

УНИВЕРЗИТЕТ "СВ. КИРИЛ И МЕТОДИЈ" ФИЛОЛОШКИ ФАКУЛТЕТ "БЛАЖЕ КОНЕСКИ" СКОПЈЕ



# ДОКТОРСКА ДИСЕРТАЦИЈА

# УЛОГАТА НА МЕТАКОГНИТИВНИТЕ СТРАТЕГИИ ВО РАЗВИВАЊЕ НА ВЕШТИНАТА ЧИТАЊЕ ПРИ ИЗУЧУВАЊЕ НА АНГЛИСКИОТ ЈАЗИК КАКО СТРАНСКИ ВО ВИСОКОТО ОБРАЗОВАНИЕ ВО КОСОВО

Ментор:

Проф. д-р Анжела Николовска

Кандидат: М-р Назли Туфекчи

Скопје, 2018

### ABSTRACT

Metacognitive strategies are one of widely among teaching strategies that involves planning, self-monitoring and self-evaluation. Metacognition is characterized as a build that alludes to considering one's reasoning or the human capacity to be aware of one's mental procedures. As per Flavell (1976) metacognitive learning is "one's learning concerning one's own particular intellectual procedures and items or anything identified with them, e.g., the learningapplicable properties of data or information". Metacognition is a type of discernment and an abnormal state thinking process that includes dynamic control over subjective procedures. The purpose of the study is to investigate to what extent the University EFL learners employ metacognitive reading strategies in reading comprehension. Further, it aims to research whether University EFL teachers train their students how to be effective readers. Moreover it examines the influence of metacognitive reading strategy training on students' reading comprehension enhancement. A survey study using MARSI questionnaire was conducted among 473 students. 100 students were chosen from the survey sample and categorized into two groups (experimental = 50; control = 50) for analyzing the role of training on metacognitive strategies in experimental setting. Statistical analysis using MANOVA, ANOVA, correlation and paired sample t-test were performed to assess the research objectives which is discussed in further sections.

To my beloved sun, who is above all else in my life, believing that science one day will be able to aid him.....

#### ACKNOWLEDGEMENT

Foremost, I would like to express my deepest appreciation to my mentor professor prof. dr. Anzela Nikolovska, who introduced me to the field of foreign language learning methodologies. She thought me how to conduct academic research, how to write a research paper and how to present my work effectively to others; the three skills that shaped my career. The mentorship and guidance of my precious mentor professor has been the best material from which my graduate education could be made, not only for her contributions to scientific knowledge, but also for my personal benefit from the privilege of working alongside her.

The research presented in this dissertation is the product of a wide-ranging collaboration. I would especially like to acknowledge prof.dr Asllan Hamiti for motivating me to always do better and for getting me to accomplish more than I ever thought is possible. I also thank him for his confidence and friendship over the years. The greatest obstacle I faced was having confidence in myself, and you've helped me overcome that. I would like to express my gratitude to prof. dr Avzi Mustafa, that with his outrageous humor certainly influenced my decision to continue on to doctoral studies. I am profoundly grateful to University rectors and deans, where I have conducted the research, for always opening the doors without any hesitation. I am also grateful to all professors taking place in research, for being ready to meet me and being patient with my rhetorical questions. In addition, I consider myself lucky to have worked alongside colleagues that are always willing to gather around table for a good scientific debate or a needed distraction.

Very special thanks to my husband for his love, motivations and continuous support. Finally, I am profoundly grateful to my mother, you have helped me make it through each day and each step of this research. Without your moral and physical support throughout my life I cannot imagine arriving to this point.

# TABLE OF CONTENTS

List of abbreviations       9         CHAPTER 1       11         INTRODUCTION       11         1.1 Background of the study       12         1.2 Rationale of the study       16         1.3 Problem Statement       17         1.4 Research Questions       17         1.5 Research Aim       18         1.6 Research Objectives       18         1.7 Hypotheses       18         1.8 Significance of the present study       19         1.9 Definition of Terms       19         1.9.1 Native Speakers       19         1.9.3 Second language       20         1.9.4 EFL       20         1.9.5 ESL       21         1.9.6 Reading comprehension       20         1.0 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         2.1 Introduction       23         2.2 Reviewed Studies       23	ABSTRACT	2
INTRODUCTION       11         1.1 Background of the study       12         1.2 Rationale of the study       16         1.3 Problem Statement       17         1.4 Research Questions       17         1.5 Research Aim       18         1.6 Research Objectives       18         1.7 Hypotheses       18         1.8 Significance of the present study       19         1.9 Definition of Terms       19         1.9.2 First language       19         1.9.3 Second language       20         1.9.4 EFL       20         1.9.7 Familiarity of the participant with the text       20         1.10 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         2.1 Introduction       23	List of abbreviations	9
1.1 Background of the study       12         1.2 Rationale of the study       16         1.3 Problem Statement       17         1.4 Research Questions       17         1.5 Research Aim       18         1.6 Research Objectives       18         1.7 Hypotheses       18         1.8 Significance of the present study       19         1.9 Definition of Terms       19         1.9.1 Native Speakers       19         1.9.2 First language       20         1.9.4 EFL       20         1.9.5 ESL       21         1.9.6 Reading comprehension       20         1.10 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         2.1 Introduction       23	CHAPTER 1	11
1.2 Rationale of the study       16         1.3 Problem Statement       17         1.4 Research Questions       17         1.5 Research Aim       18         1.6 Research Objectives       18         1.7 Hypotheses       18         1.8 Significance of the present study       19         1.9 Definition of Terms       19         1.9.1 Native Speakers       19         1.9.2 First language       20         1.9.4 EFL       20         1.9.5 ESL       .21         1.9.6 Reading comprehension       20         1.9.7 Familiarity of the participant with the text       20         1.10 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         2.1 Introduction       23	INTRODUCTION	11
1.3 Problem Statement       17         1.4 Research Questions       17         1.5 Research Aim       18         1.6 Research Objectives       18         1.7 Hypotheses       18         1.8 Significance of the present study       19         1.9 Definition of Terms       19         1.9.1 Native Speakers       19         1.9.2 First language       20         1.9.4 EFL       20         1.9.5 ESL       21         1.9.6 Reading comprehension       20         1.10 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         2.1 Introduction       23	1.1 Background of the study	12
1.4 Research Questions       17         1.5 Research Aim       18         1.6 Research Objectives       18         1.7 Hypotheses       18         1.7 Hypotheses       18         1.8 Significance of the present study       19         1.9 Definition of Terms       19         1.9.1 Native Speakers       19         1.9.2 First language       19         1.9.3 Second language       20         1.9.5 ESL       21         1.9.6 Reading comprehension       20         1.9.7 Familiarity of the participant with the text       20         1.10 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         2.1 Introduction       23	1.2 Rationale of the study	16
1.5 Research Aim       18         1.6 Research Objectives       18         1.7 Hypotheses       18         1.8 Significance of the present study       19         1.9 Definition of Terms       19         1.9 Definition of Terms       19         1.9.1 Native Speakers       19         1.9.2 First language       19         1.9.3 Second language       20         1.9.4 EFL       20         1.9.5 ESL       21         1.9.6 Reading comprehension       20         1.9.7 Familiarity of the participant with the text       20         1.10 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         2.1 Introduction       23	1.3 Problem Statement	17
1.6 Research Objectives       18         1.7. Hypotheses       18         1.8 Significance of the present study       19         1.9 Definition of Terms       19         1.9.1 Native Speakers       19         1.9.2 First language       19         1.9.3 Second language       20         1.9.4 EFL       20         1.9.5 ESL       21         1.9.6 Reading comprehension       20         1.9.7 Familiarity of the participant with the text       20         1.10 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         2.1 Introduction       22         2.1 Introduction       23	1.4 Research Questions	17
1.7. Hypotheses	1.5 Research Aim	18
1.8 Significance of the present study	1.6 Research Objectives	18
1.9 Definition of Terms191.9.1 Native Speakers191.9.2 First language191.9.3 Second language201.9.4 EFL201.9.5 ESL211.9.6 Reading comprehension201.9.7 Familiarity of the participant with the text201.10 Limitation of the Study201.11 Summary21CHAPTER 2222.1 Introduction23	1.7. Hypotheses	18
1.9.1 Native Speakers       19         1.9.2 First language       19         1.9.3 Second language       20         1.9.4 EFL       20         1.9.5 ESL       21         1.9.6 Reading comprehension       20         1.9.7 Familiarity of the participant with the text       20         1.10 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         2.1 Introduction       23	1.8 Significance of the present study	19
1.9.2 First language       19         1.9.3 Second language       20         1.9.4 EFL       20         1.9.5 ESL       21         1.9.6 Reading comprehension       20         1.9.7 Familiarity of the participant with the text       20         1.10 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         LITERATURE REVIEW       22         2.1 Introduction       23	1.9 Definition of Terms	19
1.9.3 Second language       20         1.9.4 EFL       20         1.9.5 ESL       21         1.9.6 Reading comprehension       20         1.9.7 Familiarity of the participant with the text       20         1.10 Limitation of the Study       20         1.11 Summary       21         CHAPTER 2       22         LITERATURE REVIEW       22         2.1 Introduction       23	1.9.1 Native Speakers	19
1.9.4 EFL       .20         1.9.5 ESL       .21         1.9.6 Reading comprehension       .20         1.9.7 Familiarity of the participant with the text       .20         1.10 Limitation of the Study       .20         1.11 Summary       .21         CHAPTER 2       .22         LITERATURE REVIEW       .22         2.1 Introduction       .23	1.9.2 First language	19
1.9.5 ESL211.9.6 Reading comprehension.201.9.7 Familiarity of the participant with the text.201.10 Limitation of the Study.201.11 Summary.21CHAPTER 2.22LITERATURE REVIEW.222.1 Introduction.23	1.9.3 Second language	20
1.9.6 Reading comprehension.201.9.7 Familiarity of the participant with the text.201.10 Limitation of the Study.201.11 Summary.21CHAPTER 2.22LITERATURE REVIEW.222.1 Introduction.23	1.9.4 EFL	20
1.9.7 Familiarity of the participant with the text.201.10 Limitation of the Study201.11 Summary21CHAPTER 222LITERATURE REVIEW222.1 Introduction23	1.9.5 ESL	21
1.10 Limitation of the Study	1.9.6 Reading comprehension	20
1.11 Summary	1.9.7 Familiarity of the participant with the text	20
CHAPTER 2    22      LITERATURE REVIEW    22      2.1 Introduction    23	1.10 Limitation of the Study	20
LITERATURE REVIEW	1.11 Summary	21
2.1 Introduction	CHAPTER 2	
	LITERATURE REVIEW	
2.2 Reviewed Studies	2.1 Introduction	23
	2.2 Reviewed Studies	23
2.2.1 Review on Foreign language reading comprehension	2.2.1 Review on Foreign language reading comprehension	23
2.2.2 Reviewing types of language learning	2.2.2 Reviewing types of language learning	23
2.2.2.1 Reading Comprehension	2.2.2.1 Reading Comprehension	26

	2.2.3 Reviewing cognitive processes related with reading comprehension	32
	2.3 Metacognition: Definition and Components	33
	2.3.1 Characteristics and Implications of Metacognition	36
	2.3.2 Metacognitive Processes: The Mechanism	41
	2.3.3 Metacognitive Strategies and Reading Ability	45
	2.3.4 Language Learning Autonomy and Metacognition theory	46
	2.4 Previous research in metacognitive reading strategies	51
	2.4.1 Review of the studies on awareness of metacognitive reading strategies or approach	les53
	2.5 Student Proficiency and reading comprehension	56
	2.6 Relationship between Metacognitive reading strategies and reading comprehension	57
	2.7 Models for Reading Comprehension	60
	2.7.1 The Bottom up Model	60
	2.7.1.1 Use of the Bottom up model in L2	62
	2.7.2 The Top-down Model	63
	2.7.3 The Intelligent Model	64
	2.8 Survey of Studies on Reading Techniques	65
	2.8.1. Reading Techniques in the L1 Setting	66
	2.8.2 Reading Strategies in the L2 Context	
	2.8.3 Descriptive Studies on L2 Reading strategies	71
	2.8.4 Descriptive studies in Metacognitive reading strategies in L2 context	78
	2.8.5. Summary of descriptive studies in L2 context	81
	2.8.6 Experimental studies in L2 reading context	82
0	CHAPTER 3	92
N	AETHODOLOGY	93
	3.1 Introduction	94
	3.2 Design	94
	3.3 Participants	95
	3.4 Research Instruments	96
	3.4.1 Questionnaire	96
	3.4.2 Tests	97
	3.4.3 Training Procedure	98

REFERENCES Error! Bookmark not defined.	
References Error! Booki	mark not defined.
5.3.2 Limitations of the study	
5.3.1 Recommendation	
5.3 Recommendation and Study limitations	171
5.2 Conclusion	170
5.1.4 Research question 4	157
5.1.3 Research question 3	156
5.1.2 Research question 2	153
5.1.1 Research question 1	
5.1 Discussion	146
DISCUSSION AND CONCLUSION	
CHAPTER 5	
4.5.3. Hypothesis 3	
4.5.2 Hypothesis 2	
4.5.1 Hypothesis 1	
4.5. Statistical analysis	132
4.4. Descriptive analysis	124
4.3.2. Validity analysis	
4.3. Reliability and validity analysis	110
4.2.3 MARSI Scores from five different universities	
4.2.2 Branch of the study	
4.2.1 Participant Universities	
4.2 Demographical analysis.	105
4.1 Introduction	105
RESULTS AND DISCUSSION	
CHAPTER 4	
3.7 Conclusion	103
3.6.1 Ethical Principles and Values	
3.6 Ethical implication	
3.5 Data Analysis Procedure	

Appendices	194	
Appendix 1 MARSI questionnaire	1	94
Appendix 2 Multiple Comparison table	2	01

# LIST OF TABLES

Table1. Participant universities of Kosovo    10	)7
Table 2. Study branches of students of participant universities of Kosovo       10	)9
Table 3. MARSI scores of five different universities	10
Table 4. Cranach's reliability analysis1	12
Table 5. Reliability statistics    1	12
Table 6. Item statistics    1	15
Table 7. Correlation for Inter –item in scale1	16
Table 8. Inter item correlation Matrix	.19
Table 9. Item total statistics    12	20
Table 10. Validity analysis – Chi square values1	124
Table 11. Descriptive statistics	126
Table 12. Hypothesis 1- ANOVA report    1	34
Table 13. ANOVA report	136
Table 14. ANOVA Table	138
Table 15. Hypothesis 2 – Pearson's correlation    1	40
Table 16. Spearman's correlation1	41
Table 17. MANOVA- Tests of Between subjects Effect    1	144
Table 18. Paired Sample Statistics	45
Table 19. Paired Samples Test    14	46

### LIST OF FIGURES

Figure 1. Interaction of metacognitive processes and existing metacognitive knowle	edge which the
executive controller governs	50
Figure 2. Participant universities of Kosovo	108
Figure 3. Study branches of students of participant universities of Kosovo	110
Figure 4. Histogram of MARSI scores	111

#### LIST OF ABBREVIATIONS

- 1) EFL English as a foreign language
- 2) ESL English as a second language
- 3) MRS Metacognitive reading strategy
- 4) MRS 1 I have a purpose in mind when I read.
- 5) MRS 2 I take notes while reading to help me understand what I read
- 6) MRS 3 I think about what I know to help me understand what I read.
- 7) MRS 4 I preview the text to see what it's about before reading it.
- 8) MRS 5 When text becomes difficult, I read aloud to help me understand what I read.
- 9) MRS 6 I summarize what I read to reflect on important information in the text.
- 10) MRS 7- I think about whether the content of the text fits my reading purpose.
- 11) MRS 8 I read slowly but carefully to be sure I understand what I'm reading.
- 12) MRS 9 I discuss what I read with others to check my understanding.
- 13) MRS 10 I skim the text first by noting characteristics like length and organization.
- 14) MRS 11 I try to get back on track when I lose concentration.
- 15) MRS 12 I underline or circle information in the text to help me remember it.
- 16) MRS 13 I adjust my reading speed according to what I'm reading.
- 17) MRS 14 I decide what to read closely and what to ignore.
- 18) MRS 15 I use reference materials such as dictionaries to help me understand what I read.
- 19) MRS 16 When text becomes difficult, I pay closer attention to what I'm reading.
- 20) MRS 17 I use tables, figures, and pictures in text to increase my understanding.

- 21) MRS 18 I stop from time to time and think about what I'm reading.
- 22) MRS 19 I use context clues to help me better understand what I'm reading.
- 23) MRS 20 I paraphrase (restate ideas in my own words) to better understand what I read.
- 24) MRS 21 I try to picture or visualize information to help remember what I read.
- 25) MRS 22 I use typographical aids like bold face and italics to identify key information.
- 26) MRS 23 I critically analyze and evaluate the information presented in the text.
- 27) MRS 24 I go back and forth in the text to find relationships among ideas in it.
- 28) MRS 25 I check my understanding when I come across conflicting information.
- 29) MRS 26 I try to guess what the material is about when I read.
- 30) MRS 27 When text becomes difficult, I re-read to increase my understanding.
- 31) MRS 28 I ask myself questions I like to have answered in the text.
- 32) MRS 29 I check to see if my guesses about the text are right or wrong.
- 33) MRS 30 I try to guess the meaning of unknown words or phrases.

# **CHAPTER 1**

# **INTRODUCTION**

- 1.1 Background of the study
- 1.2 Rationale of the study
- 1.3 Problem Statement
- 1.4 Research Questions
- 1.5 Research Aim
- 1.6 Research Objectives
- 1.7. Hypotheses
- 1.8 Significance of the present study
- 1.9 Definition of Terms
- 1.9.1 Native Speakers
- 1.9.2 First language
- 1.9.3 Second language
- 1.9.4 EFL
- 1.9.5 ESL
- 1.9.6 Reading comprehension
- 1.9.7 Familiarity of the participant with the text
- 1.10 Limitation of the Study
- 1.11 Summary

#### **1.1 Background of the study**

Language learning strategies determine how well students learn and understand foreign language. Foreign language is studied in a setting where primary language is a main mode of every day communication and foreign language input is restricted in day to day life. Many students from various global locations learn English language as a foreign language since many important information sources are available in English language. According to (Oxford, 2003), a learning style is defined as "a set of characteristics both biologically and developmentally predefined that makes same teaching method of a language best for some and terrible for others". Learning style of a student differs due to sensory priorities, personality types, biological differences and desired generalizable factors in a language.

(Oxford, 2003) also defined learning strategies as "few specific actions, behaviors and methods employed by the students to enhance their learning". This includes frequent conversation with their partners, encouraging partners to execute difficult tasks in the language and so on. Learner generally select suitable strategies that fits his or her own learning style. These strategies become ideal manual for the students that motivates to engage actively in learning experience for the purposeful self-regulation of EFL learning. Oxford (2003) observed six important learning strategies that facilitates English as Foreign Language (EFL) and English as Second Language (ESL). They are *cognitive, metacognitive, memory-related, compensatory, social* and *affective*. This paper focuses on effect of metacognitive strategies on English reading skills among Kosovo EFL students at the tertiary level. Metacognitive reading skills was observed to enhance comprehension reading skills among various EFL students irrespective of their nationalities (Wang, 2009).

Reading skill is considered as most important proficiency to acquire in language. Development of new teaching methods is essential for new English learners especially for English as a Foreign Language students. Speaking English language is regarded as important skill for communicating with others among global societies. Reading English is key component of academic success for non-native English speakers (Shoerey & Mokhtari, 2008). Regardless of difference in academic majors, English as foreign language students are closely tied in their capacity to read and write English in order to understand their academic coursework study materials. Foreign Students studying in UK and US universities experience trouble being nonnative English speakers while comprehending the academic context in their study materials. When a student reads any kind of text or writing, the primary goal is to understand what is written, while learnings something new in the process (Sadoski &Paivio, 2013).

Reading comprehension is a similar activity presented to students, with purpose of testing the reader's overall comprehension skills in a specific language (Krashen, 1982). Like in first and second language education, reading comprehension is also carried out in foreign language studies. Non-native and foreign language speakers find it difficult to decode the hidden messages within the text as argued by Pulido (2003). Although to native speakers of the language, answers to reading comprehension is obvious plain sight, while for EFL students it can be difficult task (Johnson & Newport, 1989).

When English or any other language is learnt as a foreign language, many barriers manifest itself. Unlike learning second language, foreign languages are often taught to students who are much older; hence, their ability to fully understand the language is quite limited (Cook, 2013). EFL students not only face difficulty conversing in English, but also in comprehension (Taglieber, Johnson & Yarbrough, 1988). Often such students undertake strategies to improve their comprehension abilities, such as, improving reading skills and expanding their vocabulary. A general belief regarding foreign language learners is that topic familiarity can positively influence these strategies (Sadoski & Paivio, 2013). This study is based around this hypothesis, and will explore literature as well conduct tests to determine whether this is factual. Several studies (Haus & Levine, 1985) have been conducted in the field of language studies to understand whether background knowledge can aid in understanding or processing of text. Such studies have suggested that it may have a positive impact on various cognitive tasks, similar to reading comprehension as stated by Nassaji (2002) in his Schema theory.

Metacognitive strategies are one of widely among teaching strategies that involves planning, self-monitoring and self-evaluation. Metacognition is characterized as a build that alludes to considering one's reasoning or the human capacity to be aware of one's mental procedures. As per Flavell (1976) metacognitive learning is "one's learning concerning one's own particular intellectual procedures and items or anything identified with them, e.g., the learning-applicable properties of data or information". Metacognition is a type of discernment and thinking process that includes dynamic control over subjective procedures (Wenden, 1998).

Inside the domain of language showing one range of study has concentrated on finding the part metacognitive information plays in deciding the adequacy of people's endeavors to take in another language. As per Flavell (1979), the powerful part of metacognitive learning in numerous intellectual exercises identified with language utilize is obvious, e.g., oral correspondence of data, oral influence, oral cognizance, reading understanding, and composing. Study conducted on metacognitive information and language adapting particularly learner systems has recognized a shared impact as far as second language learning (Zhang and Goh, 2006) and highlights the way that metacognitive learning ought to be fused in learner preparing projects to make adapting more effective (Wenden, 1998).

Some different reviews have concentrated on what capable and effective language learners do while reading, composing, talking, and tuning in with respect to the kind of techniques they utilize, and how and under what conditions they utilize those methodologies. The discoveries of these reviews strengthen the way that capable language learners find a way to comprehend what they are doing by utilizing a more extensive scope of systems than less capable learners do (Anderson

, 2003; Rasekh et al., 2003).

Handful of reviews uncover that there is an awesome requirement for EFL learners to utilize learning and metacognitive aptitudes, among learning periods, and in addition among long lasting learning approaches. Then again, the related writing incorporates a few reviews that explore critical thinking and metacognitive aptitudes, which found that metacognition had an unmistakable part in the instruction of youth and grown-ups. (Victor, 2004). Besides, Deseoete & Roeyers (2002) found a critical connection between the level of metacognitive abilities and the level of educational achievement. In this manner the EFL learners, who know how to apply metacognitive abilities while learning, know about how to achieve the learning procedure and get to memory and also choose which learning aptitudes are fitting their need. (Clear, 2000; Beeth, 1998; Paris and Myers, 1981).

With respect to the reviews on remote language learning comparative discoveries have likewise been accounted for (Goh 1998, 1999; O'Maley, Chamot and Küpper 1989; Vandergrift 1996, 1997; Youthful, 1997). The general finding of these reviews demonstrates that high degrees of metacognitive information help learners to be better at preparing and putting away new data, finding the most ideal approaches to sharpen and strengthen what they have realized (Vandergrift et al., 2006) and it assumes an imperative part in improving speculation and understanding (Costa, 2001; Sternberg, 1998; Wenden, 1998).

Various of the reviews with respect to metacognition methodologies and remote language learning have been accounted for in the Center East. Among them, consequences of the review showed that Iranian EFL learners utilize metacognitive methodologies more than different procedures and full of feeling techniques not as much as other learning systems.

As of late, Shirani Bidabadi and Yamat (2011) explored the connection between learning systems utilized by Iranian EFL rookie college EFL learners and their listening capability. They applied Oxford Situation Test created by Allen (1992) and the adjusted variant of MALQ (Vandergrift, et al. 2006; Vandergrift, 1997). They accumulated information from cutting edge, intermediated, and lower–intermediate college EFL learners and found that these EFL learners utilize metacognitive systems more every now and again than psychological and socio emotional listening techniques.

In this way, more research is required to discover the part of metacognitive information in deciding the viability of people's endeavors to take in another language, determining the attributes of good language learners, and the kind of techniques they use in a particular language assignment.

In the light of research thesis on metacognition contemplates by and large, and metacognition systems preparing specifically, no confirmation of logical research has been found in Kosovo and the district. Hence, the present investigation propagates English literature assumption that would be of extraordinary enthusiasm for the domain of remote language learning and educating. This thus would straightforwardly impact the review of remote language educational program, which would in the end increment the nature of outside language learning and instructing in Kosovo.

#### **1.2 Rationale of the study**

Within the theoretical framework provided in the literature review, the overall objective of the research is to investigate metacognitive reading strategy use by EFL (English as a Foreign Language) University students in Kosovo and the influence of metacognitive reading strategy training on students' reading comprehension enhancement. The purpose of the study is to investigate to what extent the University EFL learners employ metacognitive reading strategies in reading comprehension. Further, it aims to research whether University EFL teachers train their students how to be effective readers.

Moreover, the research's aim is to investigate the relationship between training University EFL learners to use metacognitive reading strategies and their achievement in reading. Metacognitive Reading is an activity presented to students, with purpose of testing the reader's overall comprehension skills in a specific language.

There have been several studies conducted in past with regard to understand language learning, and how it can be enhanced to facilitate better learning of foreign languages amongst non-native speakers. Although research on second language learning studies go back to the early 19<sup>th</sup> century, foreign language learning has only recently come in to the limelight. This means there are significant unknowns with regard to learning foreign languages, which have not been answered yet.

