

## How to Measure and Increase Second Language Writing Motivation

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Received 04/12/2021	<b>Abstract</b>  This study aimed to develop a Second Language (L2) Writing Motivation Scale in an EFL context. Within this central aim, sub-studies in three phases were carried out: 1) to create an L2 Writing Motivation Scale, 2) to perform a confirmatory factor analysis and validate the scale, and 3) to test two path models regarding increasing students' intrinsic motivation and decreasing their amotivation towards L2 writing. The participants included a total of 657 students from different departments of three large state universities. In the first of three study phases, an L2 Writing Motivation Scale was developed. Then, exploratory factor analysis was conducted, and a three-dimension L2 writing motivation scale emerged. Here, the test-retest reliability coefficient of the scale's dimensions was found to be satisfactory. In the second phase, confirmatory factor analysis was performed, and the scale construction was validated. Finally, two path models regarding increasing students' intrinsic motivation and decreasing their amotivation towards L2 writing were found to fit perfectly. The possible
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### Keywords

Motivation to write, L2 writing motivation scale, EFL writing motivation scale, EFL writing

	contribution of the use of the scale in L2 writing pedagogy is discussed.
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## Introduction

Writing is an inseparable part of communication though it is regarded as a difficult language skill to master. It is challenging both for nonnative and native speakers since it requires bringing together many different components. Writing is an essential part of the language learning process; however, it is undervalued, in particular by young people who do not attach the necessary importance to writing. They see it as not only boring but also as a complex process (Elliot, 1999), which can result in a lack of motivation to both study writing and in attempting to write. While lack of motivation to write in their mother tongue may suggest an unwillingness to write in a second language (L2), there may be other reasons why students lack the necessary motivation. Thus, a thorough investigation into motivation to write in an L2 is required.

Motivation in language learning and teaching has been researched in a general sense rather than in terms of certain skills, namely, reading, listening, speaking, and writing (Dörnyei & Ushioda, 2021; Gardner & Lambert, 1972; Ushioda, 2011), and the number of studies focusing on motivation to write in an L2 is limited (Boscolo & Hidi, 2006; Kim & Kim, 2016; Lo & Hyland, 2007; Tahmouresi & Papi, 2021). Boscolo and Hidi (2006) state that "studies on the motivational aspects of writing are relatively recent" (p. 1). While this observation was made more than a decade ago, the claim still stands. There have been a number of research studies focusing on motivation in learning L2 writing. For instance, Lo and Hyland (2007) carried out an action research in which they tried to enhance learners' motivation and engagement in an English as a Second Language (ESL) writing program. They revealed that writing about topics of interest and that are relevant to learners both liberates them and builds confidence to write. Moreover, Kim and Kim (2016) discovered that topic choice and whether students are free to choose their writing topics influences lexical sophistication and temporal cohesion in students' writing and found that students' motivation increases where they are able to choose the writing topic.

Some studies approached motivation to write in an L2 within Dörnyei's L2 motivational self-system (Jang & Lee, 2019; Piniel & Csizer, 2014; Tahmouresi & Papi, 2021). Dörnyei (2009) states that motivation is

an essential part of acquiring an L2 and that this is a dynamic process. His theory of L2 motivational self-system puts forward three selves that L2 learners may have. The ideal-self refers to the future image that a learner would like to have. An image of a fluent L2 speaker motivates a learner to study the L2 to the extent that his/her effort brings the actual self-closer to the ideal self (Papi, 2010). The ought-to L2 self represents obligations and responsibilities of an L2 learner. A learner who wants to please their family or teacher with their language proficiency is mainly motivated by the ought-to self. The third self relates to a learner's enjoyment of the L2 learning experience rather than a self-image. The "L2 learning experience" refers to "situated, executive motives related to the immediate learning environment and experience" (Dörnyei, 2009, p. 29) and relates to elements of the L2 learning process such as the language teacher, classmates, and materials. These three types of motivational self are linked to integrative and instrumental motivation, extrinsic motivational factors, and intrinsic motivation respectively.

Of the studies that adopted Dörnyei's L2 motivational self-system, Pinel and Csizer (2014) carried out a longitudinal study in which they explored changes regarding anxiety, motivation, and self-efficacy of learners during an academic writing course. They revealed that changes in total motivation and writing anxiety were small but statistically significant across time. Also, Jang and Lee (2019), who adopted the same theory, investigated the effects of L2 self-related motivation on the quality of L2 writing and learners' writing strategies. They found that an idealized L2 self-image can largely influence L2 writing processes and products.

Other studies, on the other hand, adopted the self-determination theory to investigate L2 writing motivation (Kirk, 2011; Yesilyurt, 2008). Deci and Ryan's (2008), Self Determination Theory (SDT) focuses on human motivation and personality. It assumes that the integration of people's self-motivation and personality and the conditions which support these constructive processes arise from their inherent personal growth and innate psychological development. According to this theory, the need for autonomy, competence, and relatedness facilitates not only the tendency for growth and integration but also social development and personal well-being (Deci & Ryan, 2008). Kirk (2011) carried out an action research in a tertiary level academic writing course at a university in Japan. He investigated whether the results of the research support the concepts of SDT and whether their course component enhanced students' motivation to write in the L2. Although they incorporate its conceptual framework,

the results were not completely consistent with SDT, which indicates that some data cannot be accounted for by the theory. Yesilyurt (2008) examined EFL students' motivational patterns and their perceived autonomy in an academic writing course. He found a significant relationship between the two, stating that students with more autonomous motivation have higher perceived autonomy. The study indicates that ensuring autonomy in L2 learning can enhance both intrinsic motivation and achievement in writing courses.

