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Language Learning Styles and Writing Strategies as Predictors of Writing Anxiety among Iranian EFL Learners

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ABSTRACT

The main aim of this study was to see if a significant relationship existed among Iranian EFL learners' Learning Styles, Writing Strategies and Writing Anxiety. To this effect, 183 EFL learners studying English in three language institutes from the upper intermediate and advanced proficiency levels were selected based on convenient nonrandom sampling procedure. They completed the Kolb Learning Style (KLS), the Inventory of Learning Strategies for writing (ILS) and the Foreign Language Writing Anxiety Scale (FLWAS) self-report questionnaires. However, after the initial screening, 21 cases were discarded as their answers were incomplete, leaving 162 participants in the final sample. The relationship among EFL learners learning styles, writing strategies and writing anxiety were analyzed using the Spearman rank order coefficient of correlation. Since, the results indicated statistically significant relationships among them, multiple regression analyses were run to see if significant predictors of EFL learners' writing anxiety could be identified. Interestingly, the analyses showed that pragmatist learning style made the strongest statistically significant unique contribution to predict writing anxiety while activist learning style failed to make such a significant contribution. To clarify, the negative relationship suggests that the more pragmatic the preferred learning style is, the lower the writing anxiety. Furthermore, only memory writing strategy made a statistically significant unique contribution to predicting writing anxiety while the other five writing strategies did not. To explain further, their positive relationship implies that learners who apply memory strategies more, face higher levels of writing anxiety. Thus, this study identified learners' pragmatist learning style and memory writing strategy as significant predictors of writing anxiety in the EFL context. As a result, not only does this study provide statistical evidence of the relationship among these variables but it also stresses the importance of EFL learners' language learning styles and writing strategies to their writing anxiety.

Keywords: Language learning styles, Writing strategies, Writing anxiety

Introduction

Writing is fundamentally complex and involves the exploration of one's thoughts, discovering ideas, and generating meaning [1]. It is complex because writers must simultaneously plan, translate, and review their text as well as consider a content problem of what to write, and a rhetorical problem of how to express their ideas in a way that suits both the topic and the audience" [2]. Among the language skills, writing is believed to be one of the most difficult to master [3, 4, 5, 6]. This phenomenon is more acute in the EFL context where writing for most EFL learners has become so challenging that they merely strive to pass any writing test they attempt [7]. Research has revealed that lack of motivation [8], ineffective strategies [9] and imposed materials and methods [10] are the main causes of learners' writing problems. Furthermore, with a shift to more learner-centered approaches in the 21st. century [11], Manchón [12] stresses the importance of

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individual differences in learning to write in another language, using writing to learn the target language, and writing in order to learn a specific content area in this context.

Even as early as the 1970s, second language learning researchers have stressed that each learning is not only individual but that differences in interest and ability of learners existed in their learning process [13]. The same holds true for the learning of a foreign language as it is believed that among the factors that affected the learning of a foreign language is individual differences (ID) [14]. Broadly speaking, these individual differences, according to Dörnyei [15] are long-lasting personal characteristics which are believed to apply to everybody and on which people differ by degree. Individual learner differences influencing foreign language acquisition have been the subject of much research [16;17]. Such research has led to the implication that in the process of learning-teaching, it is necessary for the teacher to plan learning by taking these individual differences into consideration [18].

Researchers such as Gardner [1992] and Macintyre (1993) have identified specific learner characteristics that influences how well will he/she can learn a second language. They classify individual differences in language learning into three broad categories which can be incorporated into the socio-educational model of second language acquisition [19]. The first category is labeled cognitive variables, which include intelligence, language aptitude, language learning strategies, previous language training and experience. The second category is labeled affective variables with attitude, motivation, language anxiety, and self-confidence about the language, personality, and learning styles as the components of this category. And finally, the third category is titled miscellaneous variables which include factors such as age and sociocultural experiences. Thus, it is seen that both cognitive variables and affective variables play important roles in language learning.

Among the cognitive variables, much research has been seen involving strategies used by students to learn a language. According to Oxford, learning strategy is a certain way which students use in order to comprehend certain material and improve their learning [20]. It is also said that, "Language learning strategies are the often-conscious steps or behaviors used by language learners to enhance the acquisition, storage, retention, recall, and use of new information [20, 21]. In Nyikos and Oxford"s [22] words, "interest in learning strategies is due in large part to increased attention to learner and to learner-centered models". Furthermore, they are "especially important for language learning because they are tools for active, self-directed involvement, which is essential for developing communicative competence" [20]. Another researcher adds When learners start to learn something, they have the ability to respond to the particular learning situation and to manage their learning in an appropriate way. Learners use learning strategies in order to learn something more successfully [23].

