Relationships between motivation and anxiety in adult EFL learners at an Ethiopian university

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ABSTRACT

Studies in many educational settings show that motivation and anxiety are related to learning foreign languages (FL). Acknowledging the relevance and multifaceted complexity of motivation and anxiety, the present study aims to examine the relationships in the Ethiopian context where such research has not been conducted. To do so, first, we needed to validate the L2 motivational self-system (L2MSS, Dörnyei, 2009) and a new FL anxiety scale, based on hypothesized relationships between the L2MSS (i.e., the ideal L2 self, ought to L2 self, and L2 learning experience) and FL anxiety (both facilitative and debilitative). A total of 65 university students participated in the research at an Ethiopian university. Questionnaires on L2MSS and facilitative/debilitative anxiety were used to gather data. The data were analyzed using descriptive statistics, correlational analyses, and t-tests using SPSS software Version 25. Total scale reliability for the L2MSS and FL anxiety instruments was 0.90 and 0.70, respectively, higher than 0.6, suggesting adequate consistency for both constructs. The validity of the construct was evaluated by several model fit indices including the comparative fit index (CFI), Tucker-Lewis's index (TLI), the goodness of fit index (GFI), and root mean square error of approximation (RMSEA). All fit indexes were above 0.90, except for RMSEA; RMSEA was below 0.05 revealing that the models were valid. Students rated their L2MSS and FL anxiety moderate. The strongest significant relationship was found between students' ideal L2 self and their L2 learning experiences, whereas a weak but significant relationship was found between the latter and debilitative anxiety. The paper discusses these outcomes and their implications for classrooms and further research.

1. Introduction

Several individual variables have been widely researched in the field of foreign language learning (FLL), as many key factors must be present to allow students to learn a foreign language (FL) successfully. These include long-term motivation and a high level of engagement as well as low anxiety. Successful language learning is a complicated process in which various elements interact in complex relationships and impact students' motivation and, conversely, increase or lower their level of language learning anxiety. As a result, these constructs are essential emotional aspects and critical variables in FLL as they are substantially connected with FL performance (Dörnyei, 2005).

So far, research has looked at the function of these two constructs at the same time in contexts where English is a foreign language (EFL). In the L2 motivational self-system framework, however, little research has explored the relationship between different facets of the L2 self (ideal L2

self, ought to L2 self, and learning experience) and L2 anxiety (facilitative and debilitative). We hope that by investigating the link between the components of L2MSS and FL anxiety, language teachers and researchers would be able to better understand the function of these two factors in the classroom. Such an inquiry may also provide credence to Dörnyei's (2009, 2019) theory of the applicability of L2MSS in a new multicultural setting where no previous study examined the link between L2 motivation and anxiety. The study employed a quantitative research design to answer three research questions.

1. What are the students' overall motivational orientations in learning English?
2. How can their types and levels of anxiety in learning English be characterized?
3. What is the relationship between L2 motivation and anxiety in this young adult population?

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2. Literature review

2.1. L2 motivation

Learners' motivation is one of the most elusive concepts in FLL research, and its complexity and multi-faceted nature have often resulted in conflicting findings in past studies (Dörnyei and Ushioda, 2013). Motivation is an internal drive that allows people to achieve specific goals. As a result, FL motivation refers to a "primary push to commence FL learning, and subsequently, the driving force to sustain the long, sometimes tedious learning process; indeed, all other components involved in SLA require motivation to some extent" (Dörnyei and Ryan, 2015, p. 72). Dörnyei (2005), a leading second language acquisition (SLA) scholar, divided L2 motivational research into three periods: the socio-psychological period (1959-1990), the cognitive-situated period (the 1990s), and the socio-dynamic period (from 2000 to the present).

In the socio-psychological period, Robert Gardner and his associates conducted most of the significant studies. Their socio-educational approach paved the way for L2 motivation research. Gardner (1985) defined motivation as a behavior that is oriented toward achieving a certain objective. Motivation determines why people work to reach certain goals, how long they keep doing something, and how hard they try (Gardner & Lambert, 1959 as cited in Dörnyei and Ryan, 2015, p.75). Gardner and Lambert (1959) identified two distinct orientations: integrative and instrumental orientations. Integrativeness refers to learners' desire to become fully integrated members of the target language community and culture, whereas instrumentality refers to the functional significance of learning the target language.

The second phase, during the 1990s, was marked by works that drew on cognitive theories in educational psychology, with Self-Determination Theory (SDT), the early work of Deci and Ryan (1985), being a significant approach in this period. SDT's core concept is that individuals have natural impulses toward personal growth and vitality; these are either fulfilled or dissatisfied by their surrounding environment. SDT targets three kinds of motivation: intrinsic motivation, extrinsic motivation, and amotivation. These define the direction of behavior and the reasons for a person's engagement in action to reach a goal. (1) Intrinsic motivation is concerned with the satisfaction in doing a task itself rather than depending on any external pushing or pulling pressure. (2) Extrinsic motivation is classified into four regulations: external, introjection, identification, and integrated. (a) External regulation, which is the least autonomous form of extrinsic drive, is motivated by external pressures, such as rewards or punishments; (b) introjected regulation refers to individuals' motivation to engage in tasks because of internal pressure (i.e., tension, guilt); (c) identified regulation involves identifying a goal or regulation as personally important, that one values so that one will perform it; (d) integrative regulation, the most autonomous extrinsic motivation, includes behavior that is completely integrated with the individual's behavior, aspirations, interests, and personality. Finally, (3) amotivation exists when an individual lacks innate or extrinsic motivation or intention to accomplish a certain goal (Deci and Ryan, 2000).

The third period characterized by Dörnyei (2005), the current socio-dynamic period, is marked by a focus on motivational change, self-regulation, imagined (possible) selves, and the emergence of individual motivation in sociocultural contexts (Mahmoodi and Yousefi, 2021; My, 2021). Most importantly, this period of motivational research centered on motivational transformation, i.e., how self-identity and motivation are linked. It is widely accepted that the theories of motivation, particularly Gardner's model, made significant contributions to the development of L2 motivation research; however, it has since been challenged by many researchers (for example, Dörnyei, 2005, 2009) who believe that the emphasis on integrativeness leads to a neglect of the effects of the language learning environment (i.e., EFL contexts) and learner differences. Dörnyei (2009, 2019) proposed the L2 Motivational Self System (L2MSS) to fill the shortcomings. The L2MSS aims to examine self-specific motivation in L2 learning (Dörnyei and Ryan, 2015) and it is viewed as a reinterpretation of Gardner's integrative motive notion.