According to Williams and Burden (1997), second language learning motivation is affected not only by learners' socio-cultural and contextual background but also by internal factors such as their attitude towards language learning, their intrinsic interest, and their perception of the activity's relevance and value. In this regard, many studies have explored L2 writing motivation as an essential part of language acquisition. Most empirical research studies approach L2 writing motivation within motivation in general learning activities and motivation to learn an L2 in general. The relationship between L2 writing motivation and anxiety, autonomy and language proficiency, L2 writing motivation and language learning strategies, L2 writing motivation and interest, self-regulation, self-efficacy, anxiety and L2 writing motivation and engagement (Boscolo & Hidi, 2006; Tsao et al., 2017; Yu et al., 2019, p. 129-141) have been investigated in the literature. However, these studies mainly focused on motivation in learning to write in an L2 with students' general orientation towards the language process (Gardner & Lambert, 1972; Hashemian & Heidari, 2013). Hashemian and Heidari (2013), for example, studied the relationship between motivation/attitude and L2 writing. Their results revealed that while there is no relationship between learners' instrumental motivation and their writing skills, learners with integrative motivation gain a higher writing proficiency.

As stated above, the studies that researched L2 writing motivation approached the issue with regard to language learning and teaching in a general sense. They integrated language learning motivation and learning L2 writing. However, few of them measured L2 writing motivation in particular. That is, they administered the scales for general language learning in researching L2 writing motivation. Only a few instruments developed especially for measuring L2 writing motivation (Codling et al., 1996; Yesilyurt, 2008) and demotivation (Karaca & Inan, 2020) exist in the relevant literature. Thus, the development of a scale that can be administered in the study of learners' motivation to write in an L2 is

needed to help explore the issue in detail. To this end, this study is an attempt to develop a scale to measure students' L2 writing motivation and administer it to validate its utility.

## Method

The purpose of the study was to develop a scale to measure students' motivation to write in an L2. To this end, the study adopted a sequential mixed method procedure. This procedure includes exploratory instrument design followed by confirming quantitative phases where the instrument is both tested and put to use. This procedure can help researchers by providing a reliable instrument where item generation is comprehensive and emerging items are rigorously validated (Collins et al., 2006; Zhou, 2019). The study consisted of three phases: 1) an instrument development procedure of qualitative data collection and validation, 2) a confirmatory quantitative procedure, and 3) a procedure putting the developed instrument into practice. In line with these phases, the first sub-goal of the study was to create a scale of motivation to write in an L2 and determine its validity and reliability. Confirmatory factor analysis was used to examine the factor structure of the scale. Finally, the relationship not only between L2 writing motivation and attitude towards learning English but also between L2 writing motivation and need satisfaction was explored by putting the scale into use. These sub-goals are presented through phase 1, phase 2, and phase 3 respectively.

### Phase 1: Forming L2 Writing Motivation (L2WM) Scale

The first phase aimed to create and validate a measure that examines motivation to write in English as a Second Language. In the following sections, the method is introduced and the results are presented. The test-retest reliability of the scale is provided in the end.

#### *Design*

First, an item pool was created. In the preparation of the items, primarily studies on motivation and L2 writing, motivation and L2 acquisition, and self-determination and motivation were reviewed in the relevant literature (Everhart Chaffee et al., 2014; Tang & Liu, 2018). In

addition, university students from an English language teaching department of a large university were interviewed. During the interview, the students were asked such questions as "What affects your motivation to write in English?", "Think of when you are tired of writing in English, what do you think and feel during these times?" and "What are the factors that affect your motivation in writing English?". Participants' answers to the questions were examined with the help of content analysis. Students' responses to the above questions were grouped under three dimensions: intrinsic motivation, extrinsic motivation, and amotivation. The obtained responses were transformed into scale expressions. Six items were prepared for both intrinsic and extrinsic motivation dimensions, and five for amotivation dimension. The 17 items, which were turned into a pre-pilot form of the scale, were examined by experts (other than the researchers) with a PhD in the field of educational evaluation and psychology to determine whether there is a form, expression, or participation indicator. It was suggested that 3 items in the scale should be removed from the pilot scale form in terms of language and meaning. As a result, it was decided that 14 items should remain. Then, the other phases (phase 2 and 3) were conducted with those items.

### *Sample*

Thirty university students (15 female and 15 male) from the English language teaching department of a large university were interviewed. The reason these students were chosen as participants is that they were thought to have sufficient writing experiences. In these interviews, not only were they asked questions on writing in general and writing in an L2 but also on their views on motivation to write in English.

The participants in the exploratory factor analysis group consisted of students studying in various departments of a private university where they also learn English as a second language as well as department courses. The age range of the participants was between 18 and 26, with an average age of 20.76 and a standard deviation of 1.61. Of the 192 participants, 150 were female (78.1%) and 42 were male (21.9%). Fifty-seven (29.7%) of the students were first year; 87 (45.3%) were second year; 28 were third (14.6%), and 19 (9.9%) were fourth year students. Forty of the first phase participants took part in the test-retest procedure items.

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*Instrument*

An item pool on motivation to write in an L2 was used as the initial research instrument. The relevant literature was reviewed. University students' views were also applied in this process.