Incidentally, the learning strategies the students find the most comfortable and easy to apply, typically reflect their learning styles [24]. Learning styles are known as cognitive/ affective variables. Various theories of learning styles aim to account for individual differences in the speed and amount of absorbed knowledge that are not explained by abilities [25]. Some researchers such as Grigorenko and Sternberg believe that styles are not abilities, but rather how these abilities (and the knowledge acquired through them) are used in day-to-day interactions with the environment (1995, p.205). The importance of teacher awareness of the learners' preferred learning styles and how this can help teachers understand and cope with students' course-related learning difficulties and ultimately help alleviate their frustration levels was pointed out by Dunn [26]. Also, Chang (2003) believes that understanding the preferred learning styles of students has a great impact on curriculum design, teacher training, material development and student orientation. Another researcher, Macfarlane (2004) when teachers misunderstand or lack interest in students' educational backgrounds, this may eventually harm the relationship between teachers and students.

Another affective factor that has been seen to influence second and foreign language achievement and proficiency, is anxiety. Broadly speaking, anxiety is the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the automatic nervous system [27]. Anxiety when associated with learning a foreign language is termed as "foreign language anxiety" (FLA) related to the negative emotional reactions of the learners towards foreign language acquisition [28]. A previous body of literature suggests that a high level of foreign language anxiety interferes with foreign language learning [29, 30]. Compared to the number of studies on speaking anxiety [31, 32].studies on writing anxiety are not common. However, anecdotal studies have indicated that many language learners have great anxiety about writing in their second language (L2), and their anxiety is often more serious than that of first language writers. Thus, individual differences in language learning such as learning strategies, styles and anxiety are seen to affect language learning. Yet, not much is seen in the exploration of these individual variables related to writing. Also, empirically exploring the relationship between learning style, writing strategy and writing anxiety is rare although each one of these variables have been seen to individually affect overall language learning. Furthermore, studies related to how certain types of writing strategy or even learning style could influence writing anxiety are rare, especially in Iranian TEFL. Therefore, it is suggested that conducting

research into the relationship among the three variables and related predictors of writing anxiety can help both teachers and learners in developing writing skills.

Method

Participants

The sample chosen as the subset of the population involved in this study consisted of EFL learners currently participating in regular EFL classes in different language institutes spread over various regions in Tehran province. This is important for this study as one of the aims of this study was to find out if EFL learners showed any statistically significant relationship among their levels of writing anxiety, writing strategies and language learning styles and choosing participants from various venues would provide a more reliable result.

Besides, the potential participants approached were those in the higher language proficiency levels for ease of comprehension of and response to the study questionnaires. These consisted of EFL learners from the upper-intermediate and advance levels.

Key terms/instrumentation

The key terms and related self-report scales used in the current study are defined as follows:

Learning styles

The learning styles hypothesis suggests that all people have a certain style or modality through which they prefer to process information, and if they are presented with or engage information in that preferred modality, learning will be enhanced in some way [33]. Vermunt [34] states that learning style is a coherent whole of learning activities those students usually employ.

Kolb [35] states that learning styles are relatively stable attributes or preferences or habitual strategies used by individual learner to organize and process information for problem solving. According to Jantan and Razali [36], psychologically, learning style is the way the student concentrate, and their method in processing and obtaining information, knowledge, or experience.

This construct was measured using The Kolb Learning Style questionnaire developed by Honey and Mumford [37]. It consists of 80 questions related to four types of learning styles; Activists, Pragmatist, Theorists and Reflectors. Activists are those people who learn by doing. They have an open-minded approach to learning, involving themselves fully and without bias in new experiences. Theorists like to understand the theory behind the actions. They need models, concepts and facts in order to engage in the learning process. Prefer to analyze and synthesize, drawing new information into a systematic and logical 'theory'. Pragmatist need to be able to see how to put the learning into practice in the real world. They are experimenters, trying out new ideas, theories and techniques to see if they work. Reflectors learn by observing and thinking about what happened. They prefer to view experiences from a number of different perspectives, collecting data and taking the time to work towards an appropriate conclusion. In this study, its reliability as measured by Cronbach's α was .821 with 80 items.

Writing strategies

It was the belief among cognitive psychologists that strategies are deliberate actions that learners select, implement and manage in order to carry out reading or writing tasks. As Jones et al. [38] explained it: "an effective learner or good strategy user knows when to use a given strategy as well as when to abandon it and select another one".

Writing strategy is defined as "the sequence in which a writer engages in planning, composing, revising and other writing related activities" [39]. This construct was measured by the Inventory of Learning Strategies (ILS) introduced by Peuelas [40]. This instrument was chosen as it is a Likert-type measure test that examined the frequency with which students used writing strategies. Based on Oxford's [20] questionnaire, this inventory was created to include social and affective strategies in alignment with self-regulation models from areas of psychology with the learning strategy models in foreign languages strategy types. In this study, its reliability as measured by Cronbach's α was .97 with the final 47 items.

