measures such as professional attitudes and professional identity. A part of the problem is due to the lack of appropriate instruments for measuring these non-academic attributes. Therefore, this study aimed to construct and validate a scale for measuring professional attitudes of those candidates who would be accepted into Iranian teacher education universities as TEFL prospective teachers. Such an instrument can provide administrators with a useful benchmark to measure candidates' professional attitudes in the teacher education admission process.

2. Review of the Literature

Attitude as a core concept in social psychology is defined as "a relatively stable tendency to react to certain problems in a typical way, which also means a relatively stable system of positive or negative characteristics assigned to certain objects, phenomena, situations, persons etc." (Barnová et al., 2022, p. 14). Although there is a consensus on the core definition of the term, the proposed characteristics for the term vary considerably, ranging from "stable entities stored in memory" to "temporary judgments constructed on the spot from the information at hand" (Bohner & Dickel, 2011, p. 392). Neither of these two positions has been completely supported by research findings (Bohner & Dickel, 2011). On the one hand, some models conceptualize attitudes as fixed entities stored in mind (Fazio, 2007; Petty et al., 2007; Visser & Mirabile, 2004). On the other hand, some have taken a constructionist approach proposing that attitudes form on the spot according to currently accessible information in the context (Conrey & Smith, 2007; Gawronski & Bodenhausen, 2007; Schwarz, 2007).

In terms of its dimensions, it is believed that attitude consists of cognitive, affective, and behavioral components (Wood, 2000). In this multicomponent model of attitude, the cognitive dimension refers to the ideas and thoughts that are related to a phenomenon, the affective component pertains to the emotions and feelings about an object, and the behavioral component is linked to individuals' previous experiences (Scanlon et al., 2022). The last component is central to many studies assuming that 'the ability of attitudes to predict behavioral intentions or overt behavior continues to be a major focus of theory and research (Ajzen 2001, p. 42). In this regard, so many studies have indicated the mutual relationship between attitudes and behaviors (Aiyedun, 2020; Marcinkowski & Reid, 2019).

To clarify the relationship between attitude and behavior, social psychologists have developed some models. Fishbein and Ajzen (1975) suggested a model, entitled Theory of Reasoned Action, stating that behavior is predicted by behavioral intentions, which are determined by attitudes and accepted values. Since some behaviors are not deliberative and planned, Fazio (1990) suggested another model called the MODE Model to uncover how attitudes influence spontaneous behaviors. The model suggests that when a person has motivation and opportunity, they may base their behavior on a deliberative consideration of the available information. When one of the elements is absent or low, only attitudes that are highly accessible will predict spontaneous behavior.

All these models indicate that attitudes play a key role in the behaviors that individuals exhibit (Scanlon et al., 2022). Therefore, the predictive validity of attitudes has persuaded the researchers to fill the gap between attitude and behavior by devising measurement tools to predict future behaviors from the currently held attitudes (Duckworth & Yeager, 2015). In this line of inquiry, over the last decades, several new attitude measurement tools have been introduced (Meissner et al., 2019). Self-report instruments as a typical form of explicit measurement have been widely used for measuring attitudes. Although they are often criticized for being susceptible to socially desirable responses by respondents (Hendrick et al, 2013), the alternative methods which employ implicit measures have also been criticized for their limitations when they are used for predicting social behaviors (Nosek & Smyth, 2007).

In spite of such limitations, many scales have been developed to measure individuals' attitudes believing that they can predict future behaviors. In the realm of education, measuring attitudes is of great importance since learners' attitudes toward learning play a crucial role in retention and enrollment (Gasiewski et al., 2012). Such importance can be generalized to teacher education universities that aim at educating and producing qualified teachers for education systems. Teacher education universities as one of the most influential agencies in the education system have tried to recruit the best possible candidates by incorporating better admission criteria and more appropriate assessment tools. In the process of admission, preparation, and retention of these universities, both academic measures like GPA and non-academic measures such as motivation, professional identity, and identity have received considerable attention (Dore et al., 2009). In the admission procedure, the selectors give more chance to those applicants who adopt positive attitudes (Hirschkorn et al., 2017), believing that such applicants are more likely to achieve academic success in their professional life (Cornelius, 2000).

