MEASURING POSSIBLE LANGUAGE TEACHER SELVES: A SCALE DEVELOPMENT STUDY

Research Article

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Abstract

The current study set out to build on the limited research on possible language teacher selves. The study aimed to develop a possible language teacher selves scale (PLTSS) for English as a foreign language (EFL) student teachers. The tripartite scale intending to measure the constructs of ideal, ought-to and feared language teacher selves was developed in two major stages. Data were collected from two distinct samples of senior Turkish EFL student teachers studying at twelve different universities in Turkey. In a preliminary study, tentative scale items were constructed based on a review of literature and qualitative data collected from a small sample and finalized through expert review and pre-piloting. The initial form of the scale was then administered to 296 senior student teachers of English. Following an exploratory factor analysis, the final form of the scale was constructed. The final form was administered to a different sample involving 274 student teachers. By this way, the scale was further validated through confirmatory factor analysis. The three scales under the PLTSS were checked for internal consistency reliability with both datasets. Findings revealed the sound psychometric properties of the PLTSS in terms of construct validity and internal consistency reliability.

Keywords: possible selves, possible language teacher selves, L2 teacher motivation, scale development, student teachers of English

1. Introduction

Issues related to identity and self have long been among major areas of interest in mainstream psychology, and a principal focus has been on the affective and motivational aspects of the self-processes (Leary, 2007). An outstanding contribution to the motivational aspects of the self was made by Markus and Nurius (1986) through introducing the concept of possible selves. The idea of possible selves was a product of a time when the self-concept was no longer thought of as static and unidimensional; in contrast, there was a heightened interest in the dynamic and multifaceted nature of the self-concept (Markus & Wurf, 1987; Oyserman & Markus, 1990).

Possible selves embody individuals' "cognitive manifestation of enduring goals, aspirations, motives, fears, and threats" (Markus & Nurius, 1986, p. 954). Correspondingly, possible selves theory delineates the way the individuals' future self-guides are deeply related to their motivation at present and for future action (Markus & Nurius, 1986). In a similar vein, Higgins (1987, 1998) highlights the way future self-guides affect our current behaviors with a comparison of current and future selves. A dissonance between current and desired selves

triggers efforts to get rid of this discrepancy. Based on a possible selves perspective to teacher motivation, motivated behaviors of teachers are a kind of execution of their future self-guides related to the teaching profession (Sahakyan, Lamb, & Chambers, 2018). Operating as a complex, dynamic system along with current teacher selves, teachers' possible selves result in a motivational power that impacts teacher affect and behaviors (Richardson & Watt, 2010).

Although the sound theoretical framework of possible selves has lent itself to empirical research in psychology for long, the initial attempts to make use of this framework in applied linguistics were made in the second half of the 2000s as underlined by Hiver (2013). The well-established nature of the concept of possible selves in mainstream psychology with pioneering works of Markus and Nurius (1986) and Higgins (1987) giving weight to the future-oriented facet of the self-concept was effectively applied to the field of SLA with the efforts of Dörnyei (2005) through his model of L2 Motivational Self System (L2MSS). Inspired by the possible selves and their sound adaptation to L2 learner motivation construct through the L2MSS, Kubanyiova (2007, 2009) introduced the construct of possible language teacher selves in an attempt to explain the underpinnings of language teacher development by way of the links among teacher cognition, motivation and development. In this sense, the conceptualization of possible language teacher selves is rooted in the theoretical grounds of the concepts of possible selves (Markus & Nurius, 1986) and self-discrepancy (Higgins, 1987, 1998).

1.1. The Possible Selves Theory

Within the scope of possible selves theory, Markus and Nurius (1986, p. 954) refer to possible selves as "individuals' ideas of what they might become, what they would like to become, and what they are afraid of becoming". Although not exactly naming each of these constructs, they provided three major forms of possible selves that represent the ideal or hoped-for selves people would like to become, the expected selves they could realistically become and the feared selves they are afraid of becoming and therefore avoid. Moreover, they offered an overview of the collection of individuals' self-images and conceptions that occur in multiple forms such as the good selves, bad selves, ideal selves, ought selves, hoped-for selves and feared selves. Therefore, possible selves can be considered as individuals' future-oriented self-representations that come out in multiple forms and conceptually associate cognition and motivation (Markus & Nurius, 1986).

Based on the possible selves theory, the possible selves serve two crucial functions that raise their prominence from a cognitive and motivational perspective (Hoyle & Sherrill, 2006; Markus & Nurius, 1986; Markus & Wurf, 1987; Oyserman & Markus, 1990): (1) They serve as incentives for individuals' future behavior, and (2) they offer a context for the evaluation and interpretation of current actual selves of individuals. In other words, possible selves initially provide an impetus for future behavior and guide it through personal representations in mind in the form of selves to approach or avoid. At the same time, possible selves also provide a mental framework for the interpretation of the current selves and behaviors in relation to possible future selves. These desired or undesired self states are supported by mental imagery. The crucial role of mental imagery as part of possible selves serve as a driving force for behavioral regulation and performance (Ruvolo & Markus, 1992).

Self-relevant mental imagery is a crucial component of possible selves (Markus, 2006), and this is what distinguishes possible selves from goals that guide human behavior (Dörnyei, 2009). Besides involving long-term self-relevant goals with a guiding role (Miller & Brickman, 2004), possible selves consist of "tangible images and senses" (Dörnyei & Ushioda, 2011, p. 81) which make individuals perceive them like a reality they experience (Dörnyei, 2009). Therefore, possible selves get beyond abstract conceptions in individuals' minds with their emotional and experiential aspects (Hiver, 2013). With the help of these visionary elements,

possible selves constitute an important concept for the exploration of the way individuals' self-representations guide them for future action by approaching their hoped-for selves or avoiding their feared selves (Hoyle & Sherrill, 2006).

1.2. The Self-discrepancy Theory

During the time the concept of possible selves was theorized by Markus and Nurius (1986), a complementary perspective to explain self-knowledge with a focus on the future elements of the self-concept was introduced by Higgins and his associates (Higgins, 1987; Higgins, Klein, & Strauman, 1985) with the well-known self-discrepancy theory. With this theory, Higgins (1987) aimed to provide a systematic scope to explain the interplay among various self-states and divided the self into three major domains: (1) the actual self, (2) the ideal self, and (3) the ought self. Based on this distinction, the actual self refers to the self-representation of the characteristics or attributes personally believed to be possessed at present. The ideal self stands for the self-representation of the characteristics an individual would ideally like to possess. In other words, the ideal self concerns the personal wishes, aspirations, desires and self-imagined goals. Lastly, the ought self refers to an individual's self-representation of the characteristics s/he believes s/he ought to possess. This is closely related to the individual's sense of responsibilities, duties and obligations.

A major distinction is made between ideal and ought selves in the literature by referring to the ideal self as a state rooted in the individual's own desires and aspirations leading to a personal vision whereas the ought self is underlined as attributes one ought to possess that are derived from others' vision for the person (Dörnyei, 2009). However, as emphasized by various scholars (e.g., Boyatzis & Akrivou, 2006; Dörnyei, 2009; Ryan & Irie, 2014), the elusiveness of the divergence between the two is maintained in that we all belong to diverse social groups and adapt to social norms in a way. From this perspective, it is inevitable to embody some social expectations or roles representing the ought self into the self-derived goals and desires reflecting the ideal self. Therefore, ideal and ought selves can maintain overlapping and harmonious aspects; however, they can also have conflicting elements (Ryan & Irie, 2014).

Higgins (1987) conceives of the actual self as an individual's self-concept and the remaining ideal and ought selves as future self-guides. Drawing on the taxonomy of self-states involving actual, ideal and ought selves, the self-discrepancy theory (Higgins, 1987, 1998) posits that individuals compare their actual with their desired end-states, namely the ideal and ought selves, seek for a harmony between their self-concepts and these personally relevant self-guides, and get motivated by the wish to reduce the discrepancies between their actual and ideal/ought selves. Therefore, they similarly view the ideal and ought selves as standards to be met and the goals to be reached.

Apparently, self-discrepancy theory and possible selves theory approach the self and affect in similar but distinctive ways. These two social-psychological frameworks offer complementary understandings for the motivational function of future-oriented self states either in the form of possible selves or future self-guides. The overlapping element is the motivational function of the future-oriented self-representations because both frameworks focus on that "future, as-yet-unrealised selves have the potential to be powerful motivational influences on behaviour." (MacIntyre, MacKinnon, & Clément, 2009, p. 47). This function has been translated into many different disciplines, one of which is the field of SLA.

1.3. The L2 Motivational Self System (L2MSS)

The self-concept with various related self constructs in psychology (Leary, 2007; Leary & Tangney, 2012) have also been influential in the field of SLA especially over the last decade (Csizér & Magid, 2014; Mercer, 2012, 2015; Mercer & Williams, 2014). In this sense,

Dörnyei's (2005) model of the L2MSS, which was introduced to explain L2 learning motivation, has had an overarching impact in the field. Drawing on the underpinnings of Markus and Nurius's (1986) possible selves theory and Higgins's (1987, 1998) self-discrepancy theory, Dörnyei (2005) initiated a self-based perspective of L2 motivation. Along with the impact of possible selves as future self-guides, a reform in the understanding of Gardner's (2001) integrativeness guided the development of the model.