Writing anxiety

Writing anxiety was first introduced by Daly and Miller in 1975. Recently, writing anxiety was referred to as a subject and situation specific anxiety and defined as a general prohibition of writing behavior and of situations thought to potentially need some amount of writing accompanied by the potential for evaluation of that writing [43].

This construct was measured by the Foreign Language Writing Anxiety Scale by Pae [44] which was designed to sensitize the scale to EFL context. It is an adopted version of Foreign Language Writing Scale (FLWS) developed by Daly Miller [42]. It comprises 26 five-point Likert scale items with the values ranging from (1) strongly disagree, to (5) strongly agree to ensure sufficient variations among the item scores. In this study, the Cronbach's α of the writing anxiety scale with a total of 26 items was .87.

Results

H_{01}: There is no significant relationship between the language learning styles and writing strategies of Iranian EFL learners.

Table 1
Spearman's correlation between learning styles and writing strategies.

	Activist	**Reflector**	**Theorist**	**Pragmatist**
Correlation Coefficient	-.210**	-.094	-.045	-.173*
Sig. (2-tailed)	.007	.236	.572	.027
N	162	162	162	162
Correlation Coefficient	.124	.329**	.366**	-.035
Sig. (2-tailed)	.116	.000	.000	.659
N	162	162	162	162
Correlation Coefficient	.060	.439**	.413**	-.087
Sig. (2-tailed)	.447	.000	.000	.269
N	162	162	162	162
Correlation Coefficient	.140	.455**	.410**	-.071
Sig. (2-tailed)	.076	.000	.000	.367
N	162	162	162	162
Correlation Coefficient	.066	.460**	.359**	-.122
Sig. (2-tailed)	.402	.000	.000	.122
N	162	162	162	162
Correlation Coefficient	-.231**	.377**	.074	-.409**
Sig. (2-tailed)	.003	.000	.352	.000
N	162	162	162	162

The first null hypothesis was tested using Spearman's Rank-Order coefficient, a non-parametric formula. Table 1 shows the result of this analysis. The Table 1 reports an overall significant correlations among learning styles and various types of writing strategies used by EFL learners. To be exact, the memory writing strategy had negative and significant correlation with activist ϱ = -.21, $p < .01$) and pragmatist (ϱ = -.173, $p < .05$) learning styles. The relationships between cognitive writing strategy, on one hand, and reflector (ϱ = .329, $p < .01$) and theorist (ϱ = .366, $p < .01$) learning styles were positive and significant. Compensation writing strategy also showed positive and significant correlation with reflector (ϱ = .439, $p < .01$) and theorist (ϱ = .413, $p < .01$) learning styles. It was also the case for meta-cognitive and affective strategies, which showed positive and significant correlations with reflector (ϱ = .455, $p < .01$; ϱ = .460, $p < .01$) and theorist (ϱ = .410, $p < .01$; ϱ = .359, $p < .01$) styles. Finally, the social writing strategy showed negative and significant correlations with activist (ϱ = -.231, $p < .01$) and pragmatist (ϱ = -.409, $p < .01$) styles and positive and significant correlation with reflector (ϱ = .377, $p < .01$) style. Therefore, it was concluded there was an overall significant correlations among learning styles and types of writing strategies used by EFL learner; thus, the first null hypothesis was rejected H_{02}: There is no significant relationship between language learning styles and writing anxiety among Iranian EFL learners.

Table 2
Spearman's correlation between learning styles and writing anxiety.

	Anxiety
Correlation Coefficient	-.210**
Sig. (2-tailed)	.007
N	162
Correlation Coefficient	.271**
Sig. (2-tailed)	.000
N	162
Correlation Coefficient	.151
Sig. (2-tailed)	.055
N	162
Correlation Coefficient	-.348**
Sig. (2-tailed)	.000
N	162

The second null hypothesis was tested using Spearman's Rank-Order coefficient, a non-parametric formula. Table 2 shows the result of this analysis. It is seen that, out of the four learning styles, three of them showed significant correlation with writing anxiety. Also, there was a significant and negative correlations between writing anxiety, on one hand, and activist (ϱ = -.210, $p < .01$) and pragmatist (ϱ = -.348, $p < .01$) learning styles, on the other hand. There was also a positive and significant correlation between writing anxiety and reflector (ϱ = .271, $p < .01$) learning style. Overall, out of the four learning styles, three of them showed significant correlation with writing anxiety; thus, the second null hypothesis was also rejected.

H_{03}: There is no significant relationship between writing strategies and writing anxiety among Iranian EFL learners.

Table 3
Spearman's correlation between writing strategies and writing anxiety.

