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## EXAMINING LEARNER'S LEVEL OF PROCRASTINATION USING ICT AND CLASSROOM WRITING TESTS

## EXAMINANDO O NÍVEL DE PROCRASTINAÇÃO DO ALUNO USANDO ICT E TESTES DE ESCRITA EM SALA DE AULA

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Received: 01/05/21

Accepted: 15/05/21

Published: 19/05/21

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**Abstract:** The purpose of the present study was to measure the effect of procrastination of testing writing in the two groups of Information and Communication Technology (ICT) and classroom test of French language. Studies indicated that procrastination has psychological reasons, but the effect of situational and environmental issues is not well examined. In this study the testing of writing was performed in two different situations using different instrument. One group called ICT testing group used Microsoft Word to write essay writing as a testing instrument and the other group used paper and pen tools. Eligible students (60 students) were selected from a population of 100 students in the two institutions of Safir and Iran's Language Institution. Participants answered the standard procrastination by Lay (1986) that included 20 questions and scoring by Likert Scale were performed. Result showed that there is no significant difference between result of the two testing groups and their level of procrastination ( $p < 0.5$ ). Findings of the study indicates that different instruments are not determining factors of procrastination level and other factors such as educational level and psychological problems might be in work. It can be concluded that though ICT is a modern technology to aide learners' writing performance, it does not reduce students' negative effect of procrastination than traditional testing methods.

**Keywords:** Procrastination. Information and communication technology. Classroom Tests. Writing. Essay.

**Resumo:** O objetivo do presente estudo foi medir o efeito da procrastinação da escrita de testes nos dois grupos de Tecnologia da Informação e Comunicação (TIC) e teste em sala de aula de língua francesa. Estudos indicam que a procrastinação tem razões psicológicas, mas o efeito de questões situacionais e ambientais não é bem examinado. Neste estudo, o teste de redação foi realizado em duas situações diferentes, utilizando instrumentos diferentes. Um grupo chamado grupo de teste TIC utilizou o Microsoft Word para escrever ensaios como instrumento de teste e o outro grupo utilizou ferramentas de papel e caneta. Os alunos elegíveis (60 alunos) foram selecionados entre uma população de 100 alunos nas duas instituições Safir e Iran's Language Institution. Os participantes responderam ao padrão de procrastinação por Lay (1986) que incluía 20 perguntas e a pontuação por Escala Likert foram realizadas. O resultado mostrou que não há diferença significativa entre o resultado dos dois grupos de teste e seu nível de procrastinação ( $p < 0,5$ ). Os resultados do estudo indicam que diferentes instrumentos não são fatores determinantes do nível de procrastinação e outros fatores, como nível educacional e problemas psicológicos, podem estar em ação. Pode-se concluir que, embora as TIC sejam uma tecnologia moderna

para auxiliar o desempenho de escrita dos alunos, elas não reduzem o efeito negativo da procrastinação dos alunos em relação aos métodos de teste tradicionais.

Palavras-chave: Procrastinação. Tecnologia da informação e comunicação. Testes em sala de aula. Escrita. Ensaio.

## **Introduction**

The importance of writing is emphasised by many researchers (Li, 2012; Choi, 2013; Olanezhad, 2015) who discussed the crucial role writing has played in the history of human education such as writing historical text and literary productions. Li (2012) indicated that writing provides for people means of communicating their feelings, achievements, dreams, and opinions. Writing bridges the gap and connects people from different backgrounds and across borders. According to Condon and Kelly-Riley (2004), writing is a prerequisite for success in all academic fields and in workplace as well. There are drawbacks to achieve in writing tasks. Most of the students do not know how to start their writing or they cannot make up their mind to produce a correct and effective paper or essay while testing writing.

