

---

## The Relationship between Metacognitive Strategies and Other External Factors L1 Transfer, Motivation and Anxiety

Tamer Mohammad Al-Jarrah<sup>1\*</sup>, Noraïen Mansor<sup>2</sup>, Rania Hassan Talafhah<sup>3</sup>, & Jarrah Mohammad Al-Jarrah<sup>4</sup>

<sup>1</sup>Department of Language and Communication Universiti Malaysia Terengganu, 21300 Kuala Nerus, Terengganu, Malaysia

<sup>2</sup> Professor of applied linguistics, Department of Language and Communication Universiti Malaysia Terengganu, 21300 Kuala Nerus, Terengganu, Malaysia

<sup>3</sup>Assistant professor of TEFL, Department of Curriculum and Instruction, Faculty of Education, Yarmouk University, Jordan

<sup>4</sup>Assistant professor of TEFL, Department of Educational Studies, Faculty of Islamic Studies, Islamic University of Minnesota, USA

### Original Research Article

#### \*Corresponding author

Tamer Mohammad Al-Jarrah

#### Article History

Received: 02.08.2018

Accepted: 15.08.2018

Published: 30.08.2018



**Abstract:** Metacognitive awareness can improve students' writing proficiency. Engaging and supporting students in the writing process can increase their metacognitive awareness. One of the major factors that impede the smooth acquisition of writing intelligibility by EFL learners is the transfer of L1 linguistic elements into L2, motivation is another alarming factor that affects Arab EFL learners' performance and anxiety is another predicament to students' performance in writing. The aim of the study is to verify the relationship between metacognitive strategies and other external factors L1 transfer, motivation, and anxiety. The researcher used descriptive statistic methods and the correlation coefficient between Metacognitive Strategies and others factor. Questionnaire technique is used as a method of data collection; the study group was formed from secondary school students Al-Mazar, Irbid. Data were generated through distributing the questionnaire from twenty-two students selected purposively from Irbid secondary school, Jordan. Only students from experimental group were eligible for answering the questionnaire. The data were analyzed by using SPSS program. The results showed that there is a positive and significant correlation between metacognitive strategies and motivation, L1 transfer and anxiety. Metacognitive strategies played an important role to enhance the writing performance among students, whereas the majority reported that they enjoy the writing actives during the class by using metacognitive strategies.

**Keywords:** metacognitive, writing performance, L1 transfer, motivation, anxiety

## INTRODUCTION

Writing is the ultimate process through which the students' performances in virtually all phases of educational levels are assessed more especially for transition, grading or entrance examinations. It is a skill through which students can best demonstrate their grasp of mastery and control of language. Previous research in SL/FL contexts has identified the students' poor writing skills as among the major factors causing students' failures in English Language examinations [1, 2]. Studies contest that as an applied phenomenon, the poor writing skill is not only affecting students' performance in language learning but almost all the other subjects they are studying [3]. The issue of reviewing failure or poor performance of the students in the examination, concerning writing attracts much interest of second language investigators. Over the years, researchers hold the view that acquiring writing

proficiency has been the most difficult, intricate and complex task. Therefore, it required rigorous practices that can be learned explicitly through experiences [4-7, 2].

Moreover, some of these investigators concentrate on finding out how writing affects the performance of students, what factors are responsible for errors in students' compositions and how to get rid of them [8, 9]. Zhang & Mi [10] argued that the lack of competence in written English results from the lack of composing competence than from the lack of linguistic competence. Ahmad [11] pinpoints other prominent reasons for the students' inability to write effectively. The reasons include mechanical problems with the script of English; problems of accuracy of English grammar and lexis; problems relating the style of writing to the demands of a particular situation; and

problems of developing ease and comfort in expressing what needs. Therefore, to provide solutions to this overwhelming problem researchers have employed different strategies [12-14]. Teaching students with metacognitive strategies are one of the contributing methods employed to help students to overcome writing problem. Thus, the development of cognitive psychology; metacognition has drawn more and more researchers' attention and provides a new perspective for EFL writing [15].

Unfortunately, using an ineffective way of teaching metacognitive strategies are prone to errors and often exhibits poor accuracy. These errors, in turn, can have a negative impact on its implementation in teaching and learning [16-18]. Previous researchers have reported varying views on effects of using metacognitive strategies on the students overall writing abilities; some studies indicate that metacognitive strategies have no significant influence on students' performances in writing [9, 19, 20]. Furthermore, other studies found that metacognitive awareness could improve students' writing proficiency, and could also engage as well as support students in the writing process thereby increase their metacognitive awareness [15]. Kasper [21] beholds that metacognitive strategies have no impact in improving or enhancing students writing performance because they are not using a proper model of teaching. Another methodological gap found in the previous studies is that they overlooked at prominent aspects of SL/FL learning, such as students motivation, anxiety, and L1 transfer. Therefore, in line with the evolution of research in the area of metacognition in education, there is a growing need for better understanding the nature of the construct in foreign language teaching especially in writing [22].

Thus, most studies on writing strategy have focused on qualitative differences between proficient writers and the less proficient counterparts in the use of certain types of writing strategies and planning [23], organizing [24], text-generating [23], monitoring [25], and revising [23, 24]. Their findings indicate that proficient writers used their writing strategies qualitatively differently from less able ones. Meanwhile, in the case of the present study, the researcher intends to carry out teaching in real class settings to improve and enhance students writing performance in secondary school in Jordan by integrating the three components (planning, monitoring and evaluation) into Cognitive Academic Language Learning Approach (CALLA) model of teaching metacognitive strategies. The (CALLA) is one of such model designed to increase the school achievement of students who are learning through the medium of a foreign language. Moreover, it can be asserted that the model (CALLA) used to teach metacognitive strategies, was a practical and useful one [26].

