

*Full Length Research Paper*

# The psychometric properties of the Turkish version of the teacher efficacy for Inclusive practices (TEIP) scale

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Received 21 February, 2018; Accepted 24 September, 2018

The aim of this study was to adapt inclusive education teacher efficacy scale in to Turkish population. The Teacher Efficacy for Inclusive Practices (TEIP) scale needed to be translated into Turkish, as no scales were available to evaluate the efficacy of pre-service teachers in inclusive settings. The aim of this study was to test the psychometric properties of the TEIP scale (Sharma et al., 2012). The scale was administered to 567 pre-service teachers (167 males and 396 females) studying in the special education, primary education and preschool education departments across four universities. The scale's internal consistency coefficient was found to be  $\alpha=0.89$  while a confirmatory factor analysis revealed acceptable goodness of fit indices ( $\chi^2/sd=6.82$ , Root Mean Squared Error of Approximation [RMSEA]=0.10, standardized root mean squared residual [SRMR]=0.05, Normed Fit Index [NFI]=0.95, Non-Normed Fit Index [NNFI]=0.95, Comparative Fit Index [CFI]=0.96), fitting a three factor model, similar to the original version of the scale. The authors concluded that TEIP may be used as a valid and reliable instrument for identifying the self-efficacy of Turkish pre-service teachers regarding inclusive practices.

**Key words:**Teacher efficacy for Inclusive practices (TEIP), inclusive education, self-efficacy, validity, reliability.

## INTRODUCTION

The rapid changes in information and technology in today's world have multiplied the needs associated with the ability to learn. To meet these growing needs, it is important that the education sector update itself on a regular basis to effectively adapt to these shifts in how information is communicated. The self-improvement and efficacy of the educational staff (especially teachers) are two of the most substantial issues involved in the rapid change and movement that now characterize the education system (Kış and Akçamete, 2013).

Foremost, among the fundamental reasons for the importance attributed to these issues is the concept of

inclusive practices, which is in conformance with the international legal regulations and humanist approaches that serve to constitute the de facto criteria, such as human rights, children's rights and the rights of individuals with special needs (UNESCO, 1948, 1959, 1994, 2003). Inclusive practices function to optimize the pre-existing self-efficacy of the students and to meet the academic and social needs of persons with special needs in general education.

Teacher Efficacy for Inclusion Scale (TEI), developed by Hollender (2011) and Teacher Efficacy for Inclusive Practices (TEIP) scale developed by Sharma et al. (2012)

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on self-efficacy have been conducted in recent years. In association with the adoption of inclusive practice initiatives throughout the world for the purpose of evaluating the self-efficacy of the teachers working in this area and for providing them with professional support.

Results from previous studies have shown that teacher training programs focusing on inclusion and integration have undergone significant changes, that teachers equipped with the competencies to teach students with special needs in general education classes need to be trained in how to take into account individual differences, and that the perceived self-efficacy of the teachers need to be assessed to determine the extent to which they feel competent and prepared for this situation (Sharma et al., 2012).

Inclusive education can be described in part as the capacity of either formal or informal education environments to meet a broad range of learning needs. In contrast with integration, which focuses on how to integrate certain types of students into a program, inclusive education seeks to find a way to change the educational system so as to meet the differing needs of students. The concept of inclusion, which has its foundations in human rights, social justice and equality (Wah, 2010), reflects an understanding that accepts, values and respects the diversity of all individuals (Carrington and Robinson, 2004; Waitoller and Artiles, 2013). This broad point of view means that support should be provided to all students in order to maximize their learning, performance, regardless of their physical, mental, social, emotional, linguistic, ethnic, cultural and/or economic status (Bozkurt, 2007; Carrington and Robinson, 2004; Wah, 2010). Inclusion has also been described as “*A practice focusing on the placement of individuals with special needs in the general education classes of their ages, regardless of the nature or degree of their needs*” (Murphy, 1996). In Turkey, the Ministry of National Education (MoNE) describes this concept as “*A dynamic concept that proceeds actively and uninterruptedly and that is affected by the change and development of needs, possibilities and opportunities, expanding and renewing itself*” (MoNE, 2013: 26). With the development of the concept within a legal framework, the education of children with special needs has begun in recent years to be conducted in integrative or inclusive environments under an understanding of general education being based on equal opportunities (Bozkurt, 1996; Kış and Akçamete, 2013; Lewis and Doorlag, 1999; Salend, 1998). One of the aims of inclusive education is to have teachers and students feel comfortable with the differences in the learning environment and to see differences as improving and enriching opportunities rather than as causing problems (UNESCO, 2003).

