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(2008)

Determining to Which Degree Pedagogical Teacher Training Serves the Teaching Profession
A Scale Development Study

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A teacher's belief in self-efficacy is one of the most important factors that affect both the teacher's productivity and the productivity of the school.

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Introduction

In the 21st century, individuals are expected to acquire, utilize and disseminate knowledge. Schools are the most important institutions for training individuals that are fit for this century. It is the well trained and qualified teachers in schools that can ensure individuals' development (Kaya 2015). Teacher training programs are being updated in line with these changes in Turkey, a country with an established teacher training tradition.

The roots of teacher training can be traced back to the Darulmuallimin Teacher Schools (*Darülmuallimin Öğretmen Okulları*) established on 16 March 1848. The teacher training experience of Turkey, which began 166 years ago, led to the emergence of unique teacher training models that can set an example for other countries in the world (Tezic 2007).

In the initial years of the Republic of Turkey, primary teacher schools

(*İlköğretmen Okulları*) were tasked with training teachers. These schools, founded in 1923–1924, were transformed into 6 year schools after the 1931–1932 academic year (Ozturk 1996). Primary teacher schools trained teachers for primary schools from the founding of the Republic until 1974 (The Minister of Education/MEB 1995). Later, in the 1927–1928 academic year, village teacher schools (*Köy Muallim Mektepleri*) which offered an additional 2 years of education after primary school training were founded (Ozturk 1996). The teachers trained in these schools implemented programs devised for villages. Village teachers schools were closed down in the 1932–1933 academic year due to their shortcomings (Cicioglu 1983) and in 1936 village trainer courses (*Köy Eğitmen Kursları*) were established (Binbasioglu 1995). However, these trainer courses were not sufficient to teach reading and writing to illiterate Turkish villagers in densely populated villages. Therefore, village institutes (*Köy Enstitüleri*) were established in 1940 to train teachers that would guide Turkish villagers in education, health, agriculture, animal husbandry and handcrafts (Guven 2010). Due to political reasons, village institutes were closed down in 1954 and were restructured as 6 year schools under the name of primary teacher schools. Starting from this period, primary teacher schools continued to receive mostly primary school graduates from village schools and their programs were harmonized with those of other 3 year primary teacher schools (Kaya 2015). Thus, the practice of training teachers for cities and villages from different sources came to an end (Board of Higher Education/YOK 1998).

In the mid-1970s, it was made obligatory to be a graduate of a two-year Education Institute for those wishing to become a primary school teacher. In the 1974–1975 academic year, some of the existing two-year primary teacher schools were turned into education institutes, others were turned into teacher high schools and the rest were closed down (Kucukahmet 1993). Teacher high schools later continued their education and teaching activities under the name of "Anatolian Teacher Training High School" (YOK 2007). Beginning in the 2014–2015 academic year, these schools' programs were discontinued.

On 4 November 1981, the Board of Higher Education (YOK) was established; higher education institutions and teacher training institutions were subordinated to the YOK. In 1997, the YOK started a restructuring process in higher education. After this restructuring, the time allotted to practice in schools in teacher training programs was increased significantly to enable teacher candidates to acquire hands-on professional experience in schools. According to this restructuring, subject matter teacher training programs for primary schools and some secondary schools were planned to be carried out at the undergraduate level and teacher training programs for secondary schools were planned to be carried out at MA level (YOK 2007).

As the teacher training process evolved, there were also short term teacher training programs such as "Reserve Office Teacher," "Teacher Training by Correspondence" and "Accelerated Teacher Training Program" based on the demand for teachers and Turkey's condition at the time (Akyuz 2010; Karatas and Oral 2015). Although these practices yielded periodic pragmatic returns, they have not contributed to the Turkish teacher training tradition in the long run (Eraslan and Cakici 2011).

With the Fundamental Law on National Education #1739 enacted in 1973, graduates of higher education institutions were given the right to become teachers after taking pedagogical teacher training. In 1980, the Ministry of National Education introduced the 21-credit Teacher Education Program and in the 1990s the 33-credit Primary School Teacher Certificate Program was put into practice (Bilir 2011).

