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Teaching Turkish as a second language to Syrian refugees
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efficacy for Inclusive practices (TEIP) scale
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Teaching Turkish as a second language to Syrian refugees

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Received 16 May, 2018; Accepted 19 September, 2018

The aim of this qualitative study is to reveal the condition involved in teaching Turkish as a second language to Syrian refugees. Participants were selected using a criterion-based sampling technique; they were six (6) instructors and forty (40) Syrian students. The data of the research were compiled using open-ended questionnaire developed by the researchers for the students, and semi-structure interview developed for the instructors. It was revealed that the students have problems mastering basic language skills (especially speaking and listening), the teaching materials are inadequate and physical environment is not conducive. Moreover, it appears that the students have problems in using and pronouncing certain vowels, the confuse letters, and use words in figurative sense. It has also been revealed that the teachers use the same practices, render feedback-correction, and have difficulty in teaching due to lack of right curriculum, the courses being above the students’ levels, and non-functional course equipment. The participants underlined that camp and class environments need to be improved, that students should be given greater opportunities to communicate with native Turkish speakers, audiovisual materials need to be improved, teachers need to be aware of the students’ psychological conditions, teachers should be very versed in at least two languages, and teachers need to be trained extensively.

Key words: Turkish as second language, Syrian refugees, refugee camp, qualitative research.

INTRODUCTION

Immigration refers to the action of coming to live permanently in a foreign country. This act of mobility may have a cross-border dimension due to factors such as economic, political and/or legal inequalities between neighboring countries (Tekin, 2007; Yazgan et al., 2015). Syrians have demonstrated the highest level of cross-border mobility, with 6.5 million people having taken refuge in Turkey since April 2011 as a result of the civil war (NTV News, 2017).

According to data released by the Emigration Administration General Directorate (2017), there are currently 2,834,441 Syrian refugees living in Turkey. Turkey declared an “open door” policy for Syrians in 2011, whereby refugee camps coordinated by the Turkish Emergency Management Directorate (AFAD) were established in certain provinces, and refugees were granted “temporary protection” status in October 2011 (Middle East Strategic Research Center, 2015).
addition to health, housing, and economic rights, Syrian refugees with temporary protection status also have the right to education in the country they reside in. Based on the Convention on the Rights of Children that Turkey signed in 1995, Turkey is obliged to provide education to Syrians (Seydi, 2014). Thus, on September 26, 2013, the Turkish National Ministry of Education (MNE) issued a public mandate titled "Educational and Instructional Services for Syrian Citizens under Temporary Protection in our Country", which emphasized that education services be provided according to certain standard, that in and out-of-camp education services be conducted in conjunction and, more, that university education be given particular importance (MEB, 2013).

State schools and universities operate non-camp educational facilities that individuals who have entered the country with a passport are able to attend. However, the language problem experienced by Syrians is one of the biggest obstacles to the productivity of the educational facilities (Middle East Strategic Research Center, 2015). The right to education, which is one of the most important of the aforementioned rights, requires that foreign children and young adults learn Turkish language for them to communicate with their teachers and peers. Learning and teaching are activities that cannot be isolated from communication, and when it is considered that learning is largely based on language skills, it is not possible for a learner with weak language skills to succeed in classes (Tekin, 2007; Gungör, 2015).

An individual can acquire language skills as a native language based on where she/he was born and raised or can acquire this tool later within the context of a different culture and country. Thus, the concept of learning a second or foreign language is significant. A second language is the language used as the medium of communication after or alongside one’s mother tongue, and is acquired and spoken in a social environment (Klein, 1996). A foreign language, on the other hand, includes all languages learned by an individual later on and in a planned manner and tends not to be used in one’s everyday life (Başkan, 2006; Zorbaz, 2013). Turkish language education for those who reside in Turkey whose mother tongue is a language other than Turkish is referred to as “Turkish as a second language (TSL)” education in the literature; they use that second language in their everyday lives. Syrians living in Turkey thus learn Turkish as a second language.