Based on this "reconceptualization of L2 motivation as part of the learner's self system" (Dörnyei, 2009, p. 29), L2 learners' future visions of themselves is at the heart of the L2MSS which is comprised of three principal components: (1) the ideal L2 self, (2) the ought-to L2 self, and (3) the L2 learning experience. Among these dimensions, the ideal L2 self refers to the facet of the ideal self peculiar to the learning of the relevant L2 and represents the person one would ideally like to become such as someone who speaks the language fluently. Similar to the functioning of the ideal self in Higgins's (1987) self-discrepancy theory, the ideal L2 self serves as a strong motivator for future L2 learning behavior in response to the desire to reduce the mismatch between the actual and ideal selves (Dörnyei, 2005, 2009). As the second component, the ought to L2 self refers to the L2-specific attributes or qualities an individual believes s/he ought to possess in an attempt to satisfy the expectations of some significant others and to abstain from any potential negative outcomes. In this respect, it is characterized by more externally-driven and less internalized aspects of the L2 motivational self system. The third facet of the L2MSS concerns the L2 learning experience of an individual and stands for the immediate language learning environment that shapes language learning experience with such aspects as the curriculum, teacher and peers. In brief, the model of L2MSS offers insights into the way L2 learners' self-system that embodies future-oriented visions specific to the learning of an L2 energizes L2 learning motivation (Ryan & Irie, 2014).

1.4. Possible Language Teacher Selves and Their Motivational Potential

The conception of L2 motivation as an important part of the language learner's self (Dörnyei, 2009) was both a substantial shift in relation to the predominant approach to L2 learner motivation and also influential on the emergence of a self-based approach to L2 teacher motivation. To put it another way, the idea of focusing on L2 learners' future self-guides involving their future images or visions as L2 learners and users has been effective in the development of a parallel self system to explain L2 teacher motivation. In this sense, the construct of possible selves which conceptually relates self-concept and motivation (Markus & Nurius, 1986; Oyserman & Markus, 1990) was highly influential. Drawing on the theoretical grounds of possible selves theory (Markus & Nurius, 1986) and self-discrepancy theory (Higgins, 1987, 1998) as well as Dörnyei's (2005, 2009) model of the L2MSS as a well-established adaptation of these theories to the understanding of L2 learner motivation, Kubanyiova's (2007, 2009) pioneering works on language teachers' conceptual change and development drew the attention to L2 teacher motivation as part of L2 teachers' self system. In her intervention study on L2 teachers' conceptual change, she was able to explore the links among teacher cognition, motivation and development. In an effort to understand the conceptual change in language teachers, she situated the possible selves of language teachers as a central component of L2 teacher cognition. In this respect, a focus on L2 teachers' possible selves indicated the inclusion of a future dimension in language teacher cognition (Kubanyiova, 2012), which is conceived of as an abstract cognitive component of teaching involving an amalgam of teachers' thoughts, knowledge and beliefs (Borg, 2003, 2006). Possible teacher self includes a further dimension in teacher identity and self-views with its future orientation (Hamman, Gosselin, Romano, & Bunuan, 2010). The distinctiveness of the construct of possible selves among various self-constructs is a result of its focus on the future (Dörnyei & Ushioda, 2011).

Based on Kubanyiova's (2007, 2009) conceptualization, with their central place in language teacher cognition, the *possible language teacher selves* embody L2 teachers' cognitive representations of their possible selves (i.e., ideal, ought-to and feared selves) regarding the teaching profession. In parallel with the conceptualization of L2 motivation as the L2MSS, the model of possible language teacher selves comprises three principal components: (1) ideal language teacher self, (2) ought-to language teacher self and (3) feared language teacher self. Within this tripartite conceptualization, the *ideal language teacher self* corresponds to future images and visions of L2 teachers' identity goals and aspirations in relation to the language teaching profession, and typically reflects the kind of L2 teacher self one would ideally like to become in the future. The model postulates that L2 teachers get motivated by the desire to reduce the mismatch or incongruence between their actual and ideal language teacher selves. As the second dimension, the *ought-to language teacher self* is a cognitive reflection of extrinsically-driven but self-relevant duties, responsibilities and obligations regarding the language teaching profession, and simply refers to one's vision of the kind of L2 teacher s/he should become in the future. The underpinnings of this self-construct might rest in various sources such as normative pressures or school rules in the working environment in general and the latent expectations of significant others such as colleagues, families and students in particular. However, as distinct from the ideal language teacher self in the model, the motivational capacity of the ought-to language teacher self in relation to the desire to reduce the mismatch between actual and ought-to language teacher selves is rooted in external incentives and particularly the mental representation of negative consequences. The cognitive representation of the relevant negative outcomes points to the third self-construct in the model labelled as the *feared language teacher self*, which refers to the kind of L2 teacher one is afraid of becoming in the future. The model posits that the feared self might materialize in the case that L2 teachers do not accomplish their ideal or ought-to selves.

Kubanyiova (2009) lays emphasis on this third constituent of the possible language teacher selves even though the feared self is not evidently established within Dörnyei's (2005, 2009) L2MSS and Higgins's self-discrepancy theory. This is because the motivational capacity of possible selves might be heightened when they are balanced and particularly in the case that the desired selves of individuals are offset by relevant countervailing feared selves (Dörnyei, 2005, 2009; Dörnyei & Ushioda, 2001; Kubanyiova, 2007; Oyserman & Markus, 1990). In addition, similar to the internalization of different elements of the ought-to self (Boyatzis & Akrivou, 2006; Dörnyei, 2009), the ought-to language teacher self might transform into more internalized future self-images of the ideal language teacher self (Kubanyiova, 2007, 2009). In brief, with the aforementioned three major constituents, the possible language teacher selves are placed at the center of language teacher cognition and display great motivational potential. However, the self-regulatory impact and motivational capacity of possible language teacher selves depend on some certain conditions (Kubanyiova, 2007, pp. 93-95): The possible language teacher selves need to be *available and accessible, elaborated and specific, central, plausible, conceptually grasped, balanced and contextually cued.*

To sum up, the possible language teacher selves are quite promising in terms of their motivational potential. However, the enactment or activation of this potential appears to be a prominent initial step. It is possible to engage learners in the language learning process and transform the learning setting into an effective language learning environment with motivated teachers who hold a vision of themselves achieving the pre-determined goals and a well-structured pathway to reach these targets (Dörnyei & Kubanyiova, 2014). In other words, beyond the implementation of novel techniques or principles, teacher motivation appears to be a prerequisite for the transformation of classrooms in a positive direction. One such way of motivating language teachers is inspiring their vision (Kubanyiova, 2012, 2014). Visionary

training with a focus on the future self-guides of teachers might work well in motivating language teachers (for further information, see Dörnyei & Kubanyiova, 2014). In that case, language teachers' possible selves might serve as real motivators for both their teaching and professional development practices.

1.5. Previous Research into Possible Language Teacher Selves

Research into possible selves of L2 teachers originated largely from the pioneering works of Kubanyiova (2007, 2009; see also Dörnyei & Kubanyiova, 2014). In an attempt to explore the conceptual development of eight Slovakian EFL teachers, Kubanyiova (2007) conducted a longitudinal mixed methods intervention study and evaluated the effectiveness of a teacher development course on the participant in-service teachers' professional development. According to the results, the teacher development course reflected to some extent on their teaching practices but was not able to lead to a conceptual change in teachers. While accounting for the possible reasons, she developed an integrated model of Language Teacher Conceptual Change (LTCC) that described the distinct ways different participant teachers approached the course. The possible language teacher selves construct involving ideal, ought-to and feared language teacher selves of L2 teachers formed a crucial component of this model. In this sense, Kubanyiova (2009) underlined the role of teachers' possible selves in teacher development in that the mismatch between teachers' desired and actual selves serves as an impetus for the learning and professional development of teachers.

In a similar vein, White and Ding (2009) carried out a longitudinal qualitative study on the way language teacher identity and self operationalized in an e-language teaching project that aimed to familiarize experienced language teachers with technology-based language teaching practices. For this purpose, 23 language teachers at three different universities in China, UK and New Zealand participated in the project. The data collected through individual and group interviews, discussions, reflective journals and blogs revealed the crucial motivating role of teachers' possible selves as dynamic, evolving and socially constructed elements in guiding the teachers' engagement in the project and teacher development in more general terms.

Following this, Hiver (2013) carried out a qualitative study to investigate the interaction of possible language teacher selves (ideal, ought-to and feared language teacher selves) in seven in-service Korean EFL teachers' professional development choices. Analysis of qualitative data collected primarily through interviews and several other instruments suggested that the participant teachers had well-structured actual and possible language teacher selves. Participants were principally motivated for teacher development to fix their perceived incompetencies or to improve their sense of self. The perceived inadequacies were mostly about language self-efficacy beliefs. Another motive for them was related to complying with the normative obligations, though this was less significant compared to the other two.

Kumazawa (2013) specifically focused on how language teachers' possible selves impact their occupational motivation in his qualitative study. For this purpose, data were collected from four novice EFL teachers in Japan by means of interviews and several complementary online sources. The narrative inquiry of the data demonstrated that the large discrepancy between the novice teachers' initial possible selves (ideal and ought-to) and actual selves left a negative impact on their motivation in the initial period of teaching. But the relevant mismatch served as a trigger for teachers' self-reflection in time, a resultant transformation of their self-concepts and increased motivation in turn.

Drawing on a part of her larger longitudinal research (2007; see also Kubanyiova, 2006, 2012), Kubanyiova (2015) explored the data of one of the teachers that participated in the teacher development course. With reference to the way teacher-led discourse might help L2

learners to get the opportunity for language development, she analyzed how the participant teacher's future-self guides might materialize in her interactions as part of the teacher-led discourse in an EFL class. Data collected through audio recordings of lessons, interviews conducted before and after the lessons, field notes and ethnographic interviews revealed the prominent impact of the teacher's possible selves on the way she guided the classroom interaction and created language learning opportunities for students in the class.