One of the major factors that impede the smooth acquisition of writing intelligibility by EFL learners is the transfer of L1 linguistic elements into L2. Evidence from numerous studies in the field of L2 acquisition discloses that the L1 transfer negative and positive effects on L2 learning. Although most scholars assumed that there is L1 transfer, while few are explicit about what it exactly means by the L1 transfer [27]. Concerning metacognitive strategies used in EFL writing context, previous studies neglected the aspects of L1 transfer and its influence on students' performance. Although there has been debate over the exact influence of first language (L1) on the acquisition of the second language (L2/EFL), however, there is a wide acceptance that the learners' L1 have a significant role to play in the L2/EFL learning [28].

Hence, the role of L1 transfer has long been a controversial issue in applied linguistics, Second Language Acquisition (SLA) and language teaching [29]. The question of the role of L1 cannot be ignored by researchers in the field of the second language acquisition because of the apparent L1 effects in L2 learner data that indicate the existence of an L1 influence [30]. The Jordanian EFL learners in general particularly those who are writing tawjihi English exam, struggle with the negative impact of their mother tongue in the process of writing in the English language. Although, this problem may not be stamped out completely, yet, the adverse effect of L1 transfer could be minimised by identifying the causative factors and the visible areas of the interference.

Consequently, by using metacognitive strategies students can overcome the menace of L1 transfer when learning English as a foreign language. The role of the students' mother tongue (L1) in the ESL/EFL classroom has been the focus of on-going debate and research. The monolingual approach suggests that the use of the target language solely in the L2 classroom increases the learning of the target language [31]. In the EFL context, there appears to be an increasing conviction that the use of L1 in the EFL Classroom has a necessary facilitating role in their performance. Dörnyei, & Ushioda [32] concludes that students' previous experience with L1 and L2 writing instruction had a stronger influence on their metacognitive knowledge other than what had been acknowledged in the previous literature. Therefore this study is interesting in finding out the impact of metacognitive in reducing the EFL students L1 interference when writing English composition.

Moreover, motivation is another alarming factor that affects Arab EFL learners' performance in general and Jordanian students in particular. It is considered to be the second strongest predictor of success in teaching L2 [11]. Al-Khasawneh & Alomari

[33] hold that motivation is among the several factors that affected the process of learning any language. Studies considered it as the most important factor that could determine the success and achievement of students who are learning a second or a foreign language. Notwithstanding, lack of motivation is one of the critical obstacles that caused EFL students' poor performance in writing [5]. In language learning, motivation is considered a vital issue in anticipating second or foreign language achievement and success [33, 34]. Despite the fact that this crucial role and motivation is essential for researchers of metacognitive yet, it is almost being ignored in their studies. It could be argued that the debate on the effects of using metacognitive strategies (planning, monitoring, and evaluating) from both sides have overlooked the aspect motivation and its possible influence on the performance of students.

The unanswered questions by previous research are: was metacognitive strategy motivates students to write in EFL context? And what motivates students to writes. It could be recalled that most of the studies investigating the effect of motivation have found a relatively strong correlation between motivation and language learning success, and more importantly, motivation is the most significant predictor of achievement [35, 36]. There are relatively few studies on the influence of motivation on Arab EFL learners. Hence, the present study intends to investigate the aspects of motivation especially the extrinsic motivation and their effects on EFL students' performance in writing through metacognitive strategies.

Furthermore, foreign language anxiety is another predicament to students' performance in writing. Anxiety experienced in the course of learning a foreign language is specific and unique [37]. Foreign language anxiety has aroused great interest among scholars of SL/FL learning since the 1970s and became the focus of research in various fields such as stage performance and the learning of a certain subject; particular attention was paid to the students' perspectives on their experiences of anxiety. Students might be particularly prone to anxiety during the early phases of learning, like when starting beginners' language classes [38]. It was found that most of the previous studies using metacognitive strategies reviewed in this study did not explore the students' level of anxiety and its effects when implementing the metacognitive classes.

In the context of foreign language learning, causes and consequences of anxiety are not fully understood. It could be argued that writing in a foreign language is associated with three components of anxiety: 'communication apprehension', 'test anxiety', and 'fear of negative evaluation'. Students writing

anxiety cannot be ignored because in almost every educational institution there are students who suffer from anxiety [39]. The negative effects of anxiety on the academic achievement of EFL writers is//are one of the major reasons for this concern [40, 6]. Foreign language anxiety has been neglected in most of the previous studies using metacognitive strategies. Therefore, there is need to investigate the level of students' anxiety when adopting metacognitive strategies, for instance, to find the students' feelings when they are asked to write in a foreign language at planning, monitoring and evaluating stages.

There is also need to find the students level of anxiety and correlation with their performance using metacognitive. According to Lui and Ni [40], foreign language (FL) writing anxiety has long been neglected since writing is often the least practised and thus considered the least important of the four skills of an SL/FL. Nevertheless, as English writing has become increasingly more important in recent decades, FL writing anxiety has captured the interest of more and more researchers. Therefore the present study sets to investigate the level of EFL students' anxiety when writing English composition and effects of metacognitive on students' level of anxiety.

Henceforth, the overall purpose of this study is to fill these identified gaps by examining metacognitive strategies towards improving English writing performance among Jordanian secondary school students this includes the injection of CALLA model. Research shows that practical use of writing strategies can lead to better writing competence [41]. Therefore, this study assumes that with the proposed integrated cognitive learning framework of writing performance, the students would be encouraged to be aware of their cognitive processes and could motivate them both intrinsically and extrinsically, and it will help students to develop the ability to monitor and to regulate their strategic approaches to learning [42, 43]. This study also assumes that the implementation of this framework could help students to overcome or reduce the foreign language anxiety.

## LITERATURE REVIEW

### Theoretical Paradigms and Perspectives on EFL/ESL Learning

The researchers of second language (ESL) or foreign language (EFL) have given major consideration to influences and roles that some other factors play in leaning language rather than the first language. L1 transfer, Motivation and Anxiety are among the most variables that have to be considered by EFL researchers whenever they want to investigate the level of influence or effects of some theories to learning in EFL context. Henceforth, the present study will involve those three paradigms in a synergy with two theories "Cognitivism

and Constructivism” to investigate the effects of metacognitive strategies on writing performance of EFL students.