The predictive validity of professional attitudes when it comes to teacher effectiveness has made policy makers and teacher educators to use it

as one of the non-academic admission criteria in the selection procedure (Denner et al., 2001). Since professions are essentially different in terms of their requirements, the instruments that are constructed for measuring the given variable should be specific. Some questionnaires have been developed to measure professional attitudes in the domain of education.

Çetin et al. (2019) developed an instrument to measure the attitudes of TEFL prospective teachers toward a second/foreign language. Factor analyses indicated that their 43 items were loaded under 3 subdimensions named "positive belief toward learning a second/foreign language, resistance to learning a second/foreign language, and attaching importance to learning a second foreign language" (p. 972). In 2017, Küçüközyigit et al. developed a scale, entitled "The Attitude Scale toward the Special Education Teaching Profession (ASTSETP)" to measure the teacher candidates' attitudes toward the special education profession. They believed that the scale, which consisted of 19 items under three factors, could also be used as a measurement tool for the perceptions of teaching candidates, the perceptions of prospective teachers, and the perceptions of other professionals who work with special education teachers.

Some other attempts have been made to develop professional attitude scales in the realm of education. Ramzan et al. (2014) developed and validated a 30-item scale for assessing elementary prospective teachers' attitude toward the teaching profession. Their findings indicated that the given construct had five factors namely, professional belief, professional association, compliance with rules and regulation, volunteerism, and self-sufficiency. The attitude scale constructed by Ünlü (2011) with 23 items also indicated two dimensions, "affection for profession", and "concern about the profession". The scale constructed and validated by Çetin (2006) included 34 items under three subscales- "affection for profession", "value for profession" and "compatibility with profession". Finally, the scale constructed and validated by Çapa and Çil (2000), which contained 32 items, found three subscales entitled "affection for profession", "self confidence in profession" and "respect for profession" for teaching professional attitudes.

Since attitude is context-bound and professional attitude is somehow specific in every profession, identification of the factors that form teachers' attitudes toward the teaching profession is important (Ramzan et al., 2014). In teacher education programs, attention to professional attitudes has become a major concern (Richardson, 2003) because admitting the best possible candidates into teacher education programs can guarantee competent and qualified graduates. Therefore, developing tools for measuring the entry and exit attitudes of prospective teachers toward the teaching profession is among the top priorities. Such instruments can be used to assess the prospective teachers' attitudes before the program starts, while it is running, and when they eventually graduate to start their profession as beginning teachers.

3. Methodology

3.1. Participants

Two groups of participants participated in the study. The first group consisted of of 54 prospective teachers (19 females and 35 males) majoring in Teaching English as a Foreign Language (TEFL) at Farhangian University in the fall semester of 2020-2021. In a structured interview, they were asked to state their general attitudes toward the teaching profession. The second sample of the study, selected through convenience sampling, was composed of 186 junior and senior prospective teachers majoring TEFL at Farhangian University. In the selected sample, 71 were females (38%) and 115 were males (62%). The participants' age ranged from 21 to 26 years. Table 1 displays the demographic information of the samples of the study.

Table 1
Demographic Information of the Samples

Samples	Number	Gender	
		Male	Female
1st sample	54	35	19
2nd sample	186	115	71

3.2. Procedures

The procedures in the study included literature review, interview record analysis, preparation of the item pool, and reliability and validity analyses. First of all, through a systematic review of literature on prospective teachers' professional attitudes, the main dimensions of the given construct and the related items from the previously-developed scales were identified. To probe more deeply into professional attitudes, a sample of 54 TEFL prospective teachers were interviewed on Google Forms to write a paragraph expressing their attitudes toward the teaching profession. Then the interview transcripts were analyzed through a thematic content analysis, and the results gave an initial draft of the scale with 38 items under 5 dimensions (economic, social, personal, professional, & teacher competency).

