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Turkish Adaptation of the Situated Academic Writing Self-Efficacy Scale: The Validity and Reliability Study*

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Abstract. This study aims to adapt the Situated Academic Writing Self-Efficacy Scale into Turkish and conduct validity and reliability studies. The study group of this research consisted of 245 (62 male, 183 female) university students. In the study, the Situated Academic Writing Self-Efficacy Scale, the Academic Procrastination Behavior Scale, and the Student Attitudes and Beliefs Regarding Authorship Scale were used. As a result of the exploratory factor analysis, it was seen that the scale had a three-factor structure, and this structure explained %57.01 of the total variance. The results of confirmatory factor analysis revealed that the fit values of the three-factor structure were at a good level (χ^2=65.870, df=51, p=.079, χ^2/sd=1.292, IFI=.966, CFI=.965, SRMR=.036, RMSEA=.047). In the criterion-related validity study, there was a negative relationship between the Situated Academic Writing Self-Efficacy Scale and the Academic Procrastination Behavior Scale scores (r=-.38, p<.01), and a positive relationship between the Student Attitudes and Beliefs Regarding Authorship Scale scores (r=.64, p<.01) meaning that a significant correlation was found. The McDonald's ω coefficient calculated within the scope of the reliability study was .84 for the whole scale, .73 for reflection, .73 for creativity, and .68 for writing skills. In addition, the peer-half correlation was calculated as .73, and significant differences were found between the lower and upper groups of %27. When the item-total test correlations of the scale were examined, it was seen that all items were above .40. Finally, the test-retest correlation was calculated as .94. The findings revealed that the measurements made in the group of university students in Turkey gave valid and reliable results.

Keywords: Academic writing, self-efficacy, validity, reliability.

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1. INTRODUCTION

Writing, which can be expressed as the transfer of all kinds of feelings, thoughts, events, and situations within the framework of certain rules; is an important way to communicate. Karadağ and Maden (2013) explained writing as expressing the meaning to be conveyed with codes and symbols that are accepted by everyone. According to the definition, it is seen that the main purpose of the writing process is the transfer and the writing is a means of conveying what is intended to be conveyed. In addition to being a tool to convey one's thoughts and feelings, writing also provides information about the other person as a reader. In this respect, it is one of the ways to activate communication (Bayat, 2014). Writing, which is a work of creating a text to convey information, should be carried out in order and integrity to convey the meaning to the reader. While the words are used to create meaningful sentences, sentences also create paragraphs that convey the message to be given in integrity (Aktaş & Gündüz, 2004). Cognitive elements such as grammar, text creation skills, world knowledge, and thinking that make up writing cause writing become a complex process and to be challenging for individuals (Evans, 2001; Zorbaz, 2011).

As a type of writing that includes its own writing rules, academic writing has some features that differ from personal writing experiences (Oshima & Hogue, 2007 as cited in Deniz & Karagöl, 2017). The fact that the language used is official does not include the use of slang and limits the use of abbreviations without explanation makes this type of writing different from other types. Various definitions have been made, emphasizing different aspects of what academic writing is. Kan (2017) defined academic writing as a writing process that requires a skill beyond writing includes the use of language in a scientific context, and has its own rules. While Bayat (2014) defines academic writing as the type of writing in which the thought is conveyed by justifying and structuring, Bahar (2014) defines it as the writing of the research by both containing the general rules of the writing and taking into account all the principles of the scientific research process, and before an article is academic writing drew attention to the existence of a research process carried out. Reports such as articles, projects, thesis, and papers that emerge at the end of a certain research process constitute various types of academic writing (Deniz & Karagöl, 2017). In addition, according to Whitaker (2009), term papers, discussion papers, and analysis reports written by university students within the scope of university courses are also within the scope of academic writing.