The Board of Higher Education (YOK) restructured teacher certificate programs with resolutions numbered 97, 39, and 2761 dated 4 November 1997. With the restructuring, subject matter teacher certificate programs for secondary schools were deemed insufficient and were discontinued. They were replaced by non-thesis MA programs. These programs were 3.5 + 1.5 years for graduates of faculties of education and 4 + 1.5 years for graduates of faculties of science-literature (YOK 1997).

Non-thesis MA programs were discontinued and the "Certificate Program on Pedagogical Teacher Training" was reintroduced with the YOK resolution dated 28 January 2010. This regulation stated that all faculty and department students, including those who were still students in 2010–2011 academic year and graduates who met the criteria, could take pedagogical teacher training. Graduates paid high fees to take pedagogical teacher training at universities authorized by the YOK (Eraslan and Cakici 2011; Polat 2014; Yapici and Yapici 2013).

The duration of Pedagogical Teacher Training Certificate Programs started after 2010 was constantly changing. The certificate program that was offered in two semesters in the 2012–2013 academic year was offered in an intense 14-week period in the 2013–2014 academic year. Currently, two-month long summer certificate programs in teaching are offered for graduates. Additionally, in the coming years, it is thought that teaching certificates will be granted through distance learning. It is relatively difficult to get large numbers teacher candidates to acquire the subject knowledge, professional knowledge and general knowledge required for the teaching profession in a condensed time period. Therefore, it is necessary to determine to what degree the pedagogical teacher training offered to teacher candidates serves the teaching profession. In this study, a scale was developed to determine whether the pedagogical teacher training serves the students' purpose of becoming a teacher. Reliability and validity tests were also run on this scale.

On the one hand, the quality of teacher training is being questioned, and, on the other hand, mind-blowing developments are taking place in teacher development (Inceli 2014). Alhough Turkey reached a level in the past where teacher training happened at the MA level, in recent years, 2–3 month long teacher training programs have become dominant. As counties strive to become more developed, they try to achieve this ideal specifically through education. In order to serve this purpose, apart from a well-functioning system, it is essential that the key players in the system, namely the teachers, be comprehensively prepared.

When the points made above are taken into consideration as a whole, it is seen that the effectiveness of pedagogical teacher training, its fitness for purpose, and its role and status in training quality teachers should seriously be questioned. Literature reviews reveal that there is no scale that questions the success of this training and its fitness for teacher training from the perspective of those receiving that training. It is thought that the number of studies on pedagogical teacher training in Turkey will increase in an environment where pedagogical teacher training is becoming more and more common, where all university graduates are given the opportunity to become teachers and where pedagogical teacher training might even be offered through distance learning. One of the key issues addressed by this study is the fitness of pedagogical teacher training for its purpose. It is believed that the scale thus developed will contribute to the studies in this field.

The Purpose of the Study

This study aims to develop a scale to determine whether the pedagogical teacher training received by teacher candidates is fit for purpose. To reach this goal, the questions below about sub-goals were addressed:

1. What are the exploratory factor analysis results from the Scale to Determine to Which Degree Pedagogical Teacher Training Serves the Teaching Profession (PFEOOHEDO)?

2. What are the confirmatory factor analysis results from the Scale to Determine to Which Degree Pedagogical Teacher Training Serves the Teaching Profession (PFEOOHEDO)?

3. What are the reliability test results from the Scale to Determine to Which Degree Pedagogical Teacher Training Serves the Teaching Profession (PFEOOHEDO)?

The Significance of the Study

DEMOCRATICALLY ADVANCED and modern societies with high levels of citizen welfare are also advanced in many areas such as economy, education and health. Countries like Turkey, striving to attain the level of advanced countries, have great expectations for education. It is only when certain criteria are met that education as an institution can meet these expectations. One of these criteria is doubtlessly "teacher quality." As noted above, in recent years 2–3 month long teacher training programs have become dominant. Even pedagogical teacher training through distance learning is being considered. To serve its modernization goals, all aspects of education should be researched and questioned. With the scale that will be developed in this study, the fitness of pedagogical teacher training to train teachers will be evaluated. The absence in the field of a scale on this matter motivated the researchers to develop this scale.