L2MSS comprises two major components: self and context (Dörnyei, 2009). The selves are subdivided further into two parts: (a) the ideal L2 self represents all the attributes that a person would like to possess; and (b) the ought-to L2 self consists of traits that people ought to possess to avoid negative outcomes (Dörnyei, 2009). According to Dörnyei and Ryan (2015), the L2MSS selves component was conceived using two main theories: possible selves (Markus and Nurius, 1986) and self-discrepancy theory (Higgins, 1987). As Markus and Nurius (1986) saw it, people might become three types of selves: something they hope to become (the possibility that they might become their future self), something they dream of becoming (positive images of their future self), and something they fear to become (negative images of their future selves).

However, Higgins (1987) claimed that learners can have either a promotional orientation or a prevention orientation. A person with promotion-focused orientation cares about progress, growth, and accomplishment and is aware of when good things happen. On the other hand, a person with prevention-focused orientation cares about safety and security and is aware of bad things happening. Based on this model, students who have a stronger ideal L2 self will have a promotional regulatory focus, as well as enjoy working towards positive outcomes. Those with a greater ought-to L2 self tend to show a prevention regulatory orientation and feel obliged to avoid negative repercussions of not coming up to expectations or not doing their duties (Dörnyei, 2009).

Markus and Nurius (1986) and Higgins (1987) made valuable contributions to the conceptualization of self in the L2MSS; Dörnyei modeled his "ideal" and "ought" selves after Higgins' concept of self-discrepancy. Another key component of L2MSS comprises L2 learning experience. Language learning experiences, which combine past and current language learning experiences, are the basis for analyzing how context, including the L2 teacher, the curriculum, peers, the group, and the experience of success, affect the development of the self (Dörnyei, 2019).

Dörnyei and Ushioda (2013) concluded that three primary factors are responsible for motivating L2 learners: the learner's self-perception of being an L2 expert, external social pressure, and positive learning experiences. L2 motivation research has been influenced by this theory, which has changed the learner's identification with an external reference group to identify with their self-concept. As a result, numerous researchers in EFL environments (e.g., Papi, 2010; Papi and Teimouri, 2014; Taguchi et al., 2009; Teimouri, 2017) have accepted this theory as their theoretical framework within which empirical investigations have been undertaken. The present study aims to do so in a new context.

2.2. L2 anxiety

Anxiety is seen as the most common emotional element impeding L2 learning. Anxiety is a multi-faceted term; psychologists distinguished trait anxiety and state anxiety, and depending on its impact, facilitative vs. debilitative anxiety. Unsurprisingly, early research on anxiety and achievement, as well as motivation yielded varied and perplexing findings; scholars found that anxiety is not a simple, unitary entity that can be readily defined into high or low levels (Horwitz, 2010). The trait versus state anxiety category addresses the sustaining feature of anxiety: a constant or occasional worry. Trait anxiety is a constant sense of being nervous, whereas state anxiety is a transitory emotion that changes in strength throughout time. The concept of facilitative vs. debilitative anxiety refers to the degree to which anxiety impacts learning favorably or unfavorably. Debilitating anxiety has been shown to have a detrimental effect on performance, whilst facilitating anxiety has been shown to improve learners' performance (Dörnyei, 2005).

2.3. Studies on the relationship between L2MSS and L2 anxiety

Since the development of the L2MSS by Dörnyei (2009), research on L2 selves has received a great deal of interest in the field of L2 motivation. Researchers (Al-Shehri, 2009; Dörnyei and Ushioda, 2009; Ryan, 2008; Taguchi et al., 2009) have attempted to validate the approach in different learning scenarios and reported accepted Cronbach alphas value. Many scholars (e.g., Dörnyei, 2010; Dörnyei and Ryan, 2015; Papi, 2010; Papi & Teimouri; Taguchi et al., 2009) believe the L2MSS framework may explain additional emotional variables such as L2 anxiety, beliefs, willingness to communicate, and achievement in a new language. As a result, the system might be used to explain the interaction of many affective variables.

Several studies have shown a link between L2 anxiety and student motivation (e.g., Papi, 2010; Papi and Teimouri, 2014; Teimouri, 2017). Papi (2010) studied 1,011 (473 female and 538 male) Iranian high school students to test a theoretical model that included Dörnyei's (2009) L2MSS, English anxiety, and intended effort to learn English. Papi (2010) found that although the ideal L2 self and L2 learning experience reduced students' English anxiety, the ought-to L2-self increased it. Because the ideal L2 self is linked to instrumentality-promotion such as optimism and success, and the ought-to L2 self is linked to instrumentality prevention such as fear about undesirable consequences, this may increase students' anxiety.

Papi and Teimouri (2014) explored the link between anxiety's facilitative and debilitative aspects to language learners' motivational orientations—prevention and promotion systems. The participants were 1,278 (623 females, 655 males) Iranian secondary school students. The questionnaire scales were derived from Dörnyei (2005) research in Hungary and Taguchi et al. (2009) in Japan and China. Papi and Teimouri (2014) claimed that anxiety motivates prevention-focused learners to work harder to avoid undesirable consequences. However, according to Higgins (1987) self-discrepancy theory, an individual with a promotion-focused attitude is concerned about making progress, growing as an individual, accomplishing goals, and being aware of whether or not positive things occur. Therefore, the central idea is that in case a learner's real self does not correspond to their ideal self, then they are more likely to feel ashamed and anxious about themselves hence it is destructive to their drive.

Teimouri (2017) investigated the emotional experiences of L2 future self-guides in Iran. The researcher used self-developed L2MSS items to link students' emotions to their L2 selves. Five hundred and four EFL learners in Iran took part in the research by filling out a questionnaire. L2 anxiety was shown to be linked to learners' ought-to L2 selves, but not to their ideal L2 selves. L2 anxiety matched the motivational orientation of learners with a predominant prevention emphasis and provided a facilitative function by keeping them sensitive to the existence of probable negative consequences.

Jiang and Papi (2021) looked at how chronic regulatory focus, L2 self-guides, L2 anxiety, and motivated behavior were linked in 161 EFL students at a central university in China who filled out questionnaires. The results showed that participants' promotion focus (which was concerned with successes and achievements) was significantly and negatively associated with their L2 anxiety, but their prevention focus (which was concerned with safety and duties) was unrelated to their L2 anxiety.