Studies show that the criteria for the acceptance of academic texts that are created in parallel with the progress of students between curricula or changing programs differ (Mitchell & McMillan, 2018). In particular, some structural arrangements and strategies are required to facilitate the understanding of the audience (Davis & McKay, 1996). These regulations; refer to a process that starts with determining a topic and proceeds as thinking about the topic, doing research, putting forward a thesis, planning, writing, and making the necessary arrangements (Whitaker, 2009). This process is not mechanical but a critical thinking process and becomes increasingly complex and requires the individual to use metacognitive skills (Plakhotnik & Rocco, 2016). The fact

that the academic writing process requires these multiple tasks together can be challenging for students and may affect their self-confidence in their writing (Müldür & Yalçın, 2019; Tunca & Alkın-Şahin, 2014). Students' perceptions of their efficacy in writing are important in terms of causing bipolar reactions such as fulfilling writing tasks or avoiding writing (Daly & Wilson, 1983).

According to Bandura (1977), self-efficacy expresses the belief in the capacity of the individual to organize and implement the activities necessary for a certain performance; Academic-self-efficacy refers to one's belief that one can achieve an academic task or a particular academic goal at a certain level. Therefore, self-efficacy is also very important when it comes to academic performance. Even before starting a job, individuals' low belief that they can achieve that job can prevent them from taking initiative or cause them not to insist on overcoming the difficulties they encounter even if they start. As self-efficacy belief increases, one's effort, resilience, and determination for the relevant action also increase (Pajares, 2002). While perceiving a performance-related competence as low affect performance negatively, perceiving it as high has a positive effect on performance. This situation is also observed in completing a job successfully in the academic field (Zimmerman, 1995). Studies have revealed that a high level of academic self-efficacy is associated with high field-specific motivation and fulfilling academic requirements (Aktaş, 2017; Alemdağ, Öncü & Yılmaz, 2014; Koca & Dadandı, 2019; Şeker, 2017). Writing, which is one of the academic tasks, is related to one's motivation and perception of efficacy regarding the writing process (Arslan, 2018). In this case, measurement tools to evaluate academic writing competence are seen as a necessity to be used in studies to evaluate students' writing experiences, which is one of the academic tasks, and related factors.

When the existing measurement tools in the literature are examined, it is seen that the scales related to academic writing proficiency are limited in quantity, and the existing scales are aimed at measuring general writing proficiency and mostly at the primary and middle level of education grades. The Writing Self-Efficacy Scale developed by Şengül (2013) and the Writing Self-Efficacy Scale adapted by Yılmaz-Soylu and Akkoyunlu (2019) is for secondary school students. The scale developed by Gündeş, Kuşdemir, and Bulut (2017) aims to evaluate the writing self-efficacy of primary school fourth-grade students. When the existing scales for university students are examined, it is seen that the scale adapted to Turkish by Çelikkaleli and Yıldırım (2015) is a one-dimensional measurement tool for evaluating various dimensions of the writing process and self-regulation for writing motivation. Finally, the scale adapted into Turkish by Deniz and Doğan (2020) aims to evaluate university students' attitudes towards authorship in three sub-dimensions: author trust, value given to the article, and identification with authorship. It is seen that the scales in question are not intended to measure academic writing proficiency directly. Based on this, it is possible to say that a measurement tool is needed for this purpose. This study aims to adapt a measurement tool developed by Mitchell et al. (2021) into Turkish to meet the existing need and to be used in studies

planned to be done related to academic writing and to carry out validity and reliability studies.

2. METHOD

Study Group

The data of the study were collected from a total of 245 university students from three different sample groups through convenient sampling. Of the 72 university students reached for the pilot study, 45 were female (%62.5), 27 were male (%37.5), and the mean age was 22.05. Of the 143 university students reached for the main study, 113 were female (%79) and 30 were male (%21), with a mean age of 23.09. Finally, the test-retest application was carried out with 30 university students. Ethical approval was obtained from Muğla Sıtkı Koçman University Social and Humanity Sciences Research Ethics Committee with decision number 213 and dated 24.05.2021.