Procrastination is a problem that exists with all learners that should be overcome. According to Fee and Tangney (2000) procrastination is related to time management and affective cognitive and behavioural dimensions. Generally, it refers to negative feelings preventing students from concentration and effort to go on the test. Students' failure to write properly in testing situations was argued as students' inability for self-regulation due to anxiety and procrastination. While testing students, their level of writing should be considered. Scovel (1978) study on anxiety and L2 learning produced contradictory results regarding the relationship between anxiety and L2 achievement or performance. Studies on procrastination level indicated that: (1) learners with high level of procrastination get low scores on standardised tests (Wen-Shuenn, 2006), (2) EFL learners' performance quality is negatively affected procrastination (Atay & Kurt, 2006), and (3) using the target language involves a high level of procrastination in testing situations since it is a skill that expects individuals to work individually (Tsui, 1996). This study is significant, since it shows an important aspect of the writing and its relevance to procrastination level to help EFL writing instructors to have deep understanding of procrastination on classroom writing test that was believed to affect students' writing performance negatively.

The previous studies emphasised on measuring the level of anxiety in language performance, but less consider the other elements related to anxiety such as procrastination, treatment, and comprehensive study of students' characteristics. Accordingly, the purpose in this study is to find the relationship between procrastination level among Iranian upper-intermediate French learners and their testing situation in writing skill. Procrastination is related to teaching some skills so that students manage their weaknesses to overcome difficult situations. The scope of the study allowed considering participants from population of 100 Iranian upper intermediate learners of French as a Second Language in Tehran who underwent a questionnaire of procrastination and writing assessment using Information and Communication Technology (ICT) and classroom test of writing.

### **Literature Review**

The procrastination relates psychological vulnerability in students; also it reflects our perennial struggle with self-control as well as our inability to accurately predict how we'll feel tomorrow, or the next day (Solomon & Rothblum, 1984). Lay (1988) defined procrastination as “the tendency to postpone that which is necessary to reach some goal” (197). Procrastination is defined as a failure to self-regulate to achieve intended goals, which results in a time delay (Steel, 2007) and has been seen as a universal phenomenon that hinders people's ability for accomplishing their goals. It is argued that procrastination is psychological and behaviors that can be minimised using related treatments (Steel, 2007). Not only procrastination is a trouble in time management but also it includes the affective, cognitive and behavioral dimensions (Fee & Tangney, 2000).

Procrastination has been defined as a failure to self-regulate to achieve intended goals, which results in a time delay (Steel, 2007). Procrastination has been seen as a universal phenomenon that hinders people's ability for accomplishing their goals and it is argued that procrastination is psychological and behaviors that can be minimised using related treatments (Steel, 2007).

Academic procrastination specifically looks at the delay and postponing of academic tasks (Sirin, 2011). According to Yong (2010), academic procrastination is “an irrational tendency to delay at the beginning or completion of an academic task” (p. 63). Indecisive students who try to

accomplish the best scores also may fall in trap of procrastination. Sometimes fail to write their assignments due to the negative effects of procrastination.

According to Fee and Tangney (2000) many students do not have sufficient drive to start their academic work, even when they intend to complete it by the deadline. Academic procrastination has been seen to relate to students missing deadlines, delaying studying, lower grades, and even withdrawing from coin a large-scale sample. Steel and Ferrari (2013) found that procrastination was associated with lower education levels, showing the importance of self-regulation skills in achieving higher education goals.

Also, Yerdelen et al., (2016) indicated that academic procrastination specifically looks at the delay and postponing of academic tasks. According to Yong (2010), academic procrastination is “an irrational tendency to delay at the beginning or completion of an academic task” (p. 63). Indecisive students who try to accomplish the best scores also may fall in trap of procrastination. Sometimes fail to write their assignments due to the negative effects of procrastination.

According to Onwuegbuzie and Jiao (2000) tasks that causes academic procrastination are “writing term papers, studying for examinations, and keeping up with weekly reading assignments” (p. 45) and argued that procrastination is associated with missing deadlines, delaying in answering the quizzes, test anxiety, receiving low grades. They reported the result of previous studies for the degree of procrastination and supported their idea that in Clark and Hill (1994) “between 30 and 45 percent of African-American undergraduate students reported problems with procrastination on writing term papers, studying for examinations, and keeping up with weekly reading assignments. Moreover, between 55 and 60 percent of the students wanted to decrease their procrastination on these tasks”(46).