The teaching of TSL is conducted with a gradual course level system and involves textbooks that are adequate for the levels of the students: beginner, intermediate, upper-intermediate, and advanced (Candaş, 2009). Syrian refugees consider the learning of Turkish to be important in order to be able understand and integrate into Turkish culture, to complete their unfinished education in Turkey, and to start a business (Açık, 2008; Güler, 2012). Thus, most Syrians do Turkish courses provided by TÖMER (Turkish and Foreign Languages Implementation and Research Center, 2018) in refugee camps and universities. The determination of Syrians’ language learning needs and conducting the education based on curricula developed with respect to these needs is important to enable them to adapt better to the life and culture in Turkey. However, the teaching of TSL to Syrians comes with three broad challenges: problems related to the system, students, and teachers.

It has been reported that those who learn TSL mainly experience problems first with writing, followed by speaking, reading, and listening (Açık, 2008). It is known that students experience difficulties in vocalizing the main sounds/letters in general, whether in writing, reading or speaking (Er et al., 2012; Açık, 2008; Mavaşoğlu and Tüm, 2010; Adalar, 2010; Demirci, 2015; Dönmez and Paksoy, 2015; Karataş et al., 2016). In a study conducted by Er et al. (2012), it was reported that students generally experienced difficulties processing and pronouncing the sounds ğ, ş, ç, i, and ü, whilst a study by Açık (2008) revealed that students struggled most with the writing of vowels. Mavaşoğlu and Tüm (2010) stated that students experienced problems in hearing and voicing the ğ and c sounds. Furthermore, Adalar (2010) reported that Arabic-speaking students made several mistakes in terms of voicing and writing the sounds ü, o and ş sounds, none of which exist in the phonology of most Arabic dialects. In addition, Demirci (2015) reached the conclusion that Syrians doing B1 level courses in Turkish made mistakes in "reading aloud" due to differences in alphabet and phonemic differences between Turkish and their native Arabic, which, in turn, negatively affected their motivation. Due to the phonetic and structural differences between the mother tongue and target language, problems related to syntax are encountered in addition to pronunciation (Açık, 2008; Mavaşoğlu and Tüm, 2010; Demirci, 2015; Büyükükkız and Çagal, 2016). Mavaşoğlu and Tüm (2010) reported that students who are accustomed to the "subject-predicate-object" (SVO) order of their native language cannot adapt to the "subject-object-predicate" (SOV) order in Turkish and the syntax problems that they had experienced thus led to concurrent morphological, semantic, and phonetic problems. Another problem that arises from the structural differences between languages is related to semantics and use of affixes (Mavaşoğlu and Tüm, 2010; Adalar, 2010; Candaş, 2009; Özkan, 1994). According to Mavaşoğlu and Tüm (2010), foreign students experience more difficulty in using the case and possessive suffixes, and are particularly hesitant about which morpheme to use with which word. Candaş (2009) found that students experienced difficulty in using i, i, u and ü case specification suffixes, as well as a and e case orientation suffixes.

Students also seem to experience problems related to how Turkish is taught. These problems can be classified...
as problems related to methods and techniques, to instructional material and technology, and to textbooks. Previous studies have emphasized that the language instruction methods and techniques used in the courses were monotonous and not diversified based on contemporary requirements and language instruction aims (Açık, 2008; Er et al., 2012; Göçer and Moğul, 2011; Ünlü, 2011). Ünlü (2011) emphasizes that the preferred methods and techniques differ based on the institution; each institution uses its own unique methods and techniques, and that there was no uniform instruction among the institutions. Another problem area is related to the materials used. Problems experienced in this context can be listed as being material that is inadequate, unqualified, and culturally inappropriate (Er et al., 2012; Ünlü, 2011; Göçer, 2013; Durmuş, 2013; Gungör, 2015; Dağdelen, 2015; Ciğerci and Gungör, 2016; Büyükikiz and Çangal, 2016; Emin, 2016; Mavaşoğlu and Tüüm, 2010).

Yet another problem that appears to exist concerns the competency of language instructors, which includes their inability to communicate in the native language(s) of their students (Güler, 2012; Mavaşoğlu and Tüüm, 2010), their lack of knowledge of their students and their cultures (Güler, 2012), their inability to use information technology in the classroom (Büyükaslan, 2007), their lack of proper field training, and their considering their job of being temporary (Özyürek, 2009; Ünlü, 2011; Yağmur, 2011; Yıldız, 2014).

