

Metacognitive Skills and Language Achievement: A Correlational study

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Abstract

In recent years, the field of research on language learning and metacognitive skills has received much attention and became a popular area in cognitive psychology. Metacognitive skills is believed to have significant contributions to learners' academic context in the era of technology and explosion of information. The need to regulate our own thinking patterns is felt more prominently for the secondary school students with their intense exposure to more readings. This study aimed at the correlation among language achievements and metacognitive skills of the students. The findings of present study demonstrated that there was a significant relationship among language achievements and metacognitive skills. Also, gender and level of proficiency could not make a statistically significant difference in this respect.

Introduction

Metacognition was originated by Flavell, a child developmental psychologist. He suggested that metacognition is what organizes the learning process. It involves constant monitoring and regulation of cognitive process to accomplish cognitive goals (Flavell 1976). After Flavell, some other researchers focused their attention on MLS and offered different definitions for the term. But what can be inferred from these definitions is that MLS can simply be viewed as "Thinking about thinking" (Anderson 2002). Biehler and Snowman (1997) considered metacognition as a very broad concept which covers everything an individual can know that relates to how information is processed. Experts agree that appropriate use of this strategy set influences learning process positively (Anderson 2002) and they view it as what controls cognitive processes of learning (Livingston 1997). Research into language learning strategies began in the 1960s which was particularly influenced by developments in cognitive psychology (Williams and Burden 1997) "Early researchers tended to make lists of strategies and other features presumed to be essential for all good L2 learners" Oxford (1994:1). In most of the research on language learning strategies, the main concern has been on investigating what makes good language learners do to their learning.

Review of related Research

Hidayat, Zulnaldi & Zamri, (2018) in Roles of metacognition and achievement goals in mathematical modelling competency: A structural equation modelling analysis explains that the relationship between metacognition and achievement goals which may influence mathematical modelling competency in students of mathematics education programs. The study employed 538 students of mathematics education program; The study followed a correlational research design to investigate and measure the degree of relationship amongst mathematical modelling competencies, achievement goals and metacognition. Results indicate that achievement goals and metacognition positively influence mathematical



modelling competency. Moreover, four metacognition dimensions including awareness, planning, cognitive strategy and self-checking are positive partial mediators because they increase the association between achievement goals and mathematical modelling competency. In conclusion, metacognition and achievement goals positively affect students' mathematical modelling competency.

Dogan and Tuncer (2017) aimed to determine the relationship between general metacognitive awareness and academic achievement in foreign language learning. To this end, the study first tried to investigate whether there were any correlations between the construct of metacognitive awareness and its sub-dimensions-knowledge management, planning, monitoring, evaluation-and the academic achievement in foreign language. The study then went on to search whether metacognition with its sub-dimensions were effective in foreign language achievement. The sample of the study consisted 683 university students studying English as a foreign language. The data collection was conducted with the use the Metacognitive Awareness Inventory; and the students' grades were also used. As a result, it was observed that there were no correlations between the metacognitive awareness and its sub-dimensions and the achievement in foreign language. Moreover, the only variable that predicted the academic achievement was monitoring skill.

ALshammari (2015) in the study *The Effect of Using Metacognitive Strategies For Achievement And The Trend Toward Social Studies For Intermediate Schools Students In Saudi Arabia* aimed at determining the effect of metacognitive strategies in achievement and trend towards social studies for students of intermediate schools in Hafer Al Batin City in Saudi Arabia. In order to achieve the objectives of the study, the study uses sample consisting of (40) One-Grade male students selected by purposeful sampling In "tahfiidh al Quran School." The sample of the study was divided into two groups such that the experimental group consisted of (20) students who studied using the traditional method. The results of the study showed statistically significant differences in the achievement and trend towards social studies

Huseyin (2014) investigated the relationship between metacognition and academic achievement in a sample of 134 Turkish pre-service teachers of English as a foreign language (EFL). Participants completed Metacognitive Awareness Inventory (MAI) as a measure of metacognition. Participants' course scores and grade point averages at the end of the semester were aggregated as a measure of academic achievement. The findings revealed significant correlations between metacognitive awareness, exam scores and grade point average (GPA). Both knowledge of cognition and regulation of cognition significantly contributed to the prediction of variation in students' GPAs, with regulatory skills overweighing knowledge of cognition as a predictor of academic achievement. Moreover, teachers can also benefit from the findings of the present study to opt for strategies that help students to compensate for the probable intellectual shortcomings through explicit strategy teaching which in turn will help the curriculum to promote metacognitive awareness and improve academic achievement.

Kummin and Rahman (2010) studied *The Relationship between the Use of Metacognitive Strategies and Achievement in English*. The aim was to identify the differences based on gender, ethnic and achievement in Malaysian University Entrance Test (MUET). The sample consists of 50 undergraduate students. Results show that there were no differences in the use



of metacognitive strategies based on gender and ethnic groups. Rehearsal strategy was the most frequently used strategy. There were differences in the use of metacognitive strategies among proficient and less proficient English language learners.

Zahedi and Doorimanesh (2008) in his thesis titled *Metacognitive Learning Strategies and Academic Success of TEFL M.A. Students in Distance Education* defined that Appropriate use of metacognitive learning strategies (MLS) can contribute to the development of autonomy in distance learners, which is of paramount importance to their educational success. This paper reports on the frequency of MLS used by M.A. distance students of TEFL and it is intended to find out whether this particular set of strategies has any effect on these learners' academic success. The academic success rate of the subjects is determined based on their university average scores. The subjects consisted of 36 M.A. TEFL distance learners who were asked to fill out Oxford's Strategy Inventory for Language Learning (SILL) questionnaires. For the purpose of analysis, the students were classified as high and low achievers based on their average scores. The results indicate that with α set at 0.05, there is no statistically significant correlation between the use of MLS and academic success of the participants

Objectives:-

- To Study the relationship between metacognitive skills and their achievement in Hindi Language.
- To Study the relationship between metacognitive skills and their achievement in English Language.
- To Study the relationship between metacognitive skills and their achievement in Punjabi Language.
- To Study the difference between males and females regarding the relationship between metacognitive skills and language Achievement.