In conclusion, researchers have been unable to come to a consensus on the precise nature of the link between anxiety and motivation in learning a foreign language, even though studies tended to find positive and negative correlations. Therefore, the results of the empirical investigations clearly indicated that more research is needed to clarify the interplay between facilitative anxiety and debilitative anxiety. In addition, the temporal, dynamic, and domain-specific characteristics of motivation may account for the disparate outcomes. The present research used the constructs of anxiety known as facilitating anxiety and debilitating anxiety and it utilized the three L2MMS known as ideal L2 self, ought-to L2 self, and learning experience in a context where no previous study has been conducted.

3. Method

This research sought to better understand the relationship between students' L2MSS and anxiety in learning English. To answer this question, the current study employed quantitative method research design (Creswell, 2012; Mackey and Gass, 2016) to examine the connections among these variables.

3.1. Educational context

The context is Ethiopia, one of the world's oldest nations; it has never been conquered by any English-speaking or another country, hence English arrived late. Ethiopians were first introduced to foreign language teaching in 1908. Since then, significant curricular and methodological improvements have been implemented. Until 1945, most English instructors were foreigners from Europe, America, and Asia. Early on, only a few schools taught French, Italian, and English (Gopal, 2013). Students begin formal education at the age of seven. After eight years of primary school (first and second cycles), students go on to regular secondary school for two years, followed by a preparatory secondary school for two more years. They begin learning English in the first year of primary school, at age 7, and continue in 4–5 h per week until they complete preparatory high school. After preparatory secondary school, students compete for admission to public universities, where English is a major and common course. Therefore, the participants in this study were undergraduate English major students.

3.2. Participants

Participants in this study were undergraduate students majoring in English. All undergraduates at a university were targeted for this research. According to the information provided by the Department of English language and literature, the total number of students enrolled in the fall of 2021 was 97. They were all invited to complete a questionnaire. Out of 97 students, 32 refused to take part, while 65 others (males 18 and females 47) volunteered to do so. Their ages ranged from 19 to 23 (M = 21.55, SD = 1.28).

3.3. Instrument

The questionnaire used in the survey was designed and administered along the standards established by Taguchi et al. (2009). Three sections make up the questionnaire. In the first section, participants provided their background information on their gender, age, semester, and year of their studies. The second section comprised L2MSS items adapted from Taguchi et al. (2009) to identify the participants' perceived type and level of motivation. The third part encompassed a self-developed FL learning anxiety section.

The L2 motivational self-system (L2MSS) comprises three components: ideal L2 self, ought to L2 self, and Language Learning Experience (Dörnyei, 2009). However, the original scale consisted of two sub-scales (i.e., ideal L2 self and ought to L2 self). For the present study, an additional subscale for learning experience was added to measure students' situation-specific motives and learning experiences in learning EFL. Accordingly, items in the "ideal L2 self" and "ought to l2 self" were adapted from the original Taguchi et al. (2009) scale. As for Learning Experiences (LE), since Taguchi et al. (2009) did not specifically have items on them, but they mixed them with other categories, we adapted five items (1–5) from the work of Taguchi et al. (2009) related to learners' situation-specific motives and developed five additional items (6–10) on immediate classroom experiences, English classes, English learning, classroom activities, classmates, and learning materials.

The ideal L2 self is defined as the sign of the attributes that one would

ideally like to possess (Dörnyei, 2009). To investigate the measure, we adapted ten items (e.g., "I can imagine myself living abroad and communicating well with the locals in English"). The ought-to-L2 self represents the imagined quality that an L2 learner should possess when doing various tasks and commitments to avoid possible negative outcomes. Ten items were adapted to measure the ought-to L2-self construct (e.g., "Studying English is important to me because an educated person should speak English"). The L2 learning experience concerns "situation-specific motives related to the immediate learning environment and experiences" (Dörnyei, 2009, p. 29). Dörnyei (2019) further explained that the L2 Learning Experience is "the perceived quality of the learner's engagement with various aspects of the learning process (i.e., the L2 teacher, the curriculum, the peer group, and the experience of success)" (p. 20). Twelve items were used to assess learning experience and situation (e.g., "The atmosphere of my English classes is interesting").

The third part of the questionnaire comprises items on facilitative and debilitative anxiety. Three items were developed for tapping into the debilitative anxiety construct to measure debilitating experiences of FL anxiety (e.g., "When I'm nervous I'm less good at English"). Likewise, three items were designed to measure the facilitative anxiety construct to measure the facilitative experiences of foreign language classroom anxiety (e.g., "When I'm a bit nervous my English is better"). Data were collected using self-administered pencil-and-paper questionnaires. The students rated the degree to which they agreed or disagreed with the given statement on a six-point Likert scale (strongly disagree, disagree, slightly disagree, slightly agree, agree, and strongly agree).

3.4. Reliability and validity

To check to what extent the adapted items from Dörnyei's (2009, 2019) L2MSS and the self-developed FL anxiety constructs elicited valid and reliable data in this EFL context, internal consistency reliability and confirmatory factor analysis analyses were conducted.

First, the KMO index was employed to guarantee a big enough sample. The L2MSS and anxiety scales had KMO values of 0.90 and 0.66, respectively, which were higher than the cut-off value of 0.6, indicating that the dataset was eligible for factor analysis (Hair et al., 2006; Field, 2013; as cited in Huensch and Thompson, 2017, p. 426). Furthermore, DeVellis (2003, as cited in Dörnyei, 2010, p.56) suggested that the normal sample size for factor analysis should be approximately 100 (±20). The pilot study's sample size is 165, therefore, it is sufficient for factor analysis. Next, the Cronbach Alpha was then calculated, and the internal consistency of the L2MSS and FL anxiety items was assessed. Generally, researchers (i.e., Dörnyei, 2010; Taguchi et al., 2009) suggest that a test's Alpha must be at least 0.6 for it to be considered reliable. The study used Cronbach's alpha to construct two reliability analyses: one for the scale and one for the sub-scale. As a result, the overall scale reliability for the L2MSS and FL anxiety scales was determined to be 0.9 and 0.7, respectively, which were greater than 0.6, suggesting that the items in both constructs had adequate consistency. Table 1 shows the number of items as well as the Cronbach's Alpha for the subscales.