At the World Education Forum in Dakar (UNESCO, 2000), the description of persons with special needs was expanded to include children in the labor force, persons

living in impoverished conditions, immigrants, ethnic and language minorities, youth and adults who have been affected by conflicts, persons with HIV/AIDS, other health related issues and/or hunger, and the poor and disadvantaged (UNESCO, 2003). In the Salamanca Statement (1994), the commitment to inclusive practices was explained in part as “... schools should provide services to all children, regardless of their physical, mental, social and emotional status, native language or any other conditions. This service should be provided to all persons with disadvantages.”

Given the adoption of these measures, it is expected that attitudes toward special needs shall grow to be more positive. In light of the importance attributed to the acceptance of inclusive practices as fundamental human rights, two formidable obstacles stand before inclusive practices required for the education of persons with special needs, discrimination against different cultures, and the coinciding general discrimination present in the educational system (Du Toit and Forlin, 2009).

As in all occupational groups, self-efficacy among the educational staff comprising the education sector plays a valuable role. The self-efficacy of teachers, who constitute the highest number of the educational staff, has been extensively highlighted and discussed as one of the primary factors impacting the quality of education, being shown to be as influential as education programs, environments and methods.

Bandura (1977) asserted that the perceived self-efficacy of teachers affected their professional skills and influenced their ability to adopt different teaching methods to help students learn and to create a sufficient learning environment to facilitate their students' capacity to determine their own way of learning. Considering this assertion in relation to inclusive practices, teachers who demonstrate a high self-efficacy belief in inclusive practices would believe that persons with special needs can learn effectively in general education classrooms. Alternatively, teachers who demonstrate a weak self-efficacy perception in inclusive practices would feel that persons with special needs would be limited in their capacity to function in general education or would perhaps be disinclined to perform up to their full potential. Furthermore, under Bandura's assertion, it could be argued that the self-efficacy of teachers would affect not only their actions but also the results of these actions (Tschannen-Moran et al., 1998).

A review comparing international data indicated that teachers around the world faced similar problems and came up with similar solutions, and that evidence strongly supported the presence of inter-cultural validity in the structure of fundamental teacher efficacies, despite basic cultural differences (Ho and Hau, 2004). In other words, teacher self-efficacy has inter-cultural and structural validity (Sharma et al., 2012). Another important point in the determination of teacher efficacy is the necessity of analyzing teacher efficacy by taking into consideration

the tasks and context within which teaching occurs. It has been emphasized in studies that it is not crucial for a teacher perceiving herself competent in a certain area to also endeavor to perceive oneself so in another area (Bandura, 1977; Tschannen-Moran et al., 1998; Chan, 2008; Tschannen-Moran and Hoy, 2001).

Special education, mainstreaming and inclusion studies conducted in Turkey have sought to measure the general teaching self-efficacy levels of teachers, with no aim to determine their self-efficacy in the area of inclusion. These studies have examined the efficacy of classroom teachers (Babaođlan and Yılmaz, 2010; Battal, 2007; İzci, 2005; Nizamođlu, 2006; Yılmaz and Cokluk-Bokeoglu, 2008), preschool teachers (Gök and Erbaş, 2011; Kaya, 2005; Sarı et al., 2009; Üstün and Yılan, 2003), general and special education teachers (Diken and Özokçu, 2004a, 2004b), pre-service classroom teachers (Aksüt and Yaldız, 2005; Diken, 2006; Dolapçı, 2013; Kış et al., 2014) as well as the needs of pre-service special education teachers (Kış et al., 2014; Özokçu, 2010). In addition, a few studies contributed to the development of a teacher self-efficacy scale (Çapa et al., 2005; Diken, 2004; Kaner, 2010) and professional competence beliefs of teachers of students with and without special needs (Kaner et al., 2008; Kaner, 2010). Only one single study involving scale adaptation related with self-efficacy in inclusion was conducted by Meral and Bilgiç (2012). Despite the contribution mentioned earlier, all studies adapted or developed instruments to test the general self-efficacy of teachers in mainstreaming practices.