Hypothesis:-

- There will be no statistically significant relationship between metacognitive skills and their achievement in Hindi Language of Secondary School Students.
- There will be no statistically significant relationship between metacognitive skills and their achievement in Hindi Language of Secondary School Students.
- There will be no statistically significant relationship between metacognitive skills and their achievement in Hindi Language of Secondary School Students.
- There will be no statistically significant difference between male and female's metacognitive skills and language Achievement of Secondary School Students.

Method:-

Descriptive survey method of research was used.

Sample:-



The study was conducted on 60 secondary school students. The schools were selected randomly from govt. and private schools of Chandigarh district UT. A sample of 60 students was selected using quota sampling technique consisting 30 males 30 female students.

Tools:-

1. Meta-Cognitive Skills Scale (MCSS-GMS) by Gupta and Suman
2. Teacher Made Achievement Tests.

Data Analysis:-

Hypothesis-1

There will be no statistically significant relationship between metacognitive skills and their achievement in Hindi Language of Secondary School Students

TABLE-1

PEARSON CORRELATION; METACOGNITIVE SKILLS AND ACHIEVEMENT IN HINDI

Metacognitive Skills		
Achievement in Hindi	Pearson Correlation	.751**
Sig. (2-tailed)	.000	
N	60	

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

Hypothesis-1 will stand rejected as from Table 1-it can be concluded that there was a significant relationship between metacognitive skills and their achievement in Hindi Language

Hypothesis-2

There will be no statistically significant relationship between metacognitive skills and their achievement in Hindi Language of Secondary School Students

TABLE-2

PEARSON CORRELATION; METACOGNITIVE SKILLS AND ACHIEVEMENT IN ENGLISH

Metacognitive Skills		
Achievement in English	Pearson Correlation	.652**
Sig. (2-tailed)	.000	
N	60	

Hypothesis-2 will stand rejected as from Table 2-it can be concluded that there was a significant relationship between metacognitive skills and their achievement in English Language.

Hypothesis-3



There will be no statistically significant relationship between metacognitive skills and their achievement in Hindi Language of Secondary School Students

TABLE-3

PEARSON CORRELATION; METACOGNITIVE SKILLS AND ACHIEVEMENT IN PUNJABI

Metacognitive Skills		
Achievement in Punjabi	Pearson Correlation	.652**
Sig. (2-tailed)	.000	
N	60	

Hypothesis-3 will stand rejected as from Table 3-it can be concluded that there was a significant relationship between metacognitive skills and their achievement in Punjabi Language.

Hypothesis-4

There will be no statistically significant difference between male and female's metacognitive skills and language Achievement of Secondary School Students.

TABLE -4

PEARSON CORRELATION; METACOGNITIVE SKILLS AND ACHIEVEMENT BY GENDER

Metacognitive Skills				
Male (30)	Female(30)	Z-Transformation		
Language Achievement	Pearson Correlation	.783**	.781**	Z = .05
Sig. (2-tailed)	.000	.000	P = .455	
N	60			

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

Hypothesis-4 will stand accepted as Table 4 shows that the results of Z-transformation indicated that there was not any significant difference between male and female's metacognitive skills and language Achievement of Secondary School Students.

Conclusion:-

The various findings of the study have been listed below

- There is a significant statistically significant relationship between metacognitive skills and their achievement in Hindi Language.
- There is a significant statistically significant relationship between metacognitive skills and their achievement in English Language.
- There is a significant statistically significant relationship between metacognitive skills and their achievement in Punjabi Language.



- There is no statistically significant difference between male and female's metacognitive skills and language Achievement.

References:-

ALshammari, M.K (2015) The Effect Of Using Metacognitive Strategies For Achievement And The Trend Toward Social Studies For Intermediate Schools Students In Saudi Arabia. *International Journal of Education, Learning and Development* Vol.3, No.7, pp.47-54, September 2015. Published by European Centre for Research Training and Development UK (www.eajournals.org)

Dogan, Y & Tuncer, M (2017) Effect Of Metacognitive Awareness On Achievement In Foreign Language Learning.

Hidayat R, Zulnaidi H, Syed Zamri SNA (2018) Roles of metacognition and achievement goals in mathematical modeling competency: A structural equation modeling analysis. *PLoS ONE* 13(11): e0206211. <https://doi.org/10.1371/journal.pone.0206211>

Huseyin (2014). The Relationship between Metacognitive Awareness and Academic Achievement among English as a Foreign Language Teachers DO - 10.13140/2.1.2402.0162

Kummin, S & Rahman, S (2010) studied The Relationship between the Use of Metacognitive Strategies and Achievement in English. *International Conference on Learner Diversity* 20101877-0428, 2010, Elsevier Ltd. DoI: 10.1016/j.sbspro.2010.10.021, *Procedia Social and Behavioral Sciences* 7(C) (2010) 145–150

Zahedi, K & Doorimanesh, P (2008) Metacognitive Learning Strategies and Academic Success of TEFL M.A. Students in Distance Education. *International Journal of Criminology and Sociological Theory*, Vol. 1, No. 2, December 2008, 161-176