### L1 Transfer

Native language (L1) transfer is regarded as one of the sources of learning constraint in context of acquiring second/foreign language. Studies like Fatemi [44] consider transfer as a dominant influence both positively and negatively in the acquisition and learning of language skills. The significant breakthrough in the construct of transfer is the postulation of the Contrastive Analysis Hypothesis (CAH). The major prediction of this theory is that those aspect or features of L2 that are similar to the L1 would be easy to acquire, while those features that were different in the two languages would be difficult to acquire. Fellbaum [45] reformulated contrastive analysis hypothesis; he incorporated the notion of typological markedness into it. Markedness differential hypothesis (MDH) as the theory is coined is based on CAH but with additional criterion. It emphasises that it is the level of markedness of different sounds that creates difficulty not the difference in and of themselves. Another significant theory based on transfer construct is Prince and Smolensky [46] Optimality Theory (OT). It is a constraint-based approach to L2 acquisition in general; hence it encompasses all the aspect of language acquisition. The major postulation of this theory is that learner begins the L2 learning with their L1 constraint rankings and must learn the ranking of these constraints in the L2. However, the theory incorporate the idea of markedness in L2 acquisition as it posits that in the process of re-ranking the constraints from L1 to the L2, the least marked structures re-ranking will emerge before those that are more marked.

### Motivation

One of the most widely studied concepts in learning situations is the notion of motivation which has long been recognized as one of factors in the education and social psychology fields. It is also important in anticipating second or foreign language achievement and success [47, 48, 5, 49]. However, it is not easy to provide simple definition for motivation, hence; the idea of motivation has been defined and viewed differently by different schools. Tahaineh, & Daana [50] defined motivation as “a psychological concept in human behaviour that describes a predisposition reward a particular” (p.61). Gardner [51] views motivation as: “a very complex phenomenon with many facets”. As mentioned earlier, the motivation idea has been viewed by different schools of thoughts. For instance, the cognitivists view motivation as an idea which is more related to the learner’s decision to learn. Chen, & Jang [52] posits that motivation is the “choices people make as to what experiences or goals they approach or avoid and the degree of effort they exert in that respect”.

Moreover, there is much rationality for employing the concept motivation as the variable in the present study. The main aim of this study is to investigate the effects of metacognitive strategies on EFL students’ writing performance. In a point of fact, motivation is one of the key factors that influence the use of language learning strategies. For instance, the findings of Oxford [48], Dörnyei [34] revealed that motivation has most a powerful influence on the choice of language learning strategies. Their findings show that highly motivated students were found to use more learning strategies than less motivated ones; as a result they were able to improve their language ability. This implies that the more students are motivated towards writing, the higher is the use of writing strategies which in turn leads to the development of writing competence. A great deal of emphasis in language learning especially at EFL context is placed on the effects on motivation on learners’ performances in all of the four language skills. Notwithstanding, many studies are conducted to redress this issue but in relation metacognitive strategies such studies have ignore the issues particularly wring skill and stress on the other issues.

Furthermore, this study intends to investigate the motivational factors implied at the three stages of metacognitive strategies: planning, monitoring, and evaluating. At planning stage the study will look at motivational factors that can help them to plan and what give them a positive stimulus to write in language rather than their mother tongue. Planning also involves techniques used to set personal goal. Hence, Wu, Yen and Marek [53] study reveals that EFL teachers have the unique opportunity to improve student motivation through fostering desirable student goals, stimulating active learning, and leading dialog about the purposes of learning. Intrinsically motivated learners have long been considered to be more successful because their learning goal is to achieve satisfaction and enjoyment. Learners driven by extrinsic motivation tend to make the minimum effort required to avoid punishment or to gain rewards. Gardner considered integrative motivation to be more desirable and effective because it stems from the learner’s intrinsic desire to engage with the target language and culture. At monitoring stage the self-efficacy motivation can be tested. Students’ self-efficacy for self-regulation their confidence to use various self-regulated learning strategies also correlates with writing [54]. Finally at the evaluation stage different types of motivational factors can be tested like intrinsic and extrinsic motivation, and self- efficacy. The employment of motivation in this study will contribute greatly to the current trend in area of EFL research.

## **Anxiety**

Anxiety is defined as a conscious fearful emotional state, such as feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system whose effects are believed to be affecting students' performance in major subjects like science, mathematics or learning a foreign language [55]. Spielberger and Gorsuch [56] define it as a feeling of uneasiness and apprehension, usually in regards to a situation entailing uncertain outcomes. It is profoundly regarded as one of the major challenges in learning by foreign language learners [11, 35]. Crookall and Oxford [48] assert that serious language anxiety may adversely affect students' self-esteem, self-confidence, and ultimately hamper proficiency in language acquisition. Arnold and Brown [57] conclude that "anxiety is quite possibly the affective factor that most pervasively obstructs the learning process" (p. 8). Language anxiety is one of the reasons why some people avoid communicating in EFL context [58]. Horwitz, Horwitz, and Cope [55] define Foreign language anxiety as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (p. 128). In addition, Horwitz and young [59] "language anxiety has become the preferred term when discussing communication apprehension in the L2. The negative effects of language anxiety can be explained by proposing that the arousal of anxiety causes an increase in self-focused attention and distracting, self-deprecating thoughts [60, 51]. The symptoms and consequences of foreign language anxiety should thus become readily identifiable to those concerned with language learning and teaching as many people find foreign language learning, especially in classroom situations, particularly stressful. Furthermore, when anxiety is limited to the language learning situation, it falls into the category of specific anxiety reactions. Psychologists use the term specific anxiety reaction to differentiate people who are generally anxious in a variety of situations from those who are anxious only in specific situations. Researchers have identified several specific anxieties associated with school tasks such as test-taking and with academic subjects such as mathematics or science. Second language researchers and theorists have long been aware that anxiety is often associated with language learning [55, 59].