### **1.3 Problem Statement**

In recent years, the importance of English Education in Kosovo has grown considerably, and the country is providing some of the best scholarships to promote this trend. Schools in Kosovo offer English as a second language and a foreign language. The problem is that students who choose English as a foreign language face complexities to withstand with comprehension requirements. This is primarily due to the lack of understanding how background knowledge affects reading ability and comprehension. Moreover, there is insufficient evidence to directly relate background or subject familiarity with EFL students' comprehension strategies. Consequently, the current study attempts to explore this problem by discovering the extent to which background knowledge affects students' reading comprehension abilities in Kosovo Universities and Colleges.

### **1.4 Research Questions**

With respect to the purpose of the study, the following research questions are going to be addressed:

- 1. How metacognitively aware are University EFL learners in Kosovo with respect to the reading strategies, they employ?
- 2. Which reading strategies are most frequently used by University EFL learners in Kosovo?
- 3. Is there a relationship between training University EFL learners to use metacognitive reading strategies and their achievement in reading?
- 4. Do University EFL teachers train their learners to use specific reading strategies?

#### 1.5 Research Aim

The main aim of the present study is to investigate on metacognitive reading strategies on Kosovo EFL students to observe whether it enhanced comprehension skills among them.

#### **1.6 Research Objectives**

The chief objectives of this research investigation include:

- To observe the reading strategies employed by EFL students from University of Kosovo
- To determine the differences between English training methods employed by teachers and metacognitive reading strategies
- To analyze the awareness among EFL students about metacognitive strategies
- To investigate on teaching methods recruited in University of Kosovo to train their EFL students

## 1.7. Hypotheses

The research hypothesis for this study includes:

- a. University EFL learners in Kosovo are not metacognitively aware with respect to the reading strategies they employ.
- b. There is a positive relationship between metacognitive strategy use and students' reading performance in reading English as a foreign Language.
- c. Explicit training of metacognitive reading strategies enhances University EFL learners' reading proficiency.

#### **1.8** Significance of the present study

Reading and comprehension abilities are key factors towards achieving academic success in foreign language studies. Furthermore, the majority of studies have been conducted on speakers of European, Asian and South American native speakers. Since, people of different ethnicities, backgrounds and culture can demonstrate different abilities with regard to comprehending English, a study to be conducted on Kosovo EFL students may vary from previously conducted studies on this subject matter. Hence, this study is significant as it sheds lights on the impact of prior knowledge or text familiarity from Kosovo context, with special regard to Kosovo EFL students. Moreover, the study can help serve as a guide for EFL students to enhance their reading comprehension abilities based on text familiarity.

### **1.9 Definition of Terms**

#### 1.9.1 Native Speakers

Are those individuals who adopt a specific language as a first language. For example, majority of people living in Britain are native speakers of English, who ha

A term used to describe the primary language used by an individual. First language in most cases, is the dominant language used within a region, and is taught to children since birth. Since, first languages are taught early in life, the individual possess a ve adopted the language as their first preference.

#### 1.9.2 First language

strong grasp over the language with regard to reading, writing, speaking, listening and conversing.

#### 1.9.3 Second language

Non-native speakers of a language who adopt the language as second choice after their native language or first language. Usually the second most popular language in a region is taught as second language in schools; however, this may not apply in all cases.

### 1.9.4 EFL

English as a foreign language is used to describe teaching of English as foreign language in regions where other languages are predominantly used.

#### 1.9.5 ESL

ESL is an abbreviation that refers to English as a second language, and is usually designed for students who come from countries where English is not their first language of communication. So, these students will learn English as a second language, which in the meantime is also the first language of the state or the language of the majority.

#### 1.9.6 Reading comprehension

A test carried out in language evaluation containing a passage and set of questions based of the passage. The primary goal of reading comprehension is to assess how well the student can understand the text, by answering question related to it.

#### 1.9.7 Familiarity of the participant with the text

It is the level of understanding of the field of knowledge, in which this text has origins. It is measured by number of correct answers in the test.

### **1.10 Limitation of the Study**

In this section, the researcher aims to point out the limitations of the current study being undertaken. The study has two primary limitations, which are both related to the participants themselves. With A2 level of English knowledge participants from three different Universities in Kosovo, the research data gathered might experience bias. In addition, only first year students from various academic branches were recruited in this study seeming to obtain narrow results. Apart from this, the study will be conducted during the first semester of 2016, which is another limitation.

# 1.11 Summary

The concluded chapter has briefly introduced the topic and purpose of conducting the research. Since, English is taught as a second and foreign language in Kosovo. Kosovo students can find it difficult to grasp the subject as Albanian is primarily taught as the first language. As stated earlier, non-native speakers find it difficult while undertaking language evaluation in foreign languages, making it a stressful and sometimes impossible task. As a result, students have addressed to using reading comprehension strategies to enhance their understanding over the foreign language. The introduction also explained why the research was significant and how it could be used later by students. Furthermore, the limitations of the study were also discussed, where the research is believed to be limited to simply deducting whether or not topic familiarity or prior knowledge on text influences the learner ability, with regard to the use of reading comprehension strategies.

# **CHAPTER 2**

# LITERATURE REVIEW

2.1 Introduction

2.2 Reviewed Studies

2.2.1 Review on Foreign language reading comprehension

2.2.2 Reviewing types of language learning

2.2.2.1 Reading Comprehension

2.2.3 Reviewing cognitive processes related with reading comprehension

2.3 Metacognition: Definition and Components

2.3.1 Characteristics and Implications of Metacognition

2.3.2 Metacognitive Processes: The Mechanism

2.3.3 Metacognitive Strategies and Reading Ability

2.3.4 Language Learning Autonomy and Metacognition theory

2.4 Previous research in metacognitive reading strategies

2.4.1 Review of the studies on awareness of metacognitive reading strategies or approaches

2.5 Student Proficiency and reading comprehension

2.6 Relationship between Metacognitive reading strategies and reading comprehension

2.8.5. Summary of descriptive studies in L2 context

2.8.6 Experimental studies in L2 reading context

### **2.1 Introduction**

In this section of the Study, the researcher discusses existing literature on the subject being studied. This is vital part of the research, as it gives the study a knowledge base to conduct it. In addition, the literature review educates the researcher regarding studies, theories in subject of English Foreign Language and comprehension strategies.

### 2.2 Reviewed Studies

#### 2.2.1 Review on Foreign language reading comprehension

Although major effort has gone into understanding what impacts foreign language or L2 reading comprehension, only two theories proved most relevant and convincing in the field namely cognitive schema theory and threshold hypothesis.

The schema theory describes human memory as a large collection of schemata, each of which may possess several slots, components or parts. Furthermore, these individual "slots" are linked via a hierarchical structure. According to the theory, information on topics may be stored in these schemata, which the reader utilizes when attempting cognitive tasks like comprehension. The lack of prior knowledge within these schemata often result in reading problems for foreign language learners. However, when the appropriate schemata regarding a topic is present, the learner is able to quickly decode the text and overcome basic linguistic difficulties (Mandler, 2014).

Studies on first language or L1 learners have revealed similar findings as suggested by the schema theory. The research (Droop &Verhoeven, 1998) on L1 comprehension stated that if text possessed cultural similarity it is likely to have a positive impact on performance. Findings from this research suggested learners were able to recall prior knowledge and perform sentence-

recognition tasks, such as, searching for answers within the text, more effectively. Learners in the experiment improved their reading scores, when asked to read similar topics prior to taking the test. However, the research is limited in a sense that it only applies to topic familiarity based on cultural similarity. Hence, the research does not take into consideration text that does not possess cultural similarity.

Since, readers pursue different disciplines, measuring their reading comprehension skills accurately was difficult, leading to biased results. However, studies have indicated that foreign language students with domain-specific or discipline specific similarity to the text recorded higher performance. In addition, this improvement was noticed in reading comprehension as well as listening comprehension (Fang, 1994). This finding backed up earlier research conducted by Haus & Levine (1985), where they provided substantial evidence to suggest being domain-specific, low ability leaners were able to perform just as well as those who possessed high language proficiency. From this discussion, it is clear, that being domain-specific is a major contributor towards better reading comprehension in EFL or 2L learners.

However, all the earlier discussed studies had a major obstacle; while students did record better performance when pre-reading tasks were assigned, a large number of students did not improve. Since, the number of students that did demonstrate improvements were not significantly enough to draw an outright conclusion; these studies remain far from being conclusive. This is the primary limitation of most studies conducted on foreign and second language learners, where positive results did not manifest in entirety. Another famous study called the Hudson (1998) study, conducted in 1988 shed light on this subject.

The study was conducted over students of three levels; beginner, intermediate and advance. Although beginner and intermediate students demonstrated positives when made to familiarize themselves with the topic, there was no effect on advance level students as described by Pae (2004). Another interesting observation from Hudson's study was related to domain specific knowledge. Students that possessed domain specific knowledge in social science and humanities demonstrated improvements, while no effect was observed when the domain was science and technology.

This makes sense since disciplines like humanities and social science do not require creativity or intensive cognitive thinking while solving text based on them, while on the other hand, text based on science and technology requires a higher level of thinking. From this observation, it can be hypothesized, that reading comprehension tasks, which require creativity, and thinking do not benefit students even if they possess prior knowledge or topic familiarity.

A commonly accepted fact in L2 or FL studies is the fact that foreign language learners or second language learners are linguistically bound due to a lack of proficiency with the language. This means that non-native speakers or readers of a language require a higher cognitive function and attention just to read the read, as when compared to first language users. Often this prevents them from using background knowledge and interpretation, as their cognitive function is solely on reading the words and sentences itself (Ridgway, 1997).

Since, reading comprehension requires more than just recognizing words and sentences, EFL students are said to possess a 'threshold level', beyond which they are unable to process the information. The threshold hypothesis suggests that every EFL learner possess this limitation over the foreign language that "caps" or "limits" their performance while undertaking cognitive intensive studies. The hypothesis also states that different threshold levels may exist in different learners who possess different levels of linguistic abilities. Hence, the threshold level dictates the learner's vocabulary, reading, speaking and comprehension skills of foreign language (Roller, 1990).

The threshold hypothesis also explores the possibility of the text structure itself playing a role in the learner's reading comprehension ability. When the text includes abstract ideas or obscure words, it becomes difficult for learners to understand and hence related to what is already known. This is obvious, as the learner's ability to understand text is directly influenced by vocabulary. As a result, those with extensive vocabulary would perform better, even if they possess lower level linguistic ability in that foreign language. From this hypothesis, it can be deduced that learners must attain a specific level or threshold level in vocabulary and structure, in

order to effectively apply background knowledge, skills and reading strategies (Lee & Schallert, 1997).

While many have accepted the threshold hypothesis, it has had its fair share of criticism as well. Critics believe that the hypothesis claim of vocabulary alone being able to impede the use of prior knowledge or topic familiarity is weak. The primary argument being that foreign language students are able to read text with sufficient understanding, as long as a meaning-centered theoretical approach towards the reading process is undertaken as argued by MacSwan (2000). Therefore, this model allows students to start with the perceptual processing of text and move upward through word recognition to comprehension, in other words, it is the process in which the reader begins with the smallest units of text (letters) and then move to the higher units of text ( clusters) and finally get to words. So, readers derive meaning in linear manner, i.e. building letters into words, words into sentences, phrases and then proceeds to the overall meaning ( Laberg and Samuels 1974 cited in Samuel et al 1984).

#### 2.2.1.1 Reading comprehension

Reading is a complicated skill that demands considerable time and practice to develop (Lundahl 1998:175). The ability "to read" involves more than merely decoding a text. In addition to the practical skill of putting letters together, turning them into words, one is also supposed to understand what is read: one has to combine decoding; the ability of putting words together, with comprehension; the result of interpreting linguistic elements (ibid).

Philip B. Gough and William Tunmer (1986) explain reading comprehension as the formula: "Decoding (D) x Language Comprehension (LC) = Reading Comprehension (RC)". The multiplication relates to the fact that everything that is done to facilitate reading will multiply the result, in addition to alluding to that if one of the elements is missing, the result will be zero. Hence, if there is no understanding of what is read, there is no actual reading; there is no reading comprehension. When this first goal of reading is achieved, one has to add further elements to the reading process in order to become a proficient reader. The next steps on the way to full reading ability are motivation, empathy, and metacognitive ability (Kverndokken 2012:28).

When a reader manages all these elements, he/she reads with high proficiency. According to Ivar Bråten & Helge Strømsø, reading is often described as an interactive process, where comprehension is a result of joint efforts from the author and the reader (2007:196). The author has to formulate the content so that it is interpretable, whereas the reader must mobilize the skills and knowledge needed to comprehend the text – a joint venture. However, the reader is the one most likely to spoil the process; fail to understand, give in, and stop reading. Hence, the reader is considered to be the one most responsible for gaining comprehension. This questions the interactivity of reading (ibid).

Reading strategies and learning strategies are tightly intertwined, and what is considered vital in learning processes is further applicable to reading comprehension (Roe 2014:84). Hence, many researchers refer to the two concepts as one and the same (ibid.). If one fails to understand the content of texts or tasks, learning and fulfilling of tasks will be difficult, if not impossible. As the students grow older, the requirements for reading with accuracy and proficiency steadily increase. In lower secondary, the subjects become harder than in elementary school, and the amount of theory to be read is vast. This is further fortified in higher education. Nowadays, many students face several years of higher education, and good reading strategies are essential (Roe 2014:88). To be able to read with fluency and accuracy and to understand what is read is essential in all learning.

Louise Rosenblatt argues that comprehension is a result of a transaction between the reader and the text, and explains reading a text as: "an event involving a particular individual and a particular text, happening at a particular time, under particular circumstances, in a particular social and cultural setting, and as part of the ongoing life of the individual and the group" (1985:100, in Lundahl 1998:194).

This quote portrays well the full challenge of reading, and it shows the immense variety of elements that are vital in understanding texts.

What distinguishes high proficiency readers?

Roe states that reading and learning is highly intertwined, and consciousness in the learning process, knowledge about learning strategies, and abilities to use the strategies adequately are considered vital. She further emphasizes the importance of a high metacognitive ability, motivation, and self-regulated learning (2014:84). It is important for learners to supervise their own learning process, to want to learn and see the necessity of it, and to be in charge of and responsible for the process of learning new material. Hence, it might be valuable for teachers to be able to distinguish the learners with good opportunities to become high proficiency readers from those who are likely to struggle more with reading comprehension.

In distinguishing proficient readers, the concepts "strategies" and "skills" are important. Mary Beth Allen and Maureen McLaughlin (2002) divide the concepts and explain "strategies" as more complex than different, individual skills, or techniques. The reason is that the strategies demand that the reader uses more methods or techniques than using specific skills does. Peter Afflerbach, Scott Paris, and David Pearson (2008) sum this up by stating that skills become strategies only when one comprehends how and when they function, when one realizes their limits, and when one is capable of choosing the appropriate method. One might claim that reading strategies are all the different methods one uses to increase comprehension, whereas skills are the small steps and ways into understanding.

Competent, high proficiency readers are distinguished by being able to steadily increase their competence regarding independent use of strategies. A strategic reader is, according to Pearson (1993; in Roe 2014:87), someone who possesses various tools to be able to solve any problem that might arise while reading. In addition, they have a good metacognitive competence, ascertaining that they supervise their reading and are conscious of which strategies they ought to use when, and if, comprehension fails (Roe 2014:87).

As the need for good reading strategies are even more crucial in higher education, Muskingum College in Ohio, USA, has published excessive information about reading comprehension, reading strategies, and what signifies proficient readers versus poorer ones in order to prepare their students for college life. In teaching reading, it might be valuable to have an understanding of how proficient, independent readers go about approaching a new text to be able to sort out what ought to be focused upon in reading instruction. Some of the elements explaining what is significant for proficient, independent readers as opposed to poorer; more dependent readers are put together in a table found on Muskingum College's web site (Cook (1989), from Muskingum College 2016):

All these elements of how proficient versus poor readers approach reading may be relevant and fruitful in reading instruction, and ought to be considered by all teachers of reading in all subjects. It differentiates in a visible manner the different phases of reading, and portrays effectively how all phases; pre-, during, and post-reading, offer different elements of importance in reading comprehension visualizing that all phases ought to be considered.

A focus on reading comprehension has long been a topic of concern. Formerly, the teaching of reading equaled the teaching of new learners in lower elementary, and the view was that reading did not have to be taught explicitly when the pupils knew how to read – when the letters had opened up and shown the meaning behind the ramble of letters. Many teachers seem to have taken for granted that the pupils' reading comprehension will increase automatically as they get more practice (Roe 2014:12). However, researchers are now convinced that readers who receive specific and systematic reading instruction turn out as better readers than those who do not (ibid). The focus on reading strategies arouse from this knowledge. The results from the PISAand PIRLS-tests confirmed this belief and made clear that Norwegian students did not read as proficiently as one had imagined (ibid). The tests further conveyed that Norwegian students; and boys in particular, paid little attention to using reading strategies, compared to students in other countries. A focus on reading comprehension in general and reading strategies specifically was necessary and systematic teaching of reading and reading strategies was needed. As a result, The Norwegian Directorate for Education and Training developed a description of reading and what it means to be a proficient reader in lower secondary (Udir 2016). Here it is stated that, as mentioned in the above, pupils develop good reading comprehension over time when teaching is of a high quality and focuses on reading explicitly and systematically (Udir 2016). The specific aims for reading in English will be listed in the following.

In recent years, the need for good reading comprehension has steadily increased, and the demands on our ability to read have never been higher. Hence, the need for focusing on reading strategies and techniques is evident. Many pupils struggle in learning to read, and especially in understanding what is read. The aim for the teaching of reading is to be able to read fluently with

a good comprehension, as this is at the base of all acquisition and learning. Both to read with fluency and to comprehend what is read ought to be in focus and practiced long after the first teaching of reading has finished and the pupil is able to read. All elements in a text, as composition, structure, and content, are essential and equally important in understanding the content of a text. Knowledge of language and vocabulary is vital, and highly decisive for a good reading comprehension. A good comprehension of concepts, words and phrases is connected to and important in gaining motivation to read on, as the reader tends to lose coherence and continuity as well as interest in what is read if he/she struggles with understanding what is read; if he/she meets too many unknown words or phrases in what is read (Roe 2014:56). As the pupils get older, the amount of difficult words, concepts and phrases increases. This may distort comprehension and understanding. This is further fortified by the fact that the language the students meet in texts in school often has little in common with everyday language. In meeting many difficult and unfamiliar words and phrases, the students may lose patience with their reading and experience feelings of failure (Udir 2016). Hence, reading comprehension ought to be in focus in teaching.

The pupils are to acquire technical aspects of reading and spelling, gain experience, and relate to the content and semantics of the language: comprehending vocabulary, syntax and text (Hagtvedt 2009). Knowledge about different genres facilitates reading various types of texts. Hence, reading texts in a range of genres is important. Knowledge of structure, literary devices, and genres facilitates reading and makes the content more accessible. Meeting different genres continuously and teaching genres explicitly will open up different types of texts for pupils and make them easier to understand. Therefore, it is vital to work determinedly with pupils' focus on form (Kverndokken 2012:148). It is further claimed that receptive as well as productive skills are strengthened when pupils acquire knowledge of different genres (Maagerø, in Bjorvand & Seip Tønnesen 2002:39)

#### 2.2.2 Reviewing types of language learning

The need for developing effective and efficient ways of teaching foreign languages has led to several methods, theories and approaches being formulated in rapid succession in past years. Majority of theories related to teaching or learning of languages, have been shaped by developments in psychology, linguistics, sociology and anthropology. Applied linguistics takes is roots from the study of such theories and how they are applied to enhance learning as stated by Seidlhofer (2013). One of the primary issues related to learning, is to understand how to maximize language acquisition over language learning.

Learning theories suggests that there are two different ways for an individual to "learn" a language; learning and acquisition as described by Karshen (1981) in his theory of language acquisition. According to Karshen (1981), acquisition of a language refers to learning a language through "natural" ways. In other words, acquiring the language unconsciously through natural communication. First and second languages are acquired using this manner when individuals are placed in social spaces where the language is predominantly spoken (Larsen-Freeman & Long, 2014). For example, a child is most likely to learn the parents' first language via natural processes of listening and conversing. Similarly, a person belonging to social groups will naturally acquire the most dominantly spoken language, as a second language.

Individuals may also "learn" languages through conscious attempts of understanding the meaning of words, sentences, grammar and rules governing that language. This is referred to as "learning" where the individual does not acquire the language naturally, but must actively pursue it consciously. Majority of foreign languages are learnt this way, and can never lead to the individual fully "acquiring" the language (Richards, 2015).

#### 2.2.3 Reviewing cognitive processes related with reading comprehension

Researchers Sadoski & Paivio (2013), who have studied general comprehension in the past, have suggested that the task requires a dynamic interaction between reader and text at various levels. At a superficial or topmost level, the learner reads the text to understand certain linguistic code features, which is translated into written text, while also storing some knowledge into memory. It is important to note that knowledge gained during the comprehension exercise is short term, which quickly fades away. This may be due to a number of reasons; firstly, the learners don't not see the task as a learning opportunity, but rather as compulsory activity that he or she needs to complete. As a result, little attention is paid on the core details of the text; instead, the focus solely lays on finding the answers quickly.

Secondly, the subject of the text may not be interesting enough to learners, for them to exert deeper understanding of the text as stated by beyond the superficial level, readers or learners attempt to study the text in manner to decode deeper meaning and possible relationships between what is being proposed. This is done to enhance the coherence and relevancy of written text to the original text. That being said, reading comprehension activities undertaken at different levels does not guarantee learning, even if the leaners exhibits interest in the text or possess high-level linguistic capabilities.

Apart from identify words and sentences to gather explicitly stated information, skillful readers are able to pick out hidden relations between elements through advance level of reasoning. Researchers believe that this is usually possible when the reader combines high-level cognitive functions with prior knowledge or topic familiarity to make well-judged and reasoned observations (Borella, Carretti & Pelegrina, 2010).

According to McVay & Kane (2012), during compression activities like text processing, associations, explanation and predictions, three inferences may occur, all of which may be distinct or unrelated to one another. Firstly, explanation may be backward-oriented, serving to join the reader's previous knowledge with focal sentences as described by Keenan, Baillet & Brown

(1984). Secondly, text associations occur when the reader elaborates text stated in the focal sentence as argued by Myers & Duffy (1990).

Lastly, predictions made are future-oriented, to describe future consequences of event stated within the focal text (Fletcher & Bloom, 1988). It is important to note, that while these three interferences may occur while undertaking comprehension activities, some are beneficial to the process. For example, are largely elaborative and often incorrect and irrelevant to the text. While, on the other hand, explanations are more useful as they contribute to recall of factual and narrative paragraphs (Cornoldi & Oakhill, 2013).

# 2.3 Metacognition: Definition and Components

Flavell's concept of taxonomic classification of Metacognition has initiated widespread controversy in educational psychology. According to (Flavell, 1987) Metacognition is defined as "higher level of mental processes that one learns and uses to control one's thoughts or knowledge". It is about anything that is cognitive and knowledge. It involves an awareness of one's knowing about cognitive states and activities, and affective states, and control over this knowledge in order to achieve a specific goal. This knowledge is referred to as "declarative knowledge" "procedural knowledge" and "conditional knowledge". Declarative knowledge means what an individual knows about cognitive states and activities involved whereas procedural knowledge is to use knowledge strategically and personally. Finally, conditional knowledge is to know when to apply and why to apply knowledge during indifferent situations.

Flavell (1979) also describes that metacognitive experiences are concerned with one's own affective and cognitive process. This shall be traced by knowing one's own mental processing. It is believed that such experiences can bring changing in one's mental process. Such cognitive transformations lead to be integrated into, discarded from, or used to justify one's current metacognitive knowledge. Consequently, "they can cause one to change goals" (Hacker, 1998b,

p.168), and "to make decisions about how much further processing is necessary to achieve the goals" (Flavell, 1976, p. 252) and change future performance (Mazzonio & Nelson, 1998).

Thus, language researchers should look at such information by inspiring individuals to encourage their thoughts and report them. Likewise, Meta comprehension can be contemplated in individuals from an extensive variety of age classifications, from youthful to grown-up learners. Contrasts in metacognition among females and males are not measurably significant (Oxford et al., 1993). For instance, (Carr and Jessup, 1997) examined essential EFL learners' utilization of metacognition in taking care of scientific issues. They found that both young men and young ladies were equivalent in the utilization of Meta cognitive learning.

In the previous psychological research, the taxonomy of Metacognition put forward by Flavell prompted widespread controversy. The initial research studies carried out within the framework of developmental and cognitive psychology have provided the foundation for further or additional research in educational as well as social-cognitive psychology (Shoerey & Mokhtari, 2008). The subsequent attempts at clarifying imprecise, vague and fuzzy character of the metacognition concept have proved to be productive, and there has been a significant reduction in the problems that were faced in exploiting metacognition. A large number of examples of successful application have been there across a wide range of domains or areas like statistical, science mathematical, card, physics and disc moving problem solving (Johnson & amp; Newport, 1989). This means that successful application has not only been there in academic areas but also in professional areas. Since the 1980's, there has been a substantial progress in the understanding of the various elements of components of metacognition. It has been more than three decades now since the term 'metacognition' was first coined as well as introduced (Oxford, 2003). The contributions from a large number of researchers and scholars have delineated or explained the concepts of metacognition theory and metacognition.