	Anxiety
Correlation Coefficient	.299**
Sig. (2-tailed)	.000
N	162
Correlation Coefficient	.178*
Sig. (2-tailed)	.023
N	162
Correlation Coefficient	.209**
Sig. (2-tailed)	.008
N	162
Correlation Coefficient	.251**
Sig. (2-tailed)	.001
N	162
Correlation Coefficient	.242**
Sig. (2-tailed)	.002
N	162
Correlation Coefficient	.281**
Sig. (2-tailed)	.000
N	162

The third null hypothesis was tested using Spearman's Rank-Order coefficient, a non-parametric formula. According to the results of the analysis reported in Table 3, there were positive and significant correlations between writing anxiety, on one hand, and memory (ϱ = .299, $p < .01$), cognitive (ϱ = .178, $p < .05$), compensation (ϱ = .209, $p < .01$), met-cognitive (ϱ = .251, $p < .01$), affective (ϱ = .242, $p < .01$) and social (ϱ = .281, $p < .01$) writing strategies, on the other hand. As all writing strategies showed significant correlations with writing anxiety, the third null hypothesis was also rejected.

The testing of the second and third research null hypothesis showed that both learning styles and writing strategies were significantly related to writing anxiety. That is why, identifying significant predictors of writing anxiety among Iranian EFL learners' learning styles and strategies, was deemed necessary. For this reason, the fourth and fifth research null hypothesis were framed and tested using multiple regression analysis as follows:

$H0_4$: There is no significant predictor of writing anxiety among Iranian EFL learners' learning styles.

Table 4
Variables of the regression model.

Model	**Variables Entered**	**Variables Removed**	**Method**
1	Pragmatist, Reflector, Activist[b]	.	Enter

a. Dependent Variable: Anxiety. b. All requested variables entered.

In order to test the fourth null hypothesis, a standard multiple regression was run. Table 4 shows the variables of the regression model. Activist, reflector, and pragmatist learning styles were the predictor variables, and writing anxiety was the predicted variable.

Table 5
Regression model summary - R and R square.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.462[a]	.213	.198	11.11524	2.057

a. Predictors: (Constant), Pragmatist, Reflector, Activist. b. Dependent Variable: Anxiety

Table 5 presents the regression model summary including the R and R2. It can be seen that *R* came out to be 0.462 and R^2 came out to be 0.213. This means that the model explains 21.3 percent of the variance in writing anxiety [45]. Moreover, the Durbin-Watson (DW) index of 2.057 indicated that the assumption of independence errors was met. As noted by Filed (2013) DW indices between 1 and 3 are acceptable.

Table 6
Regression Output: ANOVA.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	5285.327	3	1761.776	14.260	.000[b]
Residual	19520.673	158	123.549		
Total	24806.000	161			

a. Dependent Variable: Anxiety.
b. Predictors: (Constant), Pragmatist, Reflector, Activist.

Table 6 shows the results of ANOVA (F (3,158) = 14.26, p = 0.000< .01). It can be seen that the model can significantly predict EFL learners' writing anxiety.

Table 7
Regression Output: Coefficients.

	Unstandardized Coefficients		Standardized Coefficients			Part
Model	B	Std. Error	Beta	t	Sig.	Correlations
(Constant)	97.234	4.972		19.557	.000	
Activist	-.428	.296	-.116	-1.445	.150	-.102
Reflector	.875	.267	.233	3.280	.001	.231
Pragmatist	-1.259	.321	-.315	-3.924	.000	-.277

Table 7 shows the degree to which each predictor variable contributes to the prediction of the predicted variable. The inspection of the Sig. values showed that only reflector and pragmatist learning styles can significantly predict anxiety but Activist learning style did not. Also, pragmatist learning style had the largest absolute β coefficient (β =.315, t = 3.924, p = 0.000<.01). This means that pragmatist learning style makes the strongest statistically significant unique contribution to predicting writing anxiety. Therefore, it was concluded that pragmatist learning style could more significantly predict writing anxiety scores of the participants. The negative mark in the β value indicates negative correlation. This is to say that writing anxiety is more negatively affected by high levels of pragmatist learning style. Reflector learning style turned out to be the second significant predictor of writing anxiety scores (β = 0.233, t = 3.28, p = 0.000< .01). Finally, the inspection of Part correlation (semi-partial correlation coefficient) revealed that pragmatist learning style uniquely explains 7.67 percent of the variance in writing anxiety (.277 × .277 = .0767). Thus, the fourth hypothesis was also rejected.

$H0_5$: There is no significant predictor of writing anxiety among Iranian EFL learners' writing strategies.

Table 8
Variables of the regression model.

Model	Variables Entered	Variables Removed	Method
1	Social, Memory, Cognitive, Affective, Compensation, Metacognitive[b]	.	Enter

a. Dependent Variable: Anxiety. b. All requested variables entered.