**Phase 2: Confirmatory Factor Analysis and Construct Validity of the Scale***Design*

This second sub-study aimed to investigate the construct validity of the scale. The scale which emerged from the exploratory factor analysis was subjected to confirmatory factor analysis. Here, the scale's construct was examined by using a different sample. Internal consistency analysis was conducted in calculating the reliability of the sub-dimensions of the scale.

*Sample*

A total of 204 students from English language teaching departments of two large state universities, 63 male (30.9%) and 141 female (69.1%), participated in this study. The age range of the participants was between 17 and 26 years. The mean age was 20.12 and the standard deviation was 1.44.

*Instrument*

The Flow State Scale in EFL classrooms was used to examine concurrent validity of the L2 Writing Motivation Scale. The scale was designed to measure the flow experiences of students in English courses. The four-point Likert-type scale consisted of 13 items and three dimensions: flow, boredom, and anxiety. Both confirmatory and exploratory factor analyses were conducted in the development of the scale. The reliability of the sub-dimensions of the scale ranged from .78 to .82.

**Phase 3: Two Path Models Regarding Increasing Students' Intrinsic Motivation and Decreasing their Amotivation towards L2 Writing**

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**Design**

The aim of this third sub-study was to test two path models for students studying in the English Language Teaching Department by using the L2WM Scale, which had been developed in the previous two sub-studies. For this purpose, path analysis was administered to the variables observed in the study (Kline, 2015). The first model tests whether needs satisfaction mediates between positive attitudes towards learning English and intrinsic motivation to write in English. The second, on the other hand, aimed to reveal whether needs satisfaction mediates between attitude towards learning English and amotivation to write in this language. Accordingly, the hypotheses of the two models were:

1. Needs satisfaction increases English learners' intrinsic motivation to write in English.
2. A positive attitude towards learning English increases English learners' intrinsic motivation to write in English.
3. A positive attitude towards learning English positively influences the needs satisfaction of students when the path model is based on intrinsic motivation.
4. Needs satisfaction has a mediating role between a positive attitude towards learning English and intrinsic motivation to write English.
5. Needs satisfaction decreases English learners' amotivation to write in English.
6. A positive attitude towards learning English decreases English learners' amotivation to write in English
7. A positive attitude towards learning English positively influences the needs satisfaction of students when the path model is based on amotivation.
8. Needs satisfaction has a mediating role between a positive attitude towards learning English and amotivation to write English.

**Sample**

A total of 201 students, 139 (69.15%) female and 62 male (30.85%), from English language teaching departments of two large Turkish universities participated in this third sub-study. The participants were a different group to that in the second sub-study. The age range of the

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participants was between 18 and 25 years; the mean age was 21.23 and standard deviation was 1.86.

### ***Instrument***

Two existing scales were used in this final sub-study. The Attitude Toward English Lesson scale was adapted by Tunç (2003) from another scale by Aiken (1979) that was developed to measure the attitudes of students toward math and science courses. The version of the scale that was used in this study was developed by Tuncer et al. (2015). It has 19 items grouped under four dimensions, namely, learning, unwillingness, individual meaning, and importance.

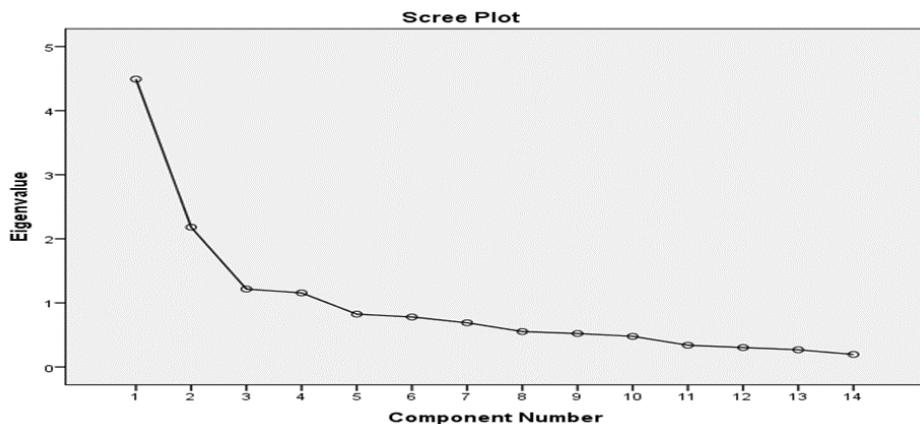
The other instrument was the General Need Satisfaction Scale. Developed by Deci and Ryan (1991) and adapted to Turkish by Cihangir-Çankaya and Bacanlı (2003), the scale has 21 items covering three needs: autonomy, competence, and relatedness. It aims to assess individuals' satisfaction of intrinsic needs for autonomy, competence, and relatedness. The competence, relatedness, and autonomy dimensions of the scale, which is a 5-point Likert type, have six, eight, and seven items respectively. The internal consistency of the scale was found to be .80 for competence, .82 for autonomy, and .81 for relatedness.

## **Results**

### **Results of Phase 1**

#### ***Initial Analyses of the Scale Construction: Exploratory Factor Analyses***

Before beginning exploratory factor analysis, whether the sample size of the study was sufficient for exploratory factor analysis was checked. To this end, the Kaiser–Meyer–Olkin (KMO) coefficient and the Bartlett's test of sphericity values were examined. The KMO value and Bartlett's test of sphericity were found to be .827 and 999, 924 ( $p<0.01$ ) respectively. The sample size was sufficient and met the assumption of multivariate normality. Exploratory factor analysis was then applied to the items.