While many revolutionary developments in the field of teaching TSL have occurred in recent years, the existence of fundamental problems negatively affects the productivity in the process, and moreover prevents more accurate use of Turkish language as a global language. Thus, the determination of the teaching-learning experiences of as well as the problems faced by teachers and students of TSL is quite important, particularly when it comes to meeting the needs of Syrian refugees. It is expected that the findings of this study be of value in deterring the problems that Syrian students living in refugee camps face when it comes to learning TSL, as well as in guiding the development of educational-instructional activities that may resolve these problems.

**The aim of the study**

The main aim of this study is to determine the current status in teaching TSL to Syrian refugees based on teachers’ and students’ views. Thus, the following research questions were posed:

1. What are the general views of teachers and students about the instruction of Turkish?
2. What problems do teachers and students experience when it comes to teaching and learning Turkish?
3. What are the possible solutions to these problems?

**METHODOLOGY**

**Research model**

In this study, a basic qualitative research design was conducted within the scope of the qualitative research method. Basic qualitative research can be observed in every application field and discipline. In this type of research, data are collected through interviews, observations, and/or document analysis. Moreover, both the data collected as well as the data collection methods may vary based on the theoretical framework of the study in question (Merriam, 2013).

**Participants**

The study participants were selected using a criterion-based sampling method, which is a purposive sampling technique. The basic criterion determined in the present study was the learning of the instruction of TSL. The participants comprise six teachers and forty students.

**Data collection tools**

Two survey forms, one containing open-ended questions, and the other containing a semi-structured interview form were used to determine the views of students and teachers, respectively, both on learning and TSL courses. A personal information form was also included, which reflected the demographics utilized as the basis for the students’ and teachers’ views.

The open-ended questions-based survey form was designed to acquire students’ views. Eight (8) carefully researched open-ended questions were developed and presented to experts for review before being administered to the students. The field experts were asked to check the comprehensibility and relevance of the questions. The interview form, on the other hand, was developed based on the principles of comprehensibility, focused questions, the development of alternative questions and probes, different types of questions, and logical organization of the questions (Yıldırım and Şimşek, 2016). A draft interview form was developed, and experts were consulted for the interview form content. A pilot scheme was conducted with one teacher after obtaining the experts’ opinion; the teachers’ responses were analyzed in order to rephrase any outstanding, incomprehensible questions. The teacher who participated in the pilot scheme was excluded from the study.

**Data collection, analysis and interpretation**

After collecting the data obtained through the open-ended survey form from the students, it was checked individually before being coded; forms that contained missing information were excluded from the analysis. The analyzed data collection instruments were enumerated, and the data were transferred onto computer.

In order to analyze the data collected regarding students’ views, students’ responses were read and coded. Through the basics of quantitative content analysis (Lincoln and Guba, 1985), the information on the codes was provided in terms of percentage based on frequency analysis. The coding of the data in the open-ended form reflected the shared views of the researchers and a field expert based on the literature.

The qualitative content analysis technique was utilized in order to analyze the data obtained from the teachers in the study. In qualitative content analysis, the data was first coded, themes were determined, the suitability of the themes was checked, the themes
were finalized, and the findings were interpreted. In order to establish the validity and reliability of the data collected with semi-structured interview forms in the study, credibility, transferability, consistency and verifiability were utilized as criteria (Lincoln and Guba, 1985).

**Credibility**

The analysis process was conducted by two different researchers, supported by experts in the determination of methodology and content analysis. The analysis reports were presented to an independent researcher, and analyzed independently; the data were analyzed independently by both the researchers and a field expert, and then the analyses were compared. Discussions were held until a consensus between the researcher and field expert was established and only then was the analysis finalized.

**Transferability**

This study contains detailed descriptions and purposive sampling based on direct citations within the scope of the transferability.

**Consistency**

Researchers established consistency among the codes during the individually conducted coding process, and later at the agreement phase, reliability was established.

**Verifiability**

Both raw data and analyses were presented for experts’ supervision within the scope of verifiability.

**FINDINGS AND INTERPRETATION**

Here, the findings and related comments obtained from teachers and Syrian refugees were presented based on the aims of the study.

**Findings on the views of teachers**

**Teachers’ reasons for working with refugees**

Based on the findings, it was observed that the teachers’ reasons for working as Turkish teachers included their not being appointed by the MNE, the field of TSL providing employment opportunities, their assuming that they are versed in the teaching of TSL, and their desire to obtain pre-service teaching experience in this field.

**Camp conditions**

According to participating teacher views, the instruction process was adversely affected by the physical conditions in the camp: collective lifestyle, inadequate psychosocial conditions, insufficient course material, and high student absenteeism.