In order to test the fifth null hypothesis, a standard multiple regression was run. Table 8 shows the variables of the regression model. Memory, cognitive, compensation, metacognitive, affective, and social writing strategies were the predictor variables, and writing anxiety was the predicted variable.

Table 9
Regression model summary - R and R square.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.494[a]	.244	.214	10.98876	2.167

a. Predictors: (Constant), Social, Memory, Cognitive, Affective, Compensation, Metacognitive
b. Dependent Variable: Anxiety

Table 9 presents the regression model summary including the R and R2. As the Table reports, *R* came out to be 0.494 and R^2 came out to be 0.244. This means that the model explains 24.4 percent of the variance in writing anxiety [45]. Moreover, the Durbin-Watson (DW) index of 2.167 indicated that the assumption of independence errors was met. As noted by Filed (2013) DW indices between 1 and 3 are acceptable.

Table 10
Regression Output: ANOVA.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	5954.493	6	992.415	8.219	.000[b]
Residual	18475.201	153	120.753		
Total	24429.694	159			

a. Dependent Variable: Anxiety.
b. Predictors: (Constant), Social, Memory, Cognitive, Affective, Compensation, Metacognitive

Table 10 reports the results of ANOVA (F (6,153) = 8.219, p = 0.000< .01), the results of which were considered significant. This means that the model can significantly predict EFL learners' writing anxiety. Also, it demonstrates the Standardized Beta Coefficients which signify the degree to which each predictor variable contributes to the prediction of the predicted variable. The inspection of the Sig. values showed that only memory writing strategy makes statistically significant unique contributions to the equation as its Sig. value is less than .05. The other five writing strategies failed to make such a significant contribution.

Table 11
Regression Output: Coefficients.

	Unstandardized Coefficients		Standardized Coefficients			
Model	B	Std. Error	Beta	t	Sig.	Part Correlations
(Constant)	47.329	6.229		7.598	.000	
Memory	1.681	.333	.360	5.045	.000	.355
Cognitive	-.042	.181	-.035	-.231	.818	-.016
Compensation	-.205	.350	-.099	-.585	.559	-.041
Metacognitive	.331	.202	.317	1.634	.104	.115
Affective	.187	.372	.082	.503	.615	.035
Social	.591	.355	.157	1.664	.098	.117

Table 11 shows the degree to which each predictor variable contributes to the prediction of the predicted variable. The inspection of β values revealed that memory writing strategy had the largest absolute β coefficient (β =.360, t = 5.045, p = 0.000<.01). This means that the memory writing strategy makes the strongest statistically significant unique contribution to predicting writing anxiety. Therefore, it was concluded that memory writing strategy could more significantly predict writing anxiety scores of the participants. The positive mark in the β value indicates positive correlation. This is to say that writing anxiety is more positively affected by high levels of memory strategies. Finally, the inspection of Part correlation (semi-partial correlation coefficient) revealed that memory writing strategy uniquely explains 12.6 percent of the variance in writing anxiety (.355 × .355 = .126). Thus, the fifth hypothesis was also rejected.

Discussion and conclusion

The analysis of hypotheses testing of question one showed significant correlations among EFL learners' learning styles and their preferred types of writing strategies. However, these correlations varied in terms of their negativity or positivity. The overall result corroborates the potential relationships between learning styles and language learning strategies found by many researchers [46, 47]. For example, a study by Carson and Longhini [48] on the analysis of a learner's diary indicated that the subjects' strategies were affected by her learning styles. This result could be explained by the idea that the learning strategies the students find the most comfortable and easy to apply, typically reflect their learning styles [49]. Thus, it is advised that learning strategies, as postulated by Ehrman, Leaver, and Oxford (2003) can be effective if they are in conformity with learners' learning priorities.

The results of the second question on the significance of the correlations among learning styles and writing anxiety of EFL learners showed overall significant correlations among the variables of the two constructs. Though, not much is seen in the literature on the relationship between learning styles and writing anxiety, generally, studies have revealed foreign language anxiety to be related to language learning styles. The results of the third question on the significance of the correlations among writing strategies and writing anxiety of EFL learners showed that all writing strategies were significantly and positively correlated with writing anxiety. These results are in line with the one concluded by Đumlija (2018) in which an overall positive correlation of anxiety and writing strategies was seen. However, they contradict Asmari's 2013 [50] study which revealed negative correlations between writing strategies and writing anxiety/apprehension. This phenomenon is explained by MacIntyre and Noels (1996) who posited that the use of strategies could lead to a "sense of mastery over the learning process" (p.383) which in turn might help reduce anxiety. In other words, using the wrong strategy or not using any, could raise anxiety levels.