One other study conducted in China by Yuan (2016) focused on the identity development of two senior student teachers of English doing their teaching practicum with reference to their interactions with both their supervisors at university and the mentor teachers that guide them in practicum schools. The data gathered through multiple instruments like field observation and interviews pointed to the gloomy aspects of mentoring for these pre-service language teachers. The study showed that the negative mentoring they got during their practicum led the pre-service teachers to leave behind their initial ideal and feared identities that were promising for their self-development as teacher candidates.

Recently, Smid (2018) carried out a study on initial motivations of Hungarian pre-service teachers of English for choosing teaching as a career and focused on their possible selves in his evaluation. He attempted to explore the relationships among various motivational factors in relation to learning and teaching English, possible teacher selves and several other factors. Major results showed that only intrinsic motivation and ideal self appeared to directly predict motivated behavior factors related to language learning and teaching while feared self, language learning experience and macro-contextual extrinsic motivation predicted these variables indirectly.

In another recent study, Kalaja and Mäntylä (2018) investigated the ideal classes of 35 pre-service teachers of English in Finland by asking them to envision teaching in their ideal class in the near future, draw an image and write explanations about what kind of a foreign language class this is. The resultant multimodal data revealed some divergent features of the imagined future classes in terms of the classroom environment, the activities, the teacher and student roles and the focus of language learning and teaching. Regarding the possible selves of pre-service teachers, the study found that both their ideal and ought-to teacher selves were salient in the envisioned English classes and in line with each other.

Likewise, Sahakyan et al. (2018) conducted a qualitative study with six English language teachers in Armenia in order to explore the trajectory of their motivation to teach in relation to their ideal and ought-to selves during their teaching career. The study specifically set out to unfold the influence of teachers' ideal and ought-to selves on their motivation to teach. The study found that the participants had elaborate ideal, ought-to and feared selves at the beginning of their career, and particularly their ideal selves were rooted in the teachers' past learning experiences and sometimes the teacher image they were familiar with due to their own teachers. However, these initial ideal selves were left behind and transformed in time due to their uninternalized, unachievable and conflicting nature from the teachers' side. As they got experienced, teachers appeared to have a kind of feasible self which is a holistic amalgam of the dimensions of ideal, ought-to and feared selves.

As understood from the previous research, language teachers' possible selves appear to be important and promising constructs, and gaining insights into the working self-concepts of language teachers from a possible selves perspective is valuable. The dominant methodology employed in the previous empirical research on L2 teacher motivation from the perspective of possible language teacher selves was qualitative in nature (e.g., Hiver, 2013; Kumazawa, 2013). In addition, after the conceptualization of the L2 self particularly with the manifestation of L2 motivational self system by Dörnyei (2005), it was established and consolidated with

recurrent empirical studies pertaining to L2 motivation (e.g., Al-Shehri, 2009; Dörnyei & Chan, 2013; Henry, 2009; Papi, 2010; Taguchi, Magid, & Papi, 2009; Yashima, 2009). In the same vein, the present study takes the initiative to validate the construct of possible language teacher selves. Accordingly, the current study aimed to contribute to the relevant research line by developing a possible language teacher selves scale. The study sought answers for the following research questions:

1. What is the underlying factor structure of the tripartite Possible Language Teacher Selves Scale (PLTSS)?

2. Is the factor structure of the tripartite PLTSS further verified?

3. What are the internal consistency estimates of the tripartite PLTSS?

2. Method

2.1. Setting and Participants

The current study was conducted in two stages at a total of twelve state universities in Turkey. The study comprised two major stages that were named as the preliminary study and the main study. The participants were final year student teachers enrolled in English Language Teaching (ELT) departments of these universities. For the item generation process, convenience sampling was employed and a total of 48 final year student teachers of English (34 female, 14 male) studying at the ELT department of Hacettepe University were included in this phase. The pilot form of the PLTSS was administered to the preliminary study sample consisting of a total of 313 senior student teachers. Following the preliminary analysis of data (i.e., data cleansing), a total of 296 senior student teachers of English (247 female, 49 male) enrolled in the ELT departments of Gazi University (n = 97), Gaziantep University (n = 65), Sakarya University (n = 38), Süleyman Demirel University (n = 33), Nevşehir Hacı Bektaş Veli University (n = 28), Mehmet Akif Ersoy University (n = 21) and Amasya University (n = 14) were included in this stage for data analysis. Participants, at the time of data collection, were aged between 21 and 40 ($M = 22.78$; $SD = 2.04$). In the main study, data were collected from a total of 310 senior student teachers of English. A data screening procedure yielded an elimination of some of the participants' data, and a total of 274 senior student teachers of English (201 female, 73 male) enrolled in the ELT departments of Akdeniz University (n = 63), Hacettepe University (n = 61), Çanakkale Onsekiz Mart University (n = 59), Pamukkale University (n = 57) and Çukurova University (n = 34) formed the remaining sample for further data analysis. The student teachers were aged between 20 and 42 ($M = 22.64$; $SD = 2.003$).

2.2. Instruments

The principles and major steps of scale development (see for example Carpenter, 2018; DeVellis, 2012; Hinkin, 2005) guided the entire process of scale development. The initial step was the conceptual development carried out through specifying the purpose of the scale and exploring the target construct by means of a detailed review of literature. The theoretical basis of the scale was Kubanyiova's (2007, 2009) framework of possible language teacher selves and tripartite distinction of ideal, ought-to and feared language teacher selves. As this conceptualization was grounded on the sound underpinnings of possible selves theory (Markus & Nurius, 1986), self-discrepancy theory (Higgins, 1987, 1998) and Dörnyei's (2005, 2009) L2MSS, the current study benefited from contributions of these theoretical frameworks as well. Previous research on possible language teacher selves (e.g., Hiver, 2013; Kumazawa, 2013; White & Ding, 2009) as well as the possible teacher selves research in general education (e.g., Hamman et al., 2010; Hamman, Wang, & Burley, 2013) enriched the understanding of the target constructs. Based on Kubanyiova's (2007, 2009, 2012) conceptualizations, the three intended constructs were defined as follows:

Ideal language teacher self: language teachers' self-representation of the kind of language teacher they would ideally like to become based on their personal identity goals and aspirations pertaining to their profession.

Ought-to language teacher self: language teachers' self-representation of the kind of language teacher they should or ought to become, which is highly associated with their obligations, responsibilities and duties at work.

Feared language teacher self: language teachers' self-representation of the kind of language teacher they are afraid of becoming in case of not reaching the desired ideals, self-perceived responsibilities and obligations.

During the item generation process of the PLTSS, an inductive approach was also utilized for scale development. Correspondingly, based on an in-depth review of literature, the qualitative data collection tools (i.e., a written form with open-ended questions and semi-structured interview forms) were constructed and used to elicit student teachers' responses. The written form comprised of three general questions for the three constructs was prepared by means of a detailed review of literature, finalized after getting expert opinion on the questions and a subsequent pre-piloting stage. The form primarily intended to capture the diversity of the participants' possible selves. As the study intended to elicit in-depth qualitative data to be able to generate representative items for the constructs of PLTSS, a follow-up data collection was deemed necessary. For this purpose, a semi-structured interview guide was prepared based on the theoretical background of possible language teacher selves by means of a review of literature. The interview guide was prepared in Turkish in order for the interviewees to express themselves more comfortably using their native language. The guide consisted of three groups of questions for the constructs of ideal, ought-to and feared language teacher selves of the participants. The resulting form comprised a total of nine interview questions. The questions were revised through expert opinion and finalized after pre-piloting.

After the qualitative data collection by means of these instruments, the data were subjected to content analysis using the qualitative data analysis software - NVivo 11. Following the deep examination of data, recurrent patterns were found, organized around themes and turned into individual tentative items. Some tentative items were also written based on the review of literature. The emerging items converged conceptually on various themes. This step was followed separately for the constructs of ideal, ought-to and feared language teacher selves. The item pool was then turned into a draft instrument with the instructions preceding the items. The resulting draft questionnaire was then independently evaluated by five content experts with a PhD in English Language Teaching. As the content validity of the items was going to be computed by means of Lawshe's (1975) content validity ratio (CVR), the content experts were requested to rate the individual items based on a 3-point scale and add their comments for the improvable items. Departing from the content experts' ratings of items, Lawshe's (1975) CVR was calculated for each item. The items reflecting a 100% agreement among the experts (CVR=1) or a relatively high level of agreement and CVR were maintained, and the ones with a low CVR were left out. After modifying several items based on the experts' comments, the draft questionnaire was made ready for the second phase of expert evaluation.

In the second phase of expert evaluation, the draft instrument involving the tentative items was evaluated by a measurement and evaluation expert with a PhD in the relevant field of study in terms of the items' appropriateness based on the principles of measurement and evaluation. Another expert with a PhD in Turkish language teaching was also requested to evaluate the instrument and items in terms of the use of the Turkish language. These two experts' feedback helped to make the last amendments, and the instrument was finalized for pre-piloting. The

resulting tripartite questionnaire was subjected to pre-piloting to check the comprehensibility of items for potential respondents.

The tripartite PLTSS was designed with a 5-point Likert scale to reflect the respondents' ideal, ought-to and feared language teacher selves (1 = Not at all true of me; 2 = Slightly true of me; 3 = Moderately true of me; 4 = Very true of me; 5 = Completely true of me). The scale items were constructed in Turkish in order to minimize possible negative effects of the length of the scale in its initial and final forms by using the native language of the participants. The fact that the scale was to be used with various cohorts of student teachers with different language levels from twelve different universities was another reason for deciding on Turkish as the scale language. The rationale was to make it suitable for all grade levels in language teaching departments from freshmen to seniors since it is evident that although the student teachers are enrolled in language teaching departments, their language levels might differ from each other. The resulting pilot form of the PLTSS was designed as a tripartite scale involving the initial forms of (1) a 45-item Ideal Language Teacher Self Scale (ILTSS), (2) a 40-item Ought-to Language Teacher Self Scale (OLTSS) and (3) a 45-item Feared Language Teacher Self Scale (FLTSS). Although the number of the items were a bit large in the pilot form of the PLTSS, the scale was reorganized by means of item reduction through exploratory factor analysis (EFA) after the preliminary study. Following the reduction of the items of the PLTSS through performing an EFA in the preliminary study, the final form of the PLTSS (ILTSS: 16 items, OLTSS: 19 items, FLTSS: 17 items) was created. (see Appendix for the English translation of the items in the final form of the PLTSS.)

2.3. Data Collection Procedures

Data collection started with the written form with open-ended questions on possible language teacher selves. The written form was administered to 48 final year student teachers of English (34 female, 14 male) enrolled in the ELT department of Hacettepe University in May 2017. The form was administered during class time. As a follow-up method of data collection, 15 student teachers (10 female, 5 male) from the same group were individually interviewed in the second half of May and the first half of June 2017 by means of the corresponding semi-structured interview form. After the finalization of the initial form of the PLTSS, a pre-piloting procedure was implemented with a small group (n = 34) in March 2018 in order to check the comprehensibility of the scale items and any potential problems that might come out during the scale administration. Before the administration of the initial form of the scale, a standard instructions sheet was prepared for its administration at different universities. The initial form of the scale was administered to the senior student teachers of English in the preliminary study sample during normal class time in April 2018. The pilot form of the scale was then revised and finalized based on the analysis of data. The final form of the scale revised through these analyses was made ready for a replication study with the main study sample. Through a standard guide for scale administration again, the final form of the PLTSS was administered to the main study sample simultaneously during normal class time. The data collection was completed in May 2018.

2.4. Data Analysis

For item generation, the qualitative data gathered through the written forms and interviews on student teachers' possible selves were subjected to content analysis. In this phase of data analysis, the qualitative data collected through the written forms were typed and the interview data were transcribed. The data were then transferred to NVivo 11 for content analysis. The student forms and interview transcripts were repeatedly read and deeply examined. Recurrent patterns were found and organized around certain themes. This phase was also supported by the review of literature. In line with the identified themes, items were generated for the PLTSS.

The quantitative data collected through the pilot form of the scale were analyzed statistically using IBM SPSS (Statistical Package for the Social Sciences) version 21. Following a data screening procedure, a total of 296 participants' data were retained for statistical analysis out of 313 participants. An initial test of assumptions was done. After the test of assumptions, the data were initially subjected to an EFA individually for the three sections of the scale: ideal, ought-to and feared language teacher selves. The factorability of the data was also evaluated using Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1974) and Bartlett's Test of Sphericity (Bartlett, 1954). While identifying the underlying factor structure, a preference was made for principal components analysis (PCA) as the factor extraction method; however, the term of factor analysis is used in a general sense while reporting the findings through following a common route (e.g., Pallant, 2011). Among orthogonal rotation methods, varimax rotation was used to have a minimum number of variables with high loadings on individual factors. After running an EFA, the internal consistency of the three scales and their subscales were tested through reliability analysis by calculating Cronbach's Alpha (α).

The quantitative data gathered from the main study sample were analyzed using SPSS 21 and LISREL 8.70 (Linear Structural Relations). The main study set out to offer further validation evidence through a replication of the PLTSS. In this regard, the current study followed the general recommendation about scale development and validation which postulates starting with an EFA and proceeding with a CFA using different samples (Costello & Osborne, 2005; Worthington & Whittaker, 2006). The data elicited from an independent group of participants by means of the final form of the PLTSS were initially prepared for subsequent analysis. Following data screening, the dataset of 274 participants out of 310 was retained for subsequent data analysis. After the test of assumptions, the remaining data were subjected to a CFA using LISREL for additional evidence of construct validity for each scale. While performing CFA, maximum likelihood (ML) estimation was employed to estimate the models. During the interpretation of the results, *t*-values greater than 1.96 were evaluated as significant at *p* < .05 while those greater than 2.56 were interpreted as significant at *p* < .01 (Tabachnick & Fidell, 2013). The study utilized various fit indices to evaluate the goodness of fit: Chi-square (χ^2) statistic, normed χ^2 (χ^2/df), the non-normed fit index (NNFI), the comparative fit index (CFI), the standardized root mean residual (SRMR) and the root mean square error of approximation (RMSEA). As for the thresholds for fit indices, a ratio of 5 or less is generally regarded as an acceptable value for the χ^2/df ratio while values of 3 or less indicate a good fit with large samples (Çokluk, Şekercioğlu, & Büyüköztürk, 2012). RMSEA values of .08 or less indicate a good fit (Hooper, Coughlan, & Mullen, 2008; Jöreskog & Sörbom, 1993) although more stringent RMSEA cut-off points like values of .6 or less also exist (Hu & Bentler, 1999). An SRMR value of .08 or below is regarded as an indicator of a good fit (Brown, 2006; Hu & Bentler, 1999). For CFI, values of .90 and above point to good model fit while values of 95 and above indicate perfect fit (Byrne, 2006; Hu & Bentler, 1999). Finally, NNFI values of .95 and greater are generally recommended for a perfect model fit (Hu & Bentler, 1999). It is crucial to note here that all the procedures of data analysis were performed on the data acquired through *the original scales in Turkish*; however, English translation of the scale items are provided in tables showing the results of analyses.

3. Findings

3.1. Factor Structure of the Possible Language Teacher Selves Scale

In order to account for the factor structure of the PLTSS involving three parts (i.e., ILTSS, OLTSS and FLTSS), an exploratory factor analysis was performed with the dataset of the preliminary study (*N* = 296) for each of the three scales. Firstly, an EFA was run for the initial form of the ILTSS (45 items). The adequacy of the sample size for factorability was verified

by the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy with a KMO value of .913 which is quite above the minimum suggested value of .6 (Tabachnick & Fidell, 2013) for good factor analysis and might be named as marvelous with a value between 0.90 and 1.00 (Kaiser, 1974). Bartlett's Test of Sphericity (Bartlett, 1954) yielded a statistically significant value (p < .05), which corresponded to a support for the factorability of the correlation matrix. The EFA provided four major components with eigenvalues greater than 1. The items under these four factors were closely analyzed. In doing so, items with factor loadings above .40 were retained for the relevant factors as suggested by Field (2013). Upon performing the varimax rotation, the results including the factor loadings of the retained items, the variance explained by individual factors and the total variance accounted for are displayed in Table 1.

Table 1. *EFA results for the Ideal Language Teacher Self Scale (ILTSS)*

ITEM Stem: The English teacher I imagine myself as…	Rotated factor loadings				
	F1 L2TE	F2 PD	F3 IR	F4 CM	h_2
…has a high level of competence in English.	**.813**	.168	.114	.205	.745
...speaks English accurately.	**.749**	.263	.237	.165	.713
...speaks English fluently.	**.734**	.217	.101	-.015	.596
...is a teacher with well-developed English communication skills.	**.720**	.181	.278	.319	.731
...improves students' English communication skills.	**.580**	.311	.276	.340	.625
…searches for new ideas about teaching English.	.256	**.742**	.280	.010	.694
…keeps his/her knowledge about teaching English up-to-date.	.321	**.721**	.239	.144	.700
…follows the developments about teaching English.	.267	**.710**	.167	.318	.704
…continues lifelong learning.	.053	**.658**	.099	.264	.515
…improves himself/herself in teaching English.	.420	**.610**	.160	.203	.615
…is respectful to students' ideas.	.121	.241	**.777**	.187	.711
…is good at human relations.	.231	.241	**.769**	.192	.739
…is a teacher who communicates well with students.	.264	.149	**.756**	.183	.696
…maintains classroom discipline.	.265	.161	.085	**.832**	.796
…creates an organized classroom environment by determining classroom rules.	.034	.313	.285	**.732**	.716
…solves possible discipline problems in class effectively.	.301	.198	.304	**.711**	.728
% of variance	20.837	18.459	14.867	14.742	
Total variance explained: 68.905%					

Note: Major loadings for the items are bolded. (L2TE: L2 teacher expertise, PD: professional development, IR: interpersonal relationships, CM: classroom management; h2 = communality coefficient.)

As can be seen in Table 1, out of 45 items, a total of 16 items neatly loaded on four factors after varimax rotation. Communality coefficients of these items ranged between .515 and .796. The four factors with eigenvalues greater than 1 (factor 1: 3.334, factor 2: 2.953, factor 3: 2.379, factor 4: 2.359) accounted for 20.837%, 18.459%, 14.867% and 14.742% of the variance respectively. Five items that clustered on factor 1 referred to *L2 teacher expertise* (L2TE) of the ideal language teacher self while the five items in factor 2 represented *professional development* (PD) of this ideal self. While the three-item factor 3 was labelled as *interpersonal relationships* (IR), the remaining three items that loaded on factor 4 reflected aspects of *classroom management* (CM) characterizing the ideal language teacher self. The four-factor solution of the 16-item ILTSS accounted for a 68.905% of the total variance in combination.

Secondly, in order to reveal the factor structure of the OLTSS, an EFA was run for the initial form of the scale (40 items). An initial analysis revealed a KMO value of .924, which was interpreted as marvelous (Kaiser, 1974) for the factorability of the data with an adequate sample size, and a statistically significant value (p < .05) as a result of the Bartlett's Test of Sphericity,

which backed up the factorability of the correlation matrix. The EFA revealed a three-component solution with eigenvalues exceeding 1. Through a close inspection of the items, the ones with a factor loading below .40 were eliminated. Table 2 demonstrates the results after the varimax rotation.

Table 2. *EFA results for the Ought-to Language Teacher Self Scale (OLTSS)*

ITEM Stem: Keeping in mind the expectations of the people around me and the society, my duties and responsibilities, in the future I ought to…	Rotated factor loadings			
	F1 L2TE	F2 IR	F3 PD	h_2
…use English accurately in lessons.	**.735**	.250	.243	.662
…have a large vocabulary in English.	**.719**	.055	.020	.521
…be at an advanced level in English.	**.689**	-.094	.335	.596
…speak English fluently.	**.657**	.215	.016	.478
…be an expert in my area.	**.630**	.203	.296	.526
…improve my English pronunciation skills.	**.600**	.213	.350	.528
…improve students' English speaking skills.	**.576**	.376	.418	.648
…encourage students to communicate in English.	**.569**	.388	.245	.535
…be competent in teaching English.	**.562**	.281	.424	.575
…build a good relationship with my students.	.299	**.773**	.098	.696
…be understanding of students.	.206	**.726**	.255	.635
…be a likeable English teacher to students.	.177	**.694**	-.016	.513
…know my students well.	.170	**.679**	.330	.598
…have a good relationship with students' parents.	.003	**.650**	.247	.483
…attend professional development activities (conferences, seminars, projects, etc.) after graduating from university.	.148	.013	**.764**	.606
…follow the developments in today's world.	.090	.277	**.732**	.621
…follow the developments in English language teaching.	.387	.173	**.694**	.662
…be a hardworking English teacher.	.264	.307	**.601**	.525
…improve myself in teaching English.	.392	.331	**.553**	.569
% of variance	*22.568*	*17.780*	*17.418*	
Total variance explained: 57.766%				

Note: Major loadings for the items are bolded. (L2TE: L2 teacher expertise, IR: interpersonal relationships, PD: professional development; h_2 = communality coefficient.)

As illustrated in Table 2, the EFA uncovered 19 items which precisely loaded on three factors. Communality coefficients of the items ranged from .478 to .696. All the factors exhibited eigenvalues above 1 (factor 1: 4.288, factor 2: 3.378, and factor 3: 3.309) and accounted for 22.568%, 17.780% and 17.418% of the variance respectively. Among the three constituent factors, factor 1 involving nine items was labelled as *L2 teacher expertise* (L2TE), factor 2 that drew together five items was named as *interpersonal relationships* (IR), and factor 3 that grouped together five items was called *professional development* (PD). The three-factor solution of the 19-item OLTSS explained 57.766% of the total variance together.

Lastly, in an attempt to account for the factor structure of the FLTSS, an EFA was computed on its 45-item initial form. A preliminary analysis showed a KMO value of .968 which can be regarded as marvelous based on Kaiser's (1974) thresholds and pointed to the adequacy of the sample size for factorability. A statistically significant value for Bartlett's Test of Sphericity ($p < .05$) supported the factorability of the correlation matrix. Through the EFA, a single factor solution came out for the FLTSS. A closer analysis was performed for the factor loadings based on the criteria of at least .40 as well as how well the items hang together in terms of their contents. Table 3 shows the results of the EFA.

Table 3. *EFA results for the Feared Language Teacher Self Scale (FLTSS)*

ITEM Stem: In the future, …	Factor loadings Single-factor	h_2
…I'm worried about being unable to ensure students' participation in the lesson.	.886	.785
…I'm afraid of being unable to speak English accurately in the lessons.	.879	.772
…it makes me anxious to be unable to follow students' individual development in learning English.	.876	.768
…it makes me worried to teach in a boring way.	.874	.764
…I'm worried about being an ordinary English teacher.	.857	.734
…I'm afraid of being unable to spare time for all language skills (reading, writing, listening, speaking) in the lessons.	.854	.730
…I'm worried about teaching English using teacher-centered traditional methods.	.853	.727
…it scares me to be an English teacher who works unwillingly.	.851	.725
…it makes me worried to be an English teacher who is uninterested in students.	.848	.719
…I'm afraid of being a disrespected English teacher.	.840	.706
…I'm worried about being unable to improve students' English communication skills.	.807	.651
…I'm afraid of being unable to speak English fluently in the lessons.	.801	.642
…it makes me anxious to be unable to use technology effectively in the lessons.	.798	.636
…I'm afraid of working as an English teacher since I have to work.	.780	.608
…it makes me worried to teach English only to prepare students for the exams.	.773	.597
…I'm afraid of teaching without preparation.	.750	.562
…I'm afraid of being an English teacher who doesn't like his/her job.	.647	.419
Total variance explained: 67.916%		

Note: h_2 = communality coefficient.

As demonstrated in Table 3, the EFA revealed a total of 17 items that nicely loaded on a single factor with an eigenvalue of 11.546. The items exhibited quite high factor loadings ranging from .647 to .886. Communality coefficients of the items ranged between .419 and .785. The single factor involving 17 items about a more general sense of feared self as a language teacher explained 67.916% of the total variance.

To sum up, for the tripartite PLTSS, a series of EFA was computed and the factor structures of the constituent scales were revealed through a process of item reduction. As a result, the ILTSS involved a total of 16 items that clustered on four factors labelled as L2 teacher expertise, professional development, interpersonal relationships and classroom management. The OLTSS consisted of a total of 19 items which converged on three factors named as L2 teacher expertise, interpersonal relationships and professional development. Finally, the FLTSS was comprised of a total of 17 items with a single-factor solution.

3.2. Further Evidence for the Construct Validity of the Possible Language Teacher Selves Scale

The factor structure of the tripartite PLTSS was further verified with an independent sample. To this end, a series of CFA was performed with each of the three parts of the PLTSS. In order to obtain additional evidence for the construct validity of the ILTSS with an independent sample, a CFA was run on the retained main study data ($N = 274$) through the revised scale with 16 items using LISREL. The results of the CFA are given in Figure 1.
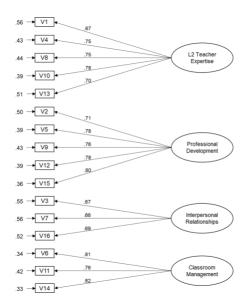
Figure 1. CFA results for the Ideal Language Teacher Self Scale (ILTSS)

As can be seen in Figure 1, standardized coefficients of the ILTSS ranged from .66 to .82, and the error variances ranged between .33 and .56 in the model. Besides, an inspection of *t*-values revealed significant results ranging between 11.77 and 15.66. Modification suggestions were examined and pointed to some similarities in statements between several item pairs. Therefore, modifications were performed between the following item pairs: V1 – V2, V2 – V3, V5 – V11, V3 – V13 and V13 – V15. Following the modifications, the fit indices were recalculated and found satisfactory, $\chi^2(93) = 271.17$, $p = .000$, $\chi^2/df = 2.92$, NNFI = .97, CFI = .98, SRMR = .045, RMSEA = .084.

In an attempt to get further evidence for the construct validity of the OLTSS with an independent sample, a CFA was run on the retained main study data by means of the revised form of the scale with 19 items through LISREL. The results of the analysis are provided in Figure 2.
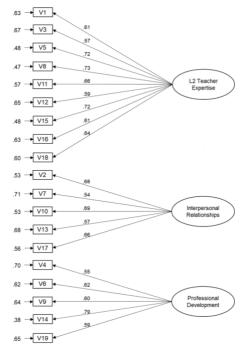

Figure 2. CFA results for the Ought-to Language Teacher Self Scale (OLTSS)

As Figure 2 suggests, standardized coefficients displayed values between .54 and .79 while the error variances ranged from .38 to .71. In addition, *t*-values were closely examined, found significant and ranged between 8.80 and 14.99. In line with the modification suggestions that implied some similarities between the statements in item pairs, modifications were made between the following pairs of items: V5 – V6, V8 – V9, V8 – V10. After these modifications, the model fit was re-evaluated, and fit indices were recalculated, $\chi_2(146) = 420.30$, *p* = .000, $\chi_2/df = 2.88$, NNFI = .95, CFI = .96, SRMR = .055, RMSEA = .083.

Finally, to attain additional evidence for the construct validity of the FLTSS, a CFA was computed on the retained main study data through the revised form of the scale with 17 items. The results of the CFA are shown in Figure 3.
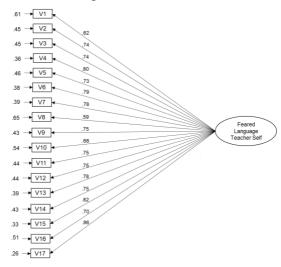

Figure 3. CFA results for the Feared Language Teacher Self Scale (FLTSS)

As demonstrated in Figure 3, the CFA uncovered standardized coefficients ranging from .59 to .86, and error variances ranging from .26 to .65. Moreover, an examination of *t*-values indicated significant values ranging from 10.50 to 17.71. Based on modification suggestions, modifications were performed between the following item pairs: V12 – V13, V5 – V6, V13 – V14, V8 – V9, V3 – V11. This is because these pairs seemed to be inclined to converge separately. The model fit was then reassessed through the fit indices, $\chi_2(114) = 337.91$, *p* = .000, $\chi_2/df = 2.96$, NNFI = .98, CFI = .98, SRMR = .040, RMSEA = .085.

3.3. Evidence for the Internal Consistency Reliability of the Possible Language Teacher Selves Scale

The coefficient alpha was used for the internal consistency estimates of the PLTSS and its parts: ILTSS, OLTSS and FLTSS. A series of internal consistency reliability analysis was performed on the preliminary and main study data based on the final form of the PLTSS using SPSS. For each of the three constituents of the PLTSS (i.e., ILTSS, OLTSS and FLTSS), the coefficient alpha was initially calculated for the whole scale. An overview of the results is provided in Table 4.

Table 4. *Reliability analysis results for the tripartite Possible Language Teacher Selves Scale (PLTSS)*

Individual Parts	Cronbach's Alpha	
	Preliminary Study	Main Study
Ideal language teacher self (16 items)	.92	.93
Ought-to language teacher self (19 items)	.91	.91
Feared language teacher self (17 items)	.97	.96

As well as the overall alpha values of the whole scales, the internal consistency coefficients of the subscales were also calculated. To reveal the internal consistency reliability of the ILTSS, a series of reliability analysis was performed on its four subscales. Coefficient alpha was computed as the measure of internal consistency for the subscales of L2 teacher expertise, professional development, interpersonal relationships and classroom management. Alpha coefficients of the subscales and the whole scale are demonstrated in Table 5.

Table 5. *Reliability analysis results for the Ideal Language Teacher Self Scale (ILTSS)*

Subscale	Cronbach's Alpha	
	Preliminary Study	Main Study
L2 teacher expertise (5 items)	.86	.84
Professional development (5 items)	.84	.87
Interpersonal relationships (3 items)	.80	.70
Classroom management (3 items)	.82	.83
Whole scale (16 items)	*.92*	*.93*

In order to further evaluate the internal consistency of the OLTSS, a series of reliability analysis was conducted by calculating the alpha values for each of the three subscales as well as the overall alpha value of the whole scale. Table 6 illustrates the results of the reliability analysis.

Table 6. *Reliability analysis results for the Ought-to Language Teacher Self Scale (OLTSS)*

Subscale	Cronbach's Alpha	
	Preliminary Study	Main Study
L2 teacher expertise (9 items)	.88	.86
Interpersonal relationships (5 items)	.78	.74
Professional development (5 items)	.80	.74
Whole scale (19 items)	*.91*	*.91*

A final reliability analysis was performed on both the preliminary and main study data so as to estimate the internal consistency of the FLTSS with a single factor structure. Table 7 displays Cronbach's alpha coefficients computed for the FLTSS on both datasets.

Table 7. *Reliability analysis results for the Feared Language Teacher Self Scale (FLTSS)*

	Cronbach's Alpha	
	Preliminary Study	Main Study
Whole scale (17 items)	.97	.96

To sum up, the research questions intended to delve into the psychometric properties of the PLTSS involving three parts as ILTSS, OLTSS and FLTSS. Accordingly, factor structures of the three scales were initially explored through a series of EFA. Further evidence on the construct validity of the scales was provided by conducting a series of CFA on an independent sample. Finally, the internal consistency reliability of the scales and subscales was reported. It is crucial to note here that the three parts of the PLTSS labelled as ILTSS, OLTSS and FLTSS also serve as individual scales that can be used independently or together based on the composite scale of PLTSS.

4. Discussion

Among the limited body of research on L2 teacher motivation, an effective attempt was made by examining it from the lens of possible selves (Hiver, 2013; Kubanyiova, 2009, 2012; Kumazawa, 2013). It goes without saying that Kubanyiova's (2007, 2009) conceptualization of possible language teacher selves based on possible selves theory (Markus & Nurius, 1986), self-discrepancy theory (Higgins, 1987, 1998) and the L2MSS (Dörnyei, 2005, 2009) was a prominent step in this sense. In an attempt to build on the limited research on possible language

teacher selves that is dominantly qualitative, this study set out to validate Kubanyiova's (2007, 2009) conceptualization of possible language teacher selves through a quantitative research paradigm. To achieve this purpose, the PLTSS was developed for pre-service teachers of English. The items were specifically written for EFL student teachers; however, to reflect the scale's theoretical underpinnings, the scale was named in a similar way with Kubanyiova's conceptualization of possible language teacher selves. In accordance with Kubanyiova's conceptualization, the scale was constructed as a tripartite instrument involving three constituent scales: (1) ILTSS to measure ideal language teacher selves; (2) OLTSS to measure ought-to language teacher selves and (2) FLTSS to measure feared language teacher selves.

4.1. Psychometric Properties of the Ideal Language Teacher Self Scale (ILTSS)

The ILTSS aimed to measure pre-service language teachers' self-representation of the kind of language teacher they would like to become. This was related to their personal identity goals and aspirations about the teaching profession. In line with the principles of scale development, an initial form was constructed for ILTSS as the first component of PLTSS. The EFA performed on the preliminary study data yielded a four-factor solution. An evaluation of factor loadings of the 16 items under the ILTSS showed that loadings of all items were above .50 and practically significant (Hair, Black, Babin, & Anderson, 2014). A further evaluation of factor loadings of items based on the suggested cut-off sizes for loadings (Tabachnick & Fidell, 2013) indicated that loadings of 14 items out of 16 were excellent while those of the remaining two were interpreted as good and very good. Communality coefficients were all in the common range of communalities in social sciences (Costello & Osborne, 2005). With a value above 60 percent (Hair et al., 2014), the total variance explained by the four factors was deemed sufficient.

The four factors were labelled as *L2 teacher expertise*, *professional development*, *interpersonal relationships* and *classroom management*. Among these factors, L2 teacher expertise (5 items) represented the ideal selves of the EFL student teachers in relation to both their imagined content expertise and expertise in language instruction. Professional development (5 items) referred to their imagined selves that focus on teacher development. Interpersonal relationships (3 items) were about the relationships they imagine building with students and other people. Finally, classroom management (3 items) concerned aspects of their ideal selves in relation to maintaining classroom discipline and control. L2 teacher expertise was a distinctive component of the scale that was particularly dominated by the content area, namely teaching 'English'. Content expertise constituted an important aspect of the student teachers' ideal language teacher selves in relation to L2 teacher expertise, and this was quite in line with Hiver's (2013) findings pointing to imagined language proficiency of in-service Korean English teachers as part of their ideal language teacher selves. The emergent components of interpersonal relationships and classroom management as part of the student teachers' ideal language teacher selves were consistent with the categories of expected teacher selves in Hamman et al.'s (2010) study. Findings of the current study were also considerably in line with the other two categories under expected teacher selves in Hamman et al.'s research, namely instruction and professionalism, which represented the expected use of various instructional strategies and the professional qualities expected of teachers, respectively. In a similar vein, the ILTSS and its constituent items showed consistencies with Hamman et al.'s (2013) study of scale development for new teachers (i.e., undergraduate student teachers who are about to complete their teaching practicum). In their New Teacher Possible Selves Questionnaire (NTPSQ), the two-factor scale for expected teacher possible selves involved aspects related to professionalism and learning to teach, and these bore similarities to the items under the ILTSS.

The results of EFA provided evidence for the construct validity of the ILTSS. In an effort to get additional evidence on the construct validity of the scale with an independent sample, the final form of the ILTSS with 16 items was administered in the main study. The factor structure of the four-factor ILTSS with 16 items was verified. Based on the results of the CFA, an inspection of fit values yielded the following interpretations: the χ_2/df ratio below 3 indicated a good fit (Çokluk et al., 2012); the NNFI value greater than .95 pointed to a perfect fit (Hu & Bentler, 1999); the CFI value above .95 indicated a perfect fit (Byrne, 2006; Hu & Bentler, 1999), and the SRMR value considerably below .08 highlighted a good fit (Brown, 2006; Hu & Bentler, 1999). Although RMSEA values of .08 or less signify a good fit (Hooper et al., 2008; Jöreskog & Sörbom, 1993), the RMSEA value of the current model was a little bit above .08 and considered to be close to a good fit. Thus, the model fit values were indicators of either good or perfect model fit. Therefore, the results revealed further evidence for the construct validity of the scale.

Evidence for the internal consistency reliability of the 16-item ILTSS was found through computing Cronbach's Alpha coefficients for the whole scale and the four subscales. The four subscales under the ILTSS displayed alpha values above .80 in both the preliminary and main studies and signified high reliability (Cohen, Manion, & Morrison, 2007). An exception for this was the subscale of interpersonal relationships, whose alpha coefficient in the main study nevertheless met the acceptable alpha threshold, namely .70. In addition, an evaluation of the internal consistency reliability of the whole scale provided alpha values greater than .90 in both preliminary and main studies and was thereby an indicator of the very highly reliable nature of the scale (Cohen et al., 2007). These values all pinpointed the high internal consistency reliability of the ILTSS. In sum, the ILTSS appeared to have strong psychometric properties with regard to its construct validity and internal consistency reliability. The finalized scale displayed a four-factor structure with a total of 16 items. Although the ILTSS constitutes an initial part of the tripartite PLTSS, it can also be administered by itself with its sound psychometric properties.

4.2. Psychometric Properties of the Ought-to Language Teacher Self Scale (OLTSS)

The OLTSS was formed as the second section of the tripartite PLTSS. It set out to measure the construct of ought-to language teacher self, which referred to the pre-service language teachers' self-representation of the kind of language teacher they ought to become. This was linked with their obligations, duties and responsibilities in relation to their profession – language teaching. The other-driven nature of the construct distinguished it from the ideal language teacher self. In accordance with the major premises of scale development, the essential steps were taken to construct the initial form of the scale. The results of the EFA conducted on the preliminary study data revealed a three-factor solution. An inspection of the factor loadings of the 19-item OLTSS indicated the practically significant nature of all loadings with values greater than .50 (Hair et al., 2014). Of nineteen items under the scale, seven items displayed good loadings while the remaining twelve had either very good or excellent loadings (Tabachnick & Fidell, 2013). Communality coefficients were in the common range of communalities in social sciences (Costello & Osborne, 2005). The total variance explained by the three factors appeared to be quite close to 60 percent. In terms of the percentage of variance explained by the factors, Hair et al. (2014) highlight 60% as a threshold in social sciences, but also add that a lower percentage can also be possibly satisfactory. Therefore, the cumulative percentage of explained variance was regarded as adequate.

The three factors under the OLTSS were labelled *as L2 teacher expertise*, *interpersonal relationships* and *professional development*. Among these subscales, L2 teacher expertise (9 items) represented aspects of the student teachers' ought-to selves in relation to their expected

expertise in their field of study (i.e., teaching English) both as a user and teacher of English. Interpersonal relationships (5 items) referred to the relationships student teachers felt that they should build with students and other people such as parents. Finally, the subscale of professional development (5 items) was labelled for the items referring to the ought-to practices in relation to the professional development of the student teachers in the future. All these subscales were labelled in the same way as those of the ILTSS. However, the subscales under the OLTSS particularly referred to the L2 teacher expertise, interpersonal relationships and professional development practices expected of the pre-service teachers by their significant others. Student teachers regarded them as their duties, obligations or responsibilities. General school-related duties and expectations appeared to be less salient for the target construct. This was not a surprising result in that the target group was comprised of pre-service English teachers, for most of whom duties were not a reality of daily life yet. In contrast, these duties appeared to be an evident aspect of in-service teachers' ought-to language teacher selves in previous research (Kubanyiova, 2009; Kumazawa, 2013).

A subsequent CFA was computed on the main study data to get further evidence for the construct validity of the OLTSS with an independent sample. The three-factor structure of the 19-item OLTSS was verified in this way. Based on the fit indices, the model fit was evaluated as follows: the χ_2/df ratio less than 3 pointed to a good fit (Çokluk et al., 2012); the NNFI value equal to .95 uncovered a perfect fit (Hu & Bentler, 1999); the CFI value greater than .95 was an indicator of perfect fit (Byrne, 2006; Hu & Bentler, 1999), and the SRMR value quite less than .08 indicated a good fit (Brown, 2006; Hu & Bentler, 1999). As a final fit index, the RMSEA value was found to be a little bit above .08, but keeping in mind the values in relation to the other fit indices, it was also considered to be tolerable and close to a good fit. Therefore, the three-factor model of the OLTSS (i.e., L2 teacher expertise, interpersonal relationships and professional development) fit the main study well, too. The results of CFA provided additional evidence for the construct validity of the scale.

As for the reliability of the scale, Cronbach's alpha coefficient was calculated for the whole scale and the three subscales with both preliminary and main study data. For the 19-item OLTSS, all three subscales' Cronbach's alpha values were found to be above .70 and therefore considered to be acceptable (George & Mallery, 2016; Hair et al., 2014). With alpha values greater than .80 in both the preliminary and main studies, especially the subscale of L2 teacher expertise was found highly reliable (Cohen et al., 2007). In a similar vein, an examination of the internal consistency reliability of the whole scale uncovered alpha values above .90 and interpreted as very highly reliable. In brief, the OLTSS similarly displayed robust psychometric properties in terms of its construct validity and internal consistency reliability. It is possible to administer this scale on its own or along with the other two constituents of the PLTSS.

4.3. Psychometric properties of the Feared Language Teacher Self Scale (FLTSS)

The FLTSS constituted the final section of the PLTSS and aimed to measure pre-service language teachers' self-representation of the kind of language teacher they fear becoming if they cannot achieve their desired ideals, self-perceived responsibilities and obligations. The results of EFA performed on the preliminary study data unearthed a single factor structure for 16 items. Factor loadings of these sixteen items were inspected based on the recommended cut-off values (Tabachnick & Fidell, 2013), and fifteen were found to have excellent loadings while the remaining item demonstrated a very good loading too. Communalities were all in the common range encountered in social sciences (Costello & Osborne, 2005). The single factor solution of the 16-item FLTSS explained more than 60% of the total variance and was therefore found sufficient in terms of this cumulative percentage (Hair et al., 2014).

The FLTSS appeared to display a single factor structure that is dominated by ineffective L2 teaching practices complemented with some feared teacher qualities. In this way, the scale seemed to reflect Conway and Clark's (2003) focus on teacher qualities and teaching tasks in a way. The aspects of the feared language teacher self appeared to be less detailed compared to ideal and ought-to language teacher selves, and concerned more general aspects of the language teacher self pertaining to teaching English and being an English teacher. The items under the FLTSS showed some sort of resemblance to aspects of the feared teacher selves labelled as uninspired instruction and uncaring teacher in Hamman et al.'s (2013) study on teacher possible selves. However, one aspect of feared teacher selves related to classroom management that emerged in Hamman et al.'s (2013) study and labelled as loss of control did not appear in the FLTSS in the current study. The dominance of aspects related to teaching 'English' in particular and domain-specific characteristics of the scale was a distinctive feature of the FLTSS as it is for the whole PLTSS.

The CFA performed on the main study data served as additional evidence for the construct validity of the FLTSS. The finalized single factor FLTSS with 16 items was administered as the final part of the PLTSS to the main study sample. The results of CFA verified the single factorial structure of the scale. The model fit indices were interpreted as follows: the χ_2/df ratio below 3 was an indicator of good fit (Çokluk et al., 2012); the NNFI value above .95 pointed to a perfect fit (Hu & Bentler, 1999); the CFI value above .95 signified a perfect fit (Byrne, 2006; Hu & Bentler, 1999), and the SRMR value considerably less than .08 highlighted a good fit (Brown, 2006; Hu & Bentler, 1999). Like the other two constituents of the PLTSS, the RMSEA value was found to be a little above the threshold of .08 (Hooper et al., 2008; Jöreskog & Sörbom, 1993), but keeping in mind the other fit indices highlighting the good or perfect fit of the model, this value was tolerated. Hence, the results of CFA yielded further evidence for the construct validity of the FLTSS.

Internal consistency reliability was also checked through computing the Cronbach's alpha coefficient. Alpha values computed for the 16-item FLTSS were found to be relatively high in both preliminary and main studies. The alpha values greater than .90 in both studies were an indicator of the very high reliability of the scale in terms of internal consistency (Cohen et al., 2007). To sum up, the psychometric properties of the FLTSS, which was the final component of the PLTSS, were found to be sufficient for measuring the feared language teacher selves of pre-service teachers of English. Based on the evidence for its construct validity and internal consistency reliability, the scale can be administered to evaluate the target construct by itself or together with the aforementioned two scales under the PLTSS.

5. Conclusion

Departing from Kubanyiova's (2007, 2009) conceptualization of possible language teacher selves involving a tripartite structure as ideal, ought-to and feared language teacher selves, the PLTSS was formed as a composite scale, or a scale set in other words, consisting of three scales to measure these three constructs. By constructing the PLTSS, the study intended to pave the way for research with quantitative and mixed methods research paradigms along with the qualitative studies conducted so far. The composite scale was specifically developed for Turkish student teachers of English and all the data analyses were carried out using the original scales in Turkish. Further research can be conducted by administering the composite scale or its constituents to different samples and its psychometric properties can be re-evaluated.

Acknowledgements

References

Al-Shehri, A. S. (2009). Motivation and vision: The relation between the ideal L2 self, imagination and visual style. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 164-171). Bristol, UK: Multilingual Matters.

Bartlett, M. S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of the Royal Statistical Society, 16*, 296-298.

Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching, 36*(2), 81-109.

Borg, S. (2006). *Teacher cognition and language education: Research and practice*. London: Continuum.

Boyatzis, R. E., & Akrivou, K. (2006). The ideal self as the driver of intentional change. *Journal of Management Development, 25*(7), 624-642.

Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford Press.

Byrne, B. M. (2006). *Structural equation modeling with EQS: Basic concepts, applications, and programming* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Carpenter, S. (2018). Ten steps in scale development and reporting: A guide for researchers. *Communication Methods and Measures, 12*(1), 25-44.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). London: Routledge.

Conway, P. F., & Clark, C. M. (2003). The journey inward and outward: A re-examination of fuller's concerns-based model of teacher development. *Teaching and Teacher Education, 19*(5), 465-482.

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation*, *10*(7), 1-9.

Csizér, K., & Magid, M. (Eds.). (2014). *The impact of self-concept on language learning*. Bristol, UK: Multilingual Matters.

Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2012). *Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları* (2. baskı). Ankara: Pegem Akademi.

DeVellis, R. F. (2012). *Scale development: Theory and applications* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum.

Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9-42). Bristol, UK: Multilingual Matters.

Dörnyei, Z., & Chan, L. (2013). Motivation and vision: An analysis of future L2 self images, sensory styles, and imagery capacity across two target languages. *Language Learning*, *63*(3), 437-462.

Dörnyei, Z., & Kubanyiova, M. (2014). *Motivating learners, motivating teachers: Building vision in the language classroom*. Cambridge: Cambridge University Press.

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Harlow, UK: Pearson Education.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). London: Sage.

Gardner, R. C. (2001). Integrative motivation and second language acquisition. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 1-19). Honolulu, HI: University of Hawai'i Press.

George, D., & Mallery, P. (2016). *IBM SPSS Statistics 23 step by step: A simple guide and reference* (14th ed.). New York, NY: Routledge.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Essex: Pearson Education Limited.

Hamman, D., Gosselin, K., Romano, J., & Bunuan, R. (2010). Using possible-selves theory to understand the identity development of new teachers. *Teaching and Teacher Education*, *26*(7), 1349-1361.

Hamman, D., Wang, E., & Burley, H. (2013). What I expect and fear next year: Measuring new teachers' possible selves. *Journal of Education for Teaching*, *39*(2), 222-234.

Henry, A. (2009). Gender differences in compulsory school pupils' L2 self-concepts: A longitudinal study. *System*, *37*, 177-193.

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*(3), 319-340.

Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology, 30*, 1-46.

Higgins, E. T., Klein, R., & Strauman, T. (1985). Self-concept discrepancy theory: A psychological model for distinguishing among different aspects of depression and anxiety. *Social Cognition, 3*(1), 51-76.

Hinkin, T. R. (2005). Scale development principles and practices. In R. A. Swanson & E. F. Holton III (Eds.), *Research in organizations: Foundations and methods of inquiry* (pp. 161-179). San Francisco, USA: Berrett-Koehler Publishers.

Hiver, P. (2013). The interplay of possible language teacher selves in professional development choices. *Language Teaching Research*, *17*(2), 210-227.

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *The Electronic Journal of Business Research Methods, 6*, 53-60.

Hoyle, R. H., & Sherrill, M. R. (2006). Future orientation in the self-system: Possible selves, self-regulation, and behavior. *Journal of Personality, 74*(6), 1673-1696.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55.

Jöreskog, K., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Chicago, IL: Scientific Software International Inc.

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika, 39*, 31-36.

Kalaja, P., & Mäntylä, K. (2018). 'The English class of my dreams': Envisioning teaching a foreign language. In S. Mercer & A. Kostoulas (Eds.), *Language teacher psychology* (pp. 34-52). Bristol, UK: Multilingual Matters.

Kubanyiova, M. (2006). Developing a motivational teaching practice in EFL teachers in Slovakia: Challenges of promoting teacher change in EFL contexts. *TESL-EJ*, *10*(2), 1-17. Retrieved 6 May 2018 from http://www.tesl-ej.org/ej38/a5.pdf

Kubanyiova, M. (2007). *Teacher development in action: An empirically-based model of promoting conceptual change in in-service language teachers in Slovakia*. Unpublished PhD thesis, University of Nottingham, Nottingham, UK.

Kubanyiova, M. (2009). Possible selves in language teacher development. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 314-332). Bristol, UK: Multilingual Matters.

Kubanyiova, M. (2012). *Teacher development in action: Understanding language teachers' conceptual change*. Basingstoke: Palgrave Macmillan.

Kubanyiova, M. (2014). Motivating language teachers: Inspiring vision. In D. Lasagabaster, A. Doiz, & J. M. Sierra (Eds.), *Motivation and foreign language learning: From theory to practice* (pp. 71-89). Amsterdam: John Benjamins.

Kubanyiova, M. (2015). The role of teachers' future self guides in creating L2 development opportunities in teacher-led classroom discourse: Reclaiming the relevance of language teacher cognition. *The Modern Language Journal, 99*(3), 565-584.

Kumazawa, M. (2013). Gaps too large: Four novice EFL teachers' self-concept and motivation. *Teaching and Teacher Education, 33*, 45-55.

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology, 28*, 563-575.

Leary, M. R. (2007). Motivational and emotional aspects of the self. *Annual Review of Psychology, 58*, 317-344.

Leary, M. R., & Tangney, J. P. (Eds.). (2012). *Handbook of self and identity* (2nd ed.). New York, NY: The Guilford Press.

MacIntyre, P. D., MacKinnon, S. P., & Clément, R. (2009). The baby, the bathwater, and the future of language learning motivation research. In Z. Dörnyei & E. Ushioda (Eds.). *Motivation, language identity and the L2 self* (pp. 43-65). Bristol, UK: Multilingual Matters.

Markus, H. (2006). Foreword. In C. Dunkel & J. Kerpelman (Eds.), *Possible selves: Theory, research and applications* (pp. xi-xiv). New York: Nova Science Publishers, Inc.

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist, 41*(9), 954-969.

Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology, 38*, 299-337.

Mercer, S. (2012). Self-concept: Situating the self. In S. Mercer, S. Ryan, & M. Williams (Eds.), *Psychology for language learning: Insights from research, theory and practice* (pp. 10-25). Basingstoke: Palgrave Macmillan.

Mercer, S. (2015). Dynamics of the self: A multilevel nested systems approach. In Z. Dörnyei, P. D. MacIntyre, & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 139-163). Bristol, UK: Multilingual Matters.

Mercer, S., & Williams, M. (2014). *Multiple perspectives on the self in SLA*. Bristol, UK: Multilingual Matters.

Miller, R. B., & Brickman, S. J. (2004). A model of future-oriented motivation and self-regulation. *Educational Psychology Review, 16*(1), 9-33.

Oyserman, D., & Markus, H. R. (1990). *Possible selves and delinquency. Journal of Personality and Social Psychology, 59*(1), 112-125.

Pallant, J. (2011). *SPSS survival manual: A step by step guide to data analysis using SPSS* (4th ed.). Australia: Allen & Unwin.

Papi, M. (2010). The L2 motivational self system, L2 anxiety, and motivated behavior: A structural equation modeling approach. *System*, *38*(3), 467-479.

Richardson, P. W., & Watt, H. M. G. (2010). Current and future directions in teacher motivation research. In T. C. Urdan & S. A. Karabenick (Eds.), *The decade ahead: Applications and contexts of motivation and achievement* (pp. 139-173). Bingley, UK: Emerald.

Ruvolo, A. P., & Markus, H. R. (1992). Possible selves and performance: The power of self-relevant imagery. *Social Cognition, 10*(1), 95-124.

Ryan, S., & Irie, K. (2014). Imagined and possible selves: Stories we tell ourselves about ourselves. In. S. Mercer & M. Williams (Eds.), *Multiple perspectives on the self in SLA* (pp. 109-126). Bristol, UK: Multilingual Matters.

Smid, D. (2018). Hungarian pre-service teachers' motivation to become English teachers: Validating a questionnaire. *Journal of Adult Learning, Knowledge and Innovation, 2*(1), 19-32.

Sahakyan, T., Lamb, M., & Chambers, G. (2018). Language teacher motivation : From the ideal to the feasible self. In S. Mercer & A. Kostoulas (Eds.), *Language teacher psychology* (pp. 53-70). Bristol, UK: Multilingual Matters.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston, MA: Pearson.

Taguchi, T., Magid, M., & Papi, M. (2009). The L2 motivational self system among Japanese, Chinese and Iranian learners of English: A comparative study. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 66-97). Bristol, UK: Multilingual Matters.

White, C., & Ding, A. (2009). Identity and self in E-language teaching. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 333-349). Bristol, UK: Multilingual Matters.

Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counseling Psychologist, 34*(6), 806-838.

Yashima, T. (2009). International posture and the ideal L2 self in the Japanese EFL context. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 144-163). Bristol, UK: Multilingual Matters.

Yuan, E. R. (2016). The dark side of mentoring on pre-service language teachers' identity formation. *Teaching and Teacher Education, 55*, 188-197.

Appendix

English Translation of the Items in the Final Form of the PLTSS

I. Items under the Ideal Language Teacher Self Scale (ILTSS)
Stem: The English teacher I imagine myself as…
1. …speaks English fluently.
2. …improves himself/herself in teaching English.
3. …is a teacher who communicates well with students.
4. …has a high level of competence in English.
5. …continues lifelong learning.
6. …maintains classroom discipline.
7. …is respectful to students' ideas.
8. …speaks English accurately.
9. … keeps his/her knowledge about teaching English up-to-date.
10. …is a teacher with well-developed English communication skills.
11. …creates an organized classroom environment by determining classroom rules.
12. …follows the developments about teaching English.
13. …improves students' English communication skills.
14. …solves possible discipline problems in class effectively.
15. …searches for new ideas about teaching English.
16. …is good at human relations.

II. Items under the Ought-to Language Teacher Self Scale (OLTSS)
Stem: Keeping in mind the expectations of the people around me and the society, my duties and responsibilities, in the future I ought to…
1. …have a large vocabulary in English.
2. …know my students well.
3. …use English accurately in lessons.
4. …attend professional development activities (conferences, seminars, projects, etc.) after graduating from university.
5. …be competent in teaching English.
6. …improve myself in teaching English.
7. …have a good relationship with students' parents.
8. …encourage students to communicate in English.
9. …follow the developments in today's world.
10. …build a good relationship with students.
11. …speak English fluently.
12. …be an expert in my area.
13. …be a likeable English teacher to students.
14. …follow the developments in English language teaching.
15. …improve students' English speaking skills.
16. …be at an advanced level in English.
17. …be understanding of students.
18. …improve my English pronunciation skills.
19. …be a hardworking English teacher.

III. Items under the Feared Language Teacher Self Scale (FLTSS)
Stem: In the future, …
1. …I'm afraid of being an English teacher who doesn't like his/her job.
2. …I'm worried about being unable to improve students' English communication skills.
3. …I'm afraid of being unable to speak English fluently in the lessons.

4. …it makes me worried to teach in a boring way.
5. …I'm worried about teaching English using teacher-centered traditional methods.
6. …I'm worried about being an ordinary English teacher.
7. …I'm afraid of being a disrespected English teacher.
8. …I'm afraid of working as an English teacher since I have to work.
9. …it scares me to be an English teacher who works unwillingly.
10. …I'm afraid of teaching without preparation.
11. …I'm afraid of being unable to speak English accurately in the lessons.
12. …I'm afraid of being unable to spare time for all language skills (reading, writing, listening, speaking) in the lessons.
13. …it makes me anxious to be unable to follow students' individual development in learning English.
14. …it makes me anxious to be unable to use technology effectively in the lessons.
15. …I'm worried about being unable to ensure students' participation in the lesson.
16. …it makes me worried to teach English only to prepare students for the exams.
17. …it makes me worried to be an English teacher who is uninterested in students.