## **METHODOLOGY AND TOOLS**

### **Method Research Approach**

In this study, the descriptive analytic research technique was followed, the technique consists of a questionnaire prepared by the researchers after adopt and adapt.

## **Population and Sampling Population**

For this study, the population comprises of the final year secondary school students of Al-Mzaar School in Irbid Jordan.

## **Samples**

The present study involved 44 final year high school students divided into two groups to represent experimental and control groups consisting of 22 students in each group. The type of sampling technique will be a purposive sampling as a type of non-probability samples, thus, all members in this cluster (the 2 classes) with their specified characteristics will be selected and included for this research. The reason for choosing this sample is due to the main purpose of conducting the research in which it is mainly to test the effect of metacognitive strategies on writing composition. The idea behind purposive sampling is to concentrate on people with particular characteristics who will better be able to assist with the relevant research.

## **Questionnaire Technique**

The questionnaire was prepared by the researchers, is formed from thirty items distributed into three factors, L1 Transfer includes (10 items), motivation includes (10 items), anxiety includes (10 items) phrases. In order to ensure the validity and reliability of the questionnaire form, it distributed to. The instruments used in this study were sent to three subject experts, two from Illinois University United States of America and one from Universiti Malaysia Terengganu. then the pilot study was conducted and the value of reliability was found. It was about (0.83) and after that, the questionnaire forms became ready for application.

## **Practical Procedures**

The principle of voluntarism was the pre-condition of participating in the questionnaire. For the questionnaire, an explanation was prepared. The goal of the research and how the study would be carried out were clearly stated in it. In addition, it was emphasized that the identities of the participants would remain confidential. During the questionnaire, written forms were used. The questionnaire took place three weeks, and the researcher used manually distributing to answering the questionnaire.

## **DATA ANALYSIS**

After gathering data, the researchers used Descriptive Statistics and Spearman's Correlation coefficient to examine the hypotheses, percentages to answer the questions to compare the results.



## RESULTS AND DISCUSSION

To examine the effects and correlation between students' performance when instructed with metacognitive strategies and three major external factors (L1 transfer, motivation and anxiety).

### Research findings in relation to research question one.

How do the uses of metacognitive strategies influence EFL students' attitudes and L1 transfer towards writing in English?

H<sub>1</sub>: Metacognitive strategies will significantly influence EFL students' attitudes and L1 transfer towards writing in English.

**Table-1: Descriptive Statistics of Questionnaire on L1 Transfer**

s/no	Variable: L1 Transfer	Means	Std. Deviations
31	I usually think in my mother tongue when asked to write in English.	3.68	0.780
32	In my opinion, the language you think in influences your writing performance.	3.50	0.859
33	My mother tongue affects my ability to revise because some words and phrases are not familiar to me.	3.73	0.703
34	Metacognitive strategies help me to deduce mother tongue interference and to improve my performance in English.	3.36	0.658
35	Students who use mother tongue perform poorly in English.	3.59	0.666
36	Students who use English perform better in English.	4.14	0.710
37	Use of mother tongue does not influence performance in English.	3.91	0.811
38	Teachers' use of mother tongue affects students' performance in English.		0.780
39	In my opinion, teacher should employ mother tongue to explain metacognitive strategies to students.	3.50	0.859
40	I find it difficult to evaluate my writing in English by myself because of the influence of mother tongue.	3.73	0.703
	Grand total	3.58	0.823

Level of indicator: Low =0.-1.99; moderate= 2.0-.3.49; high=3.5-5.0

The results in table 1 above revealed a high mean (3.58, SD = 0.823) from the grand total of the responses means. The results showed the students' overall perceptions concerning the influence of L1 Transfer in writing performance and the role of metacognitive strategies. Items 31-40 of the survey questionnaire required students to give their perceptions and opinions with regard to L1 Transfer in their writing composition and issues related to metacognitive strategies. Item 31 showed a positive high mean (3.68, SD= 0.780) which indicated that majority of the respondents believed that their thinking and mental cognition when they are asked to write a composition is usually based on their mother tongue. And item 32 revealed a different mean of (3.50, SD= 0.859) indicating that majority of the respondents believed that thinking in their mother affects their writing, while item 33 of revealed a mean of (3.73, SD = 0.703) which showed that students acknowledged that L1 affects their revision ability when they are not familiar with the words in the second language.

In addition, item 34 showed a moderate mean (3.36, SD= 0.658) which indicated that the majority of the students perceived that using of metacognitive strategies helped them to deduce mother tongue

interference and to improve my performance in English. Meanwhile, item 35 revealed a mean (3.59, SD= 0.666) which showed that the students believed that students who use mother tongue perform poorly in English. And item 36 with a mean (4.14, SD= 0.710) revealed that students perceived that practice English performed better. Items 37 and 38 the questionnaire revealed a positive high means of (3.91, SD= 0.811) for item 37 and 38 a mean (3.68, SD= 0.780) for item 38 respectively, which indicated that students believed that the use of mother tongue does not influence performance in English and that the teachers' use of mother tongue affects students' performance in English.

Furthermore, item 39 asked for the students' opinion concerning the teacher use of mother tongue to explain metacognitive strategies to students. In the result the majority of the students' favoured the use of mother tongue to explain the metacognitive strategies with mean (3.50, SD= 0.859) which was unfortunately against their believed in items 37 and 38. This may be due to the newest of the activities as for the first time introduced to metacognitive. Meanwhile, item 40 showed appositive high mean (3.73, SD= 0.703) indicating that students found difficult to evaluate their writing due to L1 barriers.

**Table-2: The Results of Spearman's Correlation coefficient between Metacognitive Strategies and L1 Transfer**

Variables	L1 Transfer	Metacognitive Strategies
L1 Transfer	1.000	0.818*
		(0.000)
Metacognitive Strategies	0.818*	1.000
	(0.000)	

\*. Correlation is significant at the 0.01 level (2-tailed)

To elaborate on the issues involved in inferring the relationship between metacognitive strategies and L1 transfer a Spearman's correlation coefficient was calculated. As illustrated in table there is a positive and significant correlation between metacognitive strategies and L1 transfer  $P = (0.000)$ .