A review of the results of the studies on pre-service or in-service teachers' perceptions of self-efficacy in inclusive practices indicated that they did not consider themselves as competent in general (Babaođlan and Yılmaz, 2010; Bayar and Üstün, 2017; Diken, 2006; Dolapçı, 2013; Gök and Erbaş, 2011; İzci, 2005; Kaya, 2005; Nizamođlu, 2006; Rakap and Kaczmarek, 2010; Sarı et al., 2009; Sucuođlu, 2004).

Other studies assessing the self-efficacy of teachers also found similar results. The unique contribution that the present study offers to the relevant literature, in contrast to previous studies, is that it creates a specific instrument for a specific issue, that of self-efficacy regarding inclusion of pre-service teachers. An instrument capable of assessing efficacy in inclusive practices is important insofar as it shall serve to facilitate teacher training, professional development and inclusion by providing a better understanding of the factors forming the background of attitudes toward the idea of "cooperation", a feature particularly emphasized in the literature (Malinen et al., 2012).

Accordingly, the qualitative training of teachers who will take part in inclusive practices aims to primarily promote positive attitudes in teachers (Morrison and Rude, 2002). Related with this, Soodak et al. (1998) found that the self-efficacy perceptions of teachers are strongest predictor of their attitudes toward inclusion. While both Turkish and

international studies have evaluated the self-efficacy of teachers, these studies have provided few instruments created to measure area-specific attitudes toward inclusive practices, and moreover, some of these were created from a medical perspective (Sharma et al., 2012).

Numerous self-efficacy and attitude study reviews on persons with special needs and related educational practices have been conducted around the world (Bailey, 2004; Chong et al., 2007; Çam and Üstün, 2016; Forlin et al., 2009; Sharma et al., 2007, 2008; Wilczenski, 1992, 1993). The scales investigated in these reviews were developed considering the general self-efficacy and attitudes of teachers towards segregated and/or inclusive education. Thus, a need arose to develop a scale to assess the self-efficacy of pre-service teachers in inclusive practices, given that inclusion is practiced in general education. The TEIP is the only area-specific instrument related with this subject which has been adapted into several languages. Therefore, the aim of this study was to contribute to the relevant literature by adapting a scale aimed to determine pre-service teachers' self-efficacy levels in inclusive practices.

## METHODOLOGY

### Sample

Purposeful sampling was used for the selection of the study sample. Pre-service teachers of special education, primary education, preschool education and child development across four Turkish universities who had finished undergraduate courses on integration and inclusion participated in the study. During the 2012 to 2013 academic year, the scales were sent to the instructors who taught at the universities and had given permission for their students to take part in the study. The researchers received a total of 573 forms back from the instructors. Six forms were excluded from the study due to missing information, resulting in a total of 567 forms suitable for analysis.

The participants included sophomore, junior and senior level students of the participants, 167 were male (29.5%), 396 were female (69.8%), with an additional 4 (0.7%) forms with missing values on gender. Additionally, 94.5% of the participants were aged 25 or younger. As for their departments, 277 (48.9%) were students of special education, 253 (44.6) were of primary education and 37 (5.1%) were of preschool education.

### Data collection

#### *The demographics form*

Translation of the scale was conducted using the copy received through e-mail from the researcher who created the scale. The demographics form was used to collect data on the demographic characteristics of the participants. This form featured items including the participants' area of study, gender, and previous training and experience in working with persons with special needs and any form of interaction with persons with special needs. The form also involved a 5-Point Likert-type item assessing participant confidence and information level in inclusive practices (1.Very little, 2. Little, 3.Fair, 4.High, and 5.Very high), and items addressing two variables used to ascertain the participants' information level on the

legal regulations related to persons with special needs (1. None, 2.Low, 3.Fair, 4.High, and 5.Veryhigh) (Sharma et al., 2012).

### TEIP scale

TEIP scale (Sharma et al., 2012) was developed with the aim of determining the self-efficacy of pre-service teachers in inclusive practices. The scale is a 6-Point Likert-type scale (1. Strongly disagree, 2. Disagree, 3. Disagree somewhat, 4. Agree somewhat, 5. Agree, and 6. Strongly agree), which includes 18 items under three sub-scales: *Inclusion environment teaching efficacy* (items 15, 18, 10, 5, 6, and 14), *behavior management efficacy* (Items 1, 2, 7, 8, 11 and 17) and *cooperation efficacy* (Items 3, 4, 9, 12, 13 and 16). Higher mean scores on the scale indicate more positive inclinations for inclusive training as well as low anxiety and high self-efficacy (Sharma et al., 2012). Data gathered from pre-service teachers in Canada (n=130), Australia (n=107), Hong Kong (n=97) and India (n=275) revealed high Alpha Coefficients (0.89 for the whole scale followed by 0.93, 0.85 and 0.85 for the subscales) (Sharma et al., 2012).