**Figure 1.***Scatter plot*

The scatter plot in Figure 1 gathers the scale items around three factors. The total variance explained by these 14 items was found to be 56.354%. The first dimension of the scale is intrinsic motivation. Five items were included in this dimension. The variance explained by this dimension was 23.763% and the eigenvalue was 3.327. The second dimension is extrinsic motivation and consists of five items. The variance explained by extrinsic motivation dimension was 18.971% and the eigenvalue was 2.656. The third dimension is amotivation and consists of four items. The variance explained by the amotivation dimension was 13.620% and the eigenvalue was 1.907. The items and factor load of the scale are shown in Table 1.

**Table 1***The items and factor load of the L2WM Scale*

	L2WM Item	Factor Loading		
		1	2	3
Factor 1:	Intrinsic Motivation			
1	Since I reveal my ego/myself (while writing in English), my desire to write in English increases.		.873	

2	Since writing in English improves my abilities, my desire to write in English increases.	.872
3	Because I get satisfied with and enjoy learning new things, my desire to write in English increases.	.838
4	Since I want to show myself that I am a successful person, my desire to write in English increases.	.799
Factor 2:	Extrinsic Motivation	
5	Since writing in English makes me happy, my desire to write in English increases.	.817
6	When I fail the English course, my desire to write in English increases.	.749
7	When I attend courses, my desire to write in English increases.	.718
8	Because my family wants me to be an English literate, my desire to write in English increases.	.552
9	When I'm away from technology, my desire to write in English increases.	.548
Factor 3:	Amotivation	
10	Because I think it will help me find a good job, my desire to write in English increases.	.695
11	To be honest, I don't know. I really think I'm wasting my time while writing in English.	.659
12	I have no idea. I do not understand what I'm doing when I'm writing in English.	.618
13	Writing in English is far from me.	.520
14	I do not find writing in English meaningful.	.420

### ***Test-retest Reliability***

The test-retest method was used to determine the reliability of the scale. The scale was applied twice to 30 students studying in the English language teaching department at a two-week interval. The reliability value

of the intrinsic motivation dimension of the scale was found to be .89, the extrinsic motivation dimension was as .83, and the reliability of the amotivation dimension was .87.

## Results of Phase 2

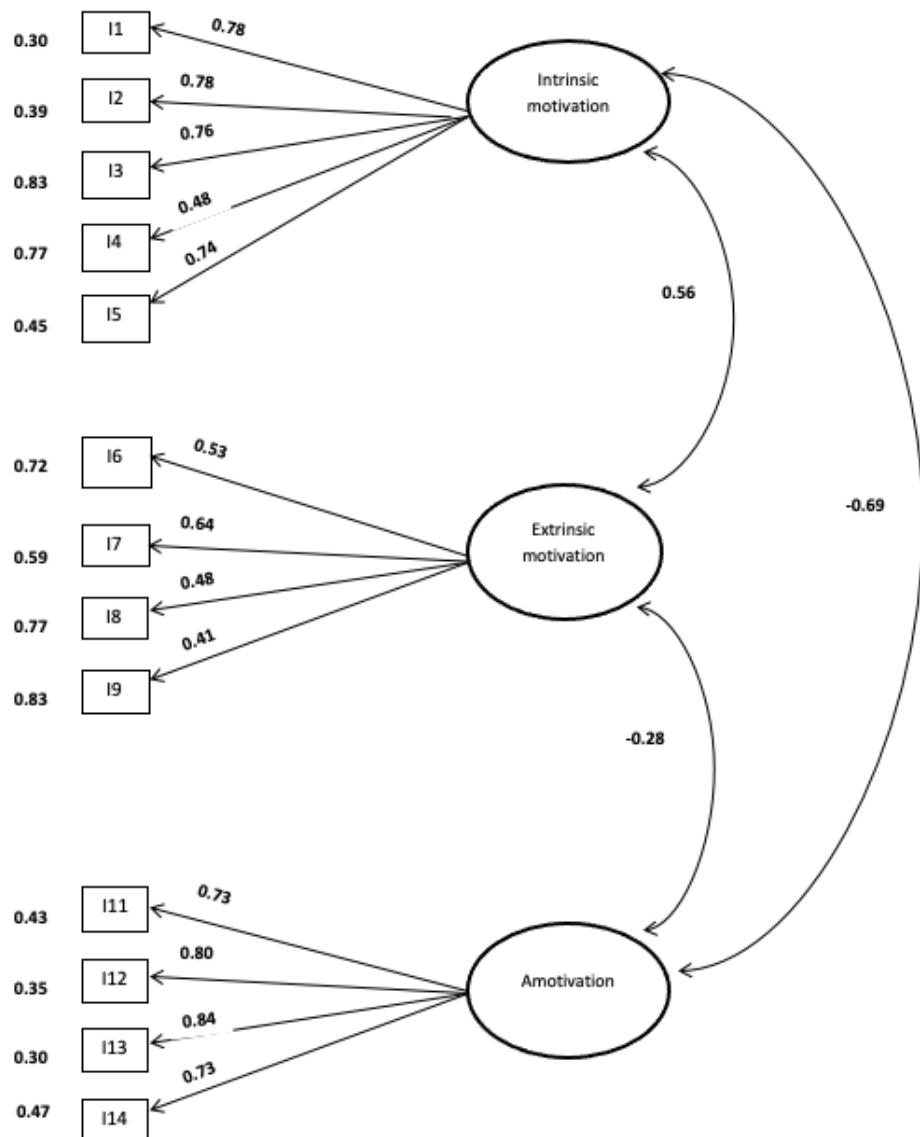
### *Confirmatory Factor Analysis and Construct Validity of the L2WM Scale*