Process

The ethical permission required for the conduct of this study was approved by the Social and Human Sciences Research Ethics Committee of Muğla Sıtkı Koçman University with protocol number 210241. For permission to adapt the scale to the sample of university students in Turkey, first of all, Kim M. Mitchell was contacted electronically, and the necessary permission was obtained. Then, the scale permissions to be used for criterion-related validity and the necessary ethics committee permission to carry out the research were obtained. Then, the translation of the original English form of the scale into Turkish was carried out and the Turkish form of the measurement tool was created by creating a 5-point Likert-type scoring key. The Turkish form created by the researchers (SAWSES-Turkish) was checked in terms of linguistic translation by a person whose mother tongue is English and who is fluent in both languages, and it was sent to the related field academics who completed their doctorate education, and expert opinion was sought. In line with the opinions of eight experts, the Turkish form of the scale was arranged to represent the translation most appropriately, and the electronic average was transferred via Google Forms and a pilot application was carried out. After the pilot application, the data were analyzed, necessary adjustments were made in four items (6, 14, 15, and 16) to facilitate understanding, and thus the scale was given its final form.

Data Collection Tools

The Situated Academic Writing Self-Efficacy Scale (SAWSES)

The Situated Academic Writing Self-Efficacy Scale was developed by Mitchell et al. (2021) to assess university students' proficiency in academic writing experiences such as homework, projects, essays, seminars, and dissertations. Unlike other measurement tools that aim to measure competence in academic writing, this scale was developed based on Bandura's theory and a socially structured writing model. The scale consists of creativity, reflection, and writing skills sub-dimensions, in which students evaluate their

potential to develop developmentally mastering various aspects of writing. The writing skills dimension includes language, synthesis, and emotional control potential; the reflection dimension facilitating writing such as teachers and academic resources and the potential to relate to the self through reflection; The creativity dimension evaluates the transformative writing potential in which the self can be revealed. The scale, which consists of 16 items in total, consisting of 5 items for creativity, 8 items for reflection, and 3 items for writing skills, is scored on a linear line graded between 0 and 100. There is no reverse-scored item on the scale. Sub-dimensions can also be scored, and it is also possible to get a total score from the scale. The total score obtained from the sub-dimensions indicates the high level of competence in that dimension, and the total score obtained from the scale indicates the high level of academic writing competence. The scale development study was carried out by collecting data from three different sample groups (255 nursing students; 543 undergraduate and 264 graduate students) in two independent studies. As a result of the Exploratory Factor Analysis conducted with the data obtained from the sample of nursing students for which the original scale was developed, it was concluded that the three-factor structure explained %61 of the total variance of the scale. The fit values obtained as a result of Confirmatory Factor Analysis are RMSEA=.068, TLI=.95, CFI=.97 and SRMR=.03. The fit values obtained in the validation study of the measurement tool for undergraduate students were RMSEA=.093, CFI=.919 and SRMR=.057; The fit values obtained in the validation study for postgraduate students were RMSEA=.068, CFI=.947 and SRMR=.041. The correlation value obtained between the parallel forms applied for the reliability study was (r)=.91 for the whole scale, reflection (r)=.88, creativity (r)=.88, writing skills (r)=.85. Cronbach Alpha coefficients obtained from two studies; for the whole scale, (α)=.94-.95, reflection (α)=.88-.91, creativity (α)=.88-.91, writing skills (α)=.79-.81.

Academic Procrastination Behavior Scale (APBS)

The Academic Procrastination Behavior Scale was developed by Ocak and Bulut (2015) to evaluate students' academic procrastination behaviors based on various factors. Consisting of four dimensions, namely irresponsibility, perceived quality of the academic task, negative perception towards teachers, and academic perfectionism, and 38 items in total, the scale has a 5-point Likert-type rating. Options for each item range from "strongly disagree" to "strongly agree". There are 11 reverse-scored items on the scale. The high scores obtained from the sub-dimensions indicate that the academic procrastination behavior belongs to that dimension, and the total score indicates that the academic procrastination behavior is at a high level. As a result of the analyzes made, it was seen that the load values of each factor varied between .52 and -.82. The Cronbach Alpha coefficient calculated for the reliability study ranges between .64 and .95 for the sub-dimensions, and .95 for the whole scale. In this study, the Cronbach Alpha internal consistency coefficient of the APBS was recalculated and found to be .97 for the entire scale.