Then the draft was examined by five expert educators and based on their comments some ambiguous or unclear items were reworded, removed, reversed, or replaced. The draft consisted of 32 items using a 5-point Likert-type scale (ranging from "completely disagree" to "completely agree) under 4 subscales entitled economic, social, professional, and teacher competency factors. The newly-developed scale was administered electronically to a group of TEFL prospective teachers. Accordingly, some minor revisions were made based on their comments. Then all potential participants in the context of the study were informed about the purpose of the study, the procedure of data collection, and their consent was obtained from those who

were volunteers to participate in the study. The final scale was uploaded to Google Forms and the generated link was given to all potential participants to complete the questionnaire. In the final validation phase of the study, 186 participants filled the questionnaire and their responses were submitted for statistical analyses.

4. Results

First, to check the reliability of the scale, the Cronbach's alpha reliability coefficient was calculated on the data from the 32-item scale, which resulted in 0.652. To improve the value, eight items were omitted and the resulting Cronbach's alpha coefficient for the overall scale with 24 items turned out to be 0.701. Finally, it was observed that dropping any other items did not increase the Cronbach's alpha total value (see Table 2).

Table 2
Item-total Statistics

Item	Mean	SD	Corrected Item-total Correlation	Alpha-if-item-deleted
2	1.77	0.76	0.260	0.691
3	1.84	0.86	0.221	0.694
4	1.9	0.83	0.192	0.696
5	1.46	0.55	-0.003	0.706
7	2.12	0.83	0.230	0.693
8	3.12	1.12	0.268	0.691
9	4.70	0.58	0.173	0.697
10	3.56	1.02	0.423	0.675
11	4.68	0.56	0.131	0.699
12	5.48	0.69	0.184	0.696
13	4.45	0.57	0.210	0.695
16	2.72	1.02	0.407	0.676
17	2.06	0.93	0.349	0.683
18	2.22	0.89	0.175	0.689
19	3.34	0.97	0.149	0.701
21	2.93	0.90	0.204	0.696
22	1.56	0.63	0.273	0.691
26	2.71	0.87	0.292	0.688
27	2.8	0.92	0.263	0.691
28	2.28	0.79	0.124	0.701
29	2.17	0.88	0.335	0.684
30	3.23	1.06	0.334	0.683
31	3.35	1.05	0.367	0.680

For exploratory factor analysis (EFA), a principal components analysis with varimax rotation was conducted to establish the structural validity of the scale. To assess the factorability of the data, Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling

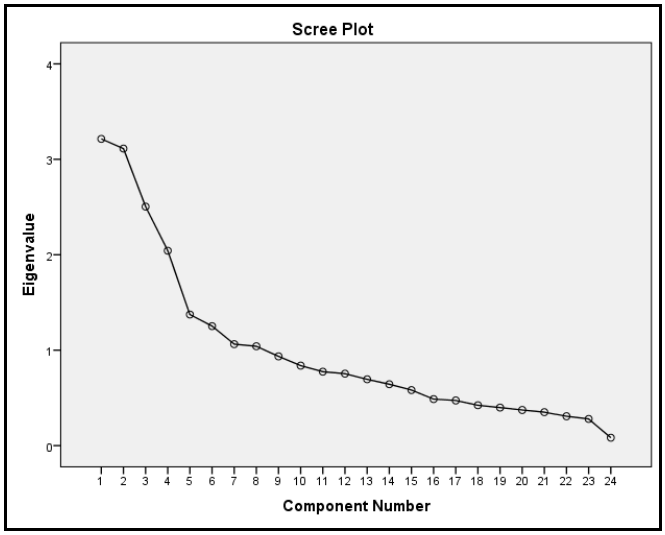
adequacy were conducted. Bartlett's test of sphericity should be significant ($p < .05$) for the factor analysis to be considered appropriate (Pallant, 2001) and the KMO index ranges from 0 to 1, with 0.6 suggested as the minimum value for a good factor analysis (Tabachnick & Fidell, 2007). As Table 3 shows the KMO value is 0.647 and Bartlett's test is significant ($p = .000$). Therefore, factor analysis was appropriate.