To conclude the analyses of hypotheses four and five, pragmatist learning style made the strongest statistically significant unique contribution in predicting writing anxiety while activist learning style failed to make such a significant contribution. To clarify, the negative relationship suggests that the more pragmatic the preferred learning style is, the lower the writing anxiety. Furthermore, only memory writing strategy made a statistically significant unique contribution to predicting writing anxiety while the other five writing strategies failed to make such a significant contribution. To explain further, the positive relationship implies that learners who apply memory strategies more, face higher levels of writing anxiety.

Since not much is seen in the review of studies on this subject, this detail finding can be explained by referring to Kolb's [35] and Honey and Mumford's [51] definitions of learning styles. Pragmatist are said to be those who need to be able to see how to put the learning into practice in the real world. They are experimenters, trying out new ideas, theories and techniques to see if they work. Making sense of the negative relationships of writing anxiety and pragmatist learning style, the study concludes that EFL learners who learn best by understanding through action feel less anxious while attempting writing tasks than the other types of learners. This result might infer that the importance attached to memorization is fading. This is in contrary to what was found by Dahmardeh [52] that language learning and teaching in Iran is dominated by the grammar-translation approach wherein memorization plays a key role. These EFL learners who show less anxiety might have learned self-directed learning skills -how to use effective learning strategies, and know their own learning styles [Rawson, 2000; Giese, 2006; 53; Hofmann, 2008]. Studies such as the one by Tekkol and Demirel [54] found that a positive effect of self-directed learning skills.

Also, according to the Inventory of Learning Strategies (ILS) introduced by Peñuelas [55] and Oxford (1999), memory strategies are those used for memorizing information. Again, since not much is seen in the review of studies on this subject, these detailed findings can be compared to a study's result that showed overall negative significant correlation between all categories of language learning strategies and language anxiety [56]. This negative result suggests that the use of any type of strategy can reduce language anxiety. On the contrary, Sediqifar and Khaleqizadeh [57] concluded that a significant positive relationship between the uses of memory strategies with success in writing skill was seen in their study. In other words, the more the use of memory strategies, the more successful the students are in their writing. This somehow contradicts the study's result as success normally lowers anxiety but the use of memory strategies here indicates higher levels of writing anxiety.

The positive relationship between memory strategy use and writing anxiety could be explained by the idea that writing is a complex activity which does not involve the use of memory strategy alone. It is believed to involve high-level processing, in which emotions and thoughts are transferred, revised, organized, and evaluated [58], and the well-ordered performance of emotions, thoughts, views, and dreams in a dynamic and eye-catching way [59]. And so, writing is said not to be dependent on ability alone; rather, it is a metacognitive process requiring being aesthetic, legible, and fluent in the affective aspect [60]; self-motivation and readiness in pre- and post-writing in the psychological aspect; and gathering information on a specific area and

arranging, organizing, and evaluating this information by considering grammatical rules in the cognitive aspect. Furthermore, it is seen to be kinesthetic since it depends on the speed of writing, holding the pencil, and motor movements, and it requires the overall process to be self-regulated [61, 62, 63, 64, 65, 66, 67]. Thus, this study identified learners' pragmatist learning style and memory writing strategy as important contributing factors of writing anxiety in the EFL context. This study not only provides statistical evidence of the relationship among these variables but it also stresses the importance of EFL learners' language learning styles and writing strategies to their writing anxiety.