Student Attitudes and Beliefs on Authorship Scale (SABAS)

Student Attitudes and Beliefs on Authorship Scale was adapted into Turkish by Deniz and Doğan (2020) to evaluate students' attitudes and beliefs towards authorship. The scale is a 6-point Likert-type measurement tool, consisting of three sub-dimensions, author trust, value given to the article, and identification with authorship, and a total of 17 items. Items are rated according to options ranging from "strongly disagree" to "strongly agree". There is no reverse-scored item on the scale. The fit values obtained as a result of the Confirmatory Factor Analysis were χ^2/df=3.85, RMSEA=.077, CFI=.97, TLI= .89, SRMR=.51. The McDonald's ω internal consistency coefficient calculated for the reliability study was found to be between .77 and .86 for the sub-dimensions and .91 for the whole scale. Within the scope of this study, McDonald's ω internal consistency coefficient of the scale was recalculated, and this value was found to be .93 for the whole scale.

Data Analysis

Data analysis was carried out using the Jamovi 2.0.0.0 and Amos 24 package programs. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) was performed for the validity study of the scale, and criterion-related validity and item factor loading values were examined. For the reliability study, McDonald's ω (Omega) coefficient was calculated, test-retest, split-half methods were applied, item-total test correlations and lower-upper group difference were examined.

Before the data were included in the analysis, standardized z scores and kurtosis-skewness values were checked for each item. As a result of examining the standardized z values to determine the extreme values, 8 data with a relevant value above 4 were not included in the analysis (Tabachnick & Fidell, 2013). The acceptable range for kurtosis and skewness values is -1.5 to +1.5 according to the literature (Tabachnick & Fidell, 2013). When the kurtosis and skewness values of the data of this study were examined, it was determined that they varied between -.847 and .158, that is, they were within acceptable limits. In addition, before the factor analysis, it was also checked whether the sample suitability criterion was met. According to Büyüköztürk (2004), the Kaiser-Meyer-Olkin (KMO) value being higher than .60 and the Barlett Sphericity test being significant indicates the suitability of the sample for factor analysis. In this study, the KMO value of the group whose data were collected for factor analysis was calculated as .838, and the result of the Barlett Sphericity test was calculated as χ^2=467.976 (p<.001). These values obtained show that the data are suitable for factor analysis.

CFA was applied to verify the structure obtained as a result of EFA and the adequacy of the fit values of the model was examined. Principal component analysis and the Varimax factor rotation method were used as estimation methods. χ^2/sd ratios were taken into account in examining the fit values of the models. For the χ^2/sd index, $0 \leq \chi^2 \leq 2$ indicates a good fit (Schermelleh-Engel & Moosbrugger, 2003). In addition, alternative fit indices (IFI, CFI, RMSEA, and SRMR) were also examined. These fit values are generally

accepted as IFI and CFI >.90 (Hu & Bentler, 1999). While RMSEA and SRMR ≤.05 are accepted as a perfect fit, RMSEA ≤.08 and SRMR ≤.10 are also within acceptable limits (Schermelleh-Engel & Moosbrugger, 2003).

3. FINDINGS

Findings Regarding The Validity of SAWSES-Turkish Form

The factor structure of SAWSES-Turskish obtained as a result of EFA, item-total test correlations, and the t-test results regarding the significance of the difference between %27 lower and upper groups are presented in Table 1.