The validity of the construct was evaluated by several criteria. Factor loadings between 0.4 and 1 remained in the model, whereas factors that loaded below 0.4 were discarded. From the ought to L2 variable, items 4 (−0.11) and 6 (0.00) were deleted. From the ideal L2-self variable, item

number 17 (0.14), and from the Learning experience variable, item number 27 (0.20) were also deleted for the same reason. The Chi-square value was calculated by the formula X^2/df, which is according to Dörnyei (2010) expected to be less than 3 to be acceptable. Accordingly, the L2MSS scale's Chi-square (667.118/461) was 1.45, and the FL anxiety scale's Chi-square (7.589/8) was 0.95. Taguchi et al. (2009) selected an additional index below from among the variety of overall model fit indices: comparative fit index (CFI), Tucker-Lewis's index (TLI), the goodness of fit index (GFI), and root mean square error of approximation (RMSEA). For all except for the last one of these indices, a value of > 0.90 is usually indicative of high fitness; for the last measure, RMSEA, a value less than 0.05 is good (Taguchi et al., 2009). Accordingly, the GFI, TLI, CFI, and RMSEA scores of the L2MSS and FL anxiety models, as shown in Table 2, revealed that the models were valid.

3.5. Data collection procedure

First, three first-year English language and literature students (ages 20–23) and one university instructor (with 9 years of English teaching experience) completed a small-scale pilot version of the questionnaire to assess its appropriateness, simplicity, and usefulness. Due to the civil war in the country, all data collection took place online. Data collection and analysis for the first pilot research started on November 5, 2021 and were completed on November 25, 2021. After collecting data from these respondents, we considered what improvements the participants suggested to the instruments. For example, translations of the items into their native language, and items were replaced, removed, and modified. For instance, the item "Studying English is important to me to gain the approval of my peers, instructors, and family" is broken down into three items, since each of the three factors — peers, teachers, and parents — has a unique influence and need to be dealt with independently. In addition, because this study was conducted in a foreign language learning setting, terms such as "second language" were replaced with "foreign language" (i.e., English). Finally, complex phrases and words were paraphrased for clarity. After completing the first pilot study, the second pilot study was undertaken with 165 students towards the end of November 2022. The main purpose of the second pilot study was to check to what extent the adapted items from Dörnyei's (2009, 2019) L2MSS and the self-developed FL anxiety constructs elicit valid and reliable data in the EFL context. Data collection for the main study began on December 2 and ended on December 10, 2021. Sixty-five students were participated in the main study. The department head and an English teacher helped recruit participants after getting detailed information on the purpose of the study and how they could help collect data. Participation in the survey was fully voluntary, and participants could opt out at any moment. Volunteer students were requested to read the information page, which emphasized the study's aims, confidentiality, and anonymity. After data collection, a thank-you letter was sent to all students, the department head, and the teacher.

3.6. Procedures of data analysis

Data were organized and analyzed quantitatively (Creswell, 2012). The statistical analyses were carried out with the help of a statistical package for social sciences (SPSS) version 25. Descriptive (mean,

Table 1
Subscales, number of items, and alpha.

Subscales	Number of Items	Cronbach's Alpha (α)
L2 Experience	12	.95
Ideal L2 Self	10	.89
Out to L2 Self	10	.71
Facilitative anxiety	3	.63
Debilitative anxiety	3	.80

Table 2
Fit indexes for the measurement models variables.

Constructs	GFI	TLI	CFI	RMSEA
Ideal L2 Self	.86	.88	.90	.11
Ought to L2 Self	.91	.89	.96	.02
Learning Experience	.97	.96	.90	.07
Facilitative anxiety	.96	.90	.91	.04
Debilitative anxiety	.90	.91	.89	.05

Standard Deviation) and inferential (Pearson Correlation Coefficient, one-sample *t*-test) statistics were used to analyze the data. The validity and reliability of the instruments were analyzed using AMOS software. Participants were assigned a code and all names referenced in the data were substituted with pseudonyms for specific purposes and ethical issues.

3.7. Ethical considerations

Considering the current study's use of human subjects, several ethical issues were considered. The study was conducted following the requirements of the University's IRB Ethics Committee, which was approved, and written permission was obtained to proceed (see Appendix A). Furthermore, at the university where the study was conducted, the participants were informed about the purpose and that participation in the study was completely voluntary, and that they could leave at any time (see appendix B). All the information gathered was treated confidentially and anonymously.

4. Results and discussion

The data were first checked for missing data before statistical analyses were conducted. Two data elements were missing. The first was a student who failed to include her semester grade in the demographic data. Second, a student marked "3" (slightly disagree) on all the items. As a result, both surveys were deleted, leaving a total of 65 participants' datasets for further analysis. In the next sections, we present the findings and discuss them along the three research questions (RQ).

RQ 1 What type and level of motivation did the students demonstrate on the three scales?

To answer the first research question, descriptive statistics were used to determine the students' perceived levels and type of L2MSS.

As demonstrated in Table 3, the cumulative mean of all three components of the L2MSS was moderate (M = 3.75, SD 0.68). On the ideal L2-self measure, students' mean was modest (M = 3.69). One of the most potent motivational elements, according to Dörnyei (2005), is the ideal L2 self. The ideal L2 self was then utilized to evaluate a student's future self-image as a successful future L2 learner. It may be inferred that students had a moderate level of motivation for seeing their future self-images as capable of speaking English as native speakers. In the study context, English is taught as a foreign language. Accordingly, students typically do not believe that they would meet target language speakers or have a native-like accent.

Students' accounts based on the items related to their L2 learning experience were ranked the lowest (M = 2.41) among the three components of L2MSS. This contradicted the conclusions drawn by Subekti (2018). According to Subekti (2018), the L2 learning experience was rated first (M = 35.75) among the three components of L2MSS. Researchers (e.g., Piniel and Csizér, 2013) contended that motivated students must have had better learning experiences. Ushioda (2009) likewise put the L2 learning experience front and center, stating that learning experiences play a significant role in creating L2 motivation. To put it another way, the more motivated a student is, the more favorably they will perceive the learning experience. The learning experience focused on how students felt about their current learning situation and

the extent to which they were satisfied with their L2 learning experiences. An unpleasant classroom environment, insufficient teaching, and learning facilities, time constraints for practicing pair and group works, a high student-to-teacher ratio, classroom size, classroom activities, inadequate school support, poor teaching methodology, negative attitudes, and limited (or almost no) access to English users outside the classroom could all contribute to this outcome, among other factors.