Initially, the scale was translated into Turkish by five experts who had a fluent command of English. The translated scales were examined collectively and all necessary revisions were made. The scale was further analyzed by eight experts in terms of face and content validity, after which a second review was conducted. Finally, expert opinions were taken for each item and scoring as well as general view about the scale.

### Data analysis

During the adaptation phase, a confirmatory factor analysis was conducted to test the construct validity of the scale and to demonstrate the effectiveness of the items. Factor analysis is a multi-variable analysis conducted by measuring multiple variables to determine how they are associated with each other and aims to discover new, previously unassociated variables in order to gain greater conceptual meaning (Büyüköztürk, 2008; Kline, 2000). In scale translation studies, the factor structures determined through exploratory factor analysis are confirmed by confirmatory factor analysis. Simply put, confirmatory factor analysis is a technique used to test whether the latent structure that is assumed to be included in the instrument can be confirmed by the study data (Tabachnick and Fidel, 2007).

The validity of the model was shown by several goodness of fit indices and construct validity proofs (Hair et al., 2006; Schumacker and Lomax, 2004), including Chi-square statistics, Root Mean Squared Error of Approximation (RMSEA), Goodness-of-Fit Index (GFI), Comparative Fit Index (CFI), Normed Fit Index (NFI), Adjusted Goodness of Fit Index (AGFI), Incremental Fit Index (IFI) and Plain Goodness of Fit Index (PGIF) (Hair et al., 2006; Kline, 2000; Tabachnick and Fidel, 2007). The study data were analyzed using SPSS and LISREL software packages.

A confirmatory factor analysis was therefore conducted for TEIP to determine whether it had a unique structure in a Turkish sample, that is, whether it provided construct validity. This study applied only confirmatory factor analysis, given that it has been observed that the more recently conducted translation studies have found confirmatory factor analysis to be sufficient for testing the factor structure. This study also computed the Cronbach's alpha coefficient, which provides information about the internal consistency of the scale together with item total correlations, which are used to identify the correlation between the single items and the total scale score and serve, to a certain extent, to be an indicator of the distinctiveness of the items. All statistical operations were evaluated by a measurement expert holding a PhD degree.

## FINDINGS

### The validity of TEIP

TEIP was originally developed as a three-factor scale, where the factors were competence to use integrated education, competence in cooperation, and competence in behavior management. Each sub-scale included six items. A confirmatory factor analysis was conducted to test whether these items displayed a similar structure for the Turkish culture as shown in Figure 1.

Considering the analyses and modification suggestions, the item "I can cooperate with other experts (e.g. traveling teachers, speech pathologists) to prepare the education plans of students with special needs" found under the competence of cooperation sub-scale was associated with the item "I am able to work together with other experts and staff (e.g. assistants, other teachers) to teach disabled students" implying that both items measured the same behavior. Similarly, the item "I am confident about preventing the emergence of problematic behaviors in my class" was associated with the item "I can control the problematic behaviors in the classroom".

Confirmatory factor analysis results confirmed the three-factor structure of the original scale. Table 1 presents the goodness-of-fit indices for the three-factor structure revealed by the study findings.

During the adaptation of the scale, the study used confirmatory factor analysis to test the correctness of the three-factor structure of the original scale. The Chi-square value was found to be 887.06 ( $p < 0.01$ ). The ratio of the Chi-square value to the degree of freedom was 6.82, with the RMSEA being 0.101. Values for the suitability of the model were found to be at an acceptable level (Jöreskog and Sörbom, 2001; Schermelleh-Engel and Moosbrugger, 2003).