**Cultural differences and the linguistic value of Turkish**

Based on the teachers’ views, it was observed that the cultural differences between Turks and Arabs were important in Turkish language instruction. While a number of teachers stated that the differences between the cultures did not affect the instruction extensively, the majority of teachers emphasized that cultural diversity affected the instruction process both positively and negatively. İ.O., who stated that cultural differences lead to a prejudice and hesitation towards the target culture and the language, argued that cultural differences have a negative impact on the teaching of Turkish: "You are learning the language of a culture that is completely different from the culture in which the individual has lived, learned, and known, which is very challenging. It is different from your lifestyle and it is different for you. This leads to a disadvantage in instruction by creating an involuntary prejudice within the student." Despite camp conditions and the problems caused by cultural differences and absenteeism of students due to these problems, the teachers emphasized that several students attended the classes due to the linguistic value of Turkish, and attached great importance to Turkish. According to the teachers, although the students considered Turkish difficult, there were also students who were aware of their obligation to speak Turkish since it was both a regional language and an important global language, and because it was important for their higher education. Teachers, who agreed with the students that Turkish was important as a global language asserted that the geopolitical significance of Turkey resting between Europe and the Middle East makes the systematic, purposive and programmed instruction of Turkish necessary for foreigners.

**Language course leveling system**

Turkish education in the camps is conducted with a gradual course level system based on TÖMER programs. The participants stated that the course level system was generally effective in instruction; however, since the students mainly learn Turkish in order to attend university, the system due to its general structure makes the students lean towards rote learning in order to pass course exams.

**Instruction process and activities**

It was observed that the views under this main theme were grouped under four sub-themes: reading, listening,
writing and speaking activities. It was stated that the teachers invited other teachers to the classroom, allowed students to read the reading texts, attempted to effectively utilize the listening CDs available as part of TÖMER book sets, allowed the students to find the missing and inaccurate words in listening texts, and frequently engaged in dictation studies to listen and make sense of various conversations while the students acquire listening skills. Teachers, who noted that the listening and writing instructions were conducted subsequently, stated that they frequently applied dictation activities and, furthermore, did not have students fill-in-the-blanks-based activities in stories and poems, find and correct the wrong word in a text, write essays, and summarize the stories they read. Within the scope of speech instruction, it was concluded that teachers implemented the question and answer method, organized debate activities, allowed the students to talk about daily life, conducted drama and role-playing activities, created dialogue groups of two students in the attempt to remove their reservations in speaking.

Teachers, in expressing their views on reading skills and activities, stated that they used literary and entertaining reading materials such as poetry, songs, and stories for students in order to acquire reading skills. In this context, it was stated that they allowed the reading texts to be read in turns, allowed the students to correct inverted sentences, and asked the students to mark the unfamiliar words in the texts, whereupon those words were written on the board and their meanings checked using dictionaries. Some teachers had emphasized the lack of course materials, and stated that they purchased storybooks using their own money and let the students to read these books. Teachers, in explaining which activities and methods they used in terms of developing students' four basic language skills, stated that they based the instruction process on cultural similarities, which in turn motivated the students.

**The main problems affecting instruction**

The main theme was categorized into three sub-themes based on the views related to the causes of problems experienced in Turkish instruction: disciplinary problems, grammatical problems, and problems in speaking and writing. Within the context of grammatical problems, it was stated that students experienced problems in using vowels, in pronouncing the vowels, and in confusing letters. On the subject, E.O. stated the following: "I guess some Turkish sounds do not exist in Arabic, and the students frequently confuse the vowels "o-ö", "u-ü" and "e-i", and they cannot use these. I say "üzüm" but the student says "üzüm". There are some students whom I failed to teach. After many repetitions, those who worked hard corrected it later, but some of them tried really hard, but then I was convinced that they could not succeed. They cannot pronounce "ö" or "ö". There is no way they can pronounce "üç"; they say "uç". They cannot pronounce "u-ü" and "o-ö"; these are very confusing for them. In writing, they confuse "e" with "i". In the pronunciation, they confuse "o-ö", "u-ü"; when writing, you say "e", they write "i"; you say "i", they write "e".