Among the three components of L2MSS, learners' ought-to L2 self (M = 5.16 SD = 0.26) was scored the highest. Ought-to L2 self refers to the obligations or requirements that an individual should have to prevent undesirable outcomes (Dörnyei, 2009) The result was not consistent with the findings reported by Subekti (2018) in Indonesia. In that study, students who were motivated by the ought-to L2 self were the least from the other components of L2MSS. The author concluded that students did not see either their teachers' or their peers' acknowledgment as a driving force to learn English. However, in the present study, students acknowledged the importance of learning English to get approval from the people surrounding them. This could be because students see their teachers and peers as important factors in the teaching and learning process and they care more about how they view them.

RQ 2 What level and type of anxiety did students demonstrate on the two anxiety scales?

Descriptive statistics were employed to identify the students' observed intensity and type of FL anxiety.

According to data in Table 4, on average, students reported experiencing a moderate level of anxiety (M = 3.58, SD.71). The mean of debilitative anxiety (M = 4.16, SD = 1.37) was higher than the Mean of facilitative anxiety (M = 3.00, SD = 0.42), which suggested that most of the students suffered from anxiety that prevented them from learning. This may be because of their socio-cultural background (i.e., ethnicity, gender, religion, geographical location). It is widely believed that students' socio-cultural background affects their affective factors like anxiety, motivation, and attitudes (Dörnyei, 2005; Taguchi et al., 2009). Accordingly, students' low self-confidence, classroom participation, and lack of English practice outside the classroom (Haile and Tilahun, 2019) could contribute to this outcome. The finding of the present study that students tended to experience debilitative anxiety is consistent with previous findings. For example, Gerencheal (2016) reported that Ethiopian university students were most anxious when learning English. He also reported that anxiety had a debilitative effect on students' achievement. Using the Hungarian FLCAS (HFLCAS), which measures debilitative effects, Tóth (2009) also observed Hungarian university students as a group felt somewhat nervous, although at a low level.

RQ 3 What were the relationships among the ideal L2 self, the ought-to L2 self, Learning experience, facilitative and debilitative anxiety in English?

Pearson correlation was performed to address the third research question concerning the relationships between L2MSS (the ideal L2 self, the ought-to L2 self, learning experience), anxiety (facilitative and debilitative). The results are summarized in Table 5.

As can be seen in Table 5, the correlation analysis indicated significant relationship between the ideal L2 self and the L2 learning experience (r = 0.616, p < 0.001). Of all the correlations in Table 5, this one is the strongest one. This outcome matches Papi's (2010) results.

Table 3
Descriptive Statistics of Learners' L2MSS.

	Minimum	Maximum	Mean	Std. Deviation
Ideal L2 Self	1.80	5.80	3.69	1.09
L2 Learning Experience	1.33	5.50	2.41	1.17
Ought-to L2 Self	4.50	5.90	5.16	.26
Total L2MSS	2.84	5.47	3.75	.68

Table 4
Descriptive Statistics of Learners' anxiety.

	Minimum	Maximum	Mean	Std. Deviation
Facilitative anxiety	2.33	4.33	3.00	.42
Debilitative anxiety	1.00	5.67	4.16	1.37
Total score	1.67	5.00	3.58	.71

Table 5

Correlation Analysis of the ideal L2 self, the ought-to L2 self, learning experience, facilitative and debilitative anxiety.

	Ideal L2 self	Learning Experience	Ought to L2 Self	Facilitative Anxiety	Debilitative Anxiety
Learning Experience	.616[a]	1			
Ought to L2 Self	.023	−.018	1		
Facilitative Anxiety	−.007	.005	−.039	1	
Debilitative Anxiety	.125[b]	.178[b]	−.100	−.031	1

[a] $p < 0.001$.
[b] $p < 0.05$.

According to Papi (2010)'s research, the Ideal L2 Self has a positive relationship with the L2 learning experience of students. The result of the present study implies that students who have a bright future self-image as language users value their learning experiences more than those who have a feeling of low ideal L2 self because they are unable to see the value or purpose of their learning environment. To put it another way, students with a strong ideal L2 self can see the importance of what they accomplish in class, as they are aware that it will assist them in achieving their future vision. Additionally, the impression students have of themselves is greatly influenced by their prior educational experiences. Students' self-esteem and motivation can be significantly boosted by experiences they perceive as pleasant or successful.

Moderate positive and statistically significant relationship was found between the ideal L2 self and debilitating anxiety ($r = 0.125$, $p < 0.05$). This finding lends empirical support to the hypothesis put forward by Papi and Teimouri (2014) about the debilitative role of anxiety on students' motivation. Learners with a strong ideal L2-self have a predominant promotional focus and are sensitive to the presence of positive outcomes, the emotional state of joy best fits their motivational orientation, and anxiety represents a misfit, having a debilitative effect on their motivation (Papi and Teimouri, 2014). Nonetheless, there was no significant relationship between ideal L2 self and facilitative anxiety ($r = −0.007$, $p > 0.05$). The result might be due to promotion focused (ideal L2 self) students who are concerned with advancement and progress and sensitive to the presence of positive outcomes, anxiety represents a misfit and thus is harmful to their motivation.

Although students' learning experiences did not have a significant relationship with facilitative anxiety ($r = 0.005$, $p > 0.05$), they did have a significant positive relationship with debilitative anxiety ($r = 0.178$, $p < 0.05$). The result indicated that as students' learning experiences increased, so did their debilitating anxiety. This outcome is not in line with a previous study (i.e., Papi, 2010) that reported L2 learning experiences to be negatively correlated with anxiety. The outcome was surprising, as one would expect that learning experiences (e.g., the atmosphere of English class, watching English movies and TV, or engaging in classroom activities) could have a positive relationship with facilitative anxiety, and a negative relationship with debilitative anxiety. Culturally, Ethiopian students are shy and do not interact much, according to my learning and teaching experiences in tertiary education. Having such cultural experiences might lead students to experience worry even in a suitable learning environment.

The ought-to L2-self had no significant relationship with either facilitative anxiety ($r = −0.039$, $p > 0.05$) or debilitative anxiety ($r = −0.10$, $p > 0.05$). The ought to L2 incorporates motivational behavior initiated by expectations, obligation, and avoidance of negative feelings. The results matched Jiang and Papi's (2021) argument that preventative focus (ought to L2 self) is unrelated to L2 anxiety. However, they contradicted the results reported by Papi (2010) and Teimouri (2017) who claimed that the ought-to L2 self positively related to a higher level of anxiety. The authors concluded that ought-to L2 self is linked to instrumentality prevention such as fear about undesirable consequences, which may cause anxiety in students. This result is not confirmed in the Ethiopian context. This could be explained by the research context and age differences, as the former study was conducted with Iranian high school students, while the present study was conducted at a university. Unlike in some other countries, there seems to be no external pressure for students to use English. They, however, might feel embarrassed when they must use English. Accordingly, the fact that there was no relationship might be driven by such an experience.