The structure of the developed three-dimensional scale was examined through confirmatory factor analysis. The maximum-likelihood estimation method was chosen as the analysis method. The value of  $\chi^2$  was found to be 127.51 and the degree of freedom (df) = 62. In addition, goodness of fit values were determined as NFI = 0.93, NNFI = 0.95, CFI = 0.96, IFI = 0.96, RFI = 0.92, GFI = 0.91, and AGFI = 0.87, and the RMSEA value was found to be 0.072. These findings display the goodness of fit of the model (Kline, 2015). Based on the confirmatory factor analysis, it was concluded that the model was compatible with the data. However, since the factor load value of the 10th item in the exploratory factor analysis was low and the t value was insignificant, it was removed from the scale.

The number of items in the exploratory factor analysis was 14. Since the factor load of one item was less than 0.30 in the first analysis of the confirmatory factor and the t value was meaningless, the relevant item was removed from the analysis and the analysis continued with 13 items. Figure 2 presents the final version of the confirmatory factor analysis.

**Figure 2**

*Results of the confirmatory factor analysis*



Chi square=127.51, df=62, P-value=0.00000, RMSEA=0.072

**Note.** I=Item (e.g. I1=Item 1)

### ***Concurrent Validity of the L2WM Scale***

The concurrent validity of the scale was examined using the Flow State Scale in the English Course. According to the results of Pearson Correlation Analysis, there was a positive and moderate relationship between intrinsic motivation and flow, and there was a low and negative relationship between intrinsic motivation and anxiety. A low positive correlation was found between extrinsic motivation and flow. While amotivation correlated positively but low with boredom and anxiety, it has a negative correlation with flow (see Table 2).

**Table 2**

*Pearson Correlations*

	1	2	3	4	5	6
Intrinsic motivation	1					
Extrinsic motivation	,410**	1				
Amotivation	-,599**	-,184**	1			
Flow	,408**	,349**	-,343**	1		
Bored	-,112	-,060	,259**	-,214**	1	
Anxiety	-,331**	-,011	,334**	-,426**	,400*	1

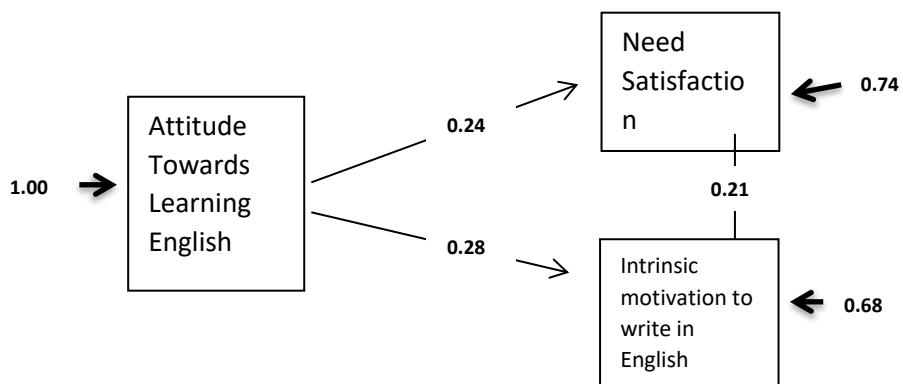
### ***Reliability***

The reliability of the sub-dimensions of the scale was calculated based on internal consistency analysis. The Cronbach Alpha value of the intrinsic motivation dimension was found to be 0.82. The value of extrinsic motivation and amotivation dimensions were determined as 0.60 and 0.86 respectively.

## Results of Phase 3

Figure 3

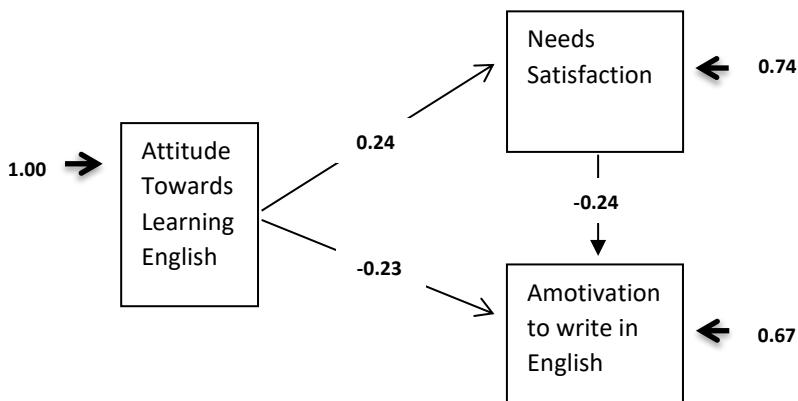
*Results of the path model regarding amotivation towards L2 writing*



The results of the path analysis found that needs satisfaction was mediated between a positive attitude towards learning English and intrinsic motivation to write English. Accordingly, one unit of increase in positive attitude towards learning English increases intrinsic motivation to write English by 0.24 ( $t = 3.55$ ;  $p < 0.01$ ) units. Similarly, one unit of increase in needs satisfaction increases the intrinsic motivation to write in English by 0.21 units. On the other hand, the mediation effect of needs satisfaction between a positive attitude towards learning English and intrinsic motivation to write English was found to be positive but of a low level. Accordingly, the mediation effect of needs satisfaction was found to be 0.05. The total effect size of the positive attitude towards learning English was 0.33. Goodness of fit values were also excellent ( $\text{Chi Square}=0.00$ ,  $\text{df}=0$ ,  $\text{RMSEA}=0.000$ ).