Furthermore, the teachers emphasized that students experienced problems with the vocalization of hard consonants. Besides phonetic problems, it was observed that teachers experienced problems with teaching sentence formation and sentence elements, and that students incorrectly ordered sentence elements, confusing the order of the genitive and the definitive in possessive and adjective clauses. Teachers moreover pointed out that students had problems while using the case and possessive suffixes accurately, and that they experienced problems with the use of punctuation marks at the beginning of the process; however, the frequency of these issues has gradually decreased over time. Linguistic problems such as replacing unrecognized words with words in Arabic, confusing Latin-based Turkish letters with Arabic letters, and not paying attention to punctuation and spelling rules were experienced during the instruction of speech and writing. Within the context of disciplinary problems, it was stated that students speak Arabic among themselves, that they do not fulfill their assignments and responsibilities and abstain from attending class. It was stated that these problems were due to the age difference among the students, their educational and grade levels, and negative physical conditions.

**Recommendations**

Teachers were asked to make recommendations about TSL instruction. In this context, it was observed that the teachers expressed the need for a better physical and auditory instructional environment, thus enabling the establishment of communication between refugees and Turks in a way that enable reflective learning, the need for the development of Turkish textbooks that emphasized the similarities and relationship between the two cultures, as well as the need for the inclusion of visual materials in the book sets. Furthermore, teachers proposed that the teachers should be aware of the conditions and the psychosocial status of the refugees, they need to speak at least two languages, be experts in basic language skills, and receive comprehensive training before instructing each course level, and that course level instruction last longer. Regarding the gradual course level system, it was suggested that course periods be extended due to the extensive book content, and that difficult texts should not be included at the initial levels.
Findings on the views of Syrian refugees

General views on Turkish language

General views of the participants on Turkish demonstrated that eleven (11) students considered Turkish as an important language, six (6) students considered it as a difficult language to learn, and four (4) students experienced difficulties in learning Turkish language initially; however, they got used to the language later.

Reasons for learning Turkish

Analysis of the views of refugee students on the reasons for learning Turkish demonstrated that twenty-nine (29) students were learning Turkish in order to attend university, ten (10) students studied Turkish because they feel that it ought to be learned as a new language, eight (8) students were learning Turkish in order to find a job in Turkey or in neighboring countries, seven (7) students were learning Turkish because they liked the language, and one (1) student was learning Turkish in order to work as an interpreter for Arab tourists. The fact that most students stated that they were learning Turkish in order to attend university was consistent with the finding that, according to teachers, the main reason for the students to learn Turkish was to attend university.

Course facilities and material

Analysis of views regarding course facilities and material demonstrated that fourteen (14) students considered textbooks to be detailed and difficult, eleven (11) students considered the educational resources used in the classroom to be inadequate, six (6) students thought that the reading texts featured in the book were long, six (6) students considered the textbooks to be useful, five (5) students considered visual and auditory resources to be inadequate, and three (3) students emphasized that teachers’ efforts were significant and found the instructional activities to be adequate. Students’ views on the inadequacy of educational resources were consistent with the views of teachers regarding the inadequacy of the educational resources available in the refugee camp, and lack of audiovisual and technological equipment in classrooms. Emphasizing the inadequacy of educational resources, S.Ö. stated the following: “We have only one source; there is no other resource than books. We experience difficulties for that reason.”

Course level system

Analysis of the views on the course examination demonstrated that twelve (12) students felt that the duration of TSL courses is overly short in proportion to the volume of course content, the topics were instructed in a very intense and rapid manner, and therefore had to memorize instead of thoroughly learning the several linguistic rules. The student views were consistent with the views of the teachers on the gradual course level system, and on the disadvantages of the exam-oriented course level system.

Experienced problems and causes of these problems

Analysis of the views about problems experienced in terms of learning demonstrated that eleven (11) students experienced problems in the speech skills, six (6) students experienced problems with learning and using grammatical rules, four (4) students experienced problems due to lack of adequate listening and speaking activities, and four (4) students experienced problems in doing homework due to lack of studying opportunities, and lack of study environment at home. Students’ views regarding communication problems demonstrated that twenty (20) students did not have any opportunity to communicate with Turks, seven (7) students could not practice Turkish because they spoke Arabic to each other, six (6) students could only get the chance to speak Turkish with their teachers, and five (5) students had no communication opportunities due to camp conditions. These findings are consistent with the teachers’ views that the life in camps impeded the use of Turkish. Students’ views regarding adaptation demonstrated that twelve (12) students experienced problems in both their social lives and the instruction process due to cultural differences, thirteen (13) students were not happy about the containers where the instruction was conducted, and that eight (8) students considered the class environment to be adverse.