Method

Research Design

THIS STUDY is a descriptive study. This study aims to develop a scale to determine the fitness of the pedagogical teacher training received by teacher candidates, administer it, and describe the psychometric properties of this scale.

Participants

THE SCALE to Determine to Which Degree Pedagogical teacher Training Serves the Teaching Profession (PFEOOHEDO) is targeted at teacher candidates who are currently enrolled in pedagogical teacher training programs. Two different groups were used in scale development. One of the groups is the group gathered to collect data to determine the construct validity and reliability (Cronbach Alpha reliability coefficient) of the scale. The students in this group were taking pedagogical teacher training at a state university in Istanbul in the spring term of the 2013–2014 academic year. The scale was administered in April. The data was collected from 231 teacher candidates who were receiving pedagogical teacher training.

The data from the second group is used to determine whether the factor structure of the scale is confirmed. The students in the second group were tak-

ing pedagogical teacher training at a state university in Istanbul in the spring term of the 2013–2014 academic year. The scale was administered at the end of April. The data was collected from 219 teacher candidates who were receiving pedagogical teacher training.

Scale Development Process

There are suggestions on scale development in various sources (Ballesteros 2003; Crocker and Algina 1986). The scale development steps are the following:

1. determining the target audience and objective of the scale;
2. determining the scope of the attributes targeted by the scale;
3. writing items for these attributes;
4. reviewing items and turning them into a form;
5. determining how to score the items and how to analyze the data;
6. doing a pilot study;
7. scoring and analyzing the items;
8. forming the real scale based on the results obtained.

This study follows Ballesteros' (2003) and Crocker and Algina's (1986) scale development process and aims to develop scales to determine the efficacy of pedagogical teacher training. Additionally, it also seeks to determine the attitudes towards pedagogical teacher training.

Data Collection

The scale developed in the study to determine its technical properties (reliability and validity), the Scale to Determine to Which Degree Pedagogical teacher Training Serves the Teaching Profession (pfeoohedo), is a 5 point (Strongly Disagree, Disagree, Partly Agree, Agree and Strongly Agree) Likert scale consisting of 24 questions. Before developing the scale, researchers scanned the literature on pedagogical teacher training, the aims of this training and the competencies that this training aims to instill in teacher candidates. The scale that was shaped in line with the data from the literature review was evaluated by three experts (an associate professor in curriculum development, an "All But Dissertation" Ph.D. student in curriculum development, and a Ph.D. student in testing and evaluation) before the pilot study.

Based on the feedback from the field experts, the scale was finalized and the pilot study was administered. Following the pilot study, it was discovered that

two items on the scale (items 6 and 7) loaded on more than two factors. These items that loaded on more than two factors were discarded from the scale. After these changes, 22 items remained and were renamed.

The remaining 22 items from the scale are clustered under 3 factors (dimensions). The names of these dimensions and the items under these dimensions are listed below:

- *The Degree to Which Pedagogical Teacher Training Serves Learning-Teaching Skills (PFEOOHED)*. This is the sub-dimension including items that explore whether pedagogical teacher training instills in a teacher the skills required for the learning-teaching process. This sub-dimension includes items 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22. 60 is the highest possible score. A high score shows that pedagogical teacher training instills the necessary skills in learning-teaching process.
- *The Degree to Which Pedagogical Teacher Training Serves Classroom Management Process Skills (PFESYHED)*. This is the sub-dimension including items that explore whether pedagogical teacher training instills in a teacher the skills required for classroom management. This sub-dimension includes items 1, 2, 3, 4, and 5. 25 is the highest possible score. A high score shows that pedagogical teacher training instills the necessary skills in classroom management.
- *The Degree to Which Pedagogical Teacher Training Serves Teachers' Skills to Determine Students Individual Differences (PFEBFBHED)*. This is the sub-dimension including items that explore whether pedagogical teacher training instills in a teacher the skills required to determine students' individual differences. This sub-dimension includes items 6, 7, 8, 9, and 10. 25 is the highest possible score. A high score shows that pedagogical teacher training instills the necessary skills in teachers to determine students' individual differences.