Metacognition is seen as the metal processes (higher level) that an individual learns as well as makes use of in controlling his or her knowledge and thoughts (Haus & Levine, 1985). Metacognition encompasses both metacognitive experiences and metacognitive knowledge. Metacognitive knowledge can be about anything psychological and anything cognitive. Metacognitive knowledge involves the awareness of an individual's knowing or understanding about cognitive states as well as activities, and affective states, as well as his or her control over this awareness and knowing in order to accomplish a specific objective or goal. This knowledge is also known as conditional knowledge, procedural knowledge and declarative knowledge. Declarative knowledge encompasses all that an individual knows about cognitive activities and states, and affective states. Cognitive activities and states involve understanding or comprehending one's own capabilities and knowledge, knowledge of strategy and knowledge of the world. Affective states involve knowledge of motivations, attitudes as well as emotions, and this is a learner's inherent quality or characteristic (Zhang and Goh, 2006). Procedural knowledge stands for the knowledge of how to make use of strategic and personal knowledge, and that of the knowledge about the world. Conditional knowledge stands for when and why one should apply this knowledge. This knowledge also encompasses or concerns how to evaluate or assess the effectiveness of knowledge application.

Metacognitive executive processes or procedural knowledge is that which can monitor selection as well as application, and regulate problem solving activities. These processes involve monitoring as well as directing, guiding or leading other thought processes. Metacognitive experiences refer to the awareness of an individual's own affective as well as cognitive processes. The metacognitive experiences are retrieved or regained by the active and dynamic monitoring of the metal processes of one's own self. Change can be brought in one's own thought processes by these experiences in which they can be discarded from, integrated into, or used for justifying the existing metacognitive knowledge of one's own self. Therefore, these experiences can cause an individual to change or modify goals, and to make decisions related to the amount of further processing is required for accomplishment of goals, and accordingly change future performance.

A correct definition of metacognition concept must include the following notions or concepts: knowledge and understanding of one's own knowledge, processes i.e. thought processes, affective and cognitive states, and the ability to deliberately as well as consciously regulate and monitor one's own knowledge. As per this, the two key components or elements of metacognition encompass knowledge and the ability to deliberately and consciously access as well as monitor that knowledge. A total of 3 types of knowledge are very much prominent. They include (1) the knowledge of the world, (2) knowledge about the individual, which encompasses a total of 26 affective and cognitive states and processes of an individual, and (3) strategic knowledge or the knowledge about strategies.

#### 2.3.1 Characteristics and Implications of Metacognition

The components or elements of metacognition, for example, the ability of cognitive monitoring or regulation, and the knowledge of cognitive monitoring, were originally assessed as separate entities. Since the 1960's, the ability of cognitive monitoring or regulation has been an integral part of cognitive research. A large number of experimental as well as descriptive studies or researches of metacognition (Clear, 2000; Beeth, 1998; Paris and Myers, 1981) in this area have laid emphasis on the aspects of memory like the ability to recall or remember, the accuracy in making judgements or decisions about one's own memory and metamemory as well as metacomprehension which are more recent aspect. For more than four decades now, developmentalists and researchers have been very much interested in meta comprehension. These scholars or developmentalists lay focus on the processes underlying control as well as monitoring, mainly those relating to the operation of processes (thought) that guide or direct other thought processes in IS (information systems). These research studies have tried to detect the various components or elements of metacognitive abilities by way of reflection on individual's cognitive processes (Clear, 2000; Beeth, 1998; Paris and Myers, 1981). They have also attempted to detect how the various components or elements of metacognitive abilities develop with age, and the various possibilities metacognitive strategies, abilities as well as knowledge contribute to cognitive progress. It has been suggested by these studies that the knowledge of cognition is deliberate and conscious. It is controlled or regulated by the one who is experiencing that knowledge as accessible and stable for others. Hence, such knowledge can be examined by the researchers by way of getting individuals to activate or stimulate their thoughts and then state or report them. In addition to this, metacognition can be assessed in individuals belonging to different age groups, from children and young individuals to adult learners. For instance, even

toddlers have the ability to accurately and appropriately monitor their knowledge. There are no significant differences in metacognition among males and females.

For instance, Bidabadi and Yamat (2011) assessed the use of metacognition by primary students in solving math problems. It was found by them that the girls and boys made equal or comparable use of metacognitive knowledge. Analogous indicators have been reported in university learner, tertiary learners and high school learners by many scholars and researchers (Goh 1998, 1999; O'Maley, Chamot and Küpper 1989; Vandergrift 1996, 1997; Youthful, 1997). In addition to this, the volume of knowledge stored or piled up in memory as well as the accuracy and appropriateness in monitoring or controlling this knowledge increases with age of any individual, indicating that the metacognitive skills as well as knowledge develops with age. It has been revealed by some research studies that metacognitive knowledge is mortal or fallible.

Young children as well as adults often misjudge or underestimate/overestimate their own ability and skills relative to the actual performance that they give. Many researches (Vandergrift, et al. 2006; Vandergrift, 1997) have demonstrated the accurateness of the ability of people in judging and monitoring their knowledge before or after study or research experimentation. But, such halfway accurate judgments or decisions are very much imperfect. Students or young children often make overconfident judgments as they usually overestimate their reading comprehension performance. In addition to this, it has been revealed by many researches that undergraduates depict both inadequate as well as adequate spontaneous beliefs about methods of solving problems (Vandergrift, et al. 2006; Vandergrift, 1997). This means that while the undergraduates can identify all important features of the techniques or methods of solving problems and the abilities that each technique asks for, they possess or keep faulty beliefs about the appropriateness or suitability of some problem-solving methods. Because metacognition has an important role to play in learning, it is of such interest. Metacognition plays a total of two roles in learning, including expertise in subject matter as well as metacognitive activities. The latter activities are more extensively acknowledged by researchers and scholars in their works (Anderson, 1991; Square, 1986; Hosenfled, 1977).

Metacognitive experiences as well as knowledge are also regarded as other critical success indicators in curriculum learning. Successful first language as well as second language learners are aware of how to plan strategies, organize, focus, and make use of many different types of strategies or techniques for overcoming difficulties as well as for evaluating their learning. This is consistent and in line with the results from outside the language learning domain. For example, similar evidence has been provided by Haus & Levine (1985) in the area of general problem solving, Droop & Verhoeven (1998) in the area of mathematics, and Lee & Schallert (1997) in the area of computer science. It appears that metacognitive experience as well as knowledge has an important role to play in all human endeavors.

But, it is important for an individual to be cautious or careful about making any judgment on the basis of unclear or incomplete knowledge. This is because the standard or quality of judgment may be contaminated due to inaccurate or incomplete knowledge. In addition to this, insufficient or inaccurate regulation or control of metacognitive engagement can result in failure or dissatisfactory results. According to Larsen-Freeman & Long (2014), an individual's success in learning increases with the increase in the accuracy of his or her metacognitive knowledge. But, they do state or claim that inaccurate or incomplete factual knowledge, declarative knowledge or metacognitive knowledge often results in inaccurate or incomplete coding. This is reflected as the inability to access as well as regulate one's knowledge resulting in domino damages like improper or poor learning and poor performance, or the inappropriateness of evaluating as well as monitoring one's knowledge. Inaccurate or incomplete metacognitive knowledge and inadequate or poor standards used for comprehension monitoring often results in inaccurate as well as incomplete encoding. This may result in inadequate content knowledge, strategies or tasks on one side, thereby causing ineffective and inefficient decision making while on the other hand they result in learner's failure in detecting issues as they take place and stop those issues from learning incoming information which challenges what already exists in the stored memory (Borella, Carretti & Pelegrina, 2010). This ultimately leads to unsatisfactory performance, ineffective problem solving and inactive planning which further results in lack of intrinsic motivation, interest and self-efficacy which are all potential success factors. Incorrect or faulty beliefs, lack of metacognitive as well as cognitive strategies, and the inability to exploit current knowledge ultimately leads to illusions. What an individual thinks he or she has knowledge turns out to be wrong or inaccurate.

This inadequate or insufficient knowledge gets stored in the individual's working knowledge and waits to get transferred to other activities or tasks. Illusions also result in inadequate knowledge and false beliefs. This is a negative cycle which leads to ineffective and inefficient operation or function of metacognitive processes and activities and should be taken care of because it is a hurdle to development.

A large number of scholars and researchers refer to the condition of final learning as metacognitive engagement. For instance, McVay & Kane (2012) shed light on the interrelation that exists between existing knowledge, high metacognitive engagement, information as well as motivation is an important factor for conceptual learning as well as change. These researchers question whether students are able to achieve learning when they are involved in high engagement elaboration but make quick heuristic judgments which do not result in long-lasting as well as strong change. When the performance or efficiency of the activation or application of metacognitive processes and methods reaches the satisfactory level of an individual, he or she is expected to maintain the action or exploitation and apply it to other activities or tasks. The condition of metacognitive engagement is satisfied with this.

As per Myers & Duffy (1990), the degree of engagement refers to distribution of awareness. This means that the academic success of learners is because of the distribution of awareness of conceptual as well as procedural knowledge such as their ability or potential for application of leaning strategies and their overall knowledge of learning strategies (Cornoldi & Oakhill, 2013). Sufficient information is made available to a learner through such knowledge which helps him or her select the most suitable and accurate strategy as well as modify that strategy to meet the requirements of a specific task, evaluate performance and efficiency, and completely change the strategy when required. For instance, when asked to have a glance at information and skim it, younger children do not really emphasize content words or information perhaps because at this age they are not aware or do not have the knowledge of the content words or information which is more important. Older students who are aware of the level of encoding words and deciding which content word is more meaningful and which is less, often lay emphasis on the words that are more meaningful and describe the entire content piece (Barnett, 1988; Carrell, 1989; Sheorey and Mokhtari, 2001; Zhang, 2008; Kong, 2006).

Another benefit of metacognition includes the easy deployment of metacognitive strategies to work through any difficult or challenging tasks in any area of study. When students face many difficult tasks of psychological problem solving, they often make use of metacognitive strategies for solving those problem solving tasks instead of using other strategies. But, Pearson, Hansen, & Gordon (1979) have found the opposite. This means they have found that when students face more challenging or difficult listening comprehension or tasks, first language or second language students make use of bottom-up strategies, which have been explained later in this research, in which much less or low cognitive processing is required (Carr and Jessup, 1997).

It is not clear what exactly results in these opposing or contradicting findings. It can be due to the discrepancy or inconsistency between non-language and language tasks etc. This area necessitates the need for further investigation or research work. To conclude, metacognition can be learned or taught as well as transferred to other activities or situations both across content areas and within the same field. Many researchers (Chamot & Kupper, 1990; Vandergift, 1997; Hallbach 2001) have documented the teaching of metacognition. For example, in their research work, Pearson, Hansen, & Gordon (1979) conclude that children gain many benefits from training in monitoring. This is because when children select or pick up a strategy and make use of it for explaining their reasoning and perception, the metacognitive engagement is high.

In addition to this, the monitoring of children is also better. They further state that this awareness can be introduced by teachers to the students so that their self-regulated learning enhances via metacognitive activities. Their claim is supported by the achievements of Gass & Varonis (1984) in adult learners who are training disabled in metacognitive activities or strategies like how the strategies can be selected, applies and monitored. Instances of transfer across different areas have been found in the language learning area. Dole and Sinatara (1998), for example, interviewed students of tertiary level ESL in a Kosovo university, undertook classroom observation and then assessed documents about the knowledge and learning they brought along with them as well as the strategies they were able to come up with in response to the demands of writing they came across in the regular curriculum programmes. The participants included a total of five students from the university. It was observed that they either shifted strategies or

changed/modified them as per their requirements. All the students were rich as well as flexible in ideas about what they should do and how. Therefore, it was concluded by the researchers that students can transfer the strategies learned by them previously to learning EFL.

But, regardless of these results, some research works (Carrell et al., 1989; Janzen and Stoller, 1998) have concluded that metacognition cannot be transferred which means that it is not transferrable. Salataki & Akyel (2002), for instance, researched on the application and sue of metacognitive knowledge. It was found by them that while such knowledge was spontaneously applied as well as transferred by tertiary level or advanced students in reading comprehension or understanding, some students who were less advanced were not able to do this. Provided the significance of metacognitive knowledge as well as control, and the contradictory findings or results related to transfer of learning and knowledge, it is important and appropriate to carry out further investigation in this area (Salataki & Akyel, 2002).

#### 2.3.2 Metacognitive Processes: The Mechanism

A large number of attempts have been made by several researchers and scholars to clarify the concept of metacognitive engagement. Evidences and findings of empirical researches related to the thought processes that guide other processes, tasks or activities at lower level of cognition from cognitive psychology indicate that the level of metacognitive engagement ranges from deliberate to automatic. Within the regulatory processing and information processing, two levels have been proposed by the information-processing model (Bernhardt, 1991; Carrell, 1988; Eskey, 1988, 1997, 2005, Koda, 1992). These two levels include the lower level and the higher level.

The higher level functions or operates deliberately while the lower level operates or functions consciously. In the information-processing model, the lower level encompasses the automatic encoding of all the information via sensory system, with negligible or zero motivation involved. The higher-level information processing gets activated rapidly and the activation of this level is subject to motives as well as familiarity. Regulatory processes are the processes that encompass the capacity and capability of selecting only that information which is deliberate and relevant for further processing.

The regulatory processing at lower level is likely to be automatics and involves the capacity to modify or change behavior (Anderson, 1999, p.72 and Carrell, 1998, p.7). It operates or functions with negligible or no prior thought. The higher level regulatory processing operation deliberately searches for, assesses as well as regulates a workable solution. As stated and explained in the above section, the existence of a large number of different thought processes is congruent with the metacognitive experiences of Sheorey and Mokhtari (2001), as well as with the arguments of Hamdan et al (2010) and Huang et al. (2009).

The thought processing at a higher level has been referred to by (Alderson, 1984, Grabe, 1991, 2004; Eskey, 2005) as the monitoring or executive component or element which directs and guides the information processing system. This means, the people monitor as well as organise their own thinking or thought processes using their individual metacognitive skills. When explaining how the higher level of thought processes directs and guides the thought processes which are at the lower level, Brunning, Shraw, and Ronning (1999) claim that the thought processes as the 'source or foundation of thought'. On the other hand, the higher level thought processes treat them as the 'object of thought'.

In the same way, the metacognitive experiences of Breznitz (1997; refered to in Pressley, 2000) specify that there exists a process or device which controls that metacognitive engagement level. These different metacognitive engagement levels can be viewed or observed from the fact that sometimes individuals automatically assess as well as make decisions, and automatically respond to situations. At times, individuals respond to a situation or circumstance appropriately as well as accurately, however most of the times they are unable to describe or define what went through their mind and why they acted like that. Empirical evidence of this has been given in a research work by (Grabe and Stoller, 2002, p.32).

It was discovered by them that even though the subjects or students had learnt through trials as well as enhanced their efficiency or performance, the questions about why they acted in a particular way were not answered by them appropriately or adequately. Engagement or activation of metacognitive thought processes of higher level developed or established beyond the subject's consciousness or perception to become automatic is indicated by this. On the other hand, there were some cases or situations in which the subjects regulated as well as controlled their behaviours deliberately. In these situations, the subjects did not face any issue in identifying and recalling their experiences. This indicates that there was deliberate activation of both metacognitive processing and cognitive processing.

In their monitoring model, (Carrell, 1988; Eskey, 1988, 1997, 2005, Bernhardt, 1991Koda, 1992) captured the interplay or relationship that exists between metacognitive knowledge and the regulation of thought processes that are multidimensional in nature. In addition to this, the same has been captured in the cognitive-metacognitive model or framework of self-regulated or self-controlled comprehension given by Dole, Darker, and Teathen (1996), Metacognitive Model or framework of Strategic Learning put forward by Hansen and Pearson (1983). All these models depict that the thinking processes at higher level monitor as well as control the thinking processes at lower level. This means that at a metacognitive level, the understanding or comprehension can be made use of for modifying or regulating thought processes at the cognitive level.

And, sequentially, the knowledge or learning at the metacognitive level can be modified by the information which is retrieved or recovered or gathered from the cognitive level. This indicates that the enhancement of the level of metacognitive engagement is recurring or say cyclical Cohen, 1987, pp. 132-133). In addition, this also indicates that the automatic engagements stated above are distributed because of higher level of metacognitive engagement. But, such automatic engagement is different from the engagement which is dispersed during the cognitive processing at lower level. A large number of researchers and scholars have supported the concept of 2 kinds of automatic though processing in their works Ehrman and Oxford (1989) and Green and Oxford (1995). Ehrman and Oxford's (1990) explain that at the cognitive level (low level), the thought processes encompass the knowledge as well as strategies that are needed for accomplishment of cognitive goals like coping with a problem or completing a task. At the lower level, activating knowledge, decision making processes as well as strategies is rapid. In addition to this, it is likely or expected to be automated due to the familiarity and motives of this information. If there is any kind of difficulty or uncertainty, the operation or function of the cognitive thought of higher level is triggered. At the higher level, the thought processes are less automatic. In addition to this, they are often subject to delay due to accessing background and related knowledge in the memory (long-term). It was observed by (Anderson, 2005; Green and Oxfrod, 1995; O'Malley and Chamot, 1990; Wharton, 2000) that as soon as the performance reaches the satisfactory level of the subjects, they continue at that level without overtly or openly giving reasons and without any further explanation.

Therefore, as per Knight, Padron, and Waxman (1985), the thought processes which are activated or triggered deliberately at the metacognitive level can be developed or transferred to an automatic status after continual or nonstop practice which has proved efficient and effective. It is clear that the automatic activation at the lower level and the automatic activation at the higher level differ from each other in terms of efficiency as well as accuracy. While automatic activation at the higher level provides information that is highly accurate as well as effective for the process of decision making, the automatic activation at the lower level tend to provide results that are far from perfect or are less effective (Barnett, 1988; Carrell, 1989; Sheorey and Mokhtari, 2001; Zhang, 2008; Kong, 2006). Hence, the automatic thought processing which occurs at the metacognitive level is the definitive or ultimate academic goal. Carrell, Pharis and Liberto (1989) suggest interaction and interplay between these processes. They claim that the metacognitive engagement can take place before, at the time of, at the end of or after every state of an operation. This implies that evaluation or monitoring may take place during the initial stage of learning, in which an individual forms an awareness or know-how of that task. In the next stage, the formulation of goals is done or they are defined, as well as the strategies that can help accomplish those goals are regulated. The recursive nature or property of the interaction and interplay between the cognitive level as well as metacognitive level processes has been corroborated and supported by a large number of experts (Cohen, 2003; Koda, 2005; Tang and Moore, 1992; Zhicheng, 1992).

#### 2.3.3 Metacognitive Strategies and Reading Ability

Reading is a fundamental skill and ability for language learning, mainly for English language learners in the Europe. There are many advanced technologies that provide the students of learners with the opportunity to have an easy access to English, however learning as well as teaching has struggled to transform from the old or traditional methods or approaches that equip learners or students with great and effective ways and tactics to make optimal use of resources outside their classrooms(Alderson, 1984, Grabe, 1991, 2004; Eskey, 2005).

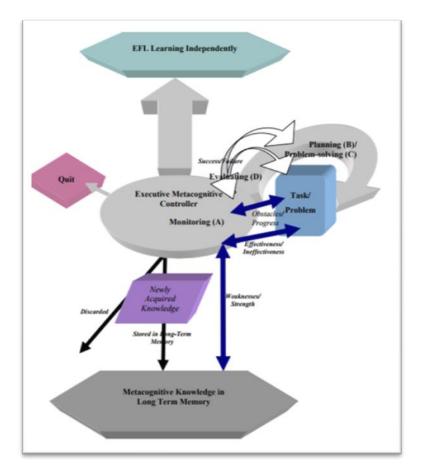
The number of study-units which is available to the tertiary level non-English teachers as well as students is very limited in many countries across the world. Therefore, the attempts to promote learning autonomy in many countries are not satisfactory (Alderson, 1984, Grabe, 1991, 2004; Eskey, 2005). However, Nikolovska in her a survey carried out among fourth-year preservice EFL teachers at the English Department, Blaže Koneski Faculty of Philology, Ss. Cyril and Methodius University in Skopje, beside other she investigated the effects of these assessments on promoting learner autonomy, and found out, that among others alternative assessment are "a powerful resource for fostering learner autonomy by enabling students to take responsibility for their own learning" (Nikolovska 2015, p. 49). Although she has brought clarifications to autonomous learning importance, in this case through alternative assessment, there is a need for further research in developing the needs of learners to read as well as listen in English language independently.

Due to the fact that metacognitive strategies appear to become general to tasks in both first language and second language, they can significantly help learners or students to be able to cope with reading as well as listening in a foreign language. As per Chamot&Kupper, 1990; Vandergift, 1997; Hallbach 2001, strategies for learning content as well as language learning strategies are quite similar. The strategies like self-evaluation, self-monitoring and selective attention can be made use of with all types of learning tasks.

Many other empirical research studies revealed that comprehending or understanding first language (L1) as well as second language (L2) encompasses the same approaches or strategies irrespective of modes, that is reading and listening. Similar strategies or approaches, such as summarizing, self-monitoring, self-evaluation, deduction, elaboration and translation are used for the purpose of overcoming the problems of reading comprehension both in L1 i.e. mother tongue or first language and FL i.e. Foreign language. According to Pressley (2000), while reading and understanding in first language and also in second language, readers make use of their existent knowledge about different situations, grammar, syntax, words and about the world in understanding what they are reading. Moreover, as per Breznitz (1997; refered to in Pressley, 2000), a majority of first language as well as second language learners share difficulty as well as problems with phonological processing as they are ineffective or lack cognitive processing both in listening and reading. Some research studies have proved that metacognition is unique or exclusive to a particular task or domain, however it is not strong. For example, there is an inconsistency or difference in the frequency of the utilization of strategies rather than in the strategy type. Even translation strategy, which seems to be specific to tasks of second language, has extensive use in Mathematics questions or problems. But, in most cases, it remains unclear and is difficult to understand what metacognitive strategies tertiary level EFL learners or students possess as well as apply or utilize effectively when they read in English (Brunning, Shraw, and Ronning, 1999).

#### 2.3.4 Language Learning Autonomy and Metacognition theory

Taking learning English as a Foreign Language (EFL), relevance of metacognition theory and learning autonomy into consideration, Salataki&Akyel (2002), in their study, depicted the learning process through the interaction of metacognitive processes and existing metacognitive knowledge which the executive controller governs. Existing metacognitive knowledge stands for the understandings of conditional, procedural and declarative knowledge about an individual's affective and cognitive activities and states, strategies and tasks, and about the world that is stored in the long term memory of that individual. At the cognitive level, the thought processes involve the strategies as well as knowledge required for achievement of the cognitive goals like dealing with a problem or tackling a task. Affective activities and states are concerned with beliefs, attitudes and the emotions of that an individual holds and how he or she responds to various situations or state of affairs. Metacognitive thought processes are the processes which are directed at acquisition of a strategy and governing the strategies as well as knowledge represented in an external situation (which is the problem or task in this case), in cognitive thought as well as in long- term memory. They include planning processes, problem-solving, evaluating as well as monitoring. The voice of the mind of an individual is the executive controller. It functions or operates as an information retriever to which evaluation or monitoring processes or strategies correspond as well as a commander of all those processes. This means that the information acquired is selected, combined as well as compared, or discarded. For further information, the command can be done where needed. Accordingly, final decisions about the strategies and knowledge are made by this mental device in order to solve a problem, to give it up, to complete a task, or decisions about what to be stored and what to be discarded or to modify what is already known in the long term memory. The executive controller tells an individual whether the problem is too grave or not or the level of difficulty of the task. The executive controller also tells one ways to effectively tackle a problem or deal with a task. It commands one to whether to give up or put in more effort. In addition to his, it orders other processes and make decisions. He states that the executive controller's activation or inactivation indicates the extent to which metacognitive engagement takes place. As per him, in Figure 1, the dynamic of the decision-making metacognitive process can take place at any time after, during or before completing a task or dealing with a problem. The two headed arrows in the figure indicate the generating or engendering of the metacognitive processes as well as the retrieval of corresponding information. The one headed arrow in the figure indicates the regulation of one method or process over another.



*Figure 1*: Interaction of metacognitive processes and existing metacognitive knowledge which the executive controller governs

Before performing a task or dealing with a problem, monitoring processes are required by the executive controller for (A) checking or assessing the task or problem and the metacognitive knowledge that already exists in the long term memory. From the monitoring processes, the information flows between the existing metacognitive knowledge, the executive controller, as well as the metacognitive level. The controller handles the information and then orders what must be done or the consequences, which could be problem-solving, discarding or avoiding, planning, evaluating processes. In Figure 1, the planning processes (B) encompass the purpose and determination of the various strategies for completing the task or solving the problem as well as the allocation of resources i.e. effort and time to the task or problem and for setting the speed or the intensity at which an individual needs to work on the task. These mental strategies have been named by Borella, Carretti&Pelegrina (2010) as the metacognitive planning processes and they suggest some strategies that can prove to be helpful and useful. For example, as an individual prepares to read or listen, he or she can make use of selective attention or goalsetting or he or she can make use of organizational planning in order to plan the sequences as well as the content of their composition when preparing to write.

While performing a task or solving a problem, the monitoring processes in Figure 1 (A) encompass those aimed at acquiring the information about the thinking process of an individual that helps him or her to identify the type of problem or task, for example, to predict outcome of progress, to evaluate progress, and to check on current progress. As soon as the executive controller retrieves the information and selects it, as well as makes a choice or decision, it commands other processes which include B and/or C presented in the figure that help an individual regulate and control he course of his or her own thinking. B and/or C include the processes such as recording the task steps as well as allocating or allotting resources to the problem or the task (McVay& Kane, 2012). For ex., to work out the task or problem, to enhance the quality of the task, or to set the speed or the intensity that is needed for completing the task or solving the problem in time.

At the task completion, the evaluating processes represented as (D) in the figure help an individual refine or enhance the quality of the final work. As per McVay& Kane (2012), these processes also help him or her in judging the skills as well as knowledge acquired from performing the task. The metacognitive engagement at such a high level under executive control leads to the determination and understanding of freshly gained knowledge and skills including particular strategy, content, the possibility of strategy transfer, as well as quality of self-comprehension about the function and nature of metal processes (Cornoldi& Oakhill, 2013).