In a study, Solomon and Rothblum (1984) stated that the primary reasons that college students procrastinate is related to task aversiveness, fear of failure, evaluation anxiety, low self-confidence, perfectionistic standards for success, and difficulty in decision making.

In a study entitled as “Individual differences in academic procrastination tendency and writing success”, Barbara Fritzsche, Beth Rapp Young and Kara CHickson (2003) “found that the tendency to procrastinate on writing tasks was associated with general anxiety, anxiety about writing the paper, writing the paper later than usual, less satisfaction with writing the paper, and

lower grades” (p. 1549). They argued that feedback could be useful for reducing students’ level of procrastination in writing exams.

Rabbitts and Fook (1996, p. 171), remind us that effective written communication is about ‘writing in the appropriate way for the appropriate audience’. The term writing in teaching composition is an activity in which the teacher and a student meet for a short period of time to discuss student writing and different aspects of the composing process (Richards and Platt, 1992, p. 409). Bandura (1989) indicates that writing concerning how individuals possess a self-system enables them to exercise measures of control over what they think, feel, and do. According to Bandura’s social cognitive theory, self-referent thought or the capacity to reflect on one’s actions works as a mediator between knowledge and action. Through self-reflection, individuals are able to evaluate their own experiences and thought processes. That is, if they go through a rewarding experience, where their performance was acknowledged as good by others, their self-efficacy will increase because they are aware of what it is that they did well and why they are being praised or rewarded.

Writing as the visual channel and the productive mode of language is a vital skill for the L2 learners to develop their language knowledge and the teaching of this skill has become central in second language classrooms (Hyland, 2003).Hudelson (1988) states that L2 learners can learn how the target language works through producing language output. According to Hinkel and Fotos (2002), the role of language output in L2 learning is not less than language input because one has to be understood, as well as to be able to understand while communicating.1978).A great number of studies in L2 have established that interaction enhances the collaborative learning experience of learners (Doughty & Long, 2003; Gass & Mackey, 2006; Gass & Selinker, 2008).

Christy Teranishi Martinez , Ned Kock and Jeffrey Cass (2011) in a study on pain and pleasure in Short Essay Writing investigated factors predicting university students' writing anxiety and writing self-efficacy. Examining predictors of students' writing anxiety and writing self-efficacy, 127 college students completed a pre- and post-assessment survey. They found that “GPA and gender significantly affected writing anxiety, and leisure writing and writing anxiety were significant predictors of writing self-efficacy” (p. 351). They discussed that writing

procrastination influences students' self-efficacy that requires application of proper strategies to reduce its negative effect.

Many studies (Atay & Kurt, 2006; Abdel Latif, 2007; Magno, 2008; Choi, 2013) attempted to investigate different aspects of the relationship between students' performance and writing procrastination and anxiety. Hassan (2001), for instance, conducted an empirical study to examine the impact of writing anxiety on the students' writing quality and asserted the negative effect of writing anxiety. In their (2006) study, Atay and Kurt also found the majority of the participants suffering from a high level of writing procrastination despite their long study of writing as prospective teachers of English. Latif (2007) confirmed the correlational relationship between linguistic knowledge and writing skill claiming that students with proficient linguistic knowledge suffer less from writing delay, anxiety and procrastination. Magno (2008) showed that writing anxiety and level of procrastination could be used to predict the level of students' writing proficiency. Choi (2013) referred to the significant correlation between learners' writing procrastination and their performance in writing.

Prior studies have shown that anxiety can have a debilitating effect on academic performance (Macher, Paechter, Papousek, & Ruggeri, 2012). In an earlier study of anxiety relating to procrastination, Lay (1989) found that state anxiety was associated with perceptions of threat, harm, and emotion-focused coping. It has been found that in graduate students academic procrastination is significantly and positively related to anxiety, with a majority of it related to tasks like writing.