References

1. Flower L, Hayers JR. The cognitive of discovery defining a rhetorical problem. *Coll Compos Comm.* 1980; 31(1): 21-32.
2. De Smet MJR, Brand-Gruwel S, Leijten M, Kirschner PA. Electronic outlining as a writing strategy: Effects on students' writing products, mental effort and writing process. *Comput Educ.* 2014; 78: 352-366.
3. MacIntyre PD, Gardner RC. Anxiety and second-language learning: Toward a theoretical clarification. *Lang Learn.* 1989; 39(2): 251-278.
4. MacIntyre PD, Gardner RC. Methods and results in the study of anxiety and language learning: A review of the literature. *Lang Learn.* 1991; 41(1): 85-117.
5. Kurt G, Atay D. The effects of peer feedback on the writing anxiety of prospective Turkish teachers of EFL. *J Theor Pract Educ.* 2007; 3(1): 12-23.
6. Latif MA. The factors accounting for the Egyptian EFL university students' negative writing affect. *Essex Graduat Stud Paper Lang Linguist.* 2007; 9: 57-82.
7. Yavuz D, Genc AB. Flexibility of setting up a writing unit at YADIM. Unpublished action research study. Çukurova University, Adana, Turkey. 1998.
8. Trivelli-Bowen B, Moore JJ, Niemeyer SR, Holmes K. Ways to use technology to motivate students' writing. *Int J Art Commerce.* 2014; 3(7): 1-11.
9. Alnufaie M, Grenfell M. EFL writing apprehension: The macro or the micro? *J Art Hum.* 2013; 2(3): 79-89.
10. Leki I. Material, educational and ideological challenges of teaching EFL writing at the turn of the century. *Int J Eng Stud.* 2001; 1(2): 197-209.
11. Richards JC, Rodgers TS. Approaches and methods in language teaching. New York, NY: Cambridge University Press. 2001.
12. Manchón RM. Writing to learn the language: Issues in theory and research. In Manchón RM. (Ed.). Learning-to-write and writing-to-learn in an additional language. Amsterdam: John Benjamins. 2011; 61-84.
13. Goldberg I, Baker GL. The individualized learning system. *Educ Leader.* 1970; 27(8): 775-780.
14. Skehan P. Individual differences in second language learning. London: Edward Arnold. 1989.
15. Dörnyei Z. The psychology of the language learner: Individual differences in second language acquisition. Mahwah, NJ: Lawrence Erlbaum. 2005.
16. Ellis R. Understanding second language acquisition. Oxford: Oxford University Press. 1985.
17. Skehan P. Theorising and updating aptitude. In Robinson P. (Ed.), Individual differences and instructed language learning. Philadelphia, PA: John Benjamins. 2002; 69-95.
18. Kubat U. Identifying the individual differences among students during learning and teaching process by science teachers. *Int J Res Educ Sci.* 2018; 4(1): 30-38.
19. Gardner RC. Social psychology and second language learning. The role of attitudes and motivation. London: Edward Arnold. 1985.
20. Oxford R. Language learning strategies: What every teacher should know. Boston: Heinle & Heinle. 1990.
21. Rigney J. Learning strategies: A theoretical perspective. In O'Neil Jr HF. (Ed.), Learning strategies. New York: Academic Press. 1978.
22. Nyikos M, Oxford R. A factor analytic study of language-learning strategy use: Interpretations from information-processing and social psychology. *Mod Lang J.* 1993; 77: 11-22.
23. Lee C. An overview of language learning strategies. *ARECLS.* 2010; 7: 132-152.
24. Oxford RL, Ehrman ME, Lavine RZ. Style wars: Teacher-student style conflicts in the language classroom. In Magnan SS. (ed.), Challenges in the 1990s for college foreign language programs. Boston: Heinle & Heinle. 1991; 1-25.
25. Zhang LF, Sternberg RJ. Are learning approaches and thinking styles related? A study in two Chinese populations. *J Psychol.* 2000; 134: 469-489.
26. Dunn RS. Understanding the Dunn and Dunn learning styles model and the need for individual diagnosis and prescription. *J Read Write Learn Disabil Int.* 1990; 6: 223-247.
27. Spielberger CD. Manual for the State-Trait Anxiety (From Y). Palo Alto, CA: Consulting Psychologists Press. 1983.
28. Horwitz EK. Language anxiety and achievement. *Ann Rev Appl Linguist.* 2001; 2(I): 112-126.
29. Macintyre PD, Gardner RC. The subtle effects of language anxiety on cognitive processing in the second language. *Lang Learn.* 1994; 44: 283-305.
30. Ohata K. Potential sources of anxiety for Japanese learners of English: Preliminary case of interviews with five Japanese college students in the US. *TESL-EJ,* 2005; 9(3): 2-23.
31. Fariadian E, Azizifar A, Gowhary H. Gender contribution in anxiety in speaking EFL among Iranian learners. *Int Res J Appl Basic Sci.* 2014; 8(11): 2095-2099.
32. Mahmoodzadeh M. Investigating foreign language speaking anxiety within the EFL learner's interlanguage