Data Analysis

THE DATA collected was processed using IBM–SPSS 22 and the Lisrel Statistical Package. In order to determine the validity and reliability of PFEOOHEDO, techniques such as the Kaiser–Meyer–Olkin (KMO) test, the Bartlett Sphericity test, varimax rotation, anti-image correlation, the Cronbach Alpha reliability coefficient, and confirmatory factor analysis were used (Buyukozturk 2003; Ozdamar 2013). The details of these analyses are given in the "Findings" section.

Results

Construct Validity (Exploratory Factor Analysis)

The construct validity of pfeoohedo was determined through principal components analysis. The Kaiser–Meyer–Olkin (kmo) test which determines whether the data file is suitable for factor analysis was applied in the principal axis factoring (paf) along with the Bartlett Sphericity test which also addresses the same question. In order to better express the factor structures, varimax rotation was used in paf (Warner 2013). The details of these analyses are as follows:

Suitability for factor analysis was tested on the data collected from the pilot study group to determine the factor structure of pfeoohedo (Buyukozturk 2003; Ozdamar 2013).

1. kmo value was found to be 0.947. A value above at least 0.50 means that data set is suitable for factor analysis.

2. The result from the Bartlett test is $\chi^2 = 3542.863$; sd=231, $p<0.01$. The fact that the meaningfulness value from the Barlett test was significant shows that factor analysis can be applied.

An exploratory factor analysis on pfeoohedo through paf showed that items 6 and 7 are highly correlated with more than one factor. Therefore these two items were discarded from the scale. The factor loadings for the remaining items range between 0.478 and 0.686. Item-total correlations range from 0.602 to 0.778. The variance in the variable (pedagogical teacher training's degree of service to teaching profession) accounted for the three factors formed after varimax rotation is 64.843%. Item factor loadings and item-total correlations are given in Table 1.

Table 1. Primary factor loadings from factor analysis and item-total correlation results

Item no.	First factor factor loading	Item-total correlation	Item no.	First factor factor loading	Item-total correlation
V1	0.602	0.623	V14	0.543	0.713
V2	0.682	0.658	V15	0.645	0.769
V3	0.652	0.685	V16	0.595	0.748
V4	0.664	0.636	V17	0.593	0.730
V5	0.478	0.602	V18	0.668	0.778
V8	0.488	0.671	V19	0.540	0.667
V9	0.640	0.663	V20	0.509	0.640
V10	0.686	0.713	V21	0.571	0.726

Item no.	First factor factor loading	Item-total correlation	Item no.	First factor factor loading	Item-total correlation
V11	0.661	0.691	V22	0.662	0.734
V12	0.625	0.674	V23	0.610	0.700
V13	0.489	0.677	V24	0.511	0.670

The variance accounted by three factors = 59.601%

An analysis of Table 1 reveals that the primary factor loadings for items left in the scale after exploratory factor analysis do not go below 0.522 and their item-total correlations do not go below 0.602. The variance accounted for by these is 59%. This value is above the acceptable level in scale development studies in social sciences (Buyukozturk 2003). Table 2 shows the anti-image values for the items left in the scale.