Recommendations

Within the scope of the students’ recommendations, it was revealed that twenty-one (21) students suggested that opportunities for communication with Turks be increased in order to better learn Turkish, ten (10) students suggested that the length of instruction in each course level be increased, seven (7) students suggested that the time allowed for final examinations be lengthened, seven (7) students suggested that provisions be made for audiovisual resources, five (5) students suggested that speaking activities be increased, and five (5) students suggested Turkish teachers be experts in TSL. The recommendations shared by both the teachers and students demonstrated that both participant groups had the same views regarding the creating of
communication opportunities with the Turks, the extending of course durations, teachers being both experienced and knowledgeable in the field, and there being an adequate educational environment both in physical and audiovisual sense.

DISCUSSION

Based on the study findings, it was concluded that the teachers taught TSL because they were not appointed by the MNE, because the field of TSL provided employment opportunities, they assumed being versed in the teaching of TSL, and they desired to obtain pre-service teaching experience in this field. Most students were learning Turkish because they wanted to attend university in the future, they felt that Turkish ought to be learned as a new language, they wanted to find an employment in Turkey and in neighboring countries, and they liked Turkish and wanted to work as interpreters for Arab tourists. It is possible to argue that the teaching of TSL is a new discipline and phenomenon in Turkey, and that the present study and its findings have a unique value since there are no previous studies that focused on the reasons for the involvement of teachers and students in this field.

Based on the study findings, it was observed problems in Turkish instruction were concentrated on linguistic, cultural, and communicative dimensions, and these findings were consistent with the findings reported by Güngör (2015), Büyükkız and Çangal (2016), Ciğerci and Güngör (2016), Özer et al. (2016), Sarıtaş et al. (2016), and Uzun and Bütün (2016). Participants stated that in Turkish language instruction, problems were experienced in the acquisition of basic language skills, especially when it came to speaking and listening activities. The sources of this problem included inadequate activities, difficult listening texts, insufficient communication opportunities, inadequate physical classroom and camp conditions, and the presence of students from different age groups and education levels in the same class. These findings were consistent with studies by Arslan et al. (2010), Mavaşıoğlu and Tüm (2010), Er et al. (2012), Ünlü (2011), Polat (2012), Göçer (2013), Güngör (2015), Büyükkız and Çangal (2016), and Emin (2016), who stated that inappropriate physical conditions and course tools and material have an impact on learning and teaching processes. Furthermore, it was concluded that teachers mostly experienced problems with the teaching of vowels, whilst students experienced problems with voicing the letters and confusing. These findings were consistent with studies by Er et al. (2012), Açık (2008), Mavaşıoğlu and Tüm (2010), Adalar (2010), Candaş (2009), Demirci (2015), and Dönmez and Paksoy (2015). Thus, it is possible to argue that there is a close relationship between the problems experienced in the teaching of TSL, low academic achievement, and the acquisition of language skills.

The findings of our study had demonstrated that the fact that Turkish is being structurally different from Arabic posed a challenge for students, who experienced difficulties in learning the words without Arabic equivalents, and who especially failed in being able to use words in a metaphorical context. In this respect, the results of the present study were consistent with the findings of studies conducted by Polat (2012), Demirci (2015), and Büyükkız and Çangal (2016).

The findings of this study reveal that teachers utilize various activities in the areas of listening, reading, speaking and writing, and that these activities were created based on their personal experiences and creativity. It was also found that teachers use the same activities in the overall instruction process, and that they coordinate the instruction process and activities. In the scope of the activities, teachers appear to employ certain instructional strategies, provide immediate feedback, to correct students’ performances in order to ensure the retention of learning and prevent inaccurate learning, and to use body language when teaching vocabulary. However, the lack of a standard curriculum, the fact that the courses are not tailored towards students’ needs, desires, and levels, the fact that the inadequacy of course material leads to instructional problems, and the fact that teachers have to instruct the students using presentation-based education have all lead to the use of rote learning. These findings were consistent with studies of Açık (2008), Er et al. (2012), Göçer and Moğul (2011), Ünlü (2011), and Demirci (2015), who emphasize that language instruction methods and techniques utilized in TSL courses were monotonous, and not diversified based on the contemporary requirements and language instruction aims. It can be stated that the book sets provided by TÖMER do not adequately reflect the Turkish cultural elements, and that they are not suitable for students’ levels. In this context, it is possible to argue that textbooks and material use care not functional, as the findings of Dağdelen (2015) suggest, who reports that the utilization of texts that reflect Turkish culture and use of cultural elements in classroom environment thus increase motivation.