According to Sadoski &Paivio (2013), when limitations as well as a failure occurs, the thought processes keep continue to work while the controller is inactivated. Automatic performances and thoughts as well as low metacognitive engagement level is there because of the absence of controller. This results in poor learning as various obstacles are caused in cognitive development (Borella, Carretti&Pelegrina, 2010). According to Borella, Carretti&Pelegrina(2010), the model indicates further cause of failure as well as limitations in learning. A lack of or inadequate metacognitive knowledge impacts the evaluation standard. This can cause domino damage which

stands for one damage after another, thereby resulting in inaccurate or poor learning (Lee &Schallert, 1997).

Such type of damage can be due to the beliefs that affect or impact metacognitive judgements. Unfamiliarity with a specific problem or a hands-on task, or inadequate domain-specific declarative knowledge, or false beliefs creates or produces ineffective standards needed in decision making process. Haus & Levine (1985)argue that the predictions of even young children are accurate in a familiar situation. The deviant and ineffective standard makes an individual fail to identify problems or issues as they take place and prevents him or her from learning or understanding information that contradicts what he or she already knows or holds. As per Sadoski &Paivio (2013), this is the reason why some of the students or EFL learners fail to identify any problem or issue while reading texts in English and this is why they face a problem in understanding those texts. They state that this is due to the ineffective and inadequate standards that they make use of in evaluating and monitoring their understanding.

They indicate another key reason for this and that reason is the standards that they miss or do not follow. Taking into consideration the accessibility as well as familiarity, Sadoski & Paivio (2013), found out that accessibility is there only when there is high level of familiarity, high enough to drive the interrogation, grilling or examination of memory for possible answers or solutions. The absence of appropriate monitoring processes or their inefficient utilization can impair the success of an individual by resulting in inappropriate and ineffective regulation processes (Borella, Carretti&Pelegrina, 2010). It can also lead to ineffective problem solving, inactive planning as well as unsatisfactory performance. As a result of all of this, one lacks the intrinsic motivation, interest as well as efficacy which are the critical success factors.

According to Borella, Carretti&Pelegrina (2010), he incorrect beliefs held by people, as well as their inability and/or lack of skills to effectively exploit metacognitive as well as cognitive strategies ultimately leads to illusions. Illusions can therefore be defined as misunderstood information or knowledge that is stored in the long-term or working memory of an individual. This misunderstood knowledge waits to be transferred or moved to other tasks. Hence, illusions lead to inadequate knowledge, false beliefs as well as other inappropriate and inapt regulation

processes (Borella, Carretti&Pelegrina, 2010). Therefore, there is a need for analyzing the existing metacognitive knowledge of the EFL learners in order to encourage as well as enhance learning in them.

# 2.4 Previous research in metacognitive reading strategies

Pearson, Hansen, & Gordon (1979), was one of the earliest and first studies that attempted to decipher the impact of background on young children's comprehension abilities. Twenty-five young students from second grade were selected from a school in Minnesota to form the sample. A schema test to assess prior knowledge was conducted to help separate those students with high and low-level schema. The results were conclusive; students possessing prior knowledge about spiders outscored those with schema. The difference between strong and weak schema was statistically significant; hence, proving that background can significantly improve reading comprehension scores due to the presence of topic-relevant schemata.

Langer & Nicolich (1980) conducted one of the earlier studies, with regard to understanding the role of prior knowledge on comprehension. 36 high school students from a suburban school in New York made up the sample study. Since, all of the students were senior; all of them were college bound. In this study, Langer & Nicolich used IQ, prior knowledge and recall measures as the 3 primary components for analysis. The study reveals that IQ plays a small role in reading comprehension, with the student's prior knowledge a much more influential factor in results. However, prior knowledge was not influential with regard to all passages, and varied with structure type and complexity.

Gass & Varonis (1984) conducted a comprehensive study on understanding the impact of text familiarity on comprehension abilities of non-native speakers. Since, the experiment was conducted purely to assess the impact of topic familiarity; Gass & Varonis (1984) eliminated gender variations by selecting an all-male sample. The results clearly demonstrated that when students read North Wind story prior to the test, the passage was more comprehensible. Since, the

comprehensive was based of passages within the North Wind story, the experiments show a direct relationship, between background knowledge gained by reading and comprehension ability.

According to (Chamot & Kupper, 1990; Vandergift, 1997; Hallbach 2001) successful EFL students knows how to organize, plan, focus and implement strategies to overcome learning difficulties through their metacognitive abilities. Studies from (Dole and Sinatara, 1998) explain relationship between metacognitive engagements with the conceptual language learning. If students are not actively involved in the high engagement learning that brings heuristic judgement does not lead to eternal changes in learning styles. When the performance reaches satisfactory level, students actively engage same metacognitive strategies to other tasks and this is known as metacognitive engagement.

(Salataki & Akyel, 2002) explains that metacognitive strategies render the students to regulate and monitor their learning actions and aids them to define their goals, strategically plan based on their goals and perform future oriented mental processing in order to achieve their tasks. Furthermore, metacognitive reading is completely different from cognitive learning since students engaging metacognitive reading strategies know how to strategically plan and encounter their learning difficulties unlike cognitive learning experience. (Phakit, 2003) also explained that metacognitive strategies emphasis that one's thinking will aid in the learning experience especially students who face extreme difficulties in understanding English concepts when it was given in the written context.

According to (Ramesh, 2009) lecturers, instructors must identify and monitor metacognitive process for the enhancement of EFL students learning process. Metacognitive reading awareness skill strategies should be considered as valuable instruction for the EFL student tutors. When EFL students reflect upon the learning strategies, they mentally prepared to take decisions about what can be done for their knowledge enhancement while reading English texts. Thus, author concludes metacognitive reading skills should be implemented in every English as Foreign/ Second language classrooms.

Wang et al (2009) also described that metacognitive English reading skills are beneficial to EFL and ESL students for comprehending the texts. In a study conducted among Chinese EFL students pointed out that metacognitive reading strategies and beliefs has promising results among the students. The study also reported that metacognitive reading strategies are directly related to the English learning achievement results of the Chinese EFL students. Students who is confident in language was observed to use metacognitive strategies such as planning, monitoring and evaluating about their reading and learning program.

According to (Takalou, 2011) metacognitive reading and learning strategies for the authentic and unauthentic texts in EFL context comprise of self-monitoring and proper planning strategies. Researchers concluded that participants showed immense performance in the instruction based learning incorporated with metacognitive strategies rather than subjects not exposed to the instructions in the study. They also argued that metacognitive learning strategies comprise of task based and context oriented where students learning proficiency levels needs to be take in to account. Alternately, language scholars claim that little empirical research is essential for supporting the benefits of implementation of the metacognitive strategies as this area is little unclear since how far the metacognitive reading instructions increases EFL students' performance and to what extent. This study is interested in analyzing the degree of influence of Metacognitive reading strategies among Kosovo EFL Student's learning performance.

### 2.4.1 Review of the studies on awareness of metacognitive reading strategies or approaches

Some research studies have explicitly analyzed the usefulness or benefits of the increased awareness as well as employment of metacognitive strategies or approaches in the development or enhancement of the reading comprehension of language learners or students. For example, McVay& Kane (2012) carried out a research on L2 i.e. second language reading with students of French language, and the findings of the research indicated that the proficient and expert readers showed more awareness and knowledge of the employment of metacognitive reading strategies in understanding what they read than those who were less proficient readers.

According to a study conducted by Haus & Levine (1985), there is a positive relationship between the level of awareness of metacognitive reading strategies and their comprehension or understanding process in EFL (English as a Foreign Language) learners. Another research that laid emphasis on reading academic materials indicated that there exists a relationship between the reading ability of the students or learners and the aforementioned reading strategies, irrespective of the level of the reading ability of a student. This finding confirms that the skilled or proficient readers make use of more reading strategies as compared to those who are less skilled readers because of their high awareness of a variety of metacognitive reading strategies.

In another research study carried out by Haus & Levine (1985), the various effects of teaching metacognitive strategies on the reading comprehension of students were explored. The results of findings of this research study exposed a significant enhancement in the group of students who were trained to employ various metacognitive reading strategies in a conscious manner in their reading activities as compared to the group of students which was not trained for the same. Keenan, Baillet& Brown (1984) also explored the relationship that exists between reading strategy and comprehension of reading.

It was observed that the students from the Southeastern Europe usually preferred to employ supporting strategies or approaches in academic reading, followed by problem-solving approaches. They least preferred or used global approaches. In addition to this, there were some significant differences in how they used reading strategies, apart from the supporting strategy. Additionally, many gender differences were also observed in how they used reading strategy. Superior performance was exhibited by the female students. The relationship between strategies of reading and achievement of correct reading comprehension was also confirmed.

Keenan, Baillet& Brown (1984) found out in his research that problem-solving reading strategies were more useful as well as effective as compared to support and global strategies for studying a second language. The research study also discovered that the use of strategy in all categories was significantly higher among junior as well as senior students as compared to the students belonging to first year and second year. Cornoldi& Oakhill (2013), in their research study, observed that the most commonly used strategies in reading were problem-solving strategies. This was followed by the moderate application of global reading strategies, as well as

the moderate utilization of the support reading strategies. His findings also exposed many gender differences, and indicated that the female participants of the study gave better performance. Also, other faculties were outperformed by science faculties, and the use of reading strategies was the highest among the high academic achievers.

The reading strategies employed by the tertiary level Iranian EFL learners in university when they give a read to authentic expository or descriptive texts written in English was investigated by Breznitz (1997; referred to in Pressley, 2000) in their research study. Their findings or results indicated that the participants of the research study are not highly aware of the various reading strategies. Their findings also showed that the most frequently applied reading strategies were support strategies. The use of support strategies was followed by the use of global strategies. The least preferred strategy among participants was the problem-solving reading strategy.

Ramesh (2009), in his research study on a total of 80 Iranian EFL learners, discovered that EFL (English as a Foreign Language) learners can be categorized as moderate reading strategy users. He also observed that there is not much difference in the employment or application of reading strategies between female and male language learners. In addition to this, he observed that the utilization or application of reading strategies by EFL learners had a strong positive connection with the achievement of reading comprehension.

In another research study, Wang et al (2009) taught a total of 50 students to make use of strategies of reading comprehension in reading some articles written in English language over a period of twenty reading sessions. The results of this research study indicated that while the awareness of various reading strategies was raised among the students through strategy training and also that the training could encourage the use of reading strategies by some learners, the training on reading strategies was unable to improve the reading performance of the students statistically.

#### **2.5 Student Proficiency and reading comprehension**

There exists considerable plenty of literary works focusing reading performance of proficient learners and also students lacking sufficient proficiency. Few studies also emphasized that there is a strong relationship among metacognitive awareness level and learning proficiency of the students on their English reading performances. According to (Alderson, 1984) good and bad readers use different reading strategies but poor learners use strategies ineffectively. However, (Anderson, 1991) claims that both proficient and non-proficient English learners use same strategies but they differ in the level of frequency used. Studies from (Mistar, 2001) also confirmed that good and bad EFL learners use same strategies but they differ in the frequency level of metacognitive learning methods among Indonesian EFL students. He reported that good learners used the same strategy more and more frequently than poor students did.

The basic difference between good and bad learners in frequency level is skilled learners search and understand the main ideas of the text whereas unskilled learners failed to do the same and also wrongly construct them unlike good learners. From the works of (Shoerey and Mokhtari, 2001) also reported the difference between reading strategies among native and non-native English speakers based on their academic performances. The results suggest that both native and non-native English speakers had good awareness and knowledge about all kind of metacognitive reading strategies included in the survey. Sheorey and Mokhtari (2001) found that the primary distinction amongst gifted and incompetent EFL/ ESL readers lies in the capacity to participate in ponder exercises that require considering, adaptability in utilizing systems and consistent self-observing. Hence, metacognitive mindfulness is fundamental for reading cognizance and is vital for EFL/ ESL readers to have and assess.

Different reviews likewise uncovered a positive connection between the successful utilization of metacognitive aptitudes and reading execution. It was asserted that the primary contrast amongst gifted and untalented learners is the capacity to take part in considers exercises that require considering, adaptable methodologies usage, and consistent self-checking (Sheorey and Mokhtari, 2001). Metacognitively gifted EFL learners develop importance as well as screen

and assess writings (Israel, 2007). They display comprehension of what they read and are continually mindful of their own mental procedures (Gunning, 1996).

Looking into on metacognitive reading procedures has additionally uncovered the profiles of viable and insufficient learners. Santana (2003) found that the techniques that denoted the genuine distinction amongst powerful and insufficient learners were the metacognitive procedures. Productive individuals are great technique clients; they know how to utilize an assortment of objective particular strategies, execute an arranged grouping, and screen their utilization (Weinstein and Underwood, 1985). Poor English learners don't know about the utilization of techniques to screen their cognizance of writings and in addition how their procedure is utilized (Mokhtari and Reichard, 2002). The EFL learners who get the higher review apply more metacognitive methodologies among the reading systems than less effective learners do (Park, 1999)

# 2.6 Relationship between Metacognitive reading strategies and reading comprehension

As claimed in the previous sections, earlier studies have mentioned about the promising relationship between reading English comprehension and awareness on metacognitive reading strategies. As needs be, Flavell (1976) expressed that the hypothetical system that increases this review is metacognitive reading system mindfulness hypothesis (Flavell, 1976), it trusts that self-observing and direction is the imperative principle to calculate reading cognizance. These methodologies advance reading appreciation as well as encourage EFL/ ESL readers to peruse them increasingly and see better the composed message/messages.

Metacognitive reading technique mindfulness in reading appreciation forms identifies with the learning that we perceive ourselves as EFL/ ESL readers, the reading task that we experience, and the reading techniques that we use in order to illuminate the undertakings (Bread cook and Darker, 1984; Singhal, 2001). By and large, metacognitive reading technique

mindfulness in reading is characterized as the reader performed activities, for example, arranging, observing, or assessing the achievement of a specific learning assignment (O'Malley and Chamot, 1994).

Metacognitive reading procedure mindfulness incorporates the consciousness of regardless of whether appreciation is going on, and the cognizant willing of at least one systems to screen the reading perception. Koda (2005) explained that few examinations (Cohen, 2003; Tang and Moore, 1992) showed that metacognitive reading procedure mindfulness has a solid relationship with reading understanding. Truth be told, capable EFL/ ESL readers use different metacognitive reading systems while reading.

Reciprocally, less capable or poor EFL/ ESL readers don't utilize these methodologies while reading along these lines, they can't enhance in their reading cognizance. For example, Devine (1983) and Shinghal (2001) explored on second language EFL learners' conceptualizations of their second language reading forms through meetings. The outcomes explored that capable EFL/ ESL reader's underline on reading as an importance making process instead of an interpreting procedure. In the meantime, the less capable EFL/ ESL readers showed to do the inverse.

Furthermore, Barnett (1988) led an investigation of second language reading with French language EFL learners, and the outcome demonstrated that the capable EFL/ ESL readers showed more attention to their utilization of metacognitive reading methodologies in reading appreciation than less capable EFL/ ESL readers. Besides, (Chern, 1993) additionally investigated that there is a positive connection between EFL/ ESL readers' metacognitive reading procedure mindfulness and their reading cognizance prepare in EFL/ESL learners. Sheorey and Mokhtari (2001) clarified that the relationship between learners' reading appreciation capacity and metacognitive reading methodology is essential and vital for reading strategy.

And furthermore, in a review in U.S. College students, gifted EFL/ ESL readers showed a larger amount of understanding and procedural use than poor-capacity EFL/ ESL readers. In any case, late research looking at the adequacy of subjective and metacognitive reading system

preparing uncovers that undoubtedly educating of psychological techniques yields little, here and now advancements in reading execution, while preparing on metacognitive procedure brings about more steady, long load perception picks up (Cohen, 2003; Koda, 2005; Tang and Moore, 1992; Zhicheng, 1992).

In a study conducted by (Hamdan et al, 2010) researched the utilization of intellectual and metacognitive methodologies for third semester EFL learners majoring in English, in reading an English content. Consequences of the review uncovered that EFL learners misused critical thinking, the most among alternate classes of the metacognitive procedures. Rehashing, speculating, contextualizing, envisioning and utilizing word reference were the most abused methodologies in metacognitive systems. Procedures which are significantly required at tertiary level, for example, the capacity to separate amongst truths and feelings, pondering themes that cover both sides of the issue and considering what was being perused were not very well known.

A review directed by Huang et al. (2009) which revealed that the utilization of strengthening methodologies ruled the procedure utilize and added to the greater part of the reading appreciation assumption. Procedures which are enormously essential for scholastic purposes at tertiary level, for example, the capacity to separate amongst certainties and feelings and, considering subjects that cover both sides of the issue were supported by the members. This outcome repudiates with the consequences of the Hamdon et al. (2010) think about which uncovered inverse outcomes.

Moreover, while Chamot (2007) focused on the significance of learners' present methodologies, he urged instructors to survey learners' gauge reading techniques preceding procedure direction. Subsequently, as another expansion of this review, instructors ought to know about their EFL learners' present systems and plan their procedure preparing likewise. Another vital point is that the instructors need to concentrate on basic assessment of the sites so as to shield the EFL learners from wrong data on the web. Subsequently, EFL learners ought to be outfitted with basic assessment techniques for reading perception either on the web or in direct classrooms.

# 2.7 Models for Reading Comprehension

Before revision of the exploration of identifying reading techniques, I quickly outline three substantial reading models initially proposed from the viewpoints of first language reading research that are generally talked about and connected to L2 reading hypothesis. Momentum reading research has uphold the possibility that both L1 and L2 EFL/ ESL readers appear to experience comparable subjective procedures (Alderson, 1984, Grabe, 1991, 2004; Eskey, 2005). These reading models have been powerful in both L1 and L2 reading research and can be recognized from each other by its concentration in regards to how importance is achieved from print. For example, the base up model shows that the reading procedure is guided by each word in the content and a founder unravels each word to acquire meaning.

Rather than the base up model, the top-down model indicates that the reading procedure is guided for the most part by a EFL/ ESL readers past affair and earlier information. The intuitive model calls attention to that the reading procedure is guided by a collaboration between the content data and the EFL/ ESL readers past information and additionally communication between different reading techniques (Brunning, Shraw, and Ronning, 1999). In this review, metacognition is another method of guideline that spotlights on "the intelligent way of reading," as opposed to an inactive method for accepting data from the content through word recognizable proof and assignment diagnostic learning.

#### 2.7.1 The Bottom up Model

As indicated by Gough (1972), the emphasis of this model is on print itself. EFL/ ESL readers begin reading by perceiving the letters, word recognizable proof, and they step by step advance toward bigger semantic lumps to sentences, and in the end finishing in importance. The entire reading procedure is fundamentally word-based and EFL/ ESL readers develop the

significance of a reading entry by unraveling each word. Since this model underscores singular words in disconnection, fast word acknowledgment is indispensable to the base up approach (Van Duzer, 1999). This reading model trusts that EFL learners who follow this procedure rapidly end up as plainly capable EFL/ ESL readers. Be that as it may, EFL learners who are not effective at interpreting move toward becoming battle EFL/ ESL readers whose capability is hindered by their failure to unravel.

Pressley (2000) asserted, gifted decoders can perceive visit letter lumps, prefixes, additions, and outside root words quickly and such capacity can free more memory limit in the mind for reading perception. Conversely, less gifted EFL/ ESL readers put more effort into decoding words which leaves less preparing constrains in the cerebrum for reading cognizance. This thought has likewise been affirmed by Breznitz (1997; referred to in Pressley, 2000) who finished up quick deciphering enhances reading perception.

In any case, the base up has been condemned that, "base up models propose that all reading takes after a mechanical example in which the user makes a piece-by-piece mental interpretation of the data in the content, with little impedance from the EFL/ ESL readers own experience information." (Grabe and Stoller, 2002, p.32). Furthermore, this word-by-word interpreting process causes moderate difficult and tiring reading since here and now memory is over-burden, and EFL/ ESL readers overlook effectively what they have perused when reading arrives at an end (Adams, 1990).

Subsequently, EFL/ ESL readers may just recall disconnected certainties without coordinating them into a firm understanding. Without strong comprehension, EFL/ ESL readers won't issue basic considering. Without basic considering, EFL/ ESL readers will not have the inspiration to read attentively all the time. Consequently, the feedback of this model has been that it doesn't appear to consider the commitment of a EFL/ ESL readers dynamic part and foundation learning to reading appreciation. As it were, the direct nature (letters $\rightarrow$  words $\rightarrow$  sentences) of this reading model restricts the extent of the reading procedure or imagine the reading procedure as a restricted makes it neglect to see the worldwide or top-down procedures (will clarify in the

following area) that happen amid reading. Acknowledgment of the constraints inside the base up model in clarifying the reading procedure prompted the rise of the top-down reading model.

#### 2.7.1.1 Use of the Bottom up model in L2

A developing collection of research in L2 has reinforced the basic part of lower-level preparing in reading understanding (Bernhardt, 1991; Carrell, 1988; Eskey, 1988, 1997, 2005, Koda, 1992) and the absence of vocabulary "perhaps the best single obstruction to familiar reading by EFL/ ESL readers." (Grabe, 1988, p.63). In a far-reaching survey of L2 word-acknowledgment look into, Koda (1996) again focused on the exceptionally huge part of word acknowledgment in L2 reading appreciation. In addition, in a review led the connections between the part of more elevated amount syntactic and semantic procedures and word acknowledgment of sixty grown-up ESL learners in Canada, Nassaji (2003) found that lexical information was emphatically corresponded with L2 reading understanding.

Nevertheless, reading in a moment language bears some information particular to that culture and society. Along these lines, albeit number of scientists and studies have accentuated the part of lexical learning in reading cognizance, a few specialists assert that vocabulary information is an essential, however inadequate condition for the result of effective reading understanding (Koda, 1996). In line with this (Nikolvoska, 2015) asserts that "the implicit approach implies the indirect adoption of the vocabulary through communicative reading activities in which vocabulary is not the primary goal". Moreover the adoption of a vocabulary by guessing from the context is a relatively slow process that often does not come to the true meaning (ibid.)

Consequently, all together for genuine perception of a content to happen, a reader needs to have other wellspring of information (Bernhardt, 1991, Carrell, 1988, Devine, 1987) and create suitable reading methodologies (Anderson, 1991, 2001; Carrell, Pharis, and Liberto, 1989).

#### 2.7.2 The Top-down Model

Unlike to the base up model, the top-down model is an "idea" driven model where the EFL/ ESL readers' experience learning and desires to control them to develop significance from a reading content. As Eskey (2005) proposes, the top-down model states that the entire reading procedure is essentially "from cerebrum to content" (2005, p.564). That is to state, a reader begins with specific assumptions about the reading content that has got from his or her experience information and afterward utilizes his or her vocabulary learning they have in interpreting words to affirm and change past desires (Aebersold and Field, 1997). At the end of the day, a reading content itself has no importance in the top-down reading model. The reader builds the importance of the content by fitting it into his or her earlier learning.

As per Goodman (1967), who built up the top-down model, reading is a "psycholinguistic speculating diversion" and EFL/ ESL readers utilize their experience information to figure meaning. Smith (1997), who is additionally for the top-down model, asserts that a reader assumes an extremely dynamic part during the time spent making an interpretation of print into importance by utilizing information of a pertinent language, learning of the topic, and information of how to peruse to affirm or dismiss his or her speculations. The procedure of the top-down model is likewise called "examining of the content" (Cohen, 1990). Depicting the inspecting procedure, Cohen (1990) maintain that a reader does not read the greater part of the words and sentences in the content, but instead picks certain words and expressions to understand the importance of the content. Along these lines, the top-down model concentrates on reading abilities like making forecasts and deduction and also speculating from setting. The top-down model impacts both L1 and L2 reading direction in advancing the significance of expectation, speculating from setting, and getting the essence of content's importance.

By the way, the top-down reading model has been criticized for its issue of overdependence on a EFL/ ESL readers earlier semantic and applied learning and disregard the significance of the content (Eskey, 1973; Pearson, 1979). In addition, the top-down model disregards the conceivable troubles that a reader may have or experience with speculating or anticipating the point of content if the material is new to him or her (Samuels and Kamil, 1988). This is especially valid for second or remote language learners. So far, both the base up and the top-down hypotheses have been viewed as insufficient as far as portraying a sound reading processes concerned.

For the base up hypothesis, it was condemned for its inability to consider the EFL/ ESL readers part in the reading procedure, while the top-down hypothesis depends excessively on the EFL/ ESL readers' earlier phonetic and theoretical information and dismisses the significance of the content (Eskey, 1973, 1986; Pearson, 1979). In this way, the deficiency of both the base up and base down models in clarifying the reading procedure has prompted the rise of the intuitive reading model.

Utilization of the top-down model in L2 Since reading materials has a tendency to be culture-particular, the top-down model thinks about that L2 EFL/ ESL readers may neglect to comprehend a content on the off chance that they don't cohort or can't get to the suitable social learning installed in it. Dependence on top-down systems to the detriment of word recognizable proof aptitudes won't add to cognizance. That is to state, isolation on social information may bring about mutilation of the content importance if the reader depends on speculating from setting and expectation (Eskey, 1988).

It has for some time been contended that amid the reading procedure, the EFL/ ESL reader's language information, individual encounters and learning of the literary structure interface intuitively to accomplish perception. In this way, Alderson (2000) particularly focuses on that "the entire reading procedure is not an "either/or" determination between the base up and best down models, yet includes the association between both methodologies." (p.38).