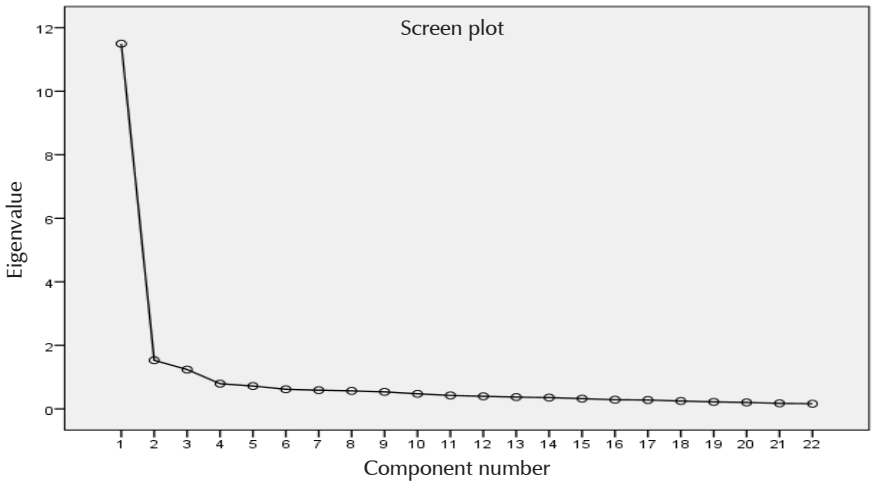
TABLE 2. ANTI-IMAGE CORRELATION VALUES FOR THE ITEMS

Item no.	Anti-image correlation	Item no.	Anti-image correlation	Item no.	Anti-image correlation
V1	0.933	V10	0.933	V17	0.958
V2	0.928	V11	0.922	V18	0.962
V3	0.954	V12	0.941	V19	0.949
V4	0.943	V13	0.968	V20	0.950
V5	0.961	V14	0.949	V21	0.975
V8	0.975	V15	0.939	V22	0.940
V9	0.919	V16	0.948	V23	0.941
				V24	0.942

An analysis of Table 2 reveals that the anti-image correlations range from 0.919 to 0.975. None of the items left in the scale has an anti-image value below 0.50. This shows that the factor loadings of these items contribute significantly to the factor structure.

In the exploratory factor analysis, in order to determine whether there were sub-dimensions in the data set and if so which items clustered under which sub-dimensions, Varimax rotation was applied (Buyukozturk 2003; Ozdamar 2013). Varimax rotation revealed 3 factors (dimensions) in the scale. The results of Varimax rotation are given in Table 3. Moreover, the scree plot in Figure 1 confirms that there are three dimensions in the scale.

Figure 1. Scree plot graph about the factor structure of pfeoohedo



It can be seen from Figure 1 that after factor (dimension) 3, there is a flat trajectory on the horizontal axis. This is a sign that the scale is three dimensional.

Table 3. Factors after varimax rotation and items under factors

Items	Factors (Dimensions)		
	1	2	3
V22	0.742		
V23	0.717		
V18	0.688		
V19	0.664		
V15	0.659		
V17	0.650		
V20	0.641		
V21	0.616		
V24	0.610		
V16	0.593		
V14	0.566		
V13	0.555		
V2		0.743	
V4		0.742	
V1		0.695	
V3		0.693	

Items	Factors (Dimensions)		
	1	2	3
V5		0.564	
V11			0.699
V10			0.696
V9			0.694
V12			0.676
V8			0.468