5. Conclusion, limitation, and pedagogical implications

5.1. Key findings

The results of this study, which focused on the relationship between the L2MSS and L2 anxiety, revealed several interesting and unexpected results. More specifically, the study aimed to characterize Ethiopian student types and levels of anxiety and to investigate the relationships among L2MSS and L2 anxiety.

First, students' perceived levels of L2MSS were moderate (M = 3.75, SD = 0.68). However, there was a significant variation in each component of the L2MSS. The proportion of students who were motivated by the learning experience was very low (M = 2.41, SD = 1.17). This give the impression that the students were unhappy with both the method of instruction and the environment in which it was delivered. In contrast, students who were motivated by the ought to L2 were very high (M = 5.16, SD = 0.26), implying that students were driven to learn English for practical reasons. The ideal L2-self, one of the most effective motivating factors, was perceived at a moderate level (M = 3.69, SD = 1.09). It is possible to deduce from the responses of the students that they had a modest degree of motivation for picturing their future selves as being capable of speaking English as fluently as native speakers.

Second, students reported experiencing a moderate level of anxiety (M = 3.58, SD = 0.71). However, the mean of debilitative anxiety (M = 4.16, SD = 1.37) was higher than the mean of facilitative anxiety (M = 3.00, SD = 0.42), which suggested that students were suffering from anxiety that prevented them from learning more efficiently. This outcome makes it evident that these university students had a high level of anxiety which most probably negatively affected their English language learning.

Third, regarding the relationship among the variables, when compared to the correlational findings of the present study, the correlation analysis revealed that the most significant link existed between the ideal L2 self and the L2 learning experience. It shows that students who have a strong ideal L2 self participates in class more because they are cognizant of themselves and the attitudes they reflect. Moderate positive and statistically significant relationship was found between the ideal L2 self and debilitating anxiety. There was no significant relationship between ideal L2 self and facilitative anxiety. The ought-to L2-self had no significant relationship with either facilitative or debilitative anxiety. Although the learning experience did not have a significant relationship with facilitative anxiety, it did have a significant positive relationship with debilitative anxiety.

5.2. Limitations and pedagogical implications

Among the three components of L2MSS, the students who were motivated by the L2 learning experience were ranked the lowest (M = 2.41, SD = 1.17). The learning experience centered on how students felt

about their current learning setting and how satisfied they were with their L2 experience. However, the research design did not allow us to collect data on what the students' learning experiences were like, as this study used a questionnaire with no open items. An additional limitation concerns the fact that we gathered data from participants at a single university. Therefore, the findings are limited to these participants and cannot be generalized to other students. Further research should involve more students at other institutions. The study used a questionnaire but did collect data on students' proficiency in English; therefore, it was not possible to examine how students' motivation and anxiety are related to what level of English they can achieve over the years. Further research should use data on English language proficiency and a longitudinal design would be necessary to examine how these variables interact over time.

As for the pedagogical implications, teachers should make the classroom activities more motivating and engaging by integrating contemporary teaching methods (i.e., ICT, games). The government should also equip universities with the infrastructural equipment necessary for teaching and learning. A good relationship and cooperation among teachers, students, and parents are also important. The ideal L2 self is a fundamental feature of the L2MSS. The ideal L2 self was found to moderately motivate participants. Accordingly, it is important to develop students' visions about themselves as future language users by, for example, designing scripted imagery (Magid, 2014) using imagery training strategies, and creating a motivational training program (Mackay, 2014). The relationship between the ideal L2 self and the L2 learning experience has also provided insight into how to concentrate in EFL sessions. Ideal L2 self represents an individual's internalized desire to acquire L2 proficiency. This desire is most often heightened by successful or pleasurable learning experiences. Hence, teachers may work to make the classroom more interesting and entertaining and help students develop and sustain an ideal L2 self by providing clear teaching

and learning goals and involving students in decision-making.

In terms of anxiety, it is crucial to highlight that although it is generally perceived as a barrier to learning, it may help students learn by positively affecting their behavior (Horwitz, 2010). Anxiety was reported to be debilitating among the students in this research. This is because most students fear their teachers and worry about what others think about their performance (Gerencheal, 2016). Accordingly, enhancing the learning experience by making the learning process more relevant, rewarding, and enjoyable for students will most probably increase their self-efficacy, which will reduce debilitative anxiety and increase motivation. Alternatively, anxiety-reducing training would help students increase the amount of energy they invest into learning and that will make the process more enjoyable and their experiences more rewarding. Moreover, lowering the levels of students' FL anxiety is crucial to improving their motivation in learning English and then enhancing achievement. Students' anxiety can be reduced if their teachers create a supportive and relaxing learning environment. Several additional techniques to handle anxiety can be used by setting clear and measurable goals, encouraging moderate responsibilities, allowing learners to practice the language with less than perfect performance, encouraging students to incorporate music and games into their learning, encouraging self and peer evaluation, providing rewards that facilitate language use, giving activities that address diverse learning outcomes, using communicative language teaching and information and communication technology, and encouraging learners to acknowledge symptoms of anxiety (Dewaele and MacIntyre, 2014).

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix

Appendix A. (Ethical approval)

University of Szeged

Institutional Review Board
Doctoral School of Education

6722 Szeged, 30-34 Petőfi S. Av., Hungary
Phone/fax: +36 62 544-032

Merih Welay Welesilassie
PhD Student: Doctoral School of Education
Reference number: 21/2021
Subject: Ethical evaluation of a research project

Date: 19 November, 2021

E T H I C A L   A P P R O V A L

The Insitutional Review Board (IRB) of the Doctoral School of Education, University of Szeged has recently reviewed your application for an ethical approval (Title of the Research Project: "**Foreign language learning motivation, anxiety and achievement: The interrelationship of individual variables in learning English as a foreign language**", supervisors: Dr. Nikolov Marianne). This proposal is deemed to meet the requirements of the ethical conducts on social research with human subjects of the Doctoral School of Education, University of Szeged.