Table 3
KMO and Bartlett's Test

Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
	Sig	df	Approx. Chi-Square
0.647	0.0001	276	1369.742

After conducting exploratory factor analysis, eight components were extracted with an eigenvalue greater than one. As Figure 1 shows, the shape of the plot indicates that there is quite a clear break between the fourth and fifth components. The first four components explain or capture much more of the variance than the remaining components.

Figure 1
Scree Plot



In order to determine how many components (factors) to extract, components that have an eigenvalue of 1 or more were kept using Kaiser's criterion. As Table 4 shows, the first eight components explain a total of 65.013 percent of the variance.

Table 4
Total Variance Explained

Item	Eigenvalue	% of Variance	% of Cumulative Variance
1	3.214	13.391	13.391
2	3.12	12.968	20.360
3	2.504	10.434	36.794
4	2.043	8.510	45.304
5	1.374	5.723	51.027
6	1.252	5.217	56.245
7	1.063	4.431	60.675
8	1.041	4.337	65.013

Table 5 displays the rotated component matrix after one Varimax rotation. It contains the factor loadings of 24 items with the eight components.

Table 5
Component Matrix

Item	Components							
	1	2	3	4	5	6	7	8
2	0.733							
3	0.681							
4	0.691							
5	0.694							
7				0.548				
8				0.755				
9							0.513	
10				0.739				
11							0.783	
12							0.848	
13							0.415	
16			0.767					
17		0.566						
18		0.568						
19			0.799					
20		0.735						
21			0.587					
22		0.752						
26						0.856		
27						0.850		
28								0.869
29					0.933			
30						0.566		
31					0.909			

The factor structures and loading of 24 items revealed that the main loadings on component 1, which were called the economic factor, were items 2-5. Items 7-13 were clustered as components 4 and 7, which were entitled

social factor. Items 16-22 which were clustered with the highest loading as component 2 and 3, were called professional factor". The remaining component 5, 6, and 8, under which items 26-31 were loaded, were labeled as teacher competency. Therefore, the 24 items were clustered under four components. The same analysis was conducted applying four-factor solution. As the results indicate, the four components explain a total of 45.304 percent of the variance. Table 6 displays the factor loadings of all items under the four components.

To measure how well the items go together into a single component and how strongly each item is associated with the overall scale, reliability analyses using the Cronbach's alpha were conducted on the 24 items with four components. As Table 7 indicates, the Cronbach's alpha reliability coefficient for the whole scale was .70, and the given index for the components varied between 0.67 and 0.76, which were acceptable (Blunch, 2008).

Confirmatory factor analyses were also performed to determine the factor structure and Goodness-of-fit index of the four-factor solution for the scale using Maximum Likelihood Estimation via calculating the values of chi-square (χ^2), Normal chi- square measure, goodness of fit index (GFI), normed fit index (NFI), non-normal fit index, comparative fit index (CFI), and root mean square error of approximation (RMSEA). The analyses were performed twice since in the first time two items (items 26 & 27) suffered very low regression weights. The results of the second analysis indicated that the four-factor solution possessed good data-model fit across all indices, χ^2 (203, N = 186) = 356.38, $p < 0.000$, χ^2/df = 1.76, *GFI* = 0.95, *NNFI* = 092, *CFI* = 0.93 *SRMR* = 0.05, *RMSEA* = 0.064 (Table 8).

Table 6

Factor Loading of the Items

z	Item Description	Economic	Social	Professional	T competency
2	Teachers in our country are paid enough.	0.80			
3	A teacher should have a second job to make ends meet.	0.55			
4	Considering the hardship in the teaching profession, teachers are paid fair payment.	0.66			
5	Considering the importance of the teaching profession, teachers deserve better payment.	0.58			
7	Interaction with young learners is among the advantages of the teaching profession.		0.61		
8	The teaching profession has a high social prestige in our country.		0.44		
9	Teachers play a key role in our society.		0.66		
10	Teachers are viewed as a role model in our society.		0.48		
11	Educating the new generation is of great importance for teachers.		0.64		
12	Social reform is among the major concerns of a teacher in our society.		0.65		
13	Getting along well with students is a prerequisite for success in the teaching profession.		0.62		
16	Our current workplace in education is a healthy work environment.			0.77	
17	Dogmatism is a general phenomenon in our education system.			0.75	
18	Our school teachers experience high emotional stress.			0.64	
19	Continuing studying is among the advantages of being a teacher in our society.			0.57	
20	Implementing new approaches and methods is not possible in our schools.			0.59	
21	Students in our schools treat their teachers with high respect.			0.52	
22	For students, getting a high score is more important than acquiring knowledge.			0.60	