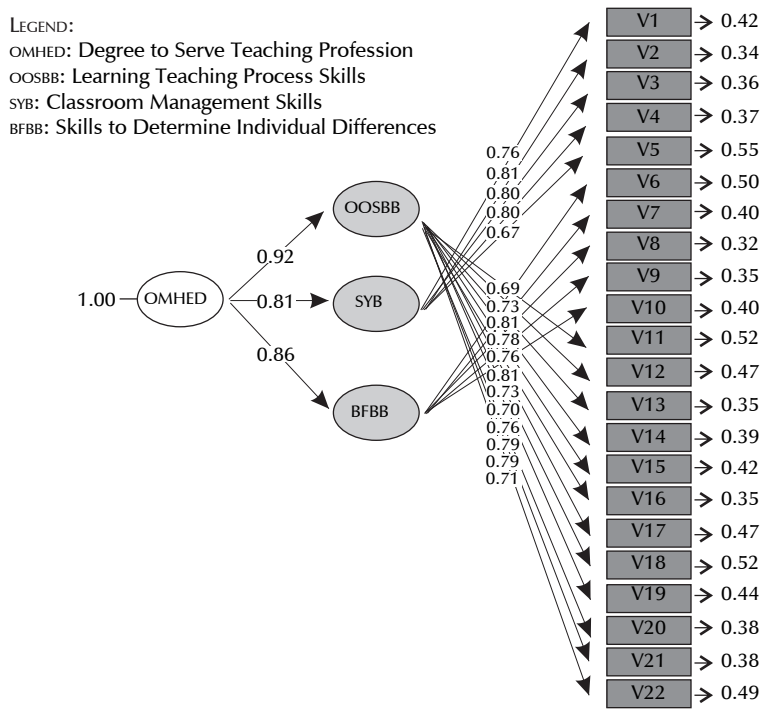
An analysis of Table 3 reveals that

- Items 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24 form a sub-dimension (first sub-dimension). The first dimension questions that include these items were analyzed. It was found that the items in this dimension were related to learning-teaching process skills. The items for this dimension were renumbered as 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 and this dimension was named "The Degree to Which Pedagogical Teacher Training Serves Learning-Teaching Process Skills (PFEOOHED)."
- It was discovered that items 1, 2, 3, 4, and 5 formed a sub-dimension (second sub-dimension). The second dimension questions that included these items were analyzed. It was found that the items in this dimension were related to the classroom management process. The items for this dimension were renumbered as 1, 2, 3, 4 and 5 and this dimension was named "The Degree to Which Pedagogical Teacher Training Serves Classroom Management Process Skills (PFESYHED)."
- It was discovered that items 8, 9, 10, 11, and 12 formed a sub-dimension (third sub-dimension). The third dimension questions that included these items were analyzed. It was found that the items in this dimension were related to teachers' skills to determine students' individual differences. The items for this dimension were renumbered as 6, 7, 8, 9 and 10 and this dimension was named "The Degree to Which Pedagogical Teacher Training Serves Teachers' Skills to Determine Students' Individual Differences (PFEBFBHED)."

Exploratory Factor Analysis

CONFIRMATORY FACTOR analysis was conducted in order to determine whether the PFEOOHEDO constructs found based on the results of exploratory factor analysis were confirmed. The model created after the analysis is given in Figure 2.

Figure 2. Factor analysis model of the scale to determine to which degree pedagogical teacher training serves the teaching profession (standardized values)



Chi-Square=439.35, df=206, P-value=0, rmsea=0.071

An analysis of Figure 2 reveals that chi-square and degree of freedom values from confirmatory factor analysis are χ^2=439.35, (sd=206, p<.01) and χ^2/sd=2.13 ratio is observed. The fact that the ratio from the sample is below 3 means a very good fit (Jöreskog and Sörbom 1993; Sümer 2000; Kline 2005). It can be said that the fit between the model derived from confirmatory factor analysis and the data is very good.

One of the most common goodness of fit indices for confirmatory factor analysis is rmsea (Root Mean Square Error of Approximation). If the rmsea index is 0.05 or below in confirmatory data analysis, it is a sign of model-data fit. However a value of up to 0.08 is stated to be acceptable (Browne and Cudeck 1989; Hu and Bentler 1999; Simsek 2007; Vieira 2011). It can be said that the rmsea value in this study, which is 0.071, is acceptable.

With an agfi (Adjusted Goodness of Fit Index) value of above 0.80, a rmr (Root-mean-square residual) value below 0.10 (Anderson and Gerbing 1984; Marsh, Balla and McDonald 1988) and a srmr (Standardized rmr) value below

0.08 (Şimşek 2007) in confirmatory factor analysis, it can be stated that the model fits real life data. The confirmatory data analysis results for this study were as follows: AGFI=0.81, RMR=0.0036 and SRMR=0.044. According to these results, it can be argued that the fitness of the model to the data is acceptable.

If NFI (Non-Normed Fit Index), CFI (Comparative Fit Index), NFI (Normed Fit Index) and IFI (Incremental Fit Index) values are at or above 0.95 in confirmatory factor analysis, this shows that there is a very good fit between data and model (Bentler 1990; Hu and Bentler 1999; Sümer 2000; Şimşek 2007; Cokluk, Sekercioglu, and Buyukozturk 2010). The analysis for this study revealed these figures as follows: NNFI=0.98, CFI=0.98, NFI=0.96 and IFI= 0.98. According to these results, it can be stated that there is a very good fit between the model and the data. The fitness values extracted from confirmatory data analysis are summarized in Table 4.