Table 1

The Factor Structure of SAWSES-Turkish Obtained As A Result of EFA, Item-Total Test Correlations, and The T-Test Results

SAWSES-Turskish form item number	SAWSES-Orijinal form item number	Reflection	Creativity	Writing skills	ITTC	Lower-upper group difference (t)
I1	I6	.807			.42	6.96*
I2	I7	.689			.50	8.86*
I3	I16	.607			.54	8.20*
I4	I10	.578			.60	8.60*
I5	I4		.824		.46	8.36*
I6	I12		.686		.50	8.07*
I7	I2		.683		.52	8.45*
I8	I3		.606		.49	7.72*
I9	I1			.790	.38	6.42*
I10	I9			.626	.58	8.51*
I11	I15			.553	.63	10.16*
I12	I14			.523	.40	6.06*
N		135				*p<.01
Eigenvalues		4.46	1.25	1.12		
Explained variance (%)		37.22	10.43	9.35		
Total explained variance (%)		57.01				
McDonald's (ω)		.73	.73	.68		
The whole scale (ω)		.84				

When Table 1 is examined, the first factor called "Reflection" consists of 4 items and factor load values vary between .57 and .80. The factor with an eigenvalue of 4.46 alone explains %37.22 of the variance of Academic Writing Self-Efficacy. The second factor, called "Creativity", consists of 4 items and factor load values vary between .60 and .82. The factor with an eigenvalue of 1.25 alone explains %10.43 of the variance. The third factor, called "Writing Skills", consists of 4 items and factor load values range from .52 to .79. The factor with an eigenvalue of 1.12 alone explains %9.35 of the variance. The three-factor structure obtained as a result of EFA explains %57.01 of the total variance of the scale. The eigenvalue factor graphics of the scale is presented in Figure 1. Since items 5 and 11 in the original scale were loaded on all three factors, and items 8 and 13 were loaded on more than one factor with a difference of less than .10, they were excluded from the Turkish form. CFA was carried out on a 12-item form.

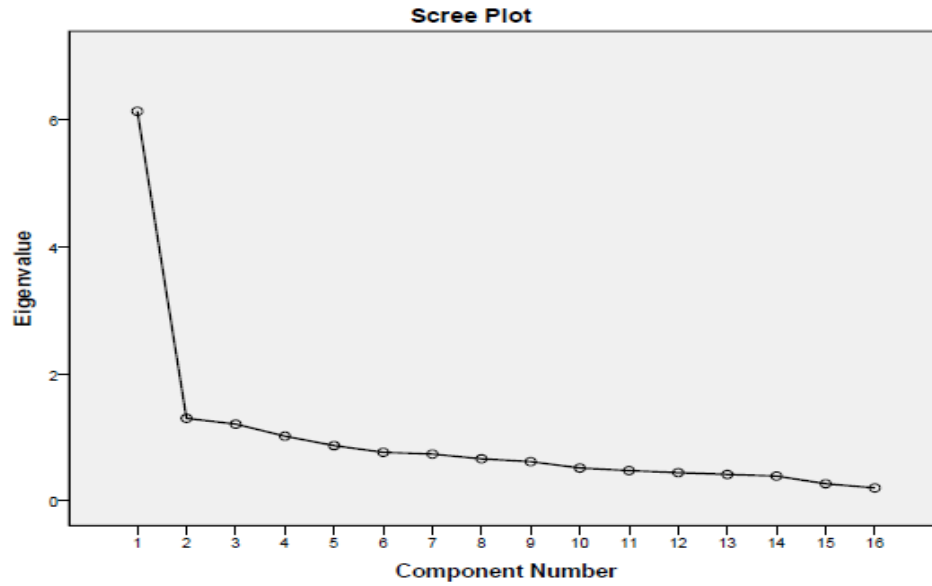

Figure 1. The Eigenvalue Factor Graphics of SAWSES-Turkish Form

Findings Regarding Construct Validity of SAWSES-Turkish Form

CFA was performed to evaluate whether the factor structure of SAWSES-Turkish obtained as a result of EFA was confirmed or not. The alternative model strategy was used by executing a way similar to the structure of the original measurement tool. DFA results are presented in Table 2. When Table 2 is examined, the first-level multifactorial model (χ^2/sd=1.292) and the second-level multifactorial model (χ^2/sd=1.292) compared to the first-level single-factor model (χ^2/sd=2.084) both in terms of χ^2/sd ratios and in terms of fit. values were found to have a better fit. It is seen that the IFI=.966, CFI=.965, SRMR=.036 and RMSEA=.065 fit values of the first-level multi-factor model and the second-level multi-factor model are the same and are within the limits indicating a good

fit. It can be said that both models are acceptable, but considering that it is parallel to the structure of the original measurement tool, it has been decided that the second level multi-factor model is appropriate for the sample of university students in Turkey.