#### 2.7.3 The Intelligent Model

The intelligent model consolidates components of the both base up and beat down models and stresses the interrelationship between a reader and the content. It is presently regularly acknowledged as the most convincing photo of the reading procedure for both L1 and L2 EFL/ ESL readers (Anderson, 1999). Presented by Rumelhart (1977), the intuitive model proposes that there is a communication between the directed reviews on L2 EFL/ ESL readers' conceptualizations of their L2 reading forms through meetings. The outcomes demonstrated that more seasoned and more capable EFL/ ESL readers tended to concentrate on reading as an importance making process instead of a disentangling procedure. In the interim, the more youthful and less capable EFL/ ESL readers seemed to do the inverse. Furthermore, directing an investigation of L2 reading with 278 French language EFL learners, Barnett (1988) called attention to that the capable ESL EFL/ ESL readers showed more familiarity with their utilization of methodologies in reading English than less capable EFL/ ESL readers.

Besides, Carrell's (1989) think about (as referred to in Chern, 1993) likewise discovered support for positive connections between EFL/ ESL readers' metacognitive consciousness of technique utilize and their reading limit in both L1 and L2. All the more as of late, Sheorey and Mokhtari (2001) (as referred to in Mokhtari and Sheorey, 2002) found the connection between EFL learners' reading limit and technique utilize while reading.

In both ESL and U.S. understudy bunches, high-capacity EFL/ ESL readers demonstrated a more elevated amount of mindfulness and system use than low-capacity ones. Additionally, late research looking at the adequacy of psychological and metacognitive procedure preparing demonstrates that unequivocal direction on intellectual techniques yields little, here and now changes in reading execution, though preparing on metacognitive systems brings about more steady, long haul appreciation picks up (refer to in Koda, 2005; Carrell, 1998; Cohen, 2003; Tang and Moore, 1992; Zhicheng, 1992).

## 2.8 Survey of Studies on Reading Techniques

As O'Malley and Chamot (1990) call attention to, most research on techniques in both L1 and L2 settings has concentrated on distinguishing and classifying the reading methodologies that "great" or capable EFL/ ESL readers utilize in contrast with "poor" or less-capable EFL/ ESL readers. On

account of reading models, inquire about on second language and outside language reading methodologies to a great extent has been educated by research done in L1 reading settings with most of the members were essential graders or therapeutic EFL learners (Grabe, 1992). Given the distinctions in language learners and settings, it is sensible question the legitimacy of utilizing L1 reading research as a beginning stage of investigation into L2 reading procedure usage.

A noteworthy concern is the consistent question of the degree to which less capable L1 EFL/ ESL readers are proportional to less-capable L2 EFL/ ESL readers (Grabe, 1992). Notwithstanding the impact of a EFL readers first language and L1 education, his or her second language capability ought to be mulled over. Notwithstanding, one can't deny that reading is a psychologically learned process for L1 EFL/ ESL readers, as it is obviously for L2 EFL/ ESL readers also. Therefore, L2 based research has depended such a great amount on past L1 work. The accompanying is the short outline of a few key discoveries of L1 reading methodology concentrates that are important to L2 reading.

#### 2.8.1. Reading Techniques in the L1 Setting

Piece (1986) outlined a few spellbinding reviews did between the mid-1960s and mid-1980s that concentrated on the "appreciation procedures" of capable EFL/ ESL readers with English as their first language. She presumed that a number of the methodologies utilized by capable EFL/ ESL readers were best down and significance centered systems, as depicted by psycholinguistics, for example, Goodman (1967) and Smith (2004) in the top-down reading cognizance explained.

Such reviews have proposed, for instance, that capable L1 EFL/ ESL readers are more equipped for checking their perception, are more mindful of the techniques they utilize, and can utilize methodologies adaptably by modifying them to the content and reason for a reading guideline (Piece, 1986). Moreover, capable L1 EFL/ ESL readers have the accompanying reading qualities, for example, the capacities of separating between fundamental focuses and points of interest in a reading content, utilizing literary signs to foresee substance and connection data,

perceiving disparities in a content, and taking care of the issues by utilizing methodologies to make such inconsistencies justifiable (Square, 1986). Investigation concentrates that concentrated on reading procedures indicate the idea that the compelling utilization of these systems clarifies the more profound appreciation of capable EFL/ ESL readers.

Other than the graphic reviews in the territory of reading procedures, there is additionally an extensive collection of writing on reading methodology preparing in a local language setting. In general, the sorts of reading methodology preparing among these reviews have been gone for preparing L1 EFL/ ESL readers in summarized writings (Dark colored, Campione, and Day, 1981; Bunny and Borchardt, 1984), utilizing self-addressing among reading (Wong and Jones, 1982), checking of comprehension, and the utilization of particular repair methodologies (Alexander, Haynes, and Winograd, 1984), initiating earlier information and making induction (Hansen, 1981; Hansen and Pearson, 1983), utilizing proportional instructing and express clarifications (Darker and Palincsar, 1985).

In the wake of exploring a few effective L1 reading appreciation systems preparing considers, the normal finding of these preparation studies is that "immediate guideline" in reading methodologies has "reliably positive outcomes" (Carrell et al., 1989, p.650). At the end of the day, the way to fruitful preparing in these reviews is by all accounts the capacity to make guideline sufficiently appearent to encourage EFL learners' advancement of metacognitive control of procedure use by giving clear and broad clarifications of the estimation of technique utilize, and data on when and how to utilize them.

Two powerful assortments of research have archived how metacognitive system direction can be incorporated into day by day reading guideline: complementary educating (Darker and Palincsar, 1985) and express technique direction (Duffy et al., 1986; Duffy et al., 1987). Dark colored and Palincsar (1985) created equal showing which concentrates on direct guideline in perception encouraging and appreciation checking methodologies. In a preparation extend, seventh graders of L1 were instructed to utilize four solid appreciation systems: outlining the principle content (condensing), figuring potential test questions (addressing), clearing up troublesome parts of the content (illuminating), and anticipating future substance (foreseeing). Amongst the preparation, the educator worked with EFL learners and demonstrated how the systems were utilized. At that point, EFL learners drilled this procedure inside a little gathering, and the educator scaffolded until the EFL learners bit by bit assumed the liability for utilizing those techniques all alone. Utilizing such a procedure specifically affected the autonomous test scores of poor EFL/ ESL readers who enhanced drastically, going from underneath 40% right to more than 75% right. This review showed proof to reinforce the ideas that EFL learners can be shown reading procedures to enhance their understanding and instructor displaying of particular reading techniques use in how to enhance reading appreciation ought to be incorporated into reading direction examine. The equal showing technique was later reproduced by L2 reading scientists, for example, Cotterall (1990 and 1993) in the US and in the EFL settings directed by Tune (1998) in Korea and Salataci and Akyel (2002) in Turkey.

Dole, Darker, and Teathen (1996) directed a different line of reading procedure investigate including sixty-seven youthful L1 EFL/ ESL readers going from fifth grade to sixth grade. The writers thought about an "educator coordinated" system in which the instructor read arranged scripts intended to enact earlier learning with "intelligent direction" in which the instructor and EFL learners together actuated and examined EFL learners' experience information before reading. Comes about showed that at hazard L1 EFL/ ESL readers who got "intuitive procedure" guideline made better picks up in appreciation execution over their companions who got customary basal direction, which is "educator coordinated" direction.

Additionally, a prior review did by Hansen (1981) explored the impacts of two test strategies on inferential reading perception of twenty-four second grade L1 children. The children were gathered into three test conditions:

- 1) The technique gathering,
- 2) The question gathering, and
- 3) The control assemble.

The "Technique Gathering" was prepared in pre-reading systems and concentrated on incorporating content data with earlier learning before reading. The "Address Assemble" got preparing in noting questions which required sharp derivation between the content and earlier information. The "Control Assemble" got customary story direction went with the normal movement of exacting surmising test. The guideline was connected to ten basal-readers' stories. After effects of post-perception tests uncovered that the execution of the children in both test grups beat that of the control aggregate. Government sanctioned test scores and scores on an experimenter-planned test additionally supported the exploratory gatherings. Taking everything into account, when reading techniques are educated, EFL/ ESL readers' registered progress .

A comparable learn about the inferential cognizance of good and poor fourth graders was explored by Hansen and Pearson (1983). Forty fourth graders were relegated to one of four instructional gatherings, two gatherings of good EFL/ ESL readers (an exploratory and a control gathering) and two gatherings of poor EFL/ ESL readers (an experimental and a control group). The exploratory treatment comprised of three sections: 1) making EFL learners mindful of the significance of drawing inductions between new data and earlier learning structure, 2) motivating EFL learners to talk about some of their own encounters that were like occasions in the content, and 3) giving EFL learners numerous inferential inquiries to examine in the wake of reading the writings. The outcomes demonstrated that poor EFL/ ESL readers profited essentially from this guideline, showing that instructional methodology in reading affect reading appreciation, particularly for poor EFL/ ESL readers.

#### 2.8.2 Reading Strategies in the L2 Context

A lot of research on reading methodology in the main language has uncovered its significance in the reading procedure and has connected to L2 reading space. Scientists in L2 settings led concentrates that were pointed not just at revealing conceivable reading procedures which learners utilized (Anderson, 1991; Square, 1986; Hosenfled, 1977), additionally the impacts of vital reading guideline on reading change (Carrell et al., 1989; Janzen and Stoller, 1998).

For example, Hosenfled (1977) began with an examination in finding the distinctive reading practices and systems between great EFL/ ESL readers and poor EFL/ ESL readers of French as a moment language. Like the discoveries of L1 reading study, there were proof demonstrating that the diverse systems use among great and poor L2 EFL/ ESL readers. Later over the most recent three decades, the consideration in second language reading research has been centered around "understanding what capable, gifted L2 EFL/ ESL readers regularly do while reading, including distinguishing the procedures they utilize and how and under what conditions they utilize those methodologies." (Sheorey and Mokhtari, 2001, p. 423).

Consequently, studies were led to explore fruitful and unsuccessful L2 EFL/ ESL readers' reading procedure use through an assortment of strategies, for example, verbally process, meeting, and poll overviews. Notwithstanding the attributes of good and poor L2 EFL/ ESL readers, L2 analysts have attempted to analyze each of the factors, for example, language foundations, learning inclination, language capability, sexual orientation, social foundations, and so forth., which may influence L2 EFL/ ESL readers' technique utilization (Chamot, 2005). For instance, researches who have inspected the connection amongst sexual orientation and technique utilize have arrived at blended and conflicting conclusions (Ehrman, Leaver, and Oxford, 2003, 1990; Green and Oxford, 1995; Wharton, 2000).

Ehrman and Oxford (1989) and Green and Oxford (1995) have arrived at a similar conclusion by finding particular sexual orientation contrasts in system utilize, while Ehrman and Oxford's (1990) neglected to find any proof of varying language learning procedure use between genders. It may be reasoned that despite the fact that men and ladies don't generally exhibit contrasts in language learning procedure usage, where contrasts are discovered ladies tend to utilize more language learning systems than men. Then again, Wharton's (2000) concentrate found that men utilized a larger number of methodologies than ladies (Wharton, 2000). With respect to the connection between language learning systems and the understudy's capability level is clearer. More capable EFL/ ESL readers utilize a more prominent assortment and regularly a more noteworthy number of reading systems (Anderson, 2005; Green and Oxfrod, 1995; O'Malley and Chamot, 1990; Wharton, 2000).

Later in the mid-1980s, a few L2 specialists additionally started preparing poor L2 EFL/ ESL readers to utilize a portion of similar methodologies that talented EFL/ ESL readers do with the conviction that once poor L2 EFL/ ESL readers were shown reading systems, then their reading appreciation would make strides. However, because of the mind-doubts attributes of L2 EFL/ ESL readers as far as their various etymological and non-phonetic elements and in addition diverse research procedure being utilized, discoveries from L2 research were not able come to indisputable discoveries. The accompanying dialog will arrange past L2 reading systems considers into illustrative reviews and test thinks about.

#### 2.8.3 Descriptive Studies on L2 Reading strategies

Observing signals from L1 reading analysts, second language scientists started to research contrasts amongst capable and less-capable readers in the late 1970s. Hosenfled (1977, refered to in Carrell, et al., 1998) is generally recognized as the first to investigate the handling systems of second language messages by great and poor readers of French. Her subjects were ninth graders learning French as a moment language. They were made a request to peruse in French however detailed in English about their reasoning procedures while reading French content. Through verbally process conventions, Hosenfeld found that effective readers of French as a L2 have the accompanying qualities: (1) remember the importance of an entry while reading, (2) read in "wide expressions," (3) skipped insignificant words, (4) had a positive view in reading. (Carrell et al., 1998, p.121). Despite what might be expected, the unsuccessful readers of French as a L2 have the accompanying attributes: (1) lost the significance of sentences when they decoded them, (2) read in short expressions, (3) saw all words as vital to aggregate expression importance and in this way infrequently skipped words as irrelevant, and (4) had a negative self-see as a reader. (Carrell et al., 1998, p.121).

This preparatory review unmistakably depicted the systems of good and poor L2 reader used to handle the reading content. Despite its commitment, be that as it may, this review has been addressed for not connecting the technique use to cognizance of particular passages or the content all in all. The information just centered on sentence-level understanding as opposed to general perception of the whole content. Plus, verbally process conventions, which provided rich bits of knowledge into undetectable mental reading systems, had a tendency to uncover on-line handling rather than metacognitive parts of arranging or assessing (Chamot, 2004).

A long time later, in a concise report of their examination discoveries, Knight, Padron, and Waxman (1985) utilized a meeting and verbally process convention to report the recurrence and sorts of technique utilization of fifteen local English talking (characterized as great readers) and twenty-three mainstreamed Spanish bilinguals (characterized as poor readers) grade school EFL learners. The outcome indicated huge contrasts as far as both the recurrence of system utilize while reading English messages and in addition the sorts of methodologies utilized. As a rule, they found that monolingual English reader utilized a few top-down procedures and twice the same number of different systems than bilingual reader utilized, for example, concentrating, noticing points of interest, and self-addressing. Spanish bilinguals, then again, utilized less metacognitive techniques than local English speakers.

From this information, Knight, Padron, and Waxman (1985) reasoned that the bilingual EFL learners' powerlessness of utilizing perception methodologies was on the grounds that they concentrated such a great amount on unraveling skills in reading English writings. Another conceivable clarification was that that they had not built up their own transferable methodologies in their L1 because of early mainstreaming. This review offered knowledge into the impact of language foundations on the utilization of reading procedures. Nevertheless, like Hosenfeld's prior review, this review has been tested for not revealing the connection between reading system utilization and reading appreciation, either. Also, the examination made between local English speakers and ESL reader appears to be risky in light of the fact that the L2 rader procedure is significantly more confused because of other phonetic and non-semantic elements. In this manner it is suggested that correlation ought to be drawn amongst L1 and L2 people with comparative reading practices.

So as to suit for the past two investigations of not relating reading procedure use to reading appreciation, Piece (1986) concentrated just on less capable reader who bombed in a school reading capability test before the review. Square's subjects were six ESL/ EFL learners (three

Chinese and three Spanish) and three local English speakers of school level. Preceding entering school, the ESL EFL learners in her review had gone to in American optional schools for roughly a similar measure of time. In spite of the way that these EFL learners had comparative language capability, Square discovered contrasts in system use inside this gathering by utilizing one-on-one meeting/verbally process strategy.

Subjects were made a request to participate in verbally processing while at the same time reading two interpretive entries chose from an initial brain research course reading and revealed their reading procedure after each sentence. The procedure was recorded, interpreted, and scored, and afterward 20 various decision perception inquiries were controlled. Square then built up a coding plan to arrange announced methodologies into two sorts of techniques: (1) nearby and (2) general systems.

Nine of EFL learners in the review, the discoveries demonstrated that the readers with higher cognizance scores on the retellings and various decision questions utilized "general techniques" of incorporating new data with old data, recognizing primary thoughts from points of interest, alluding to their experience, and concentrating on the literary significance all in all. Then again, readers with lower perception scores seldom recognized principle thoughts from points of interest, once in a while alluded to their experience, occasionally centered around literary implications, and rarely incorporated old data with new data.

Furthermore, Square found that ESL EFL learners utilized metacognitive techniques and observed perception like local English speakers. In this manner, clashing with the past two reviews, this review showed that language foundations did not represent the utilization of specific techniques. Besides, there was proof of individual contrast and every one of the readers made associations with their own encounters. What had any kind of effect was that perusers with low understanding scores neglected to reconnect back to the first content. Since this review was directed just with non-capable readers, it was later condemned that there is no real way to know the part of language capability in reading methodology utilize.

Sarig (1987) researched the commitment of L1 reading techniques and L2 reading capability on L2 reading and in addition the connection amongst L1 and L2 reading systems. Her subjects were ten Israeli female secondary school EFL learners of Hebrew as a L1 and English as a remote language. Sarig (1987) set out to look at the systems her subjects utilized as a part of reading scholarly messages in every language, conjecturing that L1 methodologies exchange to L2 reading. The sample all had gotten eight years of formal guideline in English and spoke to low, halfway, and high capability levels as controlled by educator assessments and the consequences of capability test scores. Through verbally process talks with, her subjects performed primary thought examination and general instant message blends utilizing one content in their L1 and one in their L2.

At that point, Sarig examined the frequencies and sorts of reading practices of her subjects as far as what she called "reading moves," or techniques. Notwithstanding recognizing and characterizing the sorts and recurrence of systems utilized by her subjects, Sarig additionally broke down the level of viability of every procedures utilized by her subjects in adding to effective errand execution relying upon whether they advanced or weaken appreciation. Sarig distinguished various systems, and sorted out them into four sorts: "specialized guide methodologies, for example, skimming for the general thought, "illumination and disentanglement procedures, for example, semantic unraveling, "intelligence recognizing techniques, for example, utilizing content or literary schemata to comprehend the whole content, and "checking techniques". Her outcomes demonstrated that the procedures utilized by her subjects in reading L1 and L2 writings were essentially indistinguishable as far as sorts, recurrence, extent, and relative adequacy for every language. Thusly, the discoveries of this review are accord with Piece's (1986) study in two viewpoints. To start with, both effective and unsuccessful reading utilizes worldwide techniques.

As it were, the procedures were not characteristically great or awful. Achievement in reading was appeared to be an aftereffect of the nature of a reader's one of a kind use of a mix use of techniques, as opposed to the utilization of a specific system. Second, the L2 reading process has a high level of distinction. This review was extraordinary in that techniques exchange appeared from L1 to L2 reading process and the capacity to exchange is not subject to remote

language capability. At the end of the day, when lacking of L2 capability, L2 EFL learners will depend on L1 reading methodology to remunerate their L2 impediment.

Anderson (1991) led a different line of reading exploration by examining the distinctions in second language reading technique under two reading undertakings institutionalize reading test and scholastic reading assignment. Twenty-eight subjects in Anderson's review were Spanish L1 EFL learners of blended capability levels from different nations contemplating ESL seriously at an American college. Utilizing a verbally process convention on two L2 reading assignments: 1) an institutionalized reading test with various decision cognizance inquiries, and 2) a scholastic reading undertaking of more noteworthy length took after by different decision questions), Anderson recorded the sorts and frequencies of procedures utilized by his examination members. He then performed basic relapse examinations utilizing the subjects' capability levels as autonomous factors and both state sanctioned test and scholarly reading assignment scores as needy factors. It happens to demonstrate that L2 language capability represented a greater amount of the variation on the state administered test than any system or blend of techniques. With respect to the scholarly rading assignment, language capability represented just a little rate of score change. A key finding was that there is no single arrangement of preparing procedures that fundamentally add to accomplishment on these two reading errands. In any case the subjects' distinctive capability levels, it appears that the readers with high and low scores utilization of similar methodologies when reading and while noting appreciation inquiries on both undertakings. This discovering drove Anderson to presume that techniques were "in essence not characteristically either fruitful or unsuccessful, yet rather it is the compelling utilization of a procedure that makes appreciation effective." (1991, p.466). When all is said in done, subjects who detailed utilizing more systems tended to score higher on both errands and there was a critical connection between recurrence of technique use and subjects' scores. No critical relationship was found between the quantities of novel methodologies utilized and test scores. In this way, Anderson finished up from his information that it is not adequate to comprehend what methodologies to utilize, but rather a reader must know how to utilize them as indicated by their individual styles and needs effectively.

As per Block (1992) explored the utilization of reading systems with respect to capable and non-capable readers. There were eleven local speakers and fourteen Chinese speakers of school level. They were additionally ordered as 16 capable readers (8 ESL and 8 local speakers) and 9 less capable readers (6 ESL and 3 local speakers). She utilized a verbally process strategy to think about the cognizance checking procedures of local speakers and second language learners of English as they managed reference and vocabulary issues in an interpretive entry. The discoveries demonstrated that ESL speakers with more English capability took more activities to take care of issues and check arrangements. Piece detailed that "distinctions that existed in observing appeared to be expected more to reading capability than to language foundations of the readers." (p.334). A critical conclusion from this review was that "the less capable readers appeared to support a neighborhood word handling procedure while the more capable readers had a tendency to favor a more worldwide significance based one." (p.334). This review accordingly demonstrated a move in technique utilize in light of language capability.

So far, the above reviews appear to call attention to two critical discoveries: 1) great readers utilize techniques that best take care of the issues, while 2) poor readers tend to utilize less successful and improper reading systems among reading. Be that as it may, the connection between reading procedures and appreciation was observed to be more confusing than was proposed by these early reviews. For example, both Sarig (1987) and Anderson (1991) examined the conventional division of good and poor readers. They think there is no great system or poor methodology; rather, the reader chooses which procedure to utilize when appreciation separates in the reading procedure. Anderson's review demonstrated that similar sorts of methodologies were utilized by both high and low appreciation readers. Along these lines, there is nobody to-one connection between specific methodologies and achievement or absence of accomplishment in reading cognizance. In addition, or maybe as opposed to clear gathering contrasts as far as capability and general ways to deal with L2 reading found in the investigations of Anderson (1991), Piece (1986), Hosenfeld (1977), Knight, Padron, and Waxman (1985), and Sarig's (1987) discoveries proposed an extraordinary level of fluctuation between individual learners.

Anderson's (1991) discoveries and conclusion resounded Sarig's (1987) in two imperative viewpoints. Initially, methodology utilize was observed to be very individualistic and no technique was observed to be innately great when checked against subjects' test scores. Second, effective utilization of systems, that is, utilizing procedures deliberately, requires a metacognitive way to deal with and control of the reading procedure. All things considered, Anderson (1991) proposes that compelling reading systems guideline plans to cultivate language learners' advancement as vital readers, which is best accomplished through express reading methodology direction of not just the what and how of individual technique in any case, similarly critical the when and why also. To be particular, that is the metacognitive mindfulness in the reading procedure.

Like Sarig (1987) and Anderson's discoveries, Kern (1997) did a contextual investigation of two American school youth who learned French as a moment language. The two EFL learners have distinctive capability levels in French reading. The estimation comprised of a reading assignment meet. In the wake of investigating their reading methodologies, Kern found that the two readers of various language proficiencies utilized comparative reading procedures, yet they uncovered contrasts by the way they utilized these techniques in specific occurrences. Kern, at the end of the day, noticed that no system has a characteristically terrible or great quality. The adequacy of a few methodologies is subject to an assortment of logical elements, including a reader's motivation, language ability, learning style, and L1 education foundation, and in addition elements of the specific content being perused (Kern, 1997).

To summarize, no direct relationship seems to exist between technique utilize and reading capacity. As research proof designated, "utilization of certain reading techniques does not generally prompt fruitful reading cognizance, while utilization of different systems does not generally bring about unsuccessful reading appreciation." (Carrell, 1991, p.168). What's more, "systems may not be necessarily great or terrible for a given reader. Or maybe, they could possibly advance effective perception of a content, contingent upon the specific reader, the specific content, the setting in which the reading is going on, and the decision of different techniques in conjunction with the selected one." (Cohen, 1987, pp. 132-133). In this manner, to be vital reader, EFL learners not just need to recognize what methodologies to utilize however they

likewise should know about when, why, and how to utilize these procedures as per their individual inclination properly and viably. This sort of learning is called metacognitive mindfulness or metacognitive reading methodologies. Next section of the paper will talk about past research contemplates on metacognitive reading methodology.

## 2.8.4 Descriptive studies in Metacognitive reading strategies in L2 context

Investigate in the zone of reading methodologies has as of late centered around the part of metacognition. Scientists in L1 territory like Flavell (1992) and Pressley (2002) specifically contend for giving more prominent regard for the part of metacognition in helping EFL learners' self-direction of their own learning. They keep up that EFL learners' metacognition, i.e. their attention to, and intellectual control and direction over, learning, can upgrade learning productivity and self-adequacy (Vennman and Beishuizen, 2004). "Metacognition" has been characterized as "pondering considering" (Anderson, 1999, p.72 and Carrell, 1998, p.7) and as "perception about cognizance" (Carrell, 1998, p. 7). Sheorey and Mokhtari (2001) incorporate both mindfulness and checking in their conceptualization of metacognition, which is characterized as "the learning of the reader's discernment in respect to the reading procedure and the poise system they use to screen and upgrade appreciation." (p. 432). Anderson (2002) quickly alludes to metacognition as "the capacity to consider what you know and do and what you don't know and you don't do." (p.10). Various research thinks about with respect to metacognition (Barnett, 1988; Carrell, 1989; Sheorey and Mokhtari, 2001; Zhang, 2008; Kong, 2006) have inspected the connection amongst metacognition and reading systems. For example, Devine (1984) led a contextual analysis with two members of starting and middle language capability levels as characterized by College of Michigan Situation test. Devine (1984) utilized oral reading meetings to examine second language readers' conceptualizations of their reading in a moment language. In light of what language units they admitted to concentrate on, Devine arranged subjects as sound-, word-, or importance focused. The discovering found that distinctive readers considered diverse parts of reading as essential. The findings demonstrated that importance focused readers had great to fabulous cognizance, while sound-focused readers were judged to have poor or extremely poor

perception. Consequently, the readers who utilized an importance focused approach showed great reading understanding. It was additionally watched that the utilization of an importance focused approach can relieve the impacts of low language capability, and along these lines permitting a readers to effectively exchange great first language reading methodologies to the second language reading.