To address the above problem of the study, the following research questions were proposed:

Q1: Is there any significant difference between result of writing essays using different instruments of ICT and Classroom test?

Q2: Does procrastination has significant effect on ICT and classroom testing groups?

## **Method**

The present study is a quantitative analysis of examining participants' level of procrastination in two testing situations of writing. Population of the study includes 100 Iranian French learners in upper intermediate level in Tehran. Participants were selected from two institutions: Safir language institute used ICT methods in teaching and performed the test of

writing using computer and Microsoft Word, while Iran language institute used classroom test using traditional paper and pen method. After the writing test, participants answered the procrastination level questionnaire. The procrastination level questionnaire developed by Lay (1986) was used in this study to assess the level of procrastination of students. It consisted of 20 items. Participants used the statements to describe themselves. For each statement, they decide whether the statement is uncharacteristic or characteristic to them. The answers include a five scale consisting: Extremely uncharacteristic (1) Moderately uncharacteristic (2) Neutral (3) Moderately characteristic (4) Extremely characteristic (5). Cronbachs' alpha co-efficient was reported 82% for this questionnaire by Lay (1986). Since the questionnaires were designed and their validity was achieved, these questionnaires are considered as standard instruments for application.

For the writing test, students were asked to write a five paragraph essay on "Social life in French". Students in Safir used Microsoft word as their paper sheet, while students at Iran Institute used traditional paper and pen. The principles of paragraph development and essay writing were prior to their spelling mistakes and the time limit was important since through time limit their procrastination would be manifested in their writing test. Data was analysed using SPSS 20 and t-test and correlation co-efficient test to examine the efficacy of procrastination level on writing tests in two different testing situations.

## **Result**

Result of descriptive analysis indicated that from 100 students used for the population 60 students were eligible for the analysis. The age of students was from 19 to 29 years, 36 students used ICT test and 24 students used classroom test of writing.

As level of procrastination ranged from 1 to 5; the mean of procrastination for ICT testing group was 3.11 and for classroom testing group it was 3.32. Result of the analysis in the table 1 shows that generally (without inclusion of sig level) students who did the classroom writing test represented higher level of procrastination. In addition, the mean level higher than 3 for both groups shows that in general, students have considerable level of procrastination. Besides, the significance of the effect of procrastination in the testing result of the two groups should be examined.

Table 1 Descriptive result of student's level procrastination level

**Group Statistics**

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Level of Procrastination	ICT test	36	3.1153	.27127	.04521
	Classroom test	24	3.2354	.20930	.04272

Result of writing test was analysed to examine the effect of procrastination in the two groups of ICT and classroom test. Result shows that in this level the mean of writing test for both groups is different. The mean level in the writing test shows that students who used ICT in test, had less level of scores in writing test. The mean level for classroom test group was 55.08 that and in ICT group the mean was 52.26.

Table 2: descriptive statistics of the result of writing tests

**Group Statistics**

	Groups	N	Mean	Std. Deviation	Std. Error Mean	Sig. level
Writing test	ICT	36	52.25	9.58748	1.59791	.014
	classroom test	24	55.08	7.89836	1.61225	
	Total	60	53.38			

Q1: Is there any significant difference between result of writing essays using different instruments of ICT and Classroom test?

H01: There is not any significant difference between result of writing essays using different instruments of ICT and Classroom test.

Comparison of ICTs and classroom test shows that as the sig level (0.014) is less than p-value (0.05); therefore, there is a significant difference between writing test using classroom tests and ICT. In addition, correlation between the results of writing tests and level of procrastination should be ensured.