**Figure 4**

*Results of the Path Model regarding amotivation towards L2 writing*



The second path analysis revealed that needs satisfaction mediated between a positive attitude towards learning English and amotivation to write in English. That is, one unit of increase in a positive attitude towards learning English reduces amotivation to write in English by 0.23 unit ( $t = -3.37$ ;  $p < 0.01$ ). Similarly, one unit of increase in needs satisfaction reduces amotivation to write in English by 0.24 unit ( $t = -3.46$ ;  $p < 0.01$ ). On the other hand, the mediation effect of needs satisfaction between a positive attitude towards learning English and having intrinsic motivation to write in English was found to be positive but at a low level. Here, the mediation effect of needs satisfaction was determined as 0.06. The total effect size of the positive attitude towards learning English was -0.18. Goodness of fit values were also excellent ( $\text{Chi-Square}=0.00$ ,  $\text{df}=0$ ,  $\text{RMSEA}=0.000$ ).

### Discussion and Conclusion

The purpose of this study was to create and validate a scale to examine students' motivation to write in an L2. It also intended to explore the relationship between L2 writing motivation and attitude towards learning English and to discover any relationship between L2 writing motivation and needs satisfaction of university students who are learning English as an L2. To this end, a three-factor L2 writing motivation scale was

created and its validity and reliability scores were calculated. Based on the relevant literature review and the analyses of the interviews with university students on L2 writing motivation, the three-dimension L2WM Scale was developed. The exploratory factor analysis showed that the scale has three dimensions related to intrinsic motivation, extrinsic motivation, and amotivation. The test-retest method proved that the reliability scores of all the three dimensions of the scale were satisfactory.

An in-depth literature review revealed that only a few scales have been developed to examine the writing motivation of second language learners. Some studies adapted the Motivation to Write Scale in their L2 writing motivation studies (Akyol & Aktaş, 2018). This scale was devised by Codling et al. (1996) to explore how elementary school children value writing. The Academic Writing Motivation Questionnaire (AWMQ), developed by Payne (2012), is another scale for investigating students' writing motivation. The intention of devising this scale was that it helps college instructors understand their students' motivation to write. While these two scales help research students' motivation to write, they are not fully appropriate for examining students' L2 writing motivation as they were devised to investigate students' motivation to write in their mother tongue. Another scale that was developed by Werderich and Armstrong (2013) to explore adolescent writers' writing motivations is the Cross-Level Motivation to Write Profile. However, this scale also focuses on students' writing motivation in their mother tongue rather than on their motivation for L2 writing. The best scale found in the literature review devised particularly to measure motivational orientations of university students in writing classes was the Writing Motivation Scale. The scale was prepared by Yesilyurt (2008) to examine the motivation types of learners from the viewpoint of self-determination theory. The number of scales measuring students' L2 writing motivation is very limited. Thus, the current study is an initiative to fill this gap in the relevant literature by providing a scale devised specifically to measure students' L2 writing motivation.

The second phase of the study was carried out to obtain the confirmatory factor analysis and determine the validity of the L2WM Scale through investigating the relationship between the scale's dimensions and certain positive classroom behaviors. It was found that there is a positive and moderate relationship between intrinsic motivation and flow, and a low positive correlation between extrinsic motivation and flow. The second phase also revealed a low and negative relationship between intrinsic motivation and anxiety regarding L2 writing, and that, while

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amotivation has a positive but low correlation with boredom and anxiety, it has a negative correlation with flow.

Flow and motivation in L2 learning has been approached in a general sense. That is, studies have handled the issue under the umbrella terms of language learning, second language learning or foreign language learning (Amini & Amini, 2017) while there have been few studies investigating the relationship between motivation and flow with regard to language skills (i.e. reading, writing, speaking, listening). However, as far as we are aware, no studies have explored the flow and motivation in L2 writing. This study is therefore unique in attempting to both explore students' motivational orientations regarding L2 writing and investigate any possible relationship between these orientations and flow in L2 writing.

The third phase was implemented to test the two path models. It aimed to test 1) whether needs satisfaction mediates between a positive attitude towards learning English and intrinsic motivation to write in English, and 2) whether needs satisfaction mediates between a positive attitude towards learning English and not being motivated to write in English. The analyses revealed that needs satisfaction mediates between a positive attitude towards learning English and intrinsic motivation to write English. An increase in needs satisfaction of learners who have a positive attitude towards learning English increases their L2 writing motivation. The mediation effect of needs satisfaction between a positive attitude towards learning English and intrinsic motivation to write English was found to be positive but low. The analysis also indicates that needs satisfaction mediates between a positive attitude towards learning English and amotivation in writing in English. An increase in needs satisfaction of students who have positive attitudes towards L2 writing reduces their amotivation to write in English.

According to Self-Determination Theory, individuals are generally in three important motivational situations in the educational and teaching context. This theory states that needs satisfaction has a mediating role in creating an orientation from extrinsic motivation to intrinsic motivation (Deci & Ryan, 2008; Ryan & Deci, 2000). In addition, it accepts that as long as attitudes towards learning English are positive, the level of motivation of individuals increases (Al-Tamimi & Shuib, 2009), which concurs with the findings of this study.