Barnett (1988) directed an investigation of outside language reading to explore the connections among reading perception, system utilize, and saw technique utilize (methodology mindfulness). Two gatherings of fourth semester French EFL learners in school took an interest in Barnett's review which took after a few stages. To begin with, EFL learners read a new section in French and revamped the occasions in English. Second, before reading another new story, they addressed some broad learning inquiries concerning it and after that read it. At that point, they addressed a sixteen-thing test to choose the best expression, sentence, or section to proceed with everything (methodology utilize). Finally, EFL learners have got some information about reading procedures that they thought they had utilized while reading (saw methodology employ). The outcomes demonstrated that every one of the three procedures (reading understanding, methodology utilize and saw technique utilize) were essentially corresponded for psychologically develop college level readers of French as a remote language. In addition, research demonstrated that as scores of compelling system utilize expanded, saw viable procedure utilize expanded, as well. Barnett presumed that EFL learners who remembered setting understood a greater amount of their reading than EFL learners who didn't utilize this technique. Furthermore, EFL learners who thought they utilized systems viably read and saw superior to anything the individuals who did not think so. Barnett expressed that "EFL learners who were shown system utilize showed an essentially more prominent capacity to peruse setting than did their traditionally instructed peers." (p.157).

Carrell (1989) seems to have been the principal L2 reading scientists to explicitly concentrate on metacognition in second language reading technique utilize, and to do as such in a more quantitative manner. Keeping in mind the end goal to assemble information regarding her matters' impression of their reading capacities, repair methodologies, favored reading systems, and the troubles that they confront when reading in both their first language and second language,

Carrell managed a survey to forty-five local Spanish-talking escalated ESL EFL learners of intermediate and propelled capability and seventy-five local English talking EFL learners concentrate Spanish as a remote language of three diverse capability levels at an extensive American college. Also, Carrell's subjects took a reading test in which they read two sections in their L1 and two entries in their L2 and after that addressed numerous decision understanding inquiries. Utilizing basic weakening investigation with survey reactions as her autonomous factors and L1 and L2 test scores as her dependent factors, Carrell found that for both her ESL and her Spanish as a moment language gatherings, neighborhood or base up ways to deal with reading (that is, disentangling and sentences level methodologies) contrarily related with L1 test execution.

For Spanish L1 EFL learners, the outcomes demonstrated noteworthy connections with more worldwide or top-down systems announced, which inferred that these readers moved toward their reading in English in a comparative form as their reading in their L1, Spanish. Be that as it may, for English L2 EFL learners, Carrell acquired the inverse outcomes. For local English talking EFL learners reading Spanish content, self-announced neighborhood approaches emphatically associated with test execution. Carrell clarified these outcomes as being because of the relative contrast in capability levels between the two gatherings and contrasts in learning situations. In particular, Carrell's ESL subjects were learning English for scholarly purposes in a submersion situation, making utilitarian utilization of their second language, while her subjects reading Spanish L2 content were concentrate the language as an outside language in a clearly noninundation condition and had just been examining for periods extending from one to three years. In this way, as Carrell contends here, and in addition in her later work, successful reading procedure guideline ought to look to build up learners' metacognitive mindfulness and information of second language reading process through clear and unequivocal clarification, since it is conceivable that L2 readers will have the capacity to exchange L1 reading methodologies to L2 reading undertakings. Maybe reading procedures guideline can be seen as an endeavor to emerge the exchange procedure and furnish L2 readers with compensatory aptitudes to build significance from writings before their base up abilities progress toward becoming automatized (Carrell, 1989).

Sheorey and Mokhtari (2001) looked at the metacognitive familiarity with the reading procedures of ESL undergrads with local speakers spoke to by American EFL learners. They looked to answer three inquiries: 1) are there any contrasts amongst ESL and US EFL learners in their impression of utilizing methodologies? 2) are there any sexual orientation contrasts? what's more, 3) is there a connection between revealed methodology and self-evaluated reading capacity? EFL learners gave data about their experiences including rating their reading capacity. At that point, they addressed the Review of Reading Procedures (SORS) which is isolated into three classes:

- 1) metacognitive,
- 2) subjective, and
- 3) bolster techniques.

Comes about demonstrated that ESL EFL learners detailed utilizing more bolster procedures. What's more, both ESL and the US high reading capacity speakers announced more utilization of bolster systems than the low-reading capacity ones. Likewise, the sexual orientation examination demonstrated that female EFL learners when all is said in done detailed utilizing certain techniques more than the guys. In any case, the analysts expressed that in light of the unequal quantities of females and guys in the review, sex contrasts were not factually huge. A vital finding was that reading capacity was altogether identified with EFL learners accounted for use of methodologies. Sheorey and Mokhtari express that "EFL learners who gave themselves a high appraising on reading capacity, paying little mind to their language foundation, revealed a higher utilization of all the reading methodologies in the study than did those EFL learners who gave themselves a low reading capacity rating." (p. 446).

#### 2.8.5. Summary of descriptive studies in L2 context

There are a few focuses can be drawn from the above examination with respect to the engaging reviews in the L2. Initially, capable L2 readers are more centered around separating importance from writings and report more prominent recurrence in (generally best down)

technique use than less-capable readers. Second, less capable readers tend to concentrate more consideration on decoding or bottom up procedures when reading content. Third, reading techniques they are neither characteristically great nor awful. Forward, capable or less capable L2 readers don't fundamentally vary regarding the number and sorts of novel techniques utilized as a part of reading. Fifth, regardless of whether language foundations represent the reading system utilize is uncertain. Last, however not slightest, metacognition, as it identifies with a readers' general way to deal with the reading undertaking, gives off an impression of being imperative for fruitful cognizance by methods for arranging, observing, and assessing reading, and organizing utilization of systems.

#### 2.8.6 Experimental studies in L2 reading context

As ahead of schedule as the mid-1980, Hamp-Lyons (1985) seems to have been the main second language scientist to think about the relative impacts of "conventional" and "understanding procedure based" reading direction with intermediate ESL understudies. Her subjects were twentyfour Asian undergraduates. They were separated into three coordinated groups, each with one of two

diverse instructors utilizing distinctive showing techniques, yet both utilizing a similar content. These groups were each educated by an alternate instructor, got "customary" direction, with the third group getting exploratory "content key" preparing. The post-test was indistinguishable to the pre-test and the memory impact was reduced as there was a 16-week interim amongst pre-test and post-test. Other interceding factors, for example, ages, majors, learner styles, time in the US and inspiration were uncontrolled and along these lines thought to be coincidently appropriated. The outcomes turned out to be measurably huge for the trial mass. In any case, as Kern notes, just eight out of twenty-four subjects got reading cognizance technique guideline in the review; the example size was considered too little to measurably noteworthy have importance.

Carrell, Pharis and Liberto (1989) analyzed the adequacy of reading technique preparing of semantic mapping (SM) and experience-content relationship (ETR) strategies on twelve undergraduates' reading cognizance and both strategies brought about the picked-up score of subjects' reading perception. This review included a heterogeneous gathering of twenty-six ESL undergraduates in a level four escalated ESL program at the Southern Illinois College. Two experimental groups were framed of which one got the semantic mapping (SM) preparing and the other got the experience-content relationship (ETR in the future) preparing. Two control groups basically got the pre-and post-tests. Amid four-day preparing, the semantic mapping (SM from this point forward) group was given a progression of reading sections with inquiries used to invigorate exchange and semantic maps were made. In the interim, the ETR group got an indistinguishable section from SM gathering and preparing exercises included note taking, exchange, perception inquiries and vocabulary exercises that identified with the writings.

All subjects got a pretest before the onset of preparing and nine days after the preparation during post-test scenario. The tests included inquiries in shifted organizations and two out of the three entries on the test required the subjects to finish semantic maps. Scoring was done by foreordained criteria. The outcomes demonstrated that the control assemble did not have critical picks up in the scores between their pre-and posttests on any four ward measures which were different decision questions, open-finished inquiries, cloze semantic mapping, and open-finished semantic mapping questions. Each preparation amasses, be that as it may, showed critical pick up scores in the open-finished inquiries, yet not on numerous decision questions.

Carrell, Pharis and Liberto (1989) do alert, in any case, that such outcomes should be imitated or reinforces by further research here. The commitment of this review is that, when all is said in done, the methodology preparing on the two strategies was fruitful in upgrading second language reading cognizance. All the more particularly, both groups of undergraduates indicated comparable critical picks up on one of the measures (open-finished inquiries). In any case, each gathering demonstrated diverse pick up scores on different measures (cloze semantic maps, and open-finished semantic maps).

Carrell, Pharis and Liberto (1989) recommend that, in view of the outcomes, grown-up undergraduates in second reading courses "ought to profit by the consideration of express, understanding encouraging metacognitive methodology training."(p. 669). Regardless of the

commitment of this review to L2 reading methodology preparing field, this review has been addressed for the accompanying perspectives. To start with, there is no data in regards to the legitimacy of numerous decision questions. Second, comes about exhibited that both semantic mapping and Experience-Content Relationship preparing enhanced understudies' reading perception. Nonetheless, it is not clear to what expand these procedures are contrast. Third, the analysts didn't clarify why semantic mapping was utilized as a major aspect of pre-and post-tests. Additionally, incorporating semantic mapping in the post-test unmistakably supported the gathering that was prepared with this system. Fourth, no defer test was regulated to check whether the treatment impact was kept up. Fifth, the specimen size of this review was too little (N=26) and whether the members were haphazardly chosen or not was not clear. 6th, since various instructors showed four groups, there is a conceivable danger to the legitimacy of the analysis. Last yet the most critical, since ESL perusers were prepared for utilizing semantic mapping to enhance their reading conduct and appreciation in a classroom-based errand, there was no proof demonstrating that they would have the capacity to utilize this technique on future and autonomous reading.

Kern (1989) directed a semester-long review including fifty-three undergraduates of French as a moment language at an expansive American school to decide the impact of reading procedure preparing on reading understanding and word induction capacity. The subjects were local speakers of English and enlisted in the third semester ("halfway level") of French classes. Subjects were required to peruse longer bona fide French artistic content keeping in mind the end goal to effectively total course necessities. Investment was deliberate, however preparing was led as a major aspect of typical French classes. The experimental group had two segments and the control group has three areas. Altogether, five unique teachers were included in the review. The experimental group got unequivocal guideline in reading procedure use notwithstanding the typical course content, while the control aggregate got no direction in reading methodology utilize, yet secured an indistinguishable materials from the treatment gathering. After the treatment, subjects were given a section in French and were made a request to report what they were thinking as they read each sentence, what they comprehended, what they didn't see, how they decided the significance of new words, regardless of whether they made expectations or deductions, and whether they converted into English. Both understanding and word surmising estimations were gotten from the reading undertaking. Information investigation uncovered that

reading procedure preparing has a solid constructive outcome on L2 peruser perception pick up scores. The individuals who had the most trouble in reading seemed to profit the most from reading methodology direction. Kern (1989) recommended that mid and high capacity perusers may have as of now exchanged a greater amount of their successful L1 reading procedures to the second language.

With respect to the impacts of such system preparing on word induction capacity, the outcomes were less evident. By and large, Kern (1989) detailed huge change with outside language perusers of French over a semester of preparing with accentuation set on word, sentence, talk, and reading purposes examination systems. Regardless of its positive bring about enhancing reading understanding, there are a few crevices in this review. To begin with, Kern (1989) didn't clarify the conceivable impacts of the frustrating variable brought about by five educators who were included in the review. Second, this review didn't show how these systems were educated.

Technique direction was likewise observed to be valuable to low-level perusers as exhibited in a year-long subjective review led by Jimenez and Amusements (1996). Among a twoweek time frame in a center school, three bilingual understudies in English and Spanish were instructed how to take part in a verbally process strategy while reading. What's more, unequivocal metacognitive and subjective reading procedures were educated keeping in mind the end goal to enhance their poor reading aptitudes. Using socially applicable writings, the guideline intended to elevate understanding was found to have a solid potential for advancing and encouraging the reading capacity of such understudies who were performing at low levels of education in the center school grades.

According to Song (1998) likewise adopted a metacognitive strategy to show reading systems in her review with grown-up Korean EFL perusers keeping in mind the end goal to examine instructional impacts on reading perception. Tune endeavored to join L1 reading research directed to a great extent with "poor" youthful perusers and stretches out it to the grown-up second language classroom. The subjects were fifty tertiary-level Korean understudies of blended language capability levels majoring in human sciences. The review was planned with all subjects accepting the test procedure. The information was investigated regarding low, mid, and high

language capability groups as built up on a pretest. Technique preparing occurred over a 14-week semester and was incorporated into the general classroom educational programs. The instructional approach utilized was for all intents and purposes indistinguishable to Dark colored and Palincsar's (1984) corresponding educating (one-on-one based) regarding systems with a few alterations to fit the vast size of classroom setting. Four reading techniques (abridging, addressing, predicating, and clearing up) were educated all the while as a solitary four-stage metacognitive way to deal with L2 reading Learners were instructed to peruse the start of content and to first outline the substance of what had quite recently been perused. Next, inquiries were formed in view of the content substance. The third step was to anticipate the substance of the accompanying areas of the content. The last stride was to assess the content substance for similarity with earlier learning and recognizing focuses that still required elucidation (Melody, 1998).

In educating the above way to deal with her subjects, Melody expresses that she additionally included unequivocal clarifications in L1 (Korean) of the way of key learning and key reading. Melody expresses that, notwithstanding the four principle techniques educated, different systems, for example, skimming, relevant word-speculating and utilizing content structure to help perception were likewise acquainted with understudies on an incidental premise. Experimental group for the review was finished by methods for a test-retest arrange. The instrument which filled in as both pretest and posttest was a various decision reading capability test developed for the reasons for the review. The test contained six short entries, each running from 302 - 333 words long. Every section had three sorts of question things: fundamental thought, verifiable, and surmising. Consequences of the pretest organization were utilized to order subjects as low-, mid-, and high-capability for later examination. Pretest was additionally utilized as the posttest which as was controlled toward the finish of the semester-long preparing period. Information was breaking down by methods for Multiple variation ANOVA, with test time and capability level as the free factors, and test scores as the needy factors. Both critical fundamental and cooperation impacts were accounted for, with a noteworthy contrast between general pretest and posttest implies furthermore, preparing appeared to profit low and mid-capability learners more than high capability learners. A subsequent ANOVA led on question-sorts demonstrated huge additions for fundamental thought and deduction questions.

Tune presumes that the treatment had a huge beneficial outcome regarding her matters' reading perception as far as understanding principle thoughts and making inductions, which advantage low and mid-capability learners. Non-critical increases for high capability learners were deciphered as proof of earlier methodology utilize. While there are some promising perspectives to Tune's review a generally long preparing period, clarifications of basic data in subject's L1, which maintain the legitimacy of the review, and the absence of any control or correlation amass makes a few questions with regards to the reason for her subject' critical additions.

A few reviews have found that immediate direction of reading systems was of more prominent help to undergraduates with lower capability in the L2. In view of the achievement of showing understudies outline systems in L1, Cordero-Ponce (2000) led a review to test the impacts of L2 metacognitive methodology preparing in synopsis on the capacity to comprehend and condense interpretive writings.

Thirty college level undergraduates enlisted at a halfway French course were separated into the experimental and control groups. Testing included pretest, quick posttest, and postponed posttest with every one of them including two assignments composed review and outline. The preparation was directed on two times of an hour. The analyst acquainted the accompanying standards with show outline: fall list, utilize point sentences, dispose of superfluous detail and crumple passages. Comes about showed that undergraduates essentially enhanced their understanding and reviewed more thoughts in the quick posttest. Likewise, preparing effects affected by graduate capacity to condense French writings joining the guidelines acquainted with them in the quick and postponed posttest. The researchers inferred that these summarization methods can be educated to undergraduates with low levels of L2 capability to give them subjective assets to depend on amid cognizance.

Cordero-Ponce (2000) remarks this preparation consider with intermediate level French understudies that "such preparing projects may give understudies compensatory intellectual assets to depend after amid cognizance, accordingly counterbalancing, to a specific degree, their constrained L2 phonetic information and reducing the subjective load." (p.346).

Salataci and Akyel (2002) analyzed the effect of showing reading systems to pre-halfway Turkish EFL undergraduates. They utilized the experience-content relationship and proportional educating techniques. The guideline endured four weeks (three hours seven days). The techniques presented and sharpen by undergraduates included: utilizing earlier information, condensing, discovering primary thoughts, expectation, illumination, and some other repair methodologies. The discoveries demonstrated that honed utilization of base up procedures, for example, utilizing lexicons and addressing implications of word abatement when reading in English since they were not centered on word level comprehension after the treatment. Then again, the direction positively affected honed utilization of top-down techniques when reading in English and Turkish.

The systems of forecast, condensing, and utilizing earlier learning were utilized altogether more every now and again. What's more, the utilization of metacognitive systems was higher when reading in English after direction. Likewise, the reading understanding scores expanded after direction.

A different line of L2 reading system preparing study has concentrated on furnishing L2 readers with learning of content structure. Inquire about has found that diverse societies have distinctive methods for speaking to thoughts in composed content and this distinction regularly causes certain measure of effect on L2 readers' reading appreciation while moving toward English reading errand. In light of this impact, Carrel (1985) led a preparation study with 25 high-intermediate capability school ESL understudies of different L1 foundations considering seriously at an extensive college in the US. More than five one-hour class sessions in one week, subjects in the test gathering (N=14) got direction which brought issues to light of four sorts of English top-level structures (macrostructures) found in informative writings (correlation, causation, issue/arrangement, and accumulations of portrayals).

Preparing for the exploratory gathering at first fixated on express and broad clarifications by the teacher concerning the way of reading descriptive writings, the advantage of utilizing the top-level structure methodology in supporting understanding, and how to utilize the system with various top-level structure writings. What's more, honed were given review parcels with teacher clarifications and additionally rehearse messages and activities for subjects to choose at their own pace. Agendas were likewise incorporated into the bundle with the goal that subjects could "screen and manage their own particular learning." (p.736). Among this period, a control group (N=11) read an indistinguishable writing from the experimental group however occupied with different other semantic and appreciation exercises. Information accumulation instruments included pretest, posttest, and delay posttests on which subjects read two entries (one entry of examination and one of groups of portrayals top-level structure) and created composed reviews without alluding to the first messages. Reviews were done in the subjects' L2, English. For each test entry, subjects were likewise made a request to recognize the "authoritative arrangement" the writers of every section utilized in composing through an open-finished question.

Every composed review were scored for the amount and quality (as far as top-level versus bring down level thoughts) of thoughts reviewed, with a revealed interrater dependability of r = .96. What's more, the association of each subject's review was noted to check for subjects' utilization of the first top-level structure in the content in composing their reviews. Consequences of Chi-square and one-way ANOVA tests with the treatment as autonomous variable and content structure acknowledgment, content structure review utilize and posttest and delay posttest score (amount and quality) as needy factors, indicated critical contrasts as far as acknowledgment and utilization of top-level structures on the test group. Moreover, a critical distinction in posttest scores was found between the experimental and control group for the previous, which seems to have held for the deferred posttest too (in spite of the fact that kind of test utilized was unspecified and measurements were not introduced). By and large, the commitment of this review underpins the idea that the unequivocal guideline in the top-level structures of English writings can improve ESL undergraduates' appreciation and review. It gives the idea that in view of the proof introduced in this conclusion is upheld for the educating of this specific procedure (utilization of learning of content structure) for technique based direction as an instructional approach.

Nonetheless, this review has been addressed for the accompanying viewpoints. To start with, this review didn't determine how subjects were instructed to really utilize a content structure based methodology (procedural information), instead of just being educated about content structure. Second, just 5 days of one hour for each day preparing is a somewhat short preparing period (despite the fact that this appears to have created noteworthy outcomes). Third, having subjects perform composed reviews in their L2 instead of in their first language delivered a

potential infringement of test substance legitimacy and likely had potential for creating puzzling impacts, albeit no distinctions were demonstrated between experimental group on the pretest. Forward, the example estimate (N=25) of this review is little.

Displayed nearly to Carrell's (1985) contemplate with ESL understudies talked about above, Raymond (1993) concentrated the impacts of content structure technique preparing with French as a moment language learners' review. Forty-three local English speakers of French as a moment language of high-transitional capability levels were in the review. They went in ages from 18 to 23 and had finished five semesters (a sum of 260 hours) of school level language learn at a substantial Canadian college. Members in the review volunteered to take part, yet were paid for the review. Subjects were partitioned into one exploratory and one control gathering and were resolved to be of equivalent capability by methods for a pre-treatment state sanctioned test. The review occurred outside of the customary language class and was directed by an outside teacher. Among five one-hour instructional meetings spread over a two-week time span, the experimental groups got technique preparing in the ID and utilization of five French top-level structures found in interpretive writings (portrayal, grouping, causation, issue arrangement, and correlation) and going with flag words keeping in mind the end goal to advance review. Guideline for the structure was intended to be metacognitive and included unequivocal direction in: what was the system, why the methodology ought to be realized, how to utilize the particular technique and when to utilize it. Short tests were given to help the subjects to assess the utilization of the structure procedure. Amid the five sessions, the test group got methodology guideline, while another educator instructed the control aggregate utilizing some indistinguishable writings from the experimental group for a similar measure of time, yet with standard inquiries and answers undertakings. Information was accumulated by methods for pre-and post-tests on which subjects read one of two writings with the issue arrangement best level structure and resolved to be generally equal as far as trouble through clarity measures, balanced haphazardly appropriated so that half of the subjects read a given content on the pretest and the other half read a similar content on the posttest. At the point when subjects had wrapped up the content, they addressed 10 Likertscale questions with respect to their view of content trouble, memorability, influence, intrigue, foundation information, and clearness of contention, association, proposals, substance, and exchange of substance (Raymond, 1993). After this was finished, subjects put the content in an

envelope and afterward reviewed in L1 however much of the data in the content as could be expected in composing. Each subject's content reading time and composed time were additionally recorded. The posttest, given one month after the finish of preparing, utilized an indistinguishable organization from the pretest.

Reviews were scored utilizing a thought unit convention, with scores figured as proportions with the whole of the quantity of thought units show in a review separated by the aggregate number of units present in the first for every content. Since it was found that a portion of the subjects in both the experimental and control group "suddenly" utilized the content toplevel structure in their pretest reviews (that is, before the experimental group got unequivocal preparing on the structure methodology), it was resolved that there was a distinction in subjects' earlier learning in the utilization of the content structure and flag words. Thus, an examination of covariance was initially directed on the information, with treatment condition as the autonomous factors, posttest review score as needy variable, and pretest review score as a covariate. A blended outline restate measure ANOVA was then performed with treatment, content, and content time (pretest remains for "Time I" while posttest remains for "Time II") as autonomous factors, and content review mean (balanced for pretest) as the needed variable.

As opposed to Carrell's (1985) research work, consequences of the investigation demonstrated no primary impact for treatment between groups. Be that as it may, an inside gathering two-way association was found amongst content and time and a three-route inside gathering collaboration was found between treatment, content, and time. That is, on the pretest, the two writings delivered fundamentally extraordinary mean review scores (investigation of trouble and earlier learning Liker things uncovered critical contrasts between writings), which was additionally valid on the posttests, however the content means turned around their relative position. This implies there was a higher review mean for the more troublesome content on the posttest and a comparing drop for the less demanding content. For the experimental group, Raymond translated this collaboration as the aftereffect of subjects' have to deliberately apply a content structure methodology on the more troublesome content so as to understanding and review it and it was not the situation with the nearly less demanding content. Generally, no significant issues were noted for this review. In any case, as on account of other mediation thinks about, the preparation time frame was short and may have added to the nonappearance of fundamental instructional impacts. Moreover, Raymond didn't offer any data with respect to its legitimacy as far as the estimations utilized as a part of the review. In addition, utilizing thought unit as an estimation of undergraduates' reading perception may not by any means be precise since thought unit is influenced by memory. Besides, the example was chosen through randomization and subsequently more members were required. In any case, a noteworthy pick up was found on one content and as noted above, it was really observed to be the one that was more troublesome. Discoveries from this review additionally clarify that reading perception is a surprising collaboration between peruser, test, and errand and that direction in reading techniques may not offer active arrangements.

# **CHAPTER 3**

# METHODOLOGY

3.1 Introduction

3.2 Design

3.3 Participants

3.4 Research Instruments

3.4.1 Questionnaire

3.4.2 Tests

3.4.3 Training Procedure

3.5 Data Analysis Procedure

3.6 Ethical implication

3.6.1 Ethical Principles and Values

3.7 Conclusion

# **3.1 Introduction**

This chapter briefly explains the methods and tools used in this study to explore student perception towards metacognitive strategies that will be useful to enhance reading comprehension in English language. This study also explores the ability of participants to employ these strategies to learn their subject matter in arts and science background for transferring knowledge. Moreover it attempts to prove that metacognitive strategies will be effective and independent for learning English as foreign language. To evaluate each themes of the current research, this section particularly explains the design of the research, participants, population and sampling, data collection procedures involved in this research etc.

# 3.2 Design

This research employs a quantitative, namely the empirical approach where survey items are going to be used aiming at demanding objective responses to the research questions submitted in the study. This research deals with the experimental design as it aims to examine to what extent the University EFL learners' employ metacognitive reading strategies, for their reading comprehension. Further, it aims to research the relationship and correlation between explicit metacognitive strategy training and reading comprehension of University EFL learners.

Based on the study purpose, the answer to the study questions are going to be sought with the aid of two different questionnaires and two different tests. Four hundred students will participate in the study. All of the participants are going to take a questionnaire, which aims to measure how metacognitively aware are students with respect to reading strategies they employ.