Table 2.

Fit Values of Alternative Models of SAWSES-Turkish Form

Model	χ^2	sd	*p*	χ^2/sd	IFI	CFI	SRMR	RMSEA
First level single factor model	112.557	54	.000	2.084	.864	.860	.049	.090
First-level multi-factor model	65.870	51	.079	1.292	.966	.965	.036	.047
Second-level multi-factor model	65.870	51	.079	1.292	.966	.965	.036	.047

When the relations between the reflection, creativity, and writing skills sub-dimensions of SAWSES-Turkish are examined; It is seen that there are significant relationships between Academic Writing Self-Efficacy and reflection .91 (p<.01), creativity .73 (p<.01) and writing skills .88 (p<.01). Path coefficients of reflection vary between .56 and .73, path coefficients of creativity vary between .60 and .64, and path coefficients of writing skills vary between .45 and .79 (Figure 2).

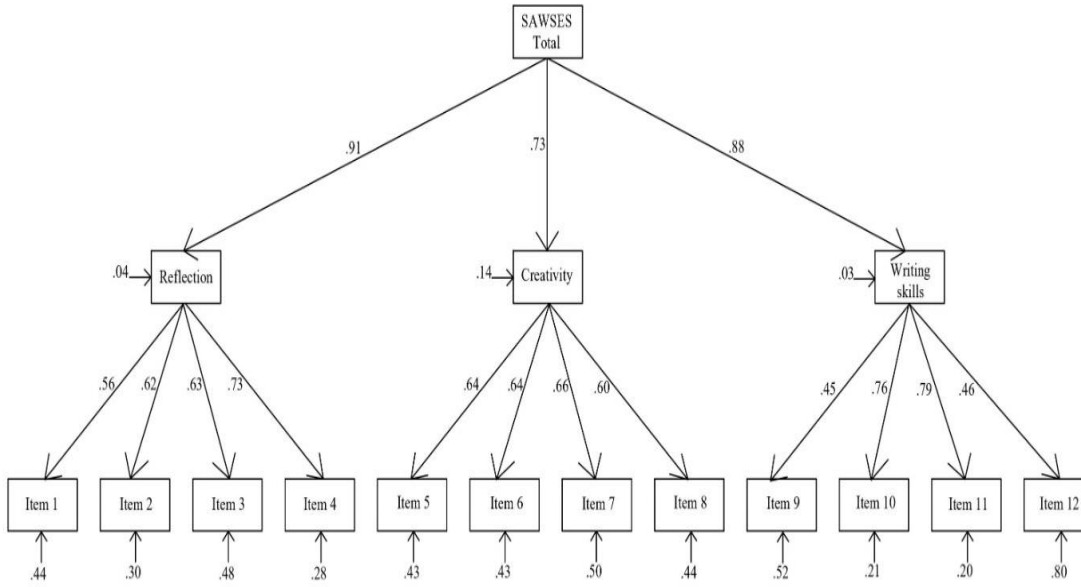

Figure 2. Standardized path coefficients for the SAWSES-Turkish form

Findings Related to Criterion-Related Validity of SAWSES-Turkish Form

Within the scope of the criterion-related validity study of the SAWSES-Turkish form, its relationship with the Academic Procrastination Behavior Scale and the Student Attitudes and Beliefs Regarding Authorship Scale scores was examined, and the results are shown in Table 3. When the table is examined, it is seen that there is a significant relationship between SAWSES-Turkish (mean=46.79, sd=6.91) and APBS (mean=91.02, sd=32.99) and SABAS (mean=80.67, sd=13.29). There was a moderate negative correlation (r=-.38, p<.01) between SAWSES-Turkish scores and APBS scores, and a moderate positive correlation (r=.64, p<.01) between SAWSES-Turkish scores and SABAS scores. The findings show that as academic writing self-efficacy scores increase, academic procrastination behavior scores decrease and student attitudes and beliefs towards authorship scores increase.