The present study revealed that the satisfaction and attitude towards English reduce the amotivation of students' writing in English. In

in this sense, the results correspond to the relevant literature. The study also investigated the relationship between motivation to write in English and other variables in a domain-specific manner and in this respect it differs from the aforementioned studies. However, the results of the current study regarding L2 writing motivation confirm Self-Determination Theory's assumptions on the issue. The path analyses results show that needs satisfaction and attitude towards English have positive and low effects on students' intrinsic motivation. The reason for this can be found in the nature of intrinsic motivation: individuals with intrinsic motivation do not need external tools since they reveal their self and personality through activity (Pelletier et al., 2001).

### Implications for Teaching and Learning L2 Writing

The results of this study can contribute to students in terms of their motivation to write in a second/foreign language by helping English teachers and instructors evaluate students in terms of their motivation status regarding L2 writing. With this information they can prepare an L2 writing training program for students individually or as groups. The study also makes clear that psychological needs satisfaction of students (relatedness, autonomy, and competence) should be secured in order that their motivation to write in an L2 can increase.

This current study investigated the relationships between motivation and domain-general variables such as attitude towards learning English and general needs satisfaction of university students with the help of a developed and validated scale. However, it might be more beneficial to investigate the relationship between motivation and domain-specific variables through scales such as attitude towards L2 writing, needs satisfaction in L2 writing, and flow in L2 writing, which can be developed in further studies. In addition, the effectiveness of the curriculum can be examined with the help of the scale developed in this study. The present scale can also benefit the development of new programs.

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### References

Aiken, L. R. (1979). Attitudes toward mathematics and science in Iranian middle schools. *School Science and Mathematics*, 79(3), 229-234.  
<https://doi.org/10.1111/j.1949-8594.1979.tb09490.x>

Akyol, H. & Aktaş, N. (2018). The relationship between fourth-grade primary school students' story-writing skills and their motivation to write. *Universal Journal of Educational Research*, 6(12), 2772-2779.  
<https://doi.org/10.13189/ujer.2018.061211>

Al-Tamimi, A. & Shuib, M. (2009). Motivation and attitudes towards learning English: A study of petroleum engineering undergraduates at Hadhramout University of Sciences and Technology. *GEMA Online Journal of Language Studies*, 9(2), 29-55.  
<http://ejournal.ukm.my/gema/article/view/156/132>

Amini, D., & Amini, M. (2017). Integrating emotional, motivational and cognitive engagement to create state of flow in language learning tasks. *Journal of Language and Communication*, 4 (1), 27-41.  
[https://fbmk.upm.edu.my/upload/dokumen/20170425152835JLC\\_MARCH\\_2017.pdf#page=33](https://fbmk.upm.edu.my/upload/dokumen/20170425152835JLC_MARCH_2017.pdf#page=33)

Boscolo, P. & Hidi, S. (2006). Chapter 1: The multiple meanings of motivation to write. *Writing and Motivation*, 1-14.  
[https://doi.org/10.1163/9781849508216\\_002](https://doi.org/10.1163/9781849508216_002)

Cihangir-Çankaya, Z. & Bacanlı, H. (2003). İhtiyaç doyum ölçeğinin geçerlik ve güvenirlik çalışması [Paper presentation]. VII. Malatya Ulusal Psikolojik Danışma ve Rehberlik Kongresi, Malatya.  
[https://issuu.com/antalyaozelegitimgrubu/docs/vii\\_ulusal\\_ps\\_kol\\_oj\\_k\\_dani\\_ma\\_re](https://issuu.com/antalyaozelegitimgrubu/docs/vii_ulusal_ps_kol_oj_k_dani_ma_re)

Codling, R. M., Gambrell, L. B., Kennedy, A., Palmer, B. M., & Graham, M. (1996). *The teacher, the text, and the context: Factors that influence elementary students' motivation to write*. University of Maryland College Park. <https://eric.ed.gov/?id=ED398548>

Collins, K. M., Onwuegbuzie, A. J., & Jiao, Q. G. (2006). Prevalence of mixed-methods sampling designs in social science research. *Evaluation & Research in Education*, 19(2), 83-101.  
<https://doi.org/10.2167/eri421.0>

Deci, E. L. & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. *Nebraska symposium on motivation: Perspectives on motivation*, 38, 237-288.  
<https://psycnet.apa.org/record/1991-98255-005>

Deci, E. L. & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne*, 49(3), 182-185.  
<https://doi.org/10.1037/a0012801>

Dörnyei, Z. (2009). The L2 motivational self system. *Motivation, Language Identity and the L2 Self*, 36(3), 9-42.  
<https://doi.org/10.21832/9781847691293-003>

Dörnyei, Z. & Ushioda, E. (2021). *Teaching and researching motivation* (3rd ed.). Routledge. <https://doi.org/10.4324/9781351006743>

Everhart Chaffee, K., Noels, K. A., & McEown, M. S. (2014). Learning from authoritarian teachers: Controlling the situation or controlling yourself can sustain motivation. *Studies in Second Language Learning and Teaching*, 4(2), 355-387.  
<https://doi.org/10.14746/ssllt.2014.4.2.9>

Gardner, R. C. & Lambert, W. E. (1972). *Attitudes and motivation in second-language learning*. Newbury House.