26	Teachers in our schools have a high level of technical knowledge.	0.54
27	Teachers in our schools have a high level of professional skills.	0.62
28	Teacher burnout is quite common in our education system.	0.34
29	Teachers in our society have lost their motivation.	0.74
30	Graduates from teacher education universities are well-qualified.	0.66
31	Admitting top candidates with high GPA into teacher education programs guarantees competent beginning teachers.	0.83

Table 7

Post-exploratory Factor Analysis Reliability Analysis.

(Sub)scale	No. of Items	Mean	SD	Cronbach's Alpha
Whole Scale	24	2.90	0.31	0.701
Economic	4	1.74	0.54	0.673
Social	7	4.16	0.47	0.691
Professional	7	2.44	0.59	0.760
T competency	6	2.76	0.63	0.732

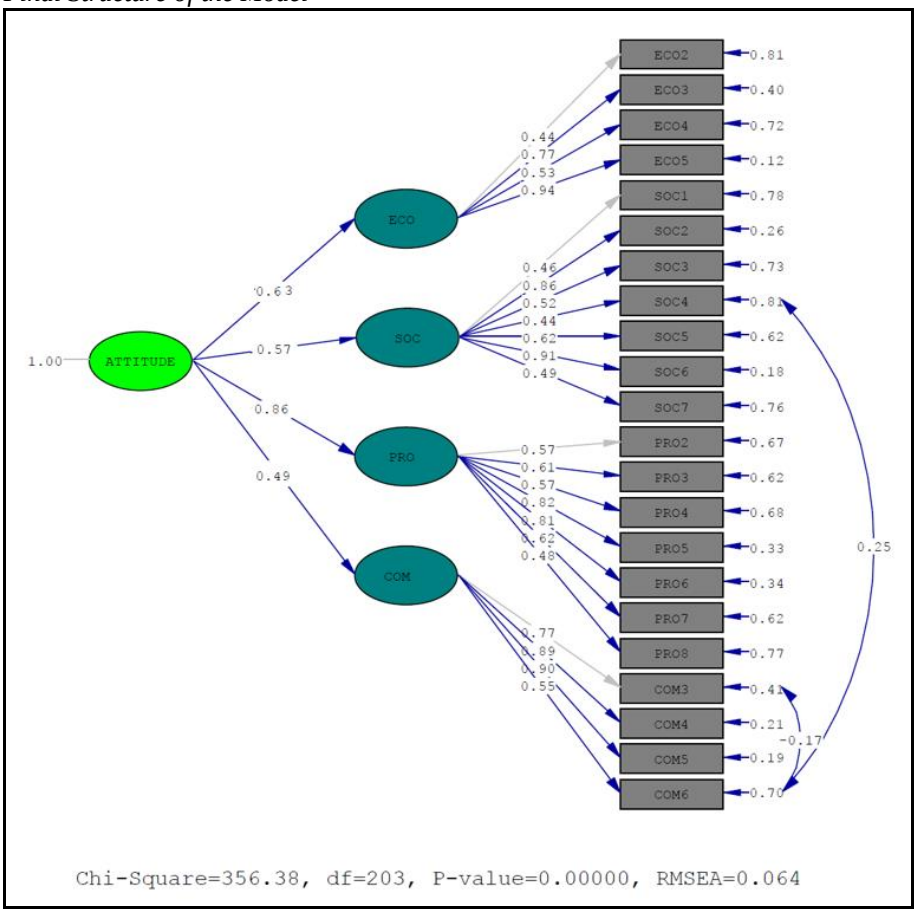
Table 8

Confirmatory Factor Analysis: Model Fit Indices

Goodness-of-fit Indices		
Index	Value	Acceptable Rate
X^2/df	1.76	< 3
RMSEA	0.064	<. 08
CFI	0.93	> 0.9
IFI	0.93	> 0.9
GFI	0.95	> 0.9
NNFI	0.92	>0.9

The results indicated that the confirmatory factor analysis based on the four-factor model that had been obtained from the exploratory factor analysis had a quit good fit with the data (Figure 2).