Table 3 Tests of Between-Subjects Effects for ICT and classroom test

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	4396.423 <sup>a</sup>	2	2198.212	337.962	.000	.922
Intercept	48.152	1	48.152	7.403	.009	.115
Procrastination	4281.276	1	4281.276	658.221	.000	.920
Groups	42.068	1	42.068	6.468	.014	.102
Error	370.746	57	6.504			
Total	175775.340	60				
Corrected Total	4767.169	59				

a. R Squared = .922 (Adjusted R Squared = .920)

The research hypothesis related to the variables in this section are included and responded:

H1: Procrastination has significant effect on ICT testing group and classroom testing group.

H0: Procrastination has no significant effect on ICT testing group and classroom testing group.

Result of the analysis by consideration of the differences between the two testing groups and the effect of procrastination on the results indicates that there is no significant difference between the two groups ( $P < 0.5$ ) and the effect of procrastination on the two groups was not significant ( $p = 0.00$ ) ( $p < 0.5$ ).

Accordingly, ICT testing group and classroom testing group showed a little difference in favour of 3.11 (ICT) to 3.23 (Classroom) but this difference was no significant to decide ICT group has less procrastination than classroom group and result indicated that there is no significant difference between the two testing groups ( $p < 0.05$ ) indicating that the level of procrastination do not change by changing testing instruments.

### Discussion

Different studies (Hassan, 2001; Latif, 2007; Macher, 2012; and Choi, 2013) emphasized on the negative effect of procrastination on students language learning especially testing situations. In their studies, it was defined as writing anxiety and they did not repeat the tests in

different testing conditions. The present study concerned about difference between levels of procrastination in different testing situations with different instruments.

Result of the study showed that though there are differences between levels of procrastination in the group using computer and Microsoft Word for writing the essay and the group using traditional classroom testing by paper and pen, differences are not significant, indicating that using different instruments and applying the test in different situations does not affect the result of writing test. In a study Martinez et al (2011) concluded that self-efficacy influences writing performance. In other studies (Atay & Kurt, 2006; Abdel Latif, 2007; Magno, 2008; Choi, 2013) studies other aspects of such as teaching methods and psychological issues and writing procrastination and anxiety and concluded the effective role of such instruments (study skills, writing structure...) on decreasing the level of procrastination. Result of this study by investigating ICT context did not approve the positive effect of changing testing condition on procrastination. In ICT context students may benefit from possibilities of Microsoft Word such as word correction and checking grammatical mistakes while the result of writing in the classroom group was similar to ICT group. Result of previous studies emphasized on psychological issues related to procrastination and the present study concerned physical elements by changing instruments and conditions and result did not support the significant of such situations. Discussion of the results and comparing them to previous studies indicates that the level of procrastination and anxiety of writing is a psychological phenomenon and environmental considerations may not change the level of procrastination.

## **Conclusion**

The present study aimed at examining the effect of learner's level of procrastination using ICT and classroom test as two distinct learning situations. The ICT in teaching refers to using technology instruments to help teaching, learning and testing. Thought using technology in education is common, but their effect of personal problems associated with learning is not well explored. Result of the present study indicated that there is no difference between the result of the two testing groups that indicated changing the instruments and situation of testing does not affect students' level of procrastination that means delay, fear of testing and losing the time and problem with starting the writing.

It is believed that procrastination hinders people's ability for accomplishing their goals perceived as a psychological and behaviour that can be minimized using related treatments (Steel, 2007), but treatments are not environmental as the result of this study indicated. In Yong's (2010) study academic procrastination referred to irrational tendency to delay at the beginning or completion of an academic task. In Steel and Ferrari (2013) lower education levels was considered as the cause of procrastination showing the importance of self-regulation skills.

Different studied attributed the causes of procrastination to psychological and educational problems than instrumental and environmental issues. The present study, however, examined the uses of modern technology of writing in testing in comparison to traditional paper and pen testing in classroom environment. Based on the results, it was concluded that procrastination is not dependent on environmental and situational issues of testing; rather it is a mental and behavioural problem that requires analyses to find out the causes and reasons in psychological sphere.

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