As for the suitability measures, the NFI was 0.95, CFI was 0.96 and IFI was 0.96. The NFI produces a value by taking the complexity of the model into consideration. Moreover, it also takes the degrees of freedom of the compared models into account when producing that value. The CFI compares the covariance matrix for which it creates freedom with that of the suggested model. Essentially, it is a fitness test that considers the sample size and the degree of freedom of the model when evaluating the model. IFI is another fitness index that produces a value by considering, similar with CFI, the sample size and the degree of freedom of the model. The NNFI, CFI and IFI indices were all higher than 0.95, indicating a perfect fit (Schermelleh-Engel and Moosbrugger, 2003). The values found for the model put forward by the study, 0.95 and 0.96, were determined to be suitable for the fitness of the model. As stated earlier, the NFI applying the same principles as the CFI, was found to be 0.95. Its similarity with CFI is based in terms on the models it compares; however, this comparison is performed without an obligation to obey the prerequisites

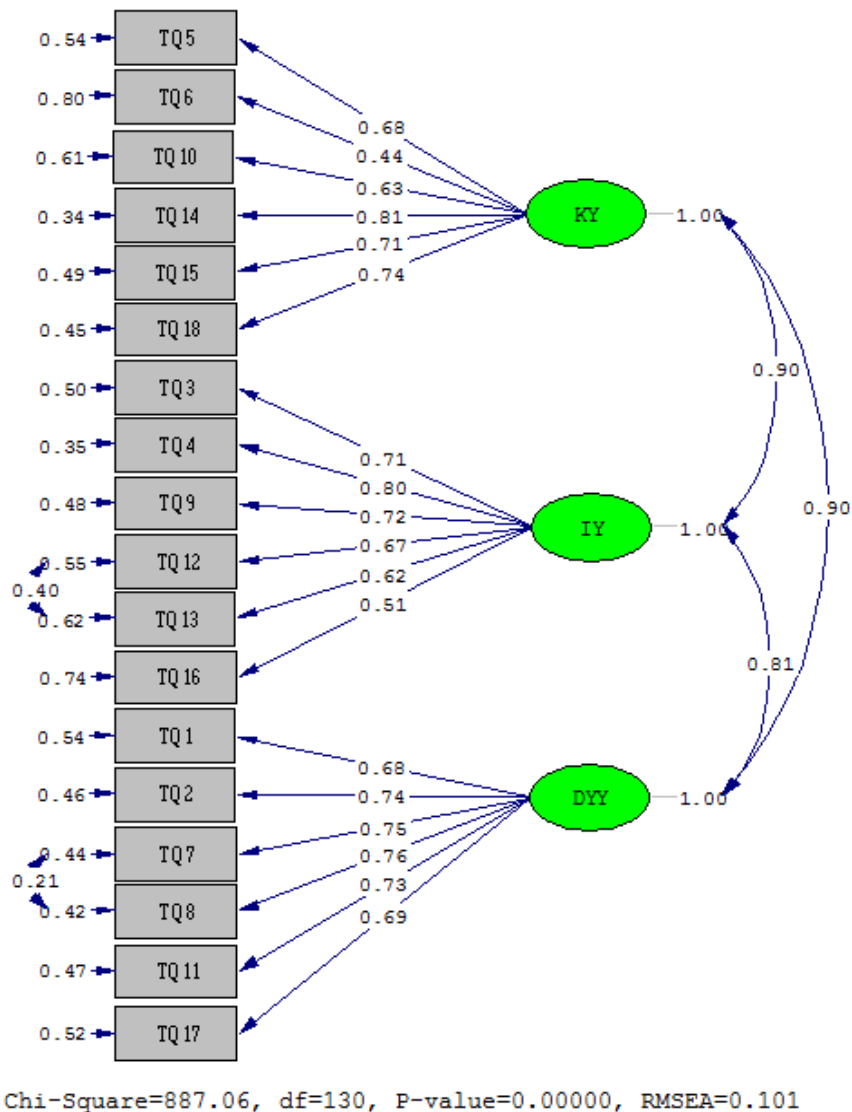


Figure 1. The path diagram showing the structure that confirms the three-factor structure.

Table 1. TEIP fit indices chart.