In summary, the results obtained from the above table 2 indicated that majority of the students believed that their teachers perceived L1 transfer is one of the external factors that the students' writing performance. From the students' opinions it was found that they believed that the writing was affected by the use of mother and they want to be taught in an immersion. Notwithstanding, item 39 was against that believed whereas the majority of the students favoured explanation of the strategies be in the mother tongue.

While the results in the table 2 illustrated the correlation between metacognitive strategies and L1 transfer whereas evidently showed significant correlation.

#### **Research findings in relation to research question two.**

This sub-section reports and discusses the findings obtained from the analysis of data based on research question 4 of the study:

To what extent do the uses of metacognitive strategies motivate EFL students to enhance their writing performance?

H<sub>2</sub>: The use of metacognitive strategies will significantly motivate EFL students to enhance their writing performance.

**Table-3: Descriptive Statistics of Questionnaire on Motivation**

No	Variable: Motivation	Means	Std. Deviations
41	Brainstorming techniques motivated me to write in English.	3.36	0.658
42	I feel more motivated when I am not stressed.	3.59	0.666
43	I feel more motivated when the lesson relates to what I know.	4.14	0.710
44	I feel more motivated when the lesson is well-organized.	3.91	0.811
45	I feel more motivated when the teacher provides me with guidelines and samples.	3.68	0.780
46	I feel more motivated when provided with opportunities to practice.	3.50	0.859
47	Metacognitive strategies give me more courage to write in English because they provide me with opportunities to revise my first draft.	3.73	0.703
48	Metacognitive strategies make me feel more motivated to write especially when I work in a group.	3.36	0.658
49	I feel more motivated when I get opportunities to evaluate my draft before I submit.	3.59	0.666
50	I would like to be taught all my subjects using meta cognitive strategies.	4.14	0.710
	Grand Total	3.70	0.722

Level of indicator: Low =0.-1.99; moderate= 2.0-.3.49; high=3.5-5.0

Table 3 revealed a high total grand mean (3.70, SD= 0.722) on the overall respondents' perceptions and opinion on motivation concerning writing composition. As linguists and psychologies postulated and assumed motivation as a standout amongst the most generally examined concepts related to language learning especially in ESL/EFL contexts. Henceforth, Item 41 on the table indicated a moderate mean (3.36, SD= 0.658) which revealed the students perception on the motivational level of the brainstorming techniques in writing in English. The result is evidence that students were motivated to write in English as a result of motivation techniques.

Meanwhile, item 42 revealed a high mean (3.59, SD= 0.666) which indicated that students believed that they more motivated to write when they are not stress. Item 43 showed a high mean (4.14, SD= 0.710) which indicated that students hold a view that they more motivated when the subject matter is related to what they know. Item 44 of the survey questionnaire revealed a mean (3.91, SD= 0.811) this showed that student believed that they are more motivated when the lesson is well-organized. In addition, item 45 with a high mean (3.68, SD= 0.780) which indicated that students are more motivated when the teacher provides them with guidelines and samples.

On the other hand, item 46 revealed a high mean (3.50, SD= 0.859) in which students hold that providing them with time for revision and practice has a significant influence for them to write. In the same vein, item 47 revealed a high mean (3.73, SD= 0.703) which indicated that students construed that metacognitive strategy give them more courage to write in English because it provide me with opportunities to revise my first draft. Meanwhile, item 48 revealed a high mean

(3.36, SD= 0.658) metacognitive strategy make them feel more confident to write especially collaboratively a group. Item 49 showed a high mean (3.59, SD= 0.666) which indicated the students strongest believe that providing them with opportunity to revise their writing drafts before submitting. Item 50 revealed a high mean (4.14, SD= 0.710) which indicated their interest to be taught other subjects using metacognitive strategy.

**Table-4: The Result of Spearman's Correlation coefficient between Metacognitive Strategies and Motivation**

Variables	Motivation	Metacognitive Strategies
Motivation	1.000	0.630*
		0.003
Metacognitive Strategies	0.630*	1.000
	0.000	

\*. Correlation is significant at the 0.01 level (2-tailed)

To elaborate on the issues involved in inferring the relationship between metacognitive strategies and motivation a Spearman's correlation coefficient was calculated. As illustrated in table 4.15 there is a positive and significant correlation between metacognitive strategies and motivation  $P = (0.000)$ .

In summary, the results obtained from the table 4 above revealed that majority of the students acknowledged the roles of motivation in their writing tasks. As the results illustrated other issues such as brainstorming, stress, and practice attracted students and motivated them positively as in the case of practice and brainstorming and negatively in the case of stress which was also related to the next variable on the survey questionnaire (anxiety). Lastly, students hold a view that metacognitive strategy has positive motivation to students as they showed their interest to be taught all other subjects using it. Meanwhile, the

results in the table 4.15 showed that there is a positive and significant correlation between metacognitive strategies and motivation.

### Research findings in relation to research question three.

This sub-section reports and discusses the findings obtained from the analysis of data based on research question 5 of the study:

To what extent do the uses of metacognitive strategies help EFL students to overcome foreign language writing anxiety?

Moreover, three research hypotheses are formulated as presented below:

H<sub>3</sub>: There is a positive influence of metacognitive strategies on EFL students' foreign writing anxiety.