It was observed that the problems experienced by students while adapting to a new country and language have a negative impact on the instruction process. The problems related to discipline are associated with the fact that students constantly spoke Arabic among each other, that they could not complete their homework and responsibilities, and that was lack of communication opportunity between the students, teachers, and the Turkish public. In this regard, Büyükkız and Çangal (2016) state that the development of language skills of students is negatively affected by their lack of opportunity to speak Turkish outside the classroom.

It has been concluded from the recommendations of
both teachers and the students that the camp and classroom environments need to be improved, communication opportunities in Turkish and more speaking activities ought to be provided, audiovisual and technological tools and materials be made available and/or improved, Turkish textbooks that emphasize the similarities and relationship between the two cultures be authored, visual materials be included in book sets, teachers need to be knowledgeable about the psycho-social conditions of the refugees, teachers should be able to speak at least two languages, teachers should specialize in basic language skills, teachers be provided comprehensive training, and that the duration of each course level be lengthened. Thus, it was observed that the findings of this study were consistent with the results of studies by Polat (2012), Mete and Gürşoy (2013), Güngör (2015) Büyükünüz and Çangal (2016), Ciğerci and Güngör (2016), Özer et al. (2016), and Sarıtaş et al. (2016). In order to conduct more functional and systematic instruction of TSL in refugee camps, it is possible to suggest that a standard curriculum be developed that is tailored toward the specific needs of Turkish language instruction in refugee camps, the interests and desires of the students and teachers be considered when developing the curriculum, course tools and materials need to be improved, audiovisual and technological tools need to be utilized, physical conditions of the classes need to be improved, courses need to be organized around students’ levels and needs, and teachers need to be competent in the field of TSL.

There is need for future studies designed with larger samples and mixed methods (both qualitative and quantitative research methods), and also application-based empirical studies ought to be conducted on the TSL pedagogy.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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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 condition. 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 (Babaoğlan and Yılmaz, 2010; Battal, 2007; İzci, 2005; Nizamoğlu, 2006; Yılmaz and Çokluk-Bokeoglu, 2008), preschool teachers (Gök and Erbaş, 2011; Kaya, 2005; Sari et al., 2009; Üstün and Yılan, 2003), general and special education teachers (Diken and Özugçu, 2004a, 2004b), pre-service classroom teachers (Aksüt and Yaldız, 2005; Diken, 2006; Dolapçi, 2013; Kiş et al., 2014) as well as the needs of pre-service special education teachers (Kiş et al., 2014; Özugçu, 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 Biligç (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 (Babaoğlan and Yılmaz, 2010; Bayar and Üstün, 2017; Diken, 2006; Dolapçi, 2013; Gök and Erbaş, 2011; İzci, 2005; Kaya, 2005; Nizamoğlu, 2006; Rakap and Kaczmarek, 2010; Sari et al., 2009; Sucuoğlu, 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
**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 (PGFI) (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
Table 1. TEIP fit indices chart.

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFI</td>
<td>0.95</td>
</tr>
<tr>
<td>NNFI</td>
<td>0.95</td>
</tr>
<tr>
<td>CFI</td>
<td>0.96</td>
</tr>
<tr>
<td>IFI</td>
<td>0.96</td>
</tr>
<tr>
<td>GFI</td>
<td>0.85</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.80</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.101</td>
</tr>
<tr>
<td>SRMR</td>
<td>0.054</td>
</tr>
<tr>
<td>Chi-square test</td>
<td>887.06</td>
</tr>
<tr>
<td>SD</td>
<td>130</td>
</tr>
<tr>
<td>Chi-square/SD</td>
<td>6.82</td>
</tr>
</tbody>
</table>

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

In the context of the Chi-square test, values of 0.90 or higher indicate 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.

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

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 (Haşlaman, 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.,
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; Firat, 2014; Gözün and Yılmaz, 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 (Firat, 2014; Sari, 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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