Another one hundreds of students will take place in an experimental stage of the study. Where explicit teaching of the metacognitive strategy and its relation to students reading proficiency is going to be measured with pre- and post- test instruments. The experimental group (50 students) will receive metacognitive reading strategy training. Another class of 50 students will be the control group which will not receive any metacognitive reading strategy-based instruction. The explicit training of metacognitive reading strategy is planned to last for 8 weeks. University English Language teachers will also be a part of the current study, taking an adopted questionnaire, that seeks to find out whether University EFL teachers train their students how to be effective readers. The independent variable in this study is the metacognitive strategy and the dependent variable is the reading (comprehension) achievement of the experimental and control groups.

## **3.3 Participants**

The participants in this study will be five hundred undergraduate students currently studying in Private and Public universities in Kosovo, and 20 English teaching teachers, conducting lectures in the same universities (mainly teaching English for Specific Purpose). In total three Public and one Private University are going to be included. All of them are accredited by the Kosovo Accreditation Agency. The Universities are selected regarding the settlement. Each of them is situated in 4 different main cities of Kosovo, such as: University of Pristina" Hasan Pristina"; "AAB" Private University in Pristina; University of Prizren- PZ "Ukshin Hoti"; University of Gjakova "Fehmi Agani" and "Haxhi Zeka" University of Peja. Meanwhile they are the biggest universities currently operating in Kosovo. Students taking part in the study have different native language, such as Albanian, Turkish, Serbian and other. They have learned English since the fifthgrade primary school. Based on a result of national test conducted by Ministry of Education and Science of Kosovo that students take after completing secondary school, the level of proficiency is assigned as A2 level (European Common Framework of Languages). The research's sample of students study at different faculties entities, such as: Computer Sciences; International Management; Business Administration; Law; and Education Faculty. Meanwhile the students who are going to take place in experimental and control group are currently studying in Computer Sciences Faculty, in two different branches of study, such as: Information Technology and Telecommunication and Software Design. All of the students taking place in this research are in a

first year of studies. They average age is between 19 to 23. Meantime they all are supposed to attend at least 2 courses of English Language during undergraduate studies, in all branches of study in different faculties, except for the faculty where English Language and Literature is the major.

# **3.4 Research Instruments**

## 3.4.1 Questionnaire

The questionnaires are the main instrument for quantitative data collection, as they are suitable for eliciting beliefs anonymously (Cohen, Manion & Morrison, 2000) from the target population in a fairly short space of time.

The first questionnaire is based on the Metacognitive Awareness of Reading Strategies Inventory or MARSI (Mokhtari & Reichard, 2002). The MARSI is a self-report questionnaire consisting of 30 items that measure the behaviors and strategies the readers employ when they read academic or school related materials. The MARSI includes three sub-categories of reading strategies: Global Reading metacognitive strategies, Problem solving metacognitive strategies and Support reading strategies.

*Global Reading strategies* (13 items). These refer to general or global reading strategies that aim at setting the stage for the reading act, for example: having a purpose in mind for reading and previewing the text content.

Problem solving strategies (8 items) these can be thought of as local, problem-solving,

or repair strategies. They are used when problems occur for a deeper understanding of the textual information, such as checking for better understanding or re-reading. These include strategies directly related to information in the text, paying closer attention to text, adjusting reading speed and visualizing information.

*Support reading strategies* (9 items) these are supportive tools that are used to maintain the responsiveness to reading, for example: taking notes, reading aloud, underlining or highlighting information and using a dictionary.

The MARSI consists of 30 items each to be rated on a 5-point Likert scale (never, occasionally, sometimes, usually, always). Respondents indicate the degree to which they engage in a behavior when reading academic materials, e.g. university text books.

The reliability analysis is going to be conducted to examine the reliability coefficients for the MARSI using Cronbach's alpha.

High reliability coefficients are going to be observed for overall usage (.82) High reliability coefficients for overall usage and for the three strategies and for all three strategy categories, with .83 for Global Reading, .81 for Problem Solving, and .80 for Support Reading.

The questionnaire will be administrated to four hundred students as well as to the experimental group of students, in the pre-training phase, with the purpose of examining their current employment of metacognitive strategies. In addition, it also has the function of raising the students' awareness of metacognitive strategies. After the metacognitive strategy training, which is planned to last for eight weeks (specific training program) the same questionnaire will be distributed to the experimental group again. From the questionnaire, we may elicit whether the metacognitive strategy training is effective and in what aspect the students improve their metacognitive strategy employment.

The second questionnaire is adapted from Metacognitive Awareness of Reading Strategies Inventory, where global, planning and supportive reading strategies are turned into questions. This questionnaire is going to be administrated on University English Teachers, with the purpose of finding out whether University EFL teachers train their learners to use metacognitive reading strategies in learning English as a foreign language.

#### 3.4.2 Tests

Pre-tests and post-tests are going to be used in this study. In order to check the homogeneity of the two groups in terms of reading comprehension, a pretest was used. The p

retest comprised of 25 multiple-choice questions for assessing reading comprehension items. The topic and the vocabulary comprised in the pretest had already been introduced by the teacher before the metacognitive training. The post-test is also 25 item multiple-choice test of reading comprehension and it will be used as the measurement of the training outcomes. The post-test will be given immediately after the metacognitive strategy training. The reliability and validity of the tests are checked as well. Two internal consistency estimates of reliability which included coefficient alpha and a split-half coefficient expressed as Spearman-Brown corrected correlation were computed for the reading comprehension test. The value for coefficient alpha is .73 and the value of the split-half coefficient is .80, each indicating satisfactory reliability. The validity of the tests is also assured. Most of the reading items in both the pre-test and the post-test are selected from the new vocabulary items of the book and are used in the appendix.

## 3.4.3 Training Procedure

The procedure of metacognitive awareness of reading strategies training will last 8 weeks in total. Reading strategy training will be given to the experimental group only, and the control group will only receive normal instruction. The detailed procedure for metacognitive strategy training would be illustrated, based on the three components of metacognitive strategies: planning, monitoring and evaluating.

*In the planning sessions* students are introduced to the role of metacognitive strategies in reading comprehension. The aim of this stage is to raise awareness of students regarding the strategies, and introducing them with 3 different categories of them. Thus, to give them opportunity to select which of them would be the most appropriate for their individual study. The planning session of training lasts 5 weeks.

*In the monitoring session* of training, the teacher has the facilitating role where students work in groups and monitor each other's reading comprehension and plan the enforcement process. The metacognition strategies that are going to be taught during the training sessions are also based on Metacognition Awareness of Reading Strategies Inventory, but redesigned and interlaced in different techniques, such as: Survey! Question! Read! Recite! (SQ3R); Preview, Question, Read, Reflect, Recite, and Review (PQ4R); Reciprocal Teaching (CQSP); Mutual teaching; Modeling

method, etc. *The evaluation session* occurs in the last week of the training, where the teacher guides the students to evaluate their reading comprehension process by handing out a post-test

## **3.5 Data Analysis Procedure**

All the survey data retrieved through survey conducted using MARSI questionnaire from students and staffs of Kosovo Universities are evaluated for the reliability and validity analysis. Validity will be evaluated using Pearson's Chi Square test and reliability of the survey data are assessed using Cronbach's alpha reliability analysis. The homogeneity effects between experimental and control groups are analyzed using ANOVA. All the data gathered are classified based on demographical data and subjected to statistical analysis using SPSS version 22 from IBM corporations.

### **3.6 Ethical implication and Values**

#### 3.6.1 Ethical Principles and Values

### Respect during data collection

As indicated by The European Code of Conduct for Research Integrity as "Good research practices are based on fundamental principles of research integrity" (ALLEA ,2011, p. 3). They guide researchers in their work as well as in their engagement with the practical, ethical and intellectual challenges inherent in research. perceives that every person has an incentive in himself or herself that advises all communication between people . Additionally, it perceives the estimation of human self-rule and furnishes insurance of those with lessened or no self-rule—a

specific worry for this study, where sexual orientation assumes a critical part inside this social setting. This examination considered, therefore, the members' particular social setting, especially as to laws and religious convictions and particularly as to the accompanying methods:

□ Confidentiality was kept up by overlooking names in interviews, studies or polls Participation was simply willful and no compulsion to take part was attempted.

□ Training and clear rules were given on the best way to lead interviews with meeting staff.

□ Respect for Kosovan dialect was maintained by interpretation of documentation into English.

□ Prior to the examining being attempted, the Kosovan Educational Council Research faculty were contacted; a resulting private meeting was masterminded to talk about the examination and verbal endorsement was given for it to continue.

□ College and college work force were educated preceding the examination being attempted and authorization was gotten from the executives of each instructive establishment.

□ An assent frame was given to the members that laid out the deliberate idea of investment and the capacity to pull back whenever amid the exploration.

## 3.6.1.2 Research Merit and Integrity

As stated in The European Code of Conduct for Research Integrity "A basic responsibility of the research community is to formulate the principles of research, to define the criteria for proper research behavior, to maximize the quality and robustness of research, and to respond adequately to threats to, or violations of, research integrity, unless research has justify and the specialists have honesty in directing the exploration, the association of human members in the examination can't be morally justifiable (ALLEA ,2011, p. 3). The outline and the direct of the exploration embraced in this nation was recognized by counsel with specialists, complying with morals endorsements and having the fundamental working knowledge inside this nation and workplace. All the more

particularly and having cognizance of the legitimacy and respectability depiction given by The European Code of Conduct for Research Integrity, the extend had the accompanying key elements:

□ The venture was composed utilizing a blended techniques approach enveloping a scope of quantitative and subjective information sets, which meets the points of the exploration venture and research questions.

□ The venture depended on current writing and past investigations in the territory of SLA.

□ The venture was administered by qualified and experienced colleagues joined to the instructive establishment.

□ Results will be sent to all gatherings concerned paying little mind to the outcomes, allowing for open investigation.

## 3.6.1.3 Equity and Beneficence

Value as clarified by The European Code of Conduct for Research Integrity is connected by surveying and considering the danger of damage to members and the more extensive group against the potential advantages of the exploration and being touchy to the welfare and interests of the general population required in the examination. "1-Researchers have due regard for the health, safety and welfare of the community, of collaborators and others connected with their research. 2-Research protocols take account of, and are sensitive to, relevant differences in age, gender, culture, religion, ethnic origin and social class" (ALLEA ,2011, p.6). It additionally includes having cognizance of the social and social ramifications required in leading the exploration. Particular practices and methods were utilized to guarantee equity and helpfulness were considered, as sketched out underneath:

3.6.1.4 Equity

□ The way toward enlisting members was considered fair, allowing for intentional interest that was asked for through open ad.

 $\Box$  No gathering of potential members was prohibited from the research, ensuring that the advantages from the exploration are significant to the more extensive group.

□ There were no advantages of this exploration to any gatherings included, including stipends, grants, blessings or something like that.

 $\Box$  Exploration results will be made open to look into members when finished.

## 3.6.1.5Value

□ The venture was intended to limit the dangers of mischief and uneasiness to members by enabling the information gathering to be completed at a place and time of their picking and by not making irrational requests on their time.

 $\Box$  The letter to all members sketched out the advantages and dangers of the venture.

□ Members were guaranteed of the deliberate and unknown nature of the venture in the going with letter.

□ There was no out of line weight of investment led in the exploration on a specific group, by taking into account adaptability of times and places for testing and meetings.

 $\Box$  The scientist had involvement in working with this culture and working condition

# **3.7** Conclusion

Thus, this chapter have detailed about methods, tools and techniques employed for the execution of research study among Kosovo students and teachers for the evaluation of application of metacognitive strategies for reading English comprehension. The chapter also explains about the practice of ethical conducts as per the standards nominated by the ethical committee of university and national ethical committee.

# **CHAPTER 4**

# **RESULTS AND DISCUSSION**

4.1 Introduction

- 4.2 Demographical analysis.
- 4.2.1 Participant Universities
- 4.2.2 Branch of the study
- 4.2.3 MARSI Scores from five different universities
- 4.3. Reliability and validity analysis
- 4.3.2. Validity analysis
- 4.4. Descriptive analysis
- 4.5. Statistical analysis
- 4.5.1 Hypothesis 1
- 4.5.2 Hypothesis 2
- 4.5.3. Hypothesis 3

# **4.1 Introduction**

This section details about the results of the experimental study conducted on survey participants. This section represents reliability & validity analysis, demographical analysis, descriptive analysis and statistical analysis. Survey study is conducted among 500 participants and only 473 filled out the survey questionnaire completely. Incomplete questionnaires were rejected in this study. Hence, data analysis was preceded with 473 survey responses.

# 4.2 Demographical analysis.

# 4.2.1 Participant Universities

				Cumulative
	Frequency	Percent	Valid Percent	Percent
AAB Collage	94	19.9	19.9	19.9
University of Prizren	96	20.3	20.3	40.2
"Ukshin Hoti",				
University of				
Gjakova"Fehmi	89	18.8	18.8	59.0
Agani"				
University of	95	20.1	20.1	79.1
Peja"Haxhi Zeka"	)5	20.1	20.1	79.1
University of				
Pristina"Hasan	99	20.9	20.9	100.0
Pristina"				
Total	473	100.0	100.0	

 Table 1. Participant universities of Kosovo

The above table represents that university of Prizren "Ukshin Hoti", University of Peja "Haxhi Zeka" and University of Pristina "Hasan Pristina" have been found to have more or less similar amount of survey participants (20.1, 20.3 and 20.9 percentage respectively) and AAB as well as University of Gjakova"Fehmi Agani" has contributed 19.9 and 18.8 percentage of student participants in this study. Increased frequency of survey participants were observed from University of Pristina (99%) and University of Gjakova has less frequency of survey participation in this study (89%).

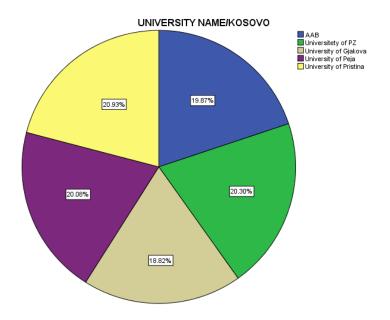


Figure 2. Participant universities of Kosovo

The above pie diagram explains that students and faculties from University of Pristina participated largely in this study. All the universities have contributed more or less with similar number of participants in this research investigation.

# 4.2.2 Branch of the study

				Cumulative
	Frequency	Percent	Valid Percent	Percent
Albanian Language	34	7.2	7.2	7.2
Albanian Literature	35	7.4	7.4	14.6
Faculty of Economy	92	19.5	19.5	34.0
Faculty of Education	93	19.7	19.7	53.7
Faculty of Law	50	10.6	10.6	64.3
Faculty of	56	11.8	11.8	76.1
Philosophy	50	11.0	11.0	/0.1
Faculty of Tourism	47	9.9	9.9	86.0
German Language	36	7.6	7.6	93.7
Software Design	30	6.3	6.3	100.0
Total	473	100.0	100.0	

**Table 2**. Study branches of students of participant universities of Kosovo

The above frequency table represents that students from Faculty of Economics (93 %) and Education (97 %) participated largely than other courses offered by five different universities. Students pursuing their education in software designing courses participated very less in this research (30%

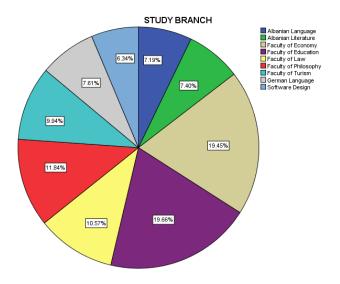


Figure 3. Study branches of students of participant universities of Kosovo

The above pie chart clearly points out that study branches such as faculty of education accounts for 19.66 percent student participation, faculty of economics 19.45%, students from branches philosophy 11.84%, tourism for 9.94%, students from law course accounted for 10.57%, German language students for 7.61%, Albanian literature students for 7.40%, Albanian language students for 7.19% and software designing course students participated only for 6.34 percentage in this study.

## 4.2.3 MARSI Scores from five different universities

 Table 3. MARSI scores of five different universities

		Supportive	Problem
University Name	Glob scores	scores	solving scores
University of Gjakova	3973	2787	2710
AAB	4397	3165	2899
University of Prizren	4550	3226	2968

University of Pristina	4491	3133	3017
University of Peja	4312	3106	2903

The subscale of MARSI questionnaire global strategies, supporting strategies and problem-solving strategies were calculated among university students. It was observed that highest global reading strategy scores were obtained by University of Prizren, highest supporting strategy scores were ensured by students from University of Prizren and highest problem-solving strategy scores were obtained by students studying in University of Pristina.

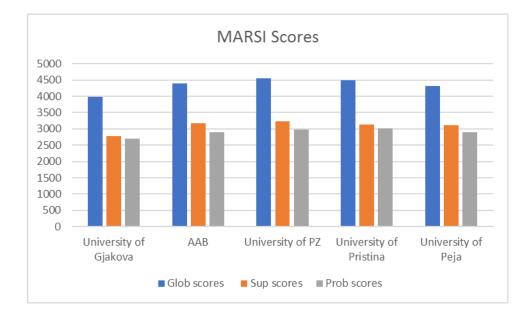


Figure 4. Histogram of MARSI scores

The above histogram represents the distribution of three subscale scores obtained by students from five different universities. The global reading strategies are highly scored by all university students whereas there is similar type of scores obtained by five different university students on problem-solving and reading supporting strategies in the MARSI scale. This reveals that there is less awareness towards the supporting and problem solving strategies among the Kosovo university students.

# 4.3. Reliability and validity analysis

### 4.3.1 Cronbach's reliability analysis

		Ν	%
Cases	Valid	470	99.4
	Excluded <sup>a</sup>	3	.6
	Total	473	100.0

 Table 4. Cranach's reliability analysis

Listwise deletion based on all a.

variables in the procedure.

The above table clearly mentions that 99.4% of cases are valid and all 473 cases were subjected to the statistical analysis.

Table	5.	Reliability	statistics.	Case
Proces	cina	Summary		

Processing Sun	ımary	
	Cronbach's	
	Alpha Based	
	on	
Cronbach's	Standardized	N of
Alpha	Items	Items

.752

30

.753

 Table 6. Item statistics

	Mean	Std. Deviation	Ν
1. I have a purpose in mind when I	4.119	.9017	470
read.	4.119	.9017	470
2. I take notes while reading to help	3.506	1.1019	470
me understand what I read.	5.500	1.1019	470
3. I think about what I know to help	3.781	1.0288	470
me understand what I read.	5.761	1.0288	470
4. I preview the text to see what it's	3.804	1.1235	470
about before reading it.	5.004	1.1255	470
5. When text becomes difficult, I			
read aloud to help me understand	3.651	1.3642	470
what I read.			
6. I summarize what I read to reflect	3.913	1.0605	470
on important information in the text.	5.915	1.0005	470
7. I think about whether the content	3.074	1.2564	470
of the text fits my reading purpose.	5.074	1.2304	470
8. I read slowly but carefully to be	4.096	1.0537	470
sure I understand what I'm reading.	4.090	1.0357	470
9.I discuss what I read with others	3.211	1.2166	470
to check my understanding.	5.211	1.2100	470
10. I skim the text first by noting			
characteristics like length and	3.670	1.1459	470
organization.			
11. I try to get back on track when I	4.113	.9785	470
lose concentration.	т.11 <i>3</i>	.7705	τ/U
12. I underline or circle information	4.217	1.0808	470
in the text to help me remember it.	7.21/	1.0000	7/0

13. I adjust my reading speed	3.268	1 2201	470
according to what I'm reading.	5.208	1.2201	470
14. I decide what to read closely	3.713	1.2219	470
and what to ignore.	5.715	1.2219	470
15. I use reference materials such as			
dictionaries to help me understand	3.277	1.2042	470
what I read.			
16. When text becomes difficult, I			
pay closer attention to what I'm	4.045	.9904	470
reading.			
17. I use tables, figures, and			
pictures in text to increase my	3.349	1.2936	470
understanding.			
18. I stop from time to time and	3.530	1.0419	470
think about what I'm reading.	5.550	1.0419	470
19. I use context clues to help me	3.489	1.0544	470
better understand what I'm reading.	3.407	1.0344	470
20. I paraphrase (restate ideas in my			
own words) to better understand	3.677	1.1394	470
what I read.			
21. I try to picture or visualize			
information to help remember what	3.502	1.1306	470
I read.			
22. I use typographical aids like			
bold face and italics to identify key	3.266	1.2694	470
information.			
23. I critically analyse and evaluate			
the information presented in the	2.972	1.1411	470
text.			
24. I go back and forth in the text to	3.479	1.1056	470
find relationships among ideas in it.	3.417	1.1030	470
•	112	I	I

25. I check my understanding when			
I come across conflicting	3.417	1.1104	470
information.			
26. I try to guess what the material	3.796	1.0015	470
is about when I read.	5.790	1.0013	470
27. When text becomes difficult, I			
re-read to increase my	4.204	.9602	470
understanding			
28. I ask myself questions I like to	3.702	1.1143	470
have answered in the text.	5.702	1.1143	470
29. I check to see if my guesses	3.581	1.0735	470
about the text are right or wrong.	5.581	1.0755	470
30. I try to guess the meaning of	2 0 4 5	0527	470
unknown words or phrases.	3.945	.9537	470

	MRS 1	MRS 2	MRS 3	MRS 4	MRS 5	MRS 6	MRS 7	MRS 8	MRS 9	<b>MRS 10</b>	<b>MRS 12</b>	<b>MRS 13</b>	<b>MRS 14</b>	<b>MRS 15</b>	<b>MRS 16</b>	<b>MRS 17</b>	<b>MRS 18</b>	<b>MRS 19</b>	<b>MRS 20</b>	<b>MRS 21</b>	<b>MRS 22</b>	<b>MRS 23</b>	<b>MRS 24</b>	<b>MRS 25</b>	<b>MRS 26</b>	<b>MRS 27</b>	<b>MRS 28</b>	<b>MRS 29</b>	MIKS 30
MRS 1	.0 21	.0 03	- .0 74	- .0 27	.0 22	.0 28	.0 49	.0 94	- .1 72	.0 21	.0 85	.0 77	.0 29	.1 31	.0 08	- .0 36	.0 05	- .0 93	.2 29	.0 19	.0 49	- .0 26	.0 18	- .0 73	- .0 11	.0 60	.1 35	.0 54	.0 99
MRS 2	1. 00 0	- .0 50	.0 42	.2 40	.1 00	- .0 26	.0 90	.0 63	- .0 16	- .0 45	.1 99	.0 62	.0 54	.2 04	.0 87	- .1 00	.2 12	.0 62	.1 17	- .0 44	.1 46	.1 03	.0 84	- .0 61	.0 03	.0 17	.0 10	.1 76	.0 19
MRS 3	- .0 50	1. 00 0	- .0 56	- .0 15	.0 51	.0 36	.0 73	- .0 26	.1 01	.0 52	- .1 83	- .0 14	- .0 72	- .0 63	- .0 20	- .0 82	- .0 17	.0 89	- .0 59	- .0 50	.0 33	- .0 05	- .0 09	.1 25	.1 92	.1 17	- .0 79	.0 29	.1 75
MRS 4	.0 42	- .0 56	1. 00 0	.1 97	.0 82	.1 52	.0 27	.2 49	.1 15	.0 43	.1 07	.0 82	.1 22	.1 35	.1 65	- .0 09	.2 29	.1 37	.2 15	- .0 52	.0 35	.2 07	.1 36	.1 65	.0 14	.0 45	.1 02	.0 68	.1 57
MRS	.2 40	- .0 15	.1 97	1. 00 0	.0 45	- .0 56	.2 43	.1 16	.0 60	- .0 18	.1 45	.2 52	.1 12	.0 97	.0 84	- .0 69	.0 87	.1 03	.0 56	- .1 18	- .0 03	.1 31	.1 94	.0 55	- .0 16	.0 79	- .0 76	- .0 83	.1 01
MRS 6	.1 00	.0 51	.0 82	.0 45	1. 00 0	.1 23	- .0 15	.2 31	.3 45	.0 77	.1 58	.0 44	.2 26	.1 53	.0 40	.1 40	.2 12	.1 87	.1 95	.0 56	- .0 19	.1 44	.0 92	.0 83	.2 20	.1 24	.1 26	.0 26	.1 96
<b>MRS 7</b>	- .0 26	.0 36	.1 52	- .0 56	.1 23	1. 00 0	- .1 73	.1 47	.0 35	.0 68	.0 67	.2 29	.1 95	.2 79	.0 04	.0 60	.2 70	.2 64	.2 42	.1 43	.2 09	.1 38	- .0 04	.3 35	.2 27	.0 51	.3 14	.3 00	.1 69
MRS 8	.0 90	.0 73	.0 27	.2 43	- .0 15	- .1 73	1. 00 0	.0 01	.1 13	.1 45	.1 00	.0 23	- .1 01	.0 29	.0 20	- .0 23	- .0 39	- .0 27	.0 05	- .0 76	- .0 86	.0 13	.1 33	- .0 41	- .0 18	.0 40	.0 08	- .0 76	.1 07

 Table 7. Correlation for Inter –item in scale

MRS 18	.2 12	- .0 17	.2 29	.0 87	.2 12	.2 70	- .0 39	.2 68	.0 63	- .0 19	.2 12	.0 76	.1 18	.2 30	.0 60	.1 54	1. 00 0	.2 37	.2 61	.0 94	.1 38	.2 81	.1 46	.1 90	.1 35	.0 32	.2 46	.2 66	
MRS 19	.0 62	.0 89	.1 37	.1 03	.1 87	.2 64	- .0 27	.1 60	.0 79	.0 02	.1 95	.0 57	.1 79	.2 09	.0 34	- .0 55	.2 37	1. 00 0	.2 12	.0 06	.0 92	.1 88	.2 58	.2 28	.1 68	.0 55	.1 86	.1 65	
MRS 20	.1 17	- .0 59	.2 15	.0 56	.1 95	.2 42	.0 05	.2 08	- .0 64	.0 14	.0 97	.2 05	.1 20	.1 01	.2 41	.1 35	.2 61	.2 12	1. 00 0	.2 44	- .0 51	.1 74	.2 50	.2 11	.1 29	.0 62	.1 84	.1 43	
MRS 21	- .0 44		- .0 52	- .1 18	.0 56	.1 43	- .0 76	.1 48	.0 24	.0 20	- .0 27	.1 31	- .0 87	.0 84	.0 10	.3 96	.0 94	.0 06	.2 44	1. 00 0	.0 92	.0 93	.0 68	.2 08	.2 21	- .0 69	.1 66	.2 02	
MRS 22	.1 46	.0 33	.0 35	- .0 03	- .0 19	.2 09	- .0 86	.1 54	.0 82	.0 27	.1 88	.1 88	.2 07	.0 22	- .0 86	.0 42	.1 38	.0 92	- .0 51	.0 92	1. 00 0	.0 32	.0 31	.1 74	.0 68	- .0 04	.1 81	.2 92	
MRS 23	.1 03	- .0 05	.2 07	.1 31	.1 44	.1 38	.0 13	.1 92	.0 75	- .0 60	.0 24	.3 35	.0 34	.2 35	.0 35	.1 19	.2 81	.1 88	.1 74	.0 93	.0 32	1. 00 0	.1 83	.2 26	.1 16	- .0 47	.2 42	.1 21	
MRS 24	.0 84	- .0 09	.1 36	.1 94	.0 92	- .0 04	.1 33	.0 42	.0 79	.1 14	.0 41	.1 01	.1 21	.0 11	.1 97	.0 22	.1 46	.2 58	.2 50	.0 68	.0 31	.1 83	1. 00 0	.1 46	.0 83	.1 97	.0 93	.1 28	
MRS 25	- .0 61	.1 25	.1 65	.0 55	.0 83	.3 35	- .0 41	.0 83	.1 28	.0 98	.0 26	.1 66	.0 51	.2 12	.0 16	.2 46	.1 90	.2 28	.2 11	.2 08	.1 74	.2 26	.1 46	1. 00 0	.2 88	.1 10	.2 87	.3 33	
<b>MRS 26</b>	.0 03	.1 92	.0 14	- .0 16	.2 20	.2 27	- .0 18	.1 09	.2 24	.1 50	.0 61	.0 89	.0 53	.0 29	.1 04	.1 31	.1 35	.1 68	.1 29	.2 21	.0 68	.1 16	.0 83	.2 88	1. 00 0	.1 63	.1 48	.1 88	

MRS 27	.0 17	.1 17	.0 45	.0 79	.1 24	.0 51	.0 40	.1 46	.1 47	.1 50	.1 24	- .0 23	.1 56	.0 03	.2 44	- .1 50	.0 32	.0 55	.0 62	- .0 69	- .0 04	- .0 47	.1 97	.1 10	.1 63	1. 00 0	.0 23	- .0 12	.2 45
<b>MRS 28</b>	.0 10	- .0 79	.1 02	- .0 76	.1 26	.3 14	.0 08	.1 17	- .0 02	.0 64	.1 18	.1 15	- .0 79	.3 62	- .0 30	.2 19	.2 46	.1 86	.1 84	.1 66	.1 81	.2 42	.0 93	.2 87	.1 48	.0 23	1. 00 0	.3 36	.1 35
MRS 29	.1 76	.0 29	.0 68	- .0 83	.0 26	.3 00	- .0 76	.0 42	- .0 29	.0 33	.0 49	.2 49	.0 30	.2 80	.0 82	.2 01	.2 66	.1 65	.1 43	.2 02	.2 92	.1 21	.1 28	.3 33	.1 88	- .0 12	.3 36	1. 00 0	.3 42
<b>MRS 30</b>	.0 19	.1 75	.1 57	.1 01	.1 96	.1 69	.1 07	.0 19	.1 84	.1 58	- .0 01	.0 86	.0 47	.1 36	.1 06	.0 57	.2 08	- .0 71	.1 60	.0 95	.0 30	.0 32	.1 14	.1 93	.1 91	.2 45	.1 35	.3 42	1. 00 0

There exists a weak positive correlation between the items present in the scale.