**Table-5: Descriptive Statistics of Questionnaire on Anxiety**

S/no	Variable: Anxiety	Means	Std. Deviations
51	I am afraid of writing essays in English when the content is not clear to me and when my writing will be evaluated.	3.91	0.811
52	I afraid to write when I don't have ideas to write in English before I start writing.	3.68	0.780
53	Confusing in setting the goal for writing my task makes me unconfident in my ability to clearly express my ideas in English writing.	3.50	0.859
54	I have a terrible time organizing my ideas in an English composition course.	3.73	0.703
55	Metacognitive strategies reduce my fear of having my English writing evaluated.	3.36	0.658
56	Writing under time constraints makes me feel nervous about writing in English.	3.59	0.666
57	I never seem to enjoy what I write in English when I do not get a chance for revision.	3.91	0.811
58	I like to have my friends read what I have written in English.	3.68	0.780
59	I expect to do poorly in English composition classes even after learning to use metacognitive strategies.	3.50	0.859
60	Metacognitive strategies make me enjoy writing in English.	3.73	0.703
	Grand Total	3.65	0.763

Level of indicator: Low =0.-1.99; moderate= 2.0-.3.49; high=3.5-5.0



Table 5 above illustrated a high mean (3.65, SD=0.763) of grand total of the mean of respondents' perceptions and opinions on writing anxiety. Meanwhile, item 51 revealed a high mean (3.91, SD= 0.811) which showed that majority of the students were afraid of writing in English when the content is not clear to them and when they know that their writing is going to be evaluated. Item 52 illustrated a high mean (3.68, SD= 0.780) whereas the students indicated that they are afraid to write when they do not have ideas to write in English before they start writing.

In addition, item 53 revealed a high mean (3.50, SD= 0.859) which indicated that respondents reported that they confusing in setting the goal for their writing task make them unconfident in their ability to clearly express their ideas in English writing. Meanwhile, item 54 depicted that majority mean (3.73, SD= 0.703) of the respondents experienced a terrible time in organizing their ideas in an English composition course.

Furthermore, concerning the use of metacognitive strategy majority of the respondents showed that it reduced their fears to write in English as illustrated in item 55 with moderate mean (3.36, SD= 0.658). Meanwhile, item 56 showed a high mean (3.59, SD= 0.666) which illustrated that the respondents reported that writing English under time constraints make them feel nervous about writing in English. Item 57 revealed a high mean (3.91, SD= 0.811) which indicated that lack of enough time to revise their writing tasks. Item 58 revealed a high mean (3.68, SD= 0.780) which illustrated that respondents depicted their dislike to have their writing task to be evaluated by their peers. Furthermore, item 59 revealed a high mean (3.50, SD= 0.859) which indicated that the respondents have very weak expectation concerning their performance in English writing. And lastly, item 60 revealed a high mean (3.73, SD= 0.703) which depicted respondents opinions concerning the use metacognitive strategies in English writing class, whereas the majority reported that they enjoy the writing actives during the class.

**Table-6: The Result of Spearman's Correlation coefficient between Metacognitive Strategies and Anxiety**

Variables	Anxiety	Metacognitive Strategies
Anxiety	1.000	0.899*
		0.000
Metacognitive Strategies	0.899*	1.000
	0.000	

\*. Correlation is significant at the 0.01 level (2-tailed)

To elaborate on the issues involved in inferring the relationship between metacognitive strategies and anxiety a Spearman's correlation coefficient was calculated. As illustrated in table there is a positive and significant correlation between metacognitive strategies and anxiety  $P = (0.000)$ .

In summary the findings illustrated in the Table 6 above showed that the respondents have a high believe on the effects of anxiety to their writing in English as the grand total revealed a high mean (3.65, SD=0.763). Results on the different items under this variable evidently showed that the respondents hold a view that employing metacognitive strategy in teaching writing has a great positive influence to the way students approach writing in English language. Furthermore, the results in the table 4.3.6 showed that there is a positive and significant correlation between metacognitive strategies and anxiety.

#### **Discussion of Findings in Relation to Research Question 1, 2 and 3 (Other factors)**

The findings presented in relation to research questions 1, 2 and 3 above revealed results that can be supported by previous studies or in other way can be contrasted with. As presented above it was found that majority of the students believed that their teachers perceived L1 transfer is one of the external factors that

the affect students' writing performance. Moreover, different views were given which indicated that motivation as one of the major factor that influences the students' performances.

Anxiety is believed by researchers especially from the psychological perspectives to be one of the factors that negatively affect the students' performances especially when using a second language. Thus, the present study sought students' perception on how metacognitive have some impact in reducing the students' anxiety. Meanwhile, the results from a Spearman's correlation coefficient presented above indicated that there is a positive and significant correlation between metacognitive strategies and L1 transfer with  $P = (0.818)$ ; between metacognitive strategies and motivation  $P = (0.630)$ ; and between metacognitive strategies and anxiety  $P = (0.8199)$ .

Furthermore, Ruan [61] study reports on an investigation into metacognitive awareness of Chinese English as foreign language (EFL) student writers. The study comprises threefold metacognition framework – person, task, and strategy variables, and which are within the premises of cognitive writing theories. The participants of the study comprise 51 Chinese tertiary English-major students. Semi-structured interview was used to collect the data in this study conducted prior to

English writing course. The results of the study found that motivation, self-efficacy, and writing anxiety constitute students' awareness of person variables influencing their EFL writing, whereas their task awareness involves task purposes, task constraints, and cross-language task interference. Strategy awareness of planning, text generating, and revising was found typical of novice EFL student writers. Finally, this study suggested the development of an interactional model of EFL student writers' metacognitive awareness that intends to describe and explain the intertwining nature of the complex process underlying their EFL writing.