Figure 2
Final Structure of the Model



As the results of Table 9 show, items 2-5 for economic factor, items 7-13 for social factor, items 16-22 for professional factor, and items 28-31 for teacher competency factor had significant factor loading ($P < 0.0001$).

Table 9
Factor Loading and T Values of Items

Item	Factor Loading	t	P-value	Item	Factor Loading	t	P-value
2	0.44	-	0.0001	16	0.57	-	0.0001
3	0.77	5.86	0.0001	17	0.61	6.48	0.0001
4	0.53	5	0.0001	18	0.57	6.13	0.0001
5	0.94	5.79	0.0001	19	0.82	7.7	0.0001
7	0.46	-	0.0001	20	0.81	7.67	0.0001
8	0.86	6.42	0.0001	21	0.62	6.51	0.0001
9	0.52	5.1	0.0001	22	0.48	5.36	0.0001
10	0.44	4.74	0.0001	28	0.77	-	0.0001
11	0.62	5.62	0.0001	29	0.89	12.68	0.0001
12	0.91	6.49	0.0001	30	0.90	12.8	0.0001
13	0.49	4.92	0.0001	31	0.55	6.79	0.0001

After conducting factor analyses, a path analysis was performed to determine the significance of the relationship between each component and the latent variable of professional attitude. The results indicated that the path coefficients for economic factor, social factor, professional factor, and teacher competency factor were $\beta = 0.63$, $\beta = 0.57$, $\beta = 0.86$, and $\beta = 0.49$, respectively (*p. value* < 0.05). To check the composite reliability (CR) for each component, the standardized regression weights and the correlation coefficients were measured. The values for economic factor, social factor, professional factor, and teacher competency factor were reported as 0.75, 0.79, 0.83, and 0.75, respectively.

Moreover, the average variance extracted (AVE) as well as the maximum shared variance (MSV) were calculated to assure the convergent validity and discriminant validity, respectively. Since for all components, AVE values were greater than CR corresponding values, the convergent validity was assured. For checking discriminant validity, the AVE values were compared to MSV and ASV (shared squared variance) values. Since AVE values were greater than MSV and ASV values, it was concluded that discriminant validity was also achieved. Table 10 displays the values for the CR, AVE, MSV, and ASV.

Table 10
The CR, AVE, and MSV Measures

Components	CR	AVE	MSV	ASV
Economic	0.748	0.431	0.34	0.43
Social	0.788	0.400	0.16	0.35
Professional	0.829	0.414	0.17	0.41
Teacher competency	0.753	0.452	0.20	0.45

5. Discussion

This study aimed at constructing and validating a scale to measure prospective TEFL teachers' attitudes toward the teaching profession. After reviewing the related literature, an initial version of the scale with 32 items was developed. After carrying out both exploratory and confirmatory factor analyses, the 22-item version of the scale was validated. The retained items were clustered around four factors: economic, social, professional, and teacher competency. The results of the reliability analyses using the Cronbach's alpha indicated the total reliability of $\alpha = 0.70$ and the reliability from $\alpha = 0.67$ to $\alpha = 0.76$, for each of the components. The acceptable value of the reliability coefficient for the whole scale and the factors indicates that the components are different facets of the same underlying construct. Moreover, the results indicated acceptable measures of composite reliability, convergent validity, and discriminant validity.

Emerging a four-factor model shows that professional attitudes toward teaching is a multi-dimensional construct. The multi-dimensionality

of professional attitudes has been proved by Çetin et al. (2019), Küçüközyigit et al. (2017), Ramzan et al. (2014), Ünlü (2011), and Çapa and Çil (2000). In the current scale, which was developed for assessing the professional attitudes of TEFL prospective teachers, four components emerged and were entitled as economic, social, professional, and teacher competency dimension.