Fit Index	Value
NFI	0.95
NNFI	0.95
CFI	0.96
IFI	0.96
GFI	0.85
AGFI	0.80
RMSEA	0.101
SRMR	0.054
Chi-square test	887.06
SD	130
Chi-square/SD	6.82

of Chi-square. In this sense, a value of 0.90 or higher indicates a good fit, while values of 0.95 and higher indicate a perfect fit. Considering the criteria determined by Schermelleh-Engel and Moosbrugger (2003), the NFI value found in this study was accepted to be "good". The GFI, whose values can range between 0.00 and 1.00, was found to be 0.85. This particular index was created to evaluate fitness independent of sample size. It is seen as an alternative to the chi-square fitness test. As in other indices, the values at 0.90 and higher are accepted to indicate a good fit. The AGFI value was found to be 0.80. AGFI is a GFI value which is corrected by considering the sample size. Although not very high, the GFI and AGFI values created by the relevant analysis were found to be at acceptable levels. In RMSEA and SRMR indices, 0.10 or lower values are considered acceptable. The Chi-

**Table 2.** TEIP Cronbach alpha coefficients and item total correlations.

Factor	Item	Item total correlations	Cronbach's alpha reliability coefficient
Factor 1: Competency to use the integrated education	14	0.644	0.77
	15	0.599	
	18	0.584	
	5	0.568	
	6	0.341	
	10	0.433	
Factor 2: Competency in cooperation	3	0.563	0.79
	4	0.609	
	12	0.622	
	13	0.581	
	9	0.572	
	16	0.394	
Factor 3: Competency in behavior management	1	0.475	0.68
	2	0.562	
	7	0.583	
	8	0.243	
	11	0.508	
Entire scale	17	0.501	0.89
	-	-	

square/SD value is another criterion that can be calculated to determine the accuracy of the structure. Values lower than 5 in this ratio are considered acceptable (Haşlamam, 2005). The Chi-square/SD value produced by the analyses was  $887.06/130=6.82$ , an acceptable value. Based on the aforementioned values, the original structure of the TEIP scale was confirmed in a Turkish sample. The fit indices of the structure are shown in Table 1.

### The reliability of TEIP

The reliability analyses for TEIP included the Cronbach's alpha coefficient for the whole scale and all sub-scales, as well as the item total correlations for each item. The Cronbach's alpha was calculated to gain insight into the internal consistency of the scale. The total item correlations were also computed and analyzed to identify the correlations between the items and the total scale score and thereby ensure the distinctiveness of the items in the scale. The findings are shown in Table 2.

When the reliability results are close to those of the original scale, this is accepted as a positive indicator of the scale being compatible with the target culture. The Cronbach's alpha value of the TEIP for the entire scale was 0.89, the exact estimate found by Sharma et al. (2012) in their study involving the original TEIP. The findings related to the sub-factors provide proof of the reliability of the instrument as well (Table 2).

### **Competency to use the integrated education**

In the *competency to use integrated education* factor, the Cronbach's alpha value was found to be 0.77. The original TEIP study had found a 0.93 estimate for this factor (Sharma et al., 2012). Although not as high as the original instrument, the difference between the Cronbach's alpha values of this factor shows that the reliability of this factor is acceptable. The item total correlations of the items in this factor ranged between 0.341 and 0.644, which shows that the values fall within the acceptable interval (Table 2).

### **Competency in cooperation**

The Cronbach's alpha value for this factor was 0.79, while it was 0.85 in the original scale (Sharma et al., 2012), displaying a proof for the reliability of the scale. The item total correlations for this subscale ranged between 0.394 and 0.622 (Table 2), where all were above 0.20, showing that the items were translated in conformance with the objective of the study.

### **Competency in behavior management**

The Cronbach's alpha coefficient for this subscale was found to be 0.68, a low value compared to the estimate found in the original version as 0.85 (Sharma et al.,

2012). This shows a fair consistency between the original and the Turkish versions of TEIP. The item total correlations in the behavior management competency sub-scale ranged between 0.243 and 0.583, displaying good consistency as found for the other two factors of TEIP (Table 2).

## DISCUSSION

This study aimed to adapt TEIP for the Turkish culture and the results can be claimed to reveal an important amount of success on behalf of both reliability and validity. Reliability analyses indicated that the coefficients for the whole scale and the sub-scales were within acceptable limits. It is believed that these values were not as high as expected owing to the limited number of the items on the scale. In the Turkish culture as well as the Turkish educational system, teachers are encouraged to cooperate with each other. However, cooperative skills are not tackled in undergraduate programs, nor are they encouraged among educators (Kış and Akçamete, 2013; Kış et al., 2014). These two points may be the reason that the Cronbach's alpha value for the cooperation factor was found low in this study.