## CONCLUSION

In summary, the present study has revealed that metacognitive strategies can be valuable and improve the content quality of EFL writing. Furthermore, the results of this investigation also show that metacognitive group has a positive relationship with the L1 transfer, motivation, and an anxiety to improve writing performance. The study has gone some way towards enhancing secondary school students understanding of the effect of metacognitive writing strategies instruction on the content of students writing performance. The analysis of cognitive and metacognitive strategies instruction undertaken here, also, has extended our knowledge of writing strategy instruction. The findings of this investigation complement those of earlier studies. The findings of this research provide insights for learners in demonstrating the importance of employing writing strategies to write better and improve the quality content of their writing. The practical implication of this study is the contribution to materials and syllabus design to indicate which of cognitive and metacognitive strategies are most likely to be instructed to students. Further studies, which take these variables into account, will need to be undertaken. 1) Further research could be conducted to determine the effectiveness of cognitive and metacognitive writing strategies on the content of the ESL learners' writing. 2) Further studies regarding the role of cognitive and metacognitive writing strategies on organization, vocabulary, language use, and mechanics of EFL/ESL learners' writing would also be worthwhile. 3) More research is required to determine the efficacy of cognitive and metacognitive writing strategies on the content of the advanced learners' writing.

## REFERENCES

1. Paek, J. K., & Kang, Y. (2017). Investigation of content features that determine Korean EFL learners' argumentative writing qualities. *English Teaching*, 72(2), 85-95.
2. Al-Hazmi, S., & Schofield, P. (2007). Enforced revision with checklist and peer feedback in EFL writing: The example of Saudi university students. *Scientific Journal of King Faisal University (Humanities and Management Sciences)*, 8(2), 237-267.
3. Hamouda, A. (2012). An exploration of causes of Saudi students' reluctance to participate in the English language classroom. *International Journal of English Language Education*, 1(1), 1-34.
4. Aliyu, M. M., Fung, Y. M., Abdullah, M. H., & Hoon, T. B. (2016). Developing Undergraduates' Awareness of Metacognitive Knowledge in Writing Through Problem-based Learning. *International Journal of Applied Linguistics and English Literature*, 5(7), 233-240.
5. Buyukyavuz, O., & Cakir, I. (2014). Uncovering the motivating factors behind writing in English in an EFL context. *The Anthropologist*, 18(1), 153-163.
6. Atay, D., & Kurt, G. (2006). Prospective teachers and L2 writing anxiety. *Asian EFL Journal*, 8(4), 100-118.
7. Barkaoui, K. (2007). Rating scale impact on EFL essay marking: A mixed-method study. *Assessing writing*, 12(2), 86-107.
8. Hyland, K., & Hyland, F. (2006). Feedback on second language students' writing. *Language teaching*, 39(2), 83-101.
9. Graham, S., McKeown, D., Kihara, S., & Harris, K. R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of educational psychology*, 104(4), 879-881.
10. Zhang, Y., & Mi, Y. (2010). Another look at the language difficulties of international students. *Journal of Studies in International Education*, 14(4), 371-388.
11. Al-Shboul, M. M., Ahmad, I. S., Nordin, M. S., & Rahman, Z. A. (2013). Foreign language reading anxiety in a Jordanian EFL context: A qualitative study. *English Language Teaching*, 6(6), 38-72.
12. Crossley, S. A., Kyle, K., & McNamara, D. S. (2016). The tool for the automatic analysis of text cohesion (TAACO): Automatic assessment of local, global, and text cohesion. *Behavior research methods*, 48(4), 1227-1237.
13. Paltridge, B. (2004). Academic writing. *Language teaching*, 37(2), 87-105.
14. Raoofi, S., Chan, S. H., Mukundan, J., & Rashid, S. M. (2014). A qualitative study into L2 writing strategies of university students. *English Language Teaching*, 7(11), 39-45.
15. Panahandeh, E., & Asl, S. E. (2014). The effect of planning and monitoring as metacognitive strategies on Iranian EFL learners' argumentative writing accuracy. *Procedia-Social and Behavioral Sciences*, 98(2), 1409-1416.
16. Finn, B. (2008). Framing effects on metacognitive monitoring and control. *Memory & cognition*, 36(4), 813-821.