The first subscale deals with the economic dimension of the teaching profession. Teachers' income has been proven to be correlated with students' educational achievements (Luka, & Samardĩc, 2014) and school productivity (Britton & Propper, 2016). When it comes to the relationship between teacher payment and career choice, so many studies have indicated that extrinsic motivation including job security, reasonable payment, and remuneration are the major reasons for applying for teaching (Azman, 2013; Gu & Lai, 2012; Yuce et al., 2013).

The second subscale, which was entitled social factor, deals with intrinsic and altruistic reasons to join the teaching profession. Findings from research carried out in western countries indicate that applicants join the teaching profession primarily due to intrinsic and altruistic reasons (Manuel & Hughes, 2006). Like the current study, other studies have indicated working with children (Moreau, 2014), contributing to the social welfare (Ganchorre & Tomanek, 2012), and a high social prestige (Mutluer & Yüksel, 2019) are among intrinsic and altruistic reasons for applicants to join the teaching profession.

The third subscale includes the requirements, challenges, and constraints, which are inherent in the teaching profession in a socio-cultural context. The way teaching applicants view their future working conditions such as prospect for respect, innovation, and professional development motivates applicants to prioritize this profession. On the contrary, since the teaching profession is considered highly demanding and teachers are expected to demonstrate proper behavioral characteristics, teaching is now widely recognized to be among high-stress occupations (Kyriacou, 2000). The applicants who want to choose teaching as their future occupation are completely familiar with the working conditions in schools.

The last subscale generally deals with the efficacy that teaching candidates or prospective teachers can show in the teaching profession. The evaluative judgment that teaching candidates make about teacher competencies in terms of knowledge, skill, and attitudes determines their level of motivation to enter the profession. The profession chosen by candidates enables them to express the totality of their abilities, traits, and preferences. If applicants' perception of teachers' professional efficacy in their future workplace is not so promising, their intrinsic and altruistic motivation will not be high enough to choose the profession.

6. Conclusion and Implications

The newly validated scale with acceptable validity and reliability is a suitable instrument for use in teacher education programs to measure the professional attitudes of the teaching candidates, prospective teachers, and TEFL graduates. Since the responsibility of preparing teachers should begin with teacher education programs (Gourneau, 2005), the scale can be used to measure the professional attitudes of those applicants who are supposed to be TEFL prospective teachers. Since professional attitude is a very important component of teacher competency, all selection processes are in urgent need of applying the scale for choosing the best possible candidates.

In addition to admission utility, the scale can be used to measure the development of prospective teachers' attitudes during the programs. The fact that some applicants with positive attitudes toward the profession are admitted into the program is not a guarantee for holding them forever. Since attitudes are "time–dependent states" rather than "static things that are stored in memory" (Conrey & Smith, 2007. p. 718), prospective teachers should be provided with opportunities to develop good attitudes toward their future profession. Curriculum developers should incorporate some courses aiming at helping prospective teachers develop positive attitudes toward the profession. Moreover, since attitudes are constructed in situations (Gawronski & Bodenhausen, 2007), teacher educators should provide situations like teaching practicum in which prospective teachers' attitudes are analyzed and reformed.

Three potential limitations need to be considered in the interpretation of the research findings. The first limitation deals with the sample size of the study. Although there is no agreed-upon consensus on the number of participants in such studies (Nour et al., 2021), the researchers made an effort to include as many participants as possible. Even though the subsequent analyses revealed that the sample size was adequate, further studies can be conducted with more participants to increase the generalizability of the findings. The second limitation deals with the correlation coefficient values that were around 0.70. Although they are acceptable, they are not high enough, and generalizing the findings to other settings should be done cautiously. The third limitation is related to the quality of the sample. The participants who provided the data were just junior and senior prospective teachers. Other studies can be carried out with other participants including freshmen and sophomores. Since gender is very influential in attitude formation, an equal number of male and female participants can give a better picture of the given construct.

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