Hashemian, M. & Heidari Soureshjani, K. (2013). An analysis of pronunciation errors of Iranian EFL learners. *Research in English Language Pedagogy*, 1(1), 5-12.  
[http://relp.khuisf.ac.ir/article\\_533586\\_3c4fed81d6a0e27daf2ac9c948c5de6b.pdf](http://relp.khuisf.ac.ir/article_533586_3c4fed81d6a0e27daf2ac9c948c5de6b.pdf)

Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing*, 16(3), 148-164.  
<https://doi.org/10.1016/j.jslw.2007.07.005>

Jang, Y. & Lee, J. (2019). The effects of ideal and ought-to L2 selves on Korean EFL learners' writing strategy use and writing quality. *Reading and Writing*, 32(5), 1129-1148.  
<https://doi.org/10.1007/s11145-018-9903-0>

Karaca, M. & Inan, S. (2020). A measure of possible sources of demotivation in L2 writing: A scale development and validation study. *Assessing Writing*, 43, 100438.  
<https://doi.org/10.1016/j.asw.2019.100438>

Kim, B. & Kim, H. (2016). Korean college EFL learners' task motivation in written language production. *International Education Studies*, 9(2), 42. <https://doi.org/10.5539/ies.v9n2p42>

Kirk, S. (2011). Application of self-determination theory to a second language writing class. *Language and Culture: The Journal of the Institute for Language and Culture*, 15, 39-70.  
[https://konanu.repo.nii.ac.jp/?action=repository\\_action\\_common\\_download&item\\_id=512&item\\_no=1&attribute\\_id=22&file\\_no=1](https://konanu.repo.nii.ac.jp/?action=repository_action_common_download&item_id=512&item_no=1&attribute_id=22&file_no=1)

Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). Guilford publications.

Lo, J. & Hyland, F. (2007). Enhancing students' engagement and motivation in writing: The case of primary students in Hong Kong. *Journal of Second Language Writing*, 16(4), 219-237.  
<https://doi.org/10.1016/j.jslw.2007.06.002>

Papi, M. (2010). The L2 motivational self system, L2 anxiety, and motivated behavior: A structural equation modeling approach. *System*, 38(3), 467-479.  
<https://www.sciencedirect.com/science/article/abs/pii/S0346251X10000734>

Payne, A. R. (2012). *Development of the academic writing motivation questionnaire* [Doctoral dissertation].  
[https://getd.libs.uga.edu/pdfs/payne\\_ashley\\_r\\_201212\\_ma.pdf](https://getd.libs.uga.edu/pdfs/payne_ashley_r_201212_ma.pdf).

Piniel, K. & Csizér, K. (2014). Changes in motivation, anxiety and self-efficacy during the course of an academic writing seminar. *Motivational Dynamics in Language Learning*, 164-194.  
<https://doi.org/10.21832/9781783092574-015>

Ryan, R. M. & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.  
<https://doi.org/10.1037/0003-066x.55.1.68>

Tang, C. & Liu, Y. (2018). Effects of indirect coded corrective feedback with and without short affective teacher comments on L2 writing performance, learner uptake and motivation. *Assessing Writing*, 35, 26-40. <https://doi.org/10.1016/j.asw.2017.12.002>

Tahmouresi, S. & Papi, M. (2021). Future selves, enjoyment and anxiety as predictors of L2 writing achievement. *Journal of Second Language Writing*, 53, 100837.

Tsao, J., Tseng, W., & Wang, C. (2017). The effects of writing anxiety and motivation on EFL college students' self-evaluative judgments of corrective feedback. *Psychological Reports*, 120(2), 219-241.  
<https://doi.org/10.1177/0033294116687123>

Tuncer, M., Berkant, H., & Doğan, Y. (2015). İngilizce dersine yönelik tutum ölçüğünün geçerlik ve güvenirlilik çalışması. *Eğitim ve Öğretim Araştırmaları Dergisi*, 4(2), 260-266.  
[http://www.jret.org/FileUpload/ks281142/File/26.murat\\_tuncer..pdf](http://www.jret.org/FileUpload/ks281142/File/26.murat_tuncer..pdf)

Tunç, S. Ö. (2003). *Use of language learning strategies in relation to student characteristics at Başkent University* [Unpublished master's thesis]. Başkent University.

Ushioda, E. (2011). Language learning motivation, self and identity: Current theoretical perspectives. *Computer Assisted Language Learning*, 24(3), 199-210.  
<https://www.tandfonline.com/doi/full/10.1080/09588221.2010.538701?scroll=top&needAccess=true>

Werderich, D.E. & Armstrong, S.L. (2013). Examining the conceptualizations, perceptions, and practices of adolescent writers. *Literacy Research and Instruction*, 52, 339 - 373.  
<https://doi.org/10.1080/19388071.2013.812167>

Williams, M. & Burden, R. L. (1997). *Psychology for language teachers: A social constructivist approach*. Ernst Klett Sprachen.

Yu, S., Zhou, N., Zheng, Y., Zhang, L., Cao, H., & Li, X. (2019). Evaluating student motivation and engagement in the Chinese EFL writing context. *Studies in Educational Evaluation*, 62, 129-141.  
<https://doi.org/10.1016/j.stueduc.2019.06.002>

Zhou, Y. (2019). A mixed methods model of scale development and validation analysis. *Measurement: Interdisciplinary Research and Perspectives*, 17(1), 38-47.  
<https://doi.org/10.1080/15366367.2018.1479088>