TABLE 4. FITNESS VALUES FROM CONFIRMATORY DATA ANALYSIS

χ^2	s_d	χ^2/s_d	RMSEA	AGFI	SRMR	RMR	NNFI	CFI	NFI	IFI
439.35	206	2.13	0,071	0.81	0.04	0.03	0.98	0.98	0.96	0.98

The main aim of confirmatory data analysis is to find the goodness of fit for a predefined model to collected data (Sumbuloglu and Akdag 2009). In this regard, the 3 dimensional structure of the Scale to Determine to Which Degree Pedagogical Teacher Training Serves the Teaching Profession can be said to be confirmed by the fitness values from confirmatory factor analysis.

Reliability (Cronbach's Alpha) Test

A SINGLE DIMENSIONAL treatment of PFEOOHEDO yields a Cronbach's Alpha internal consistency coefficient of 0.956. It was observed in "Cronbach's Alpha if Item Deleted" section of Cronbach's Alpha reliability analysis that discarding any one of the items shown in Table 1 with their item-total correlations from the scale causes the Cronbach's Alpha reliability coefficient to go below 0.956. In this case, it can be stated that all items have a high contribution to reliability (Buyukozturk 2003; Ozdamar 2013).

Exploratory factor analysis revealed that the scale consisted of three sub-dimensions. Cronbach's Alpha reliability coefficients were calculated for all these sub-dimensions. The results are summarized in Table 5.

Table 5. Cronbach's alpha reliability test results for sub-dimensions of pfeoohedo

Dimensions	Cronbach's Alpha
The Degree to Which Pedagogical Teacher Training Serves Learning-Teaching Skills (pfeoohed)	0.940
The Degree to Which Pedagogical Teacher Training Serves Classroom Management Process Skills (pfesyhed)	0.883
The Degree to Which Pedagogical Teacher Training Serves Teachers' Skills to Determine Students' Individual Differences (pfebfbhed)	0.885

It can be seen from Table 5 that Cronbach's Alpha reliability coefficient is 0.940 for the first sub-dimension, 0.883 for the second sub-dimension and 0.885 for the third sub-dimension. Reliability coefficient values above 0.70 are considered to be highly reliable (Ozdamar 2013, 555). This subscale has a high degree of reliability.

Results and Suggestions

After the exploratory and confirmatory factor analyses carried out on pfeoohedo, the scale was finalized. As a result;

- Items 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24 were renumbered as items 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22. The sub-dimension formed by these items was named as "The Degree to Which Pedagogical Teacher Training Serves Learning-Teaching Process Skills (pfeoohed)."
- Items 1, 2, 3, 4 and 5 were renumbered as items 1, 2, 3, 4 and 5. The sub-dimension formed by these items was named as "The Degree to Which Pedagogical Teacher Training Serves Classroom Management Process Skills (pfesyhed)."
- Items 8, 9, 10, 11 and 12 were renumbered as items 6, 7, 8, 9 and 10. The sub-dimension formed by these items was named as "The Degree to Which Pedagogical Teacher Training Serves Teachers' Skills to Determine Students' Individual Differences (pfebfbhed)."

This study was carried out on two groups, one group consisting of 231 students for exploratory factor analysis and one group consisting of 219 students for confirmatory factor analysis. It is thought that supplementing the findings of this study with additional studies using this scale will help determine the technical attributes of the scale. Therefore, it is recommended that pfeoohedo be used by

different researchers on different groups to find additional evidence for its validity and reliability. Several studies, including Ekici (2008) have proven that teachers are one of the important units of education. Therefore, teachers' expectations and beliefs affect their behaviors and thus they also affect students' motivations, attitudes and success. Also, a teacher's belief in self-efficacy is one of the most important factors that affect both the teacher's productivity and the productivity of the school (as cited in Bulut and Oral 2011). In addition, another study based on Kahyasğlu and Yangın's (2007) *Evaluation of Candidate Teachers' Self-Efficacy Scale* consisting of 44 items was used in this research. The reliability coefficient of the five-point Likert scale was found to be 0.8998 (Bulut and Oral 2011).