system: The case of Iranian learners. *J Lang Teach Res.* 2012; 3(3): 466-476.
33. Pashler H, McDaniel M, Rohrer D, Bjork R. Learning styles: concepts and evidence. *Psychol Sci Publ Interest,* 2009; 9(3): 105-119.
34. Vermunt JD. Metacognitive, cognitive and affective aspects of learning styles and strategies: A phenomenographic analysis. *High Educ.* 1996; 31: 25-50.
35. Kolb D. Experiential learning: Experience as the source of learning and development. Prentice-Hall, Inc, Englewood Cliffs, NJ. 1984.
36. Jantan R, Razali M. Psikologi Pendidikan Pendekatan Kontemporari. Kuala Lumpur: McGraw Hill Education. 2002.
37. Honey P, Mumford A. The manual of learning styles, Maidenhead. Berkshire: Peter Honey. 1982.
38. Jones BF, Palincsar AS, Ogle DS, Carr EG. Strategic teaching and learning: Cognitive instruction in the content areas. Alexandria, VA: Association for Supervision and Curriculum Development. 1987.
39. Torrance M, Thomas GV, Robinson EJ. Individual differences in undergraduate essay-writing strategies: A longitudinal study. *High Educ.* 2000; 39: 181-200.
40. Penuelas ABC. The writing strategies of American universty students: Focusing on memory, compensation, social, and affective strategies. *Estud Ling Ing Apl.* 2012; 77-113.
41. Oxford R. Language learning strategies: What every teacher should know. Boston: Heinle & Heinle. 1990.
42. Daly JA, Miller M. The empirical development of an instrument to measure writing apprehension. *Res Teach Eng.* 1975; 9: 242-249.
43. Hassan BA. The relationship of writing apprehension and self-esteem to the writing quantity and quality of EFL university students. *Mansoura Facul Educ J.* 2001; http://eric.Ed.Gov/PDFS/ED459671
44. Pae T-I. Skill-based L2 anxieties revisited: Their intra-relations and the inter-relations with general foreign language anxiety. *Appl. Ling.* 2013; 34: 232-252.
45. Cohen J, Cohen P, West SG, Aiken LS. Applied multiple regression/correlation analysis for the behavioral sciences (3rd Ed.). NJ: Lawrence Erlbaum Associates. 2003.
46. Bromley P. Active learning strategies for diverse learning styles: Simulations are only one method. *PS: Polit Sci Polit.* 2013; 46(4): 818-822.
47. Wong LLC, Nunan D. The learning styles and strategies of effective language learners. *Syst.* 2011; 39(2): 144-163.
48. Carson JG, Longhini A. Focusing on learning styles and strategies: A diary study in an immersion setting. *Lang Learn.* 2002; 52(2): 401-438.
49. Oxford RL, Ehrman ME, Lavine RZ. Style wars: Teacher-student style conflicts in the language classroom. In Magnan SS. (ed.), Challenges in the 1990s for college foreign language programs. Boston: Heinle & Heinle. 1991; 1-25.
50. Al Asmari A. Investigation of writing strategies, writing apprehension, and writing achievement among Saudi EFL-major students. *Int Educ Stud.* 2013; 6(11): 130-143.
51. Honey P, Mumford A. The manual of learning styles. Maidenhead. Berkshire: Peter Honey. 1982.
52. Dahmardeh M. Communicative Textbooks: Linguistic online. 2010; 40: 4-9.
53. Fredriksson U, Hoskins B. The development of learning to learn in a European context. *Curric J.* 2007; 18(2): 127 - 134.
54. Tekkol İA, Demirel M. An investigation of self-directed learning skills of undergraduate students. *Front Psychol.* 2018; 9.
https://doi.org/10.3389/fpsyg.2018.02324
55. Penuelas ABC. The writing strategies of American universty students: Focusing on memory, compensation, social, and affective strategies. *Estud Ling Ing Apl.* 2012; 77-113.
56. Noormohammadi R. On the relationship between language learning strategies and foreign language anxiety. *J Pan Pac Assoc Apl Ling.* 2009; 13(1): 39-52.
57. Sediqifar Z, Khaleqizadeh S. Memory, cognitive and compensation strategies: The relationship between application of strategies and non-Iranian Persian learners' success in writing skill. *Lang Relat Res.* 2018; 9(1): 43.
58. Gözüküçük M. Ses temelli cümle yöntemi ve yapılandırmacılık. In Kırmızı FS, Ünal E. (Eds.), Yazma öğretimi. Ankara, Turkey: Anı Yayıncılık. 2016; 1-33.
59. Kavcar C, Oğuzkan F, Hasırcı S. Türkçe öğretimi, Türkçe ve sınıf öğretmenleri için (9. bs.). Ankara, Turkey: Anı Yayıncılık. 2016.
60. Zimmerman BJ, Kitsantas A. A writer's discipline: The development of self-regulatory skill. In Boscolo P, Hidi S. (Eds.), Writing and motivation. Oxford, UK: Elsevier. 2007; 51-69.
61. Brown K, Hood S. Writing matters: writing skills and strategies for students of English. Cambridge: Cambridge University Press. 1989.
62. Flavell JH. Metacognitive aspects of problem solving. In Resnick L. (Ed.), The nature of intelligence. NJ: Lawrence Erlbaum. 1976; 17-35.
63. Flower LA, Hayes JR. The representation of meaning in writing. *Writ Comm.* 1984; 1: 120-160.
64. Flower L. Problem-solving strategies for writing in college and community (1st Ed.). Fort Worth, TX: Harcourt Brace College Publishers. 1998.
65. Güleryüz H. Türkçe programlandırılmış ilkokuma ve yazma öğretimi (5. bs.). Ankara: Pegema Yayıncılık. 2001.
66. Haven K. Writing workouts to develop common core writing skills: Step-by-step exercises, activities, and tips for student success, grades 2-6 (2nd Ed.). Santa Barbara, CA: Libraries Unlimited. 2015.
67. Sundem G. Improving student writing skills (1st Ed.). Huntington Beach, CA: Shell Education. 2007.

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