The analyses clearly demonstrated that the three factors were confirmed on a Turkish sample of pre-service teachers with virtually the same weight as in the original scale, a finding that stands as another proof of validity for the adapted TEIP. An international cross-comparative study by Sharma et al. (2012) found similar scale factors and Cronbach's alpha values to those found in this study, which serves as yet another proof that the reliability of the Turkish version of TEIP is high. The same study found the Cronbach's alpha values for the entire scale as 0.91 in Australia, 0.88 in Canada, 0.90 in Hong Kong, 0.86 in India and 0.89 in the present study. Accordingly, the Cronbach alpha estimates for the first factor, was 0.78 in Australia, 0.97 in Canada, 0.73 in Hong Kong, 0.64 in India, and 0.77 in the present study; for the second factor was 0.81 in Australia, 0.86 in Canada, 0.80 in Hong Kong, 0.81 in India, and 0.79 in the present study; and for the third factor, was 0.83 in Australia, 0.88 in Canada, 0.86 in Hong Kong, 0.79 in India, and 0.68 in the present study.

The lowest Cronbach's alpha value found in this study was in the *competency in managing problematic behavior* sub-scale. This value can perhaps be attributed to the fact that this skill is only taught in general education teacher training programs (Council of Higher Education [CoHE], 2013) but not in any courses that specifically address the behavior management of persons with special needs, including positive behavior support and behavior modification (Sucuoğlu et al., 2004). Therefore, it is of no surprise for the results to reveal relatively low reliability measures for a skill that the participants may not be holding.

An analysis of the teacher training programs which had been altered by CoHE (2013) in 2006 indicated that there were no courses focusing on inclusive practices and that general education teachers were trained with the provision of one course (two hours a week) on mainstreaming and another one (two hours a week) on special education. In this sense, it is not unusual to observe that the general scores show only minimal differences with those of other cultures.

Based on the present findings, it is suggested that courses on cooperation be included in the teacher training programs (Sucuoğlu et al., 2004). Furthermore, the findings indicate that along with the other courses and practicums offered to pre-service teachers, the practical trainings performed as part of pretest and posttest activities at different grade levels will have a positive impact on their perceptions of self-efficacy. For this reason, it is suggested that future studies also include comparisons based on these factors (Sharma et al., 2012).

It is also recommended that future studies adapt TEIP for in-service teachers with the assumption that determining any potential differences between pre and in-service teacher self-efficacy beliefs may be a critical factor in evaluating teacher training programs, as well as the professional development activities offered to in-service teachers.

The factor loads of cooperation competency, behavior management competency and use of integrated education competency factors in TEIP are closely aligned to those of the original scale, with slightly lower measures. The relevant literature indicates that the primary reason for this might be the small number of factors on the scale. On the other hand, observations of the authors of this article show that, although very different, the terms "mainstreaming" and "inclusion" are defined and used interchangeably in the field of education. Turkish teachers, therefore, do not undertake many initiatives to cooperate in collective teaching and planning, as positive attitudes and acceptance toward mainstreaming or teaching persons in general education environments are lacking (Diken and Sucuoğlu, 1999; Fırat, 2014; Gözün and Yıkmış, 2004; Kayaoğlu, 1999; Metin and Çakmak, 1998; Orel et al., 2004; Rakap and Kaczmarek, 2010; Şahin and Güldenoğlu, 2013; Uysal, 2003). Moreover, there is only one course (2 credits) in teacher training programs on special education and one elective (2 credits) mainstreaming course within some teacher training programs. Students do not, therefore, learn the relevant skills necessary to acquire a professional competency level (Fırat, 2014; Sarı, 2002), since these courses are delivered only in special education departments as a practicum course which includes observation and school experience (CoHE, 2013). In addition, a number of limitations in Turkey prohibits the provision of supportive services in schools and classes, which in turn prevents teachers from sharing

their experiences and work load.

Although it appears that inclusive practices began in 2012 in Turkey, the system instituted by the Ministry of National Education does not fit the criteria listed earlier, in neither academic nor practical terms. Based on the findings of the present study, it is believed that similar studies involving determining the self-efficacy levels of pre and in-service teachers with valid and reliable measures will serve to identify educator needs regarding inclusive practices and shape pre and in-service professional development programs accordingly. In this sense, this study can be claimed to be a major step regarding these matters.

## CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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