17. Aleven, V., McLaren, B., Roll, I., & Koedinger, K. (2006). Toward meta-cognitive tutoring: A model of help seeking with a Cognitive Tutor. *International Journal of Artificial Intelligence in Education*, 16(2), 101-128.
18. Thiede, K. W., Anderson, M., & Theriault, D. (2003). Accuracy of metacognitive monitoring affects learning of texts. *Journal of educational psychology*, 95(1), 66-70.
19. Yanyan, Z. (2010). Investigating the role of metacognitive knowledge in English writing. *HKBU Papers in Applied Language Studies*, 14, 25-46.
20. Keith, N., & Frese, M. (2005). Self-regulation in error management training: emotion control and metacognition as mediators of performance effects. *Journal of Applied Psychology*, 90(4), 677-682.
21. Kasper, L. F. (1997). Assessing the metacognitive growth of ESL student writers. *TESL-EJ*, 3(1), 1-20.
22. Maftoon, P., Birjandi, P., & Farahian, M. (2014). Investigating Iranian EFL learners' writing metacognitive awareness. *International Journal of Research Studies in Education*, 3(5), 37-52.
23. Chien, S. C. (2012). Students' use of writing strategies and their English writing achievements in Taiwan. *Asia Pacific Journal of Education*, 32(1), 93-112.
24. Victori, M. (1999). An analysis of writing knowledge in EFL composing: A case study of two effective and two less effective writers. *System*, 27(4), 537-555.
25. Uhl Chamot, A., & El-Dinary, P. B. (1999). Children's learning strategies in language immersion classrooms. *The Modern Language Journal*, 83(3), 319-338.
26. Takallou, F. (2011). The effect of metacognitive strategy instruction on EFL learners' reading comprehension performance and metacognitive awareness. *Asian EFL Journal*, 13(1), 80-87.
27. Unsworth, S. (2007). L1 and L2 acquisition between sentence and discourse: Comparing production and comprehension in child Dutch. *Lingua*, 117(11), 1930-1958.
28. Lee, I., & Coniam, D. (2013). Introducing assessment for learning for EFL writing in an assessment of learning examination-driven system in Hong Kong. *Journal of Second Language Writing*, 22(1), 34-50.
29. Odlin, T. (2013). Crosslinguistic influence in second language acquisition. *The Encyclopedia of applied linguistics*. 3(2), 57-62.
30. Grami, G. M. A., & Alzughaibi, M. G. (2012). L1 transfer among Arab ESL learners: theoretical framework and practical implications for ESL teaching. *Theory and Practice in Language Studies*, 2(8), 1552-1554.
31. Bhooth, A., Azman, H., & Ismail, K. (2014). The role of the L1 as a scaffolding tool in the EFL reading classroom. *Procedia-social and behavioral sciences*, 118, 76-84.
32. Dörnyei, Z., & Ushioda, E. (2013). *Teaching and researching: Motivation*. Routledge.
33. Al-Khasawneh, F. M., & Al-Omari, M. A. (2015). Motivations towards learning English: The case of Jordanian gifted students. *International Journal of Education*, 7(2), 306-321.
34. Dörnyei, Z. (2003). Attitudes, orientations, and motivations in language learning: Advances in theory, research, and applications. *Language learning*, 53(S1), 3-32.
35. Nasihah, M., & Cahyono, B. Y. (2017). Language learning strategies, motivation, and writing achievement of Indonesian EFL students. *Arab World English Journal*. 8(1), 250-263.
36. Williams, M., Burden, R., & Lanvers, U. (2002). 'French is the language of love and stuff': Student perceptions of issues related to motivation in learning a foreign language. *British educational research journal*, 28(4), 503-528.
37. Chu, H. N. R. (2008). Shyness and EFL learning in Taiwan: A study of shy and non-shy college students' use of strategies, foreign language anxiety, motivation, and willingness to communicate. . (Published doctoral dissertation). Texas University.
38. Al-Saraj, T. M. (2014). Foreign language anxiety in female Arabs learning English: Case studies. *Innovation in Language Learning and Teaching*, 8(3), 257-278.
39. Jahin, J. H. (2012). The Effect of Peer Reviewing on Writing Apprehension and Essay Writing Ability of Prospective EFL Teachers. *Australian Journal of Teacher Education*, 37(11), 11-15.
40. Liu, M., & Ni, H. (2015). Chinese university EFL learners' foreign language writing anxiety: Pattern, effect and causes. *English Language Teaching*, 8(3), 46.
41. Bai, R., Hu, G., & Gu, P. Y. (2014). The relationship between use of writing strategies and English proficiency in Singapore primary schools. *The Asia-Pacific Education Researcher*, 23(3), 355-365.
42. Shannon, S. V. (2008). Using metacognitive strategies and learning styles to create self-directed learners. *Institute for Learning Styles Journal*, 1(1), 14-28.
43. Hacker, D. J., Dunlosky, J., & Graesser, A. C. (Eds.). (1998). *Metacognition in educational theory and practice*. Routledge.
44. Fatemi, M. A. (2008). The relationship between writing competence, language proficiency and grammatical errors in the writing of Iranian TEFL sophomores. (Unpublished doctoral dissertation). Universiti Sains Malaysia, Penang.

45. Fellbaum, M. L. (2013). In 1977 Eckman argued that Lado's contrastive analysis hypothesis (CAH) could be "maintained as a viable principle of second language acquisition" if it was revised to incorporate certain principle. *Markedness*, 6(3), 291-299.
46. Prince, A., & Smolensky, P. (2008). *Optimality Theory: Constraint interaction in generative grammar*. John Wiley & Sons. 5(2), 74-79.
47. Zahran, M. A., El-Demerdash, M. A., & Mashaly, I. A. (1990). Vegetation types of the deltaic Mediterranean coast of Egypt and their environment. *Journal of Vegetation Science*, 1(3), 305-310.
48. Oxford, R. L. (2002). Language learning strategies in a nutshell: Update and ESL suggestions. *Methodology in language teaching: An anthology of current practice*, 4(3) 124-132.
49. Abdalla, M. Y., Ahmad, I. M., Switzer, B., & Britigan, B. E. (2015). Induction of heme oxygenase-1 contributes to survival of Mycobacterium abscessus in human macrophage-like THP-1 cells. *Redox biology*, 4, 328-339.
50. Tahaine, Y., & Daana, H. (2013). Jordanian undergraduates' motivations and attitudes towards learning English in EFL context. *International review of social sciences and humanities*, 4(2), 159-180.
51. Gardner, R. C. (2007). Motivation and second language acquisition. *University of Western Ontario*. 8(3), 9-20
52. Chen, K. C., & Jang, S. J. (2010). Motivation in online learning: Testing a model of self-determination theory. *Computers in Human Behavior*, 26(4), 741-752.
53. Wu, W. C. V., Yen, L. L., & Marek, M. (2011). Using online EFL interaction to increase confidence, motivation, and ability. *Journal of Educational Technology & Society*, 14(3) 26-35.
54. Pajares, F., & Schunk, D. (2001). The development of academic self-efficacy. *Development of achievement motivation. United States*, 7(3), 84-92.
55. Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern language journal*, 70(2), 125-132.
56. Spielberger, C. D., & Gorsuch, R. L. (1983). *State-trait anxiety inventory (form Y)*. Consulting Psychologists Press.
57. Sirringhaus, H., Brown, P. J., Friend, R. H., Nielsen, M. M., Bechgaard, K., Langeveld-Voss, B. M. W., ... & De Leeuw, D. M. (1999). Two-dimensional charge transport in self-organized, high-mobility conjugated polymers. *Nature*, 401(6754), 685.
58. MacIntyre, P. D., Baker, S. C., Clément, R., & Donovan, L. A. (2002). Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2 motivation among junior high school French immersion students. *Language learning*, 52(3), 537-564.
59. Horwitz, E. K., & Young, D. J. (1991). *Language anxiety: From theory and research to classroom implications*. Pearson College Div.
60. Eysenck, H. J. (1979). Personality factors in a random sample of the population. *Psychological Reports*, 44(3\_suppl), 1023-1027.
61. Ruan, Z. (2014). Metacognitive awareness of EFL student writers in a Chinese ELT context. *Language Awareness*, 23(1-2), 76-91.