 Table 9. Item total statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlatio n	Squared Multiple Correlatio n	Cronbach' s Alpha if Item Deleted
1. I have a purpose in mind when I read.	105.247	135.163	.069	.201	.755
2. I take notes while reading to help me understand what I read.	105.860	131.763	.176	.259	.751

3. I think about what I know to help me understand what I read.	105.585	135.953	.017	.193	.759
4. I preview the text to see what it's about before reading it.		128.903	.285	.236	.745
5. When text becomes difficult, I read aloud to help me understand what I read.		129.782	.186	.292	.752
6.I summarize what I read to reflect on important information in the text.	105.453	128.103	.342	.300	.742
7. I think about whether the content of the text fits my reading purpose.	106.291	125.124	.382	.363	.739
8. I read slowly but carefully to be sure I understand what I'm reading.	105.270	135.132	.048	.189	.758
9. I discuss what I read with others to check my understanding.	106.155	126.375	.350	.283	.741

10. I skim the text					
first by noting					
characteristics like	105.696	131.039	.193	.349	.751
length and					
organization.					
11. I try to get back					
on track when I lose	105.253	133.635	.125	.176	.753
concentration.					
12. I underline or					
circle information in	105.149	130.545	.231	.236	.748
the text to help me	105.147	150.545	.231	.250	.740
remember it.					
13. I adjust my					
reading speed	106.098	127.598	.303	.384	.744
according to what		127.390	.505	.304	./++
I'm reading.					
14. I decide what to					
read closely and	105.653	130.223	.205	.271	.750
what to ignore.					
15. I use reference					
materials such as					
dictionaries to help	106.089	126.504	.350	.327	.741
me understand what					
I read.					
16. When text					
becomes difficult, I	105 201	122 907	155	106	750
pay closer attention	105.321	132.897	.155	.186	.752
to what I'm reading.					
•		I	I	I	I

17. I use tables, figures, and pictures in text to increase my understanding.	106.017	130.115	.191	.360	.751
18. I stop from time to time and think about what I'm reading.	105.836	126.035	.441	.321	.737
19. I use context clues to help me better understand what I'm reading.	105.877	128.356	.333	.329	.743
20. I paraphrase (restate ideas in my own words) to better understand what I read.	105.689	125.976	.397	.374	.739
21. I try to picture or visualize information to help remember what I read.	105.864	130.962	.200	.276	.750
22. I use typographical aids like bold face and italics to identify key information.	106.100	129.280	.226	.297	.749
23. I critically analyze and evaluate the information presented in the text.	106.394	127.378	.340	.298	.742

24. I go back and forth in the text to find relationships among ideas in it.	105.887	128.748	.297	.243	.745
25. I check my understanding when I come across conflicting information.	105.949	125.631	.424	.344	.738
26. I try to guess what the material is about when I read.	105.570	128.783	.336	.250	.743
27. When text becomes difficult, I re-read to increase my understanding	105.162	132.277	.191	.273	.750
28. I ask myself questions I like to have answered in the text.	105.664	127.047	.364	.338	.741
29. I check to see if my guesses about the text are right or wrong.	105.785	126.787	.392	.435	.740
30. I try to guess the meaning of unknown words or phrases.	105.421	129.229	.336	.359	.743

The above reliability analysis obtained Cronbach's alpha value of 0.753. Generally, Cronbach's alpha above 0.65 is considered to be reliable to conduct statistical analysis using survey questionnaire. Hence, the scale is 75% reliable to perform statistical analysis for 470 cases at 95% C.I. additionally, after deleting few items in the scale, most of the reliability scores were found not much improved than before. Hence, existing scale is preceded for statistical analysis without changes.

#### 4.3.2. Validity analysis

This study employed Chi-squared goodness of fit analysis to test the validity of the obtained survey data set.

	<b>Chi-Square</b>	Df	Asymp. Sig.
v1	311.387a	4	0
V2	185.171a	4	0
v3	168.638a	4	0
v4	183.628a	4	0
v5	115.023a	4	0
v6	199.104a	4	0
v7	34.638b	4	0
v8	294.389a	4	0
v9	71.894a	4	0
v10	114.368a	4	0
v11	298.850a	4	0
v12	435.805a	4	0
v13	57.793a	4	0
v14	127.349a	4	0
v15	82.571a	4	0

 Table 10.
 Validity analysis – Chi square values

v16	264.748a	4	0
v17	48.131a	4	0
v18	147.201a	4	0
v19	156.757a	4	0
v20	133.839a	4	0
v21	100.943a	4	0
v22	59.674a	4	0
v23	84.452a	4	0
v24	121.471a	4	0
v25	137.983a	4	0
v26	315.664c	5	0
v27	387.222a	4	0
v28	147.264a	4	0
v29	130.584a	4	0
v30	257.243a	4	0

The test statistics clearly points out that chi square values

31

1.387a	185.171	a 168.638	3a 183.6	528a	115.023	3a 19	99.104a	34.638b
294.38	89a 7	71.894a	114.368a	298.85	60a	435.805a	57.79	3a
127.34	19a 8	32.571a	264.748a	48.131	a	147.201a	156.7	57a
133.83	39a 1	.00.943a	59.674a	84.452	la	121.471a	137.9	83a
315.66	54c 3	387.222a	147.264a	130.58	34a	257.243a	(4) p<0.00	)5 at 95%

C.I. Therefore, there is a significant difference between variables in the scale based on the chi square goodness of fit test at 95% C.I.

## 4.4. Descriptive analysis

Descriptive analysis was performed to assess the summary of the entire valid survey responses in the present study. Measures of central tendency such as mean, measures of dispersion such as standard deviation, minimum and maximum, measures of skewness and kurtosis of the distribution was performed in this study. The results are represented in the below table.

**Table 11.** Descriptive statistics

					Std.				
		Minimu	Maximu		Deviatio				
	Ν	m	m	Mean	n	Skewne	SS	Kurtosis	5
							Std.		Std.
	Statisti			Statisti		Statisti	Erro	Statisti	Erro
	c	Statistic	Statistic	c	Statistic	c	r	c	r
1. I have a									
purpose in	473	1.0	5.0	4.125	.9016	753	.112	003	.224
mind when I	+75	1.0	5.0	4.125	.9010	755	.112	005	.224
read.									
2. I take									
notes while									
reading to	172	1.0	5.0	2 502	1 0002	269	110	420	224
help me	473	1.0	5.0	3.503	1.0992	268	.112	429	.224
understand									
what I read.									

3. I think									
about what I									
know to help	473	1.0	5.0	3.789	1.0301	408	.112	745	.224
me	475	1.0	5.0	5.769	1.0301	408	.112	745	.224
understand									
what I read.									
4. I preview									
the text to see									
what it's	473	1.0	5.0	3.799	1.1217	466	.112	770	.224
about before									
reading it.									
5. When text									
becomes									
difficult, I									
read aloud to	473	1.0	5.0	3.653	1.3601	709	.112	727	.224
help me									
understand									
what I read.									
6.I									
summarize									
what I read to									
reflect on	473	1.0	5.0	3.913	1.0571	626	.112	540	.224
important									
information									
in the text.									

7. I think									
about									
whether the									
content of the	470	1.0	5.0	3.074	1.2564	024	.113	977	.225
text fits my									
reading									
purpose.									
8. I read									
slowly but									
carefully to									
be sure I	473	1.0	5.0	4.082	1.0634	961	.112	.018	.224
understand									
what I'm									
reading.									
9.I discuss									
what I read									
with others to	473	1.0	5.0	3.222	1.2210	.039	.112	-1.007	.224
check my	175	1.0	5.0	5.222	1.2210	.057	.112	1.007	.221
understandin									
g.									
10. I skim the									
text first by									
noting									
characteristic	473	1.0	5.0	3.660	1.1500	474	.112	686	.224
s like length									
and									
organization.									

11. I try to get back on track when I lose concentration		1.0	5.0	4.112	.9754	886	.112	017	.224
12. I underline or circle information in the text to help me remember it.	473	1.0	5.0	4.222	1.0792	-1.406	.112	1.301	.224
<ul> <li>13. I adjust</li> <li>my reading</li> <li>speed</li> <li>according to</li> <li>what I'm</li> <li>reading.</li> </ul>	473	1.0	5.0	3.279	1.2240	142	.112	913	.224
14. I decide what to read closely and what to ignore.	473	1.0	5.0	3.715	1.2182	626	.112	562	.224

15. I use									
reference									
materials									
such as	473	1.0	5.0	3.275	1.2005	180	.112	761	.224
dictionaries	475	1.0	5.0	5.275	1.2003	100	.112	/01	.224
to help me									
understand									
what I read.									
16. When									
text becomes									
difficult, I									
pay closer	473	1.0	5.0	4.038	.9908	864	.112	.277	.224
attention to									
what I'm									
reading.									
17. I use									
tables,									
figures, and									
pictures in	473	1.0	5.0	3.353	1.2905	222	.112	-1.030	.224
text to									
increase my									
understandin									
g.									
18. I stop									
from time to									
time and	473	1.0	5.0	3.526	1.0394	207	.112	660	.224
think about									
what I'm									
reading.									

19. I use context clues to help me better understand what I'm reading.	473	1.0	5.0	3.480	1.0577	438	.112	342	.224
20. I paraphrase (restate ideas in my own words) to better understand what I read.	473	1.0	5.0	3.679	1.1360	582	.112	360	.224
21. I try to picture or visualize information to help remember what I read.	473	1.0	5.0	3.512	1.1333	239	.112	854	.224
22. I use typographical aids like bold face and italics to identify key information.	473	1.0	5.0	3.277	1.2729	265	.112	862	.224

23. I									I
critically									
analyze and									
evaluate the	473	1.0	5.0	2.979	1.1404	.024	.112	839	.224
information									
presented in									
the text.									
24. I go back									
and forth in									
the text to									
find	473	1.0	5.0	3.469	1.1083	283	.112	586	.224
relationships									
among ideas									
in it.									
25. I check									
my									
understandin									
g when I	473	1.0	5.0	3.421	1.1078	465	.112	328	.224
come across									
conflicting									
information.									
26. I try to									
guess what									
the material		1.0	6.0	3.791	1.0003	272	.112	840	.224
is about when									
I read.									

27. When									
text becomes									
difficult, I re-									
read to	473	1.0	5.0	4.209	.9592	950	.112	.017	.224
increase my									
understandin									
g									
28. I ask									
myself									
questions I	473	1.0	5.0	3.710	1.1155	661	.112	230	.224
like to have	170	1.0	210	51,10		1001		.200	
answered in									
the text.									
29. I check to									
see if my									
guesses about	473	1.0	5.0	3.590	1.0760	214	.112	867	.224
the text are									
right or									
wrong.									
30. I try to									
guess the									
meaning of	473	1.0	5.0	3.951	.9543	755	.112	.098	.224
unknown									
words or									
phrases.									
Valid N	470								
(listwise)									

The highest mean values of global reading strategies are circling the information (4.222 $\pm$ 1.07SD), having specific purpose for reading (4.125 $\pm$ 0.90SD), attempting to get back soon

during distraction ( $4.112\pm0.97$ S.D), reading slowly and carefully ( $4.082\pm1.06$ S.D), paying close attention when text is difficult ( $4.038\pm0.99$ S.D) is largest scored mean and standard deviation values in problem solving strategies and finally support strategy re-reading the text with poor understanding has scored high mean and standard deviation values ( $4.209\pm0.959$ S.D). The distribution is found to be negative since most of the skewness values and kurtosis values are negative at 95% C.I.

### 4.5. Statistical analysis

### 4.5.1 Hypothesis 1

1. University EFL learners in Kosovo are not metcognitively aware with respect to the reading strategies they employ.

ANOVA was performed by comparing the total mean scores of global strategies, support strategies and problem-solving strategies among the survey data. According to MARSI questionnaire, average scores higher than 3.5 suggest high awareness towards metacognitive strategies among students. Students from various study branches and their awareness towards the metacognitive strategies were assessed using mean comparison analysis.

STUDY BR	ANCH	Glob_Total_Score	Sup_Total_Score	Prob_Total_Score
Albanian	Mean	44.9118	32.4412	31.5294
Language	Ν	34	34	34
	Std. Deviation	6.10200	4.56728	2.40246
Albanian	Mean	44.2286	30.4000	29.2571
Literature	Ν	35	35	35
	Std. Deviation	5.89659	4.82152	4.24502
Faculty of	Mean	45.5326	33.0978	31.0652
Economy	Ν	92	92	92
	Std. Deviation	5.84310	4.61021	2.90057
Faculty of	Mean	47.5484	33.2581	31.4624
Education	Ν	93	93	93
	Std. Deviation	5.78513	4.82499	3.28885
Faculty of	Mean	47.8200	33.3800	30.4800
Law	Ν	50	50	50
	Std. Deviation	4.81363	4.57540	3.85047
Faculty of	Mean	44.1786	30.7679	29.8750
Philosophy	Ν	56	56	56
	Std. Deviation	5.93022	5.23621	3.84737
Faculty of	Mean	46.3617	33.6596	30.8298

Tourism	Ν	47	47	47
	Std. Deviation	6.43167	4.78347	3.69676
German	Mean	45.2222	31.4722	29.8611
Language	Ν	36	36	36
	Std. Deviation	6.39692	5.61369	2.21879
Software	Mean	47.1667	34.3333	30.8333
Design	Ν	30	30	30
	Std. Deviation	6.18721	4.45153	5.02465
Total	Mean	46.0317	32.6469	30.7104
	Ν	473	473	473
	Std. Deviation	5.98808	4.92702	3.52573

The overall mean global reading strategies was observed to be  $46.03M\pm5.9$  S.D, total mean supporting strategies was observed to be ( $32.64M\pm4.9$  S.D) and mean total scores for awareness over problem solving strategies was found to be ( $30.71M\pm3.52$  S.D) at 95% C.I. Hence, it was observed that students possess increased awareness towards global reading strategies whereas they have less understanding on problem-solving and supporting strategies.

One way ANOVA table clearly points out the metacognitive strategic awareness among students studying various courses in five different universities. The table below /4.12 represents the detailed results:

	Glob_Total_S	Sup_Total_Sc	Prob_Total_S
STUDY BRANCH	core	ore	core
Albanian Language Mean	44.9118	32.4412	31.5294

 Table 13. Hypothesis 1- ANOVA report

	Ν	34	34	34
	Std. Deviation	6.10200	4.56728	2.40246
Albanian Literature	Mean	44.2286	30.4000	29.2571
	Ν	35	35	35
	Std. Deviation	5.89659	4.82152	4.24502
Faculty of Economy	Mean	45.5326	33.0978	31.0652
	Ν	92	92	92
	Std. Deviation	5.84310	4.61021	2.90057
Faculty of Education	Mean	47.5484	33.2581	31.4624
	Ν	93	93	93
	Std. Deviation	5.78513	4.82499	3.28885
Faculty of Law	Mean	47.8200	33.3800	30.4800
	Ν	50	50	50
	Std. Deviation	4.81363	4.57540	3.85047
Faculty of	Mean	44.1786	30.7679	29.8750
Philosophy	Ν	56	56	56
	Std. Deviation	5.93022	5.23621	3.84737
Faculty of Tourism	Mean	46.3617	33.6596	30.8298
	Ν	47	47	47
	Std. Deviation	6.43167	4.78347	3.69676
German Language	Mean	45.2222	31.4722	29.8611
	Ν	36	36	36
	Std. Deviation	6.39692	5.61369	2.21879
Software Design	Mean	47.1667	34.3333	30.8333
	Ν	30	30	30
	Std. Deviation	6.18721	4.45153	5.02465
Total	Mean	46.0317	32.6469	30.7104
	Ν	473	473	473
	Std. Deviation	5.98808	4.92702	3.52573

The overall mean global reading strategies was observed to be  $46.03M\pm5.9$  S.D, total mean supporting strategies was observed to be ( $32.64M\pm4.9$  S.D) and mean total scores for awareness over problem solving strategies was found to be ( $30.71M\pm3.52$  S.D) at 95% C.I. Hence, it was observed that students possess increased awareness towards global reading strategies whereas they have less understanding on problem-solving and supporting strategies.

One way ANOVA table clearly points out the metacognitive strategic awareness among students studying various courses in five different universities. The table below represents the detailed results:

		Sum of		Mean		
		Squares	df	Square	F	Sig.
Glob_Total_Score * STUDY	Between (Combined) Groups	812.849	8	101.606	2.926	.003
BRANCH	Within Groups	16111.675	464	34.723		
	Total	16924.524	472			
Sup_Total_Score * STUDY	Between (Combined) Groups	639.375	8	79.922	3.428	.001
BRANCH	Within Groups	10818.663	464	23.316		
	Total	11458.038	472			
Prob_Total_Score * STUDY	Between (Combined) Groups	229.720	8	28.715	2.363	.017
BRANCH	Within Groups	5637.599	464	12.150		
	Total	5867.319	472			

**Table 14.** ANOVA Table

One way ANOVA table reveals there exists a statistical significant difference between and within groups for global strategies and supporting strategic awareness among different courses since p=0.03, p=0.01 < 0.05 at 95% C.I. On the other hand, problem solving strategies and study branches of students fail to achieve statistical significant difference p=0.17>0.05, 95% C.I. Hence, hypothesis stating *University EFL learners in Kosovo are not metacognitively aware with respect to the reading strategies they employ* can be rejected due to the statistical significant association with different courses and metacognitive strategies applied. However, problem solving strategies failed to show statistical significance among student responses.

#### 4.5.2 Hypothesis 2

2. There is a positive relationship between metacognitive strategy use and students' reading performance in reading English as a foreign Language

Pearson's correlation and Spearman's rank correlation was performed to assess the relationship between metacognitive strategy applications and reading performance of EFL students among five universities of Kosovo.

		Metaco	GlobTotal_e	Supptotal_e	Prob.total
		g	хр	хр	_exp
Metacog	<b>Pearson Correlation</b>	1	.082	.008	146
	Sig. (2-tailed)		.572	.954	.311
	Sum of Squares and Cross-products	57.680	4.080	.520	-6.840
	Covariance	1.177	.083	.011	140
	Ν	50	50	50	50
GlobTotal_e	Pearson Correlation	.082	1	.219	100
хр	Sig. (2-tailed)	.572		.127	.489
	Sum of Squares and Cross-products	4.080	42.980	11.620	-4.040
	Covariance	.083	.877	.237	082
	Ν	50	50	50	50
Supptotal_e	Pearson Correlation	.008	.219	1	055
хр	Sig. (2-tailed)	.954	.127		.703
	Sum of Squares and Cross-products	.520	11.620	65.780	-2.760
	Covariance	.011	.237	1.342	056
	Ν	50	50	50	50
Probtot_exp	Pearson Correlation	146	100	055	1
	Sig. (2-tailed)	.311	.489	.703	
	Sum of Squares and Cross-products	-6.840	-4.040	-2.760	37.920
	Cross-products Covariance	140	082	056	.774
	N	140 50	50	50	50

The results reveal that there is a strong positive correlation between metacognitive strategy usage and students reading performance after training session since r values are positive r = 0.81, 0.08 for global and supporting strategies at 95% C.I. on the other hand, only problem solving strategies have strong negative association between students English reading strategies.

			Metaco	GlobTotal_ex	Supptotal_ex	Probtot_ex
			g	р	р	р
Spearman 's rho	Metacog	Correlatio n	1 000	0.62	000	000
		Coefficien t	1.000	.063	.009	089
		Sig. (2- tailed)		.662	.953	.537
		Ν	50	50	50	50
	GlobTotal_ex p	Correlatio n Coefficien t	.063	1.000	.172	187
		Sig. (2- tailed)	.662		.232	.193
		Ν	50	50	50	50
	Supptotal_ex p	Correlatio n Coefficien t	.009	.172	1.000	079
		Sig. (2- tailed)	.953	.232		.585

 Table 16.
 Spearman's correlation

	Ν		50	50	50	50
Pı	robtot_exp Correl	atio				
	n Coeffi	cien	089	187	079	1.000
	t					
	Sig. tailed)	(2-	.537	.193	.585	
	Ν		50	50	50	50

Also, spearman's rank correlation also shows similar results suggesting that metacognitive strategies are observed to help students to read English comprehension except problem solving strategies. Hence, the hypothesis stating that *there is a positive relationship between metacognitive strategy use and students' reading performance in reading English as a foreign Language* is accepted.

### 4.5.3. Hypothesis 3

3. Explicit training of metacognitive reading strategies enhances University EFL learners' reading proficiency

To assess the efficacy of training, mean scores of MARSI before and after the training session was evaluated using Multivariate Analysis of Variance. The below table reveals that there is no statistical significant relationship between pre-training and post-training scores. The size effects also reveal that mean square values of experimental group scores are higher than the mean square values of control group scores in this study.

		Туре					
		III Sum					Partial
	Dependent	of		Mean			Eta
Source	Variable	Squares	df	Square	F	Sig.	Squared
Corrected	Glob_cont	42.303 <sup>a</sup>	30	1.410	1.014	.499	.616
Model	Supp_cont	22.970 <sup>b</sup>	30	.766	.737	.779	.538
	Prob_cont	32.570°	30	1.086	.512	.951	.447
Intercept	Glob_cont	213.540	1	213.540	153.587	.000	.890
	Supp_cont	167.421	1	167.421	161.064	.000	.894
	Prob_cont	216.199	1	216.199	102.057	.000	.843
GlobTotal_exp	Glob_cont	4.652	4	1.163	.836	.519	.150
	Supp_cont	.946	4	.237	.228	.920	.046
	Prob_cont	9.903	4	2.476	1.169	.356	.197
Supptotal_exp	Glob_cont	2.863	4	.716	.515	.726	.098
	Supp_cont	1.116	4	.279	.269	.895	.054
	Prob_cont	6.561	4	1.640	.774	.555	.140
Probtot_exp	Glob_cont	4.808	2	2.404	1.729	.204	.154
	Supp_cont	.432	2	.216	.208	.814	.021
	Prob_cont	4.672	2	2.336	1.103	.352	.104
GlobTotal_exp	Glob_cont	5.285	6	.881	.634	.702	.167
*	Supp_cont	3.930	6