Table 3

Findings related to criterion-related validity of SAWSES-Turkish form

	$\bar{X}$	Sd	1.	2.	3.
1. SAWSES-Turkish	46.79	6.91	1	-.38**	.64**
2. APBS	91.02	32.99		1	-.38**
3. SABAS	80.67	13.29			1

**p<.01

Findings Regarding the Reliability of the SAWSES-Turkish form

The findings regarding the McDonald's ω coefficient, item-total test correlations, and the lower-upper group difference calculated within the scope of the reliability study of the SAWSES-Turkish form are presented in Table 1. McDonald's ω coefficient calculated for the whole scale was .84; For sub-dimensions, reflection is .73, creativity is .73 and writing skills are .68. When the item-total test correlations are examined, it is seen that the smallest value of all items on the scale is .40. The Pearson correlation coefficient was calculated by dividing the scale into two equal parts as even (mean=23.51 sd=3.20) and odd (mean=24.11, sd=3.21) items were found to be .73. In addition, when the difference between the two groups for each item was examined by dividing the scale into 27% lower and upper groups, it was observed that there were significant differences (Table 1). Finally, the test-retest application was made within the scope of the reliability study. The correlation coefficient between the results of the pre-test (mean=46.56 sd=7.33) and the post-test (mean=47.43 sd=7.23) applied to the same group with 14-day intervals was found to be .94.

4. RESULTS, DISCUSSIONS AND SUGGESTIONS

In this study, in which the Turkish adaptation of the situated Academic Writing Self-Efficacy Scale was made, the structure of the original scale was tried to be verified in the sample of university students in Turkey as a result of the analyzes made within the scope of the validity and reliability study. First of all, EFA was applied to determine the factor structure of the scale. As a result of EFA, it was seen that the scale had a three-factor structure. This structure is similar to the structure obtained in the study of scale development by Mitchell et al. (2021), but some items were placed under different factors from the ones they were on the original scale. Items 9, 14, and 15 under the reflection factor in the original scale were included in the writing skills factor, the 12th item in the creativity factor was included in the reflection factor, and the 2nd and 3rd items under the writing skills factor were included in the creativity factor. Erkuş and Selvi (2019) state that it is possible to encounter different factor structures in adaptation studies involving different groups, since psychological variables are open to cultural influence. Therefore, in this adaptation study, it is thought that the fact that the items are grouped differently from the original scale may be due to the fact that the culture to which the scale was adapted shows different characteristics compared to the culture in which the scale was developed. As a result, this three-factor structure together explains %57.01 of the total variance. It was seen that the three-factor structure in the original scale explained %61 of the total variance. The rate obtained in this study is lower than the original scale, but it can be said that it is at a sufficient level since it is in the range of %40-60 as the rate of variance accepted in the field of social sciences (Tavşancıl, 2006). When the factor loads of the items in the scale are examined, it is seen that they are between .52 and .80, and these values are at an acceptable level since they are above the .30 criterion value (Kline, 1994). As a result of EFA, items 5 and 11 in three factors and items 8 and 13 with similar factor loads in more than one factor were removed from the scale, and CFA was applied to confirm this structure. When the fit values obtained as a result of CFA were examined, it was seen that χ^2/sd, IFI, CFI, SRMR, and RMSEA values were within the required limits and indicated good fit (Table 2). When the fit values obtained in the original scale are examined, it is seen that RMSEA=.074, CFI=.942, and SRMR=.0433 (Mitchell et al., 2021). It is seen that the fit values obtained in this study are close to the values in the original scale, and some values are closer to a good fit than the original study. According to the results of the analysis, the three-factor structure of the scale was confirmed, and the path coefficients of all items and factors were found to be significant.