Researchers suggest that PFEOOHEDO be used on teacher candidates receiving the ever more common pedagogical teacher trainings in Turkey. In Turkey, in recent years several studies, including Demirtaş, Cömert, and Özer (2011), have been done to determine the level of self-efficacy perceptions of teacher candidates about both the teaching profession generally and a specific teaching area (as cited in Bulut and Oral 2011, 2). However, some studies on self-efficacy perceptions of the teaching profession by teacher candidates (science, theology, language and literature, history, geography, and music and arts) who continue with their pedagogic teacher training programs are not limited to the review of literature. Consequently, it is thought that the determination of self-efficacy perceptions of the teaching profession by teacher candidates who continue with their pedagogic teacher training programs will make contributions to this field and to curriculum development (Gürol, Altunbaş and Karaaslan, 2010).

Using PFEOOHEDO with other data collection tools on pedagogical teacher training and analyzing the data in combination with them will both increase the impact of this study and contribute to the development of PFEOOHEDO. Researchers also recommended that PFEOOHEDO be used in future studies in combination with the attitudes towards pedagogical teacher training, the attitudes towards the teaching profession, and towards professional teacher competencies.

❑

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Appendix

The Scale to Determine to which Degree Pedagogical Teacher Training Serves the Teaching Profession

Dear participant

This scale was prepared to determine the degree to which pedagogical teacher (professional teaching knowledge) training received by teacher candidates from different disciplines serves the teaching profession.

You are expected to read each statement (item) in the scale and depending on how much you agree with it you are expected to mark an appropriate choice for you ("Never," "Rarely," "Sometimes," "Often," "Always") with an X. The data collected will only be used for a scientific study. It is important to openly express your opinions for the reliability of the study. Therefore do not write your name on the scale.

Order	Statements A teacher who has received pedagogical teacher training	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
1	Manages a class effectively.					
2	Deals with problems that can negatively affect the order of the classroom.					
3	Communicates well with their students.					
4	Uses effective communication methods to create a positive learning environment.					
5	Knows their students well.					
6	Determines the readiness of their students at the start of the learning-teaching process.					
7	Pays attention to the individual differences of their students at the start of the learning-teaching process.					
8	Determines the learning styles (types/preferences) of their students.					
9	Prepares a course plan that is suitable for students' learning styles.					
10	Teaches in accordance with students' individual differences.					
11	Plans the education they will offer throughout the year.					
12	Designs activities that are suitable for course outcomes.					
13	Plans activities (studies) that will involve students actively.					
14	Implements the activities they plan/design in a way that actively involves students.					

Order	Statements A teacher who has received pedagogical teacher training	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
15	Guides students' learning process.					
16	Uses teaching methods and techniques properly.					
17	Decides on teaching materials related to the subject they will teach.					
18	Designs materials on subjects they will teach when needed.					
19	Motivates students to learn.					
20	Determines testing and evaluation methods (tools) suitable for the outcomes of the course.					
21	Determines testing and evaluation methods (tools) suitable for the outcomes of the course.					
22	Provides students with feedback to compensate for learning deficiencies.					

Abstract

Determining to Which Degree Pedagogical Teacher Training Serves the Teaching Profession: A Scale Development Study

The quality of teachers being trained is crucial for advanced countries. This can be seen from the fact that they frequently question their higher education process and teacher training systems. Teacher training processes have also been questioned in Turkey and there have been some adjustments. At this point, teacher candidates can take pedagogical teacher training for a few years in addition to their undergraduate degree and become a teacher. Is this pedagogical teacher-training sufficient? Do teacher candidates think that they can satisfactorily serve as teachers after this training? This study is based on the desire to make it easier to find answers to these questions. The results of this study show that the Scale to Determine to Which Degree Pedagogical Teacher Training Serves the Teaching Profession (PFEOOHEDO) is a valid and reliable measurement instrument.

Keywords

teacher candidate, pedagogical teacher training, scale development, Turkey