IRB decision: approved

Justification:
The research project meets the requirements of the professional-ethical criteria of the social research including human subjects within the field of education science. Main goal of the study is to investigate the relationship between foreign language learning motivation, anxiety, and achievement. The research design is mixed methods: it combines quantitative and qualitative methods.
Data will be collected from undergraduate Preparatory School students in Ethiopia. Participants will be undergraduate students learning English as a foreign language at school (N = 80). All of the students are above the age of 18. Questionnaire is anonymous, the face-to-face interviews will be recorded. A written consent form will be issued to the participants for their self-approval. Participation is voluntary. Procedure of the data collection does not harm their privacy law, it does not have an impact on the participants' mental or physical health. Data cannot be handled by persons to whom they are not concerned.
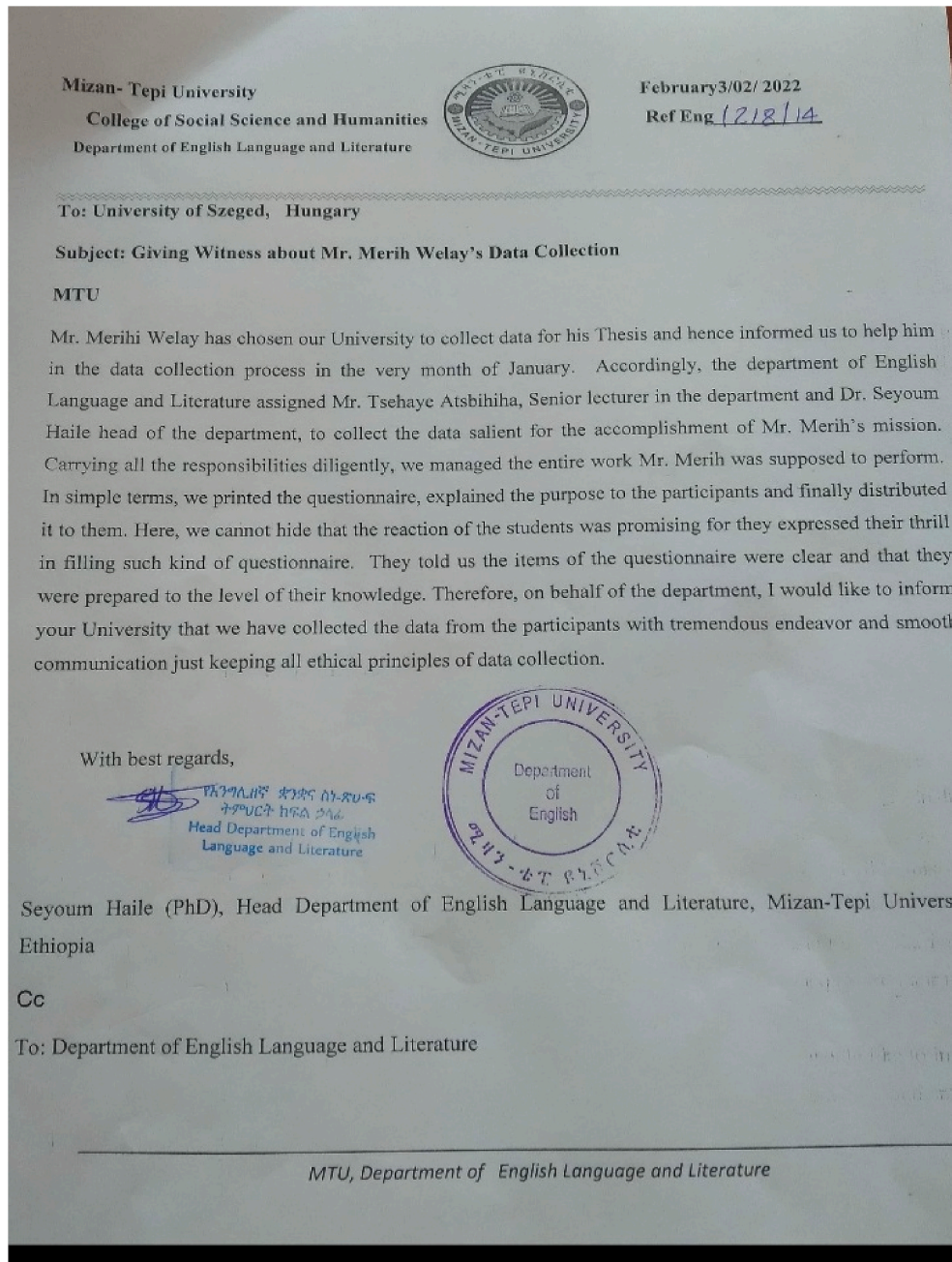
In a summary, full ethical approval has been granted.

We wish you all the best for the conduct of the project.

Prof. Dr. Bettina Pikó
IRB coordinator

Ethical Approval.

Appendix B. (obtained permission from the setting of the research)

Mizan- Tepi University

College of Social Science and Humanities

Department of English Language and Literature

February 3/02/ 2022

Ref Eng 1218/14

To: University of Szeged, Hungary

Subject: Giving Witness about Mr. Merih Welay's Data Collection

MTU

Mr. Merihi Welay has chosen our University to collect data for his Thesis and hence informed us to help him in the data collection process in the very month of January. Accordingly, the department of English Language and Literature assigned Mr. Tsehaye Atsbihiha, Senior lecturer in the department and Dr. Seyoum Haile head of the department, to collect the data salient for the accomplishment of Mr. Merih's mission. Carrying all the responsibilities diligently, we managed the entire work Mr. Merih was supposed to perform. In simple terms, we printed the questionnaire, explained the purpose to the participants and finally distributed it to them. Here, we cannot hide that the reaction of the students was promising for they expressed their thrill in filling such kind of questionnaire. They told us the items of the questionnaire were clear and that they were prepared to the level of their knowledge. Therefore, on behalf of the department, I would like to inform your University that we have collected the data from the participants with tremendous endeavor and smooth communication just keeping all ethical principles of data collection.

With best regards,

Head Department of English Language and Literature

Seyoum Haile (PhD), Head Department of English Language and Literature, Mizan-Tepi University Ethiopia

Cc

To: Department of English Language and Literature

MTU, Department of English Language and Literature

Informed consent.

References

Al-Shehri, A.H., 2009. Motivation and vision: the relation between the ideal L2 self, imagination, and visual style. In: Dörnyei, Z., Ushioda, E. (Eds.), Motivation, Language Identity and the L2 Self, pp. 164–171. Multilingual Matters.