Within the scope of the criterion-related validity study, the correlation between SAWSES-Turkish form and APBS and SABAS scores was examined. The findings revealed that academic writing self-efficacy was positively related to student attitudes and beliefs about authorship, and negatively related to academic procrastination behavior. When the literature is examined, no finding directly reveals the relationship between these variables and academic writing, but academic writing can be considered as one of the

academic tasks in terms of creating the written products in which academic studies are presented (Deniz & Karagöl, 2017). This indicates that academic self-efficacy will also include self-efficacy in academic writing and that academic writing self-efficacy can be interpreted based on studies related to academic self-efficacy. When studies on academic self-efficacy are examined, it has been found that academic self-efficacy predicts academic procrastination behavior (Akbay & Gizir, 2010; Albayrak, Yazıcı & Reisoğlu, 2016; Gün, Turabik & Atanur-Baskan, 2020). When the relationships between academic self-efficacy and academic procrastination are examined, it is seen that there is a negative relationship (Gültekin & Gürer, 2018; Şengül & Seyfi, 2020). On the other hand, it was seen that self-efficacy in academic writing was positively related to attitudes and beliefs about authorship. Attitudes and beliefs about authorship include dimensions such as the value given to the article, identification with authorship, and author trust. This suggests that self-efficacy in academic writing will be related to these dimensions. The findings can be interpreted as the SAWSES-Turkish form meets the theoretically expected structure.

McDonald's ω coefficient was calculated within the scope of the scale's reliability study. It was observed that the reliability coefficients obtained for the whole scale, as well as for the reflection and creativity sub-dimensions, were above the .70 value, which is accepted as a criterion (Fraenkel, Wallen & Hyun, 2012), but the reliability coefficient of the writing skills dimension was below this value. In the original study, the Cronbach Alpha value obtained for the whole scale was found to be .94, and for the sub-dimensions between .79 and .88 (Mitchell et al., 2021). McDonald's ω values obtained in this study were found to be lower than the original study for the sub-dimensions and the whole scale. When the reliability of the scale between the halves was examined, a correlation of .73 was obtained between the halves. This value shows that the relationship between the two halves of the scale is high. Another analysis regarding the reliability of the scale is to examine the difference between the %27 lower and upper groups. As a result of the evaluation, it was seen that there were significant differences between the lower and upper groups for all items. According to Büyüköztürk (2010), what is expected in a measurement tool is the differentiation of the answers and scores of the upper and lower groups to the items. According to the findings obtained in the study, this criterion regarding item discrimination was met. For item discrimination, item-total test correlations were also examined, and when the obtained values were examined, it was seen that they were above the .30 criterion value (Büyüköztürk, 2010). Finally, test-retest correlations were calculated within the scope of the scale's reliability analysis. According to Tavşancıl (2006), these measurements made to determine whether the scale is stable over a certain period should have a correlation value of .70 or higher. In this study, the correlation between the two measurements applied 14 days apart was found to be .94. The result obtained shows that the scale can measure consistently.

All analyzes performed as a result of the validity and reliability studies of the SAWSES-Turkish form revealed that the scale is valid and reliable for use in the sample of university students in Turkey. However, it is possible to say that this study has some limitations, like any other study. The sample group of this study consists of undergraduate university students. Another limitation is that the sample was determined by convenient sampling and was limited to as many students as possible.

Some suggestions can be made considering the limitations of the studies in which this measurement tool will be used. First of all, considering that most postgraduate students, lecturers, and faculty members have academic writing experience in Turkey, the validity and reliability of this measurement tool can be studied for various groups by using the purposive sampling method. In addition, the relationship between academic writing self-efficacy and variables such as academic procrastination, academic success, academic motivation, and academic stress can be examined.

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1st author and 2nd author planned and modeled the study. 1st author contributed to the collection and analysis of data. The 2nd author, together with the 1st author contributed to the interpretation of the results, literature review, and discussion sections. The 1st author wrote the final version of the article. Both authors have read and approved the final version of the study. (1st author contribution rate: %60, 2nd author contribution rate: %40)

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