Creswell, J.W., 2012. Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research, fourth ed. Pearson.

Deci, E.L., Ryan, R.M., 1985. Intrinsic Motivation and Self-Determination in Human Behavior. Plenum. https://doi.org/10.1007/978-1-4899-2271-7.

Deci, E.L., Ryan, R.M., 2000. The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. Psychol. Inq. 11 (4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01.

Dewaele, J.-M., MacIntyre, P.D., 2014. The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. Stud. Sec. Lang. Learn. Teach. 4 (2), 237–274. https://doi.org/10.14746/ssllt.2014.4.2.5.

Dörnyei, Z., 2005. The Psychology of the Language Learner: Individual Differences in Second Language Acquisition. Lawrence Erlbaum Associates.

Dörnyei, Z., 2009. The L2 motivational self-system. In: Dörnyei, Z., Ushioda, E. (Eds.), Motivation, Language Identity, and the L2 Self, Multilingual Matters, pp. 9–42.

Dörnyei, Z., 2010. Researching motivation: from integrativeness to the ideal L2 self. In: Hunston, S., Oakey, D. (Eds.), Introducing Applied Linguistics: Concepts and Skills. Routledge, pp. 74–83.

Dörnyei, Z., 2019. Towards a better understanding of the l2 learning experience, the Cinderella of the L2 motivational self-system. Stud. Sec. Lang. Learn. Teach. 9 (1), 19–30. https://doi.org/10.14746/ssllt.2019.9.1.2.

Dörnyei, Z., Ryan, S., 2015. The Psychology of the Language Learner Revisited. Routledge. https://doi.org/10.4324/9781315779553.

Dörnyei, Z., Ushioda, M., 2009. Motivation, language identities and the L2 self: a theoretical overview. In: Dörnyei, Z., Ushioda, E. (Eds.), Motivation, Language Identity, and the L2 Self, Multilingual Matters, pp. 1–8.

Dörnyei, Z., Ushioda, E., 2013. Teaching and Researching Motivation. Routledge.

Gerencheal, B., 2016. Gender differences in foreign language anxiety at an Ethiopian University: mizan-Tepi University third year English major students in focus. Afr. J. Educ. Pract. (AJEP) 1 (1), 1–16. www.iprjb.org.

Gopal, S., 2013. English in Ethiopia. Sci. Technol. Arts Res. J. 2 (1).

Haile, A., Tilahun, A., 2019. Exploring foreign language anxiety and its relationship with grade nine students' English language achievement. J. Hum. Soc. Sci. 24 (1), 67–74. https://doi.org/10.9790/0837-2401046774.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L., 2006. Multivariate Data Analysis, sixth ed. Prentice Hall.

Higgins, E.T., 1987. Self-discrepancy: a theory relating self and affect. Psychol. Rev. 94, 319–340.

Horwitz, E.K., 2010. Foreign and second language anxiety. Lang. Teach. 43 (2), 154–167. https://doi.org/10.1017/S026144480999036X.

Huensch, A., Thompson, A.S., 2017. Contextualizing attitudes toward pronunciation: foreign language learners in the United States. Foreign Lang. Ann. 50 (2), 410–432. https://doi.org/10.1111/flan.12259.

Jiang, C., Papi, M., 2021. The motivation-anxiety interface in language learning: a regulatory focus perspective. Int. J. Appl. Ling. 1–16. https://doi.org/10.1111/ijal.12375.

Mackay, J., 2014. Applications and implications of the L2 motivational self-system in a Catalan EFL context. In: Csizér, K., Magid, M. (Eds.), The Impact of Self-Concept on Language Learning, Multilingual Matters, pp. 377–400.

Mackey, A., Gass, S., 2016. Second Language Research: Methodology and Design, second ed. Routledge.

Magid, M., 2014. A motivational program for learners of English: an application of the L2 motivational self-system. In: Csizér, K., Magid, M. (Eds.), The Impact of Self-Concept on Language Learning, Multilingual Matters, pp. 333–356.

Mahmoodi, M.H., Yousefi, M., 2021. Second language motivation research 2010–2019: a synthetic exploration. Lang. Learn. J. https://doi.org/10.1080/09571736.2020.1869809.

Markus, H., Nurius, P., 1986. Possible selves. Am. Psychol. 41, 954–969.

My, T.T., 2021. Motivating second language learners: from major l2 motivation theories to implications for l2 classroom practice and research. VNU J. Foreign Stud. 37 (1), 55. https://doi.org/10.25073/2525-2445/vnufs.4657.

Papi, M., 2010. The L2 motivational self-system, L2 anxiety, and motivated behavior: a structural equation modeling approach. System 38, 467–479.

Papi, M., 2014. Language learner motivational types: a cluster analysis study. Lang. Learn. 64, 493–525.

Piniel, K., Csizér, K., 2013. L2 motivation, anxiety and self-efficacy: the interrelationship of individual variables in the secondary school context. Stud. Sec. Lang. Learn. Teach. 3 (4) https://doi.org/10.14746/ssllt.2013.3.4.5.

Ryan, S., 2008. The Ideal L2 Selves of Japanese Learners of English. Ph.D. dissertation, University of Nottingham, United Kingdom.

Subekti, A. S, 2018. L2 Motivational Self System and L2 achievement: a study of Indonesian EAP learners. Indones. J. Appl. Linguist. 8 (1), 57–67. https://doi.org/10.17509/ijal.v8i1.11465.

Taguchi, T., Magid, M., Papi, M., 2009. The L2 motivational self-system among Japanese, Chinese and Iranian learners of English: a comparative study. In: Dörnyei, Z., Ushioda, E. (Eds.), Motivation, Language, Identity and the L2 Self, Multilingual Matters, pp. 66–97.

Teimouri, Y., 2017. L2 selves, emotions, and motivated behaviors. Stud. Sec. Lang. Acquis. 39, 681–709.

Tóth, Zs, 2009. Foreign language anxiety – for beginners only? In: Lugossy, R., Horváth, J., Nikolov, M. (Eds.), UPRT 2008: Empirical Studies in English Applied Linguistics, pp. 225–246. Pécs: Lingua Franca Csoport. http://mek.niif.hu/07500/07558/07558.pdf.

Ushioda, E., 2009. A person-in-context relational view of emergent motivation, self, and identity. In: Dörnyei, Z., Ushioda, E. (Eds.), Motivation, Language Identity and the L2 Self, pp. 215–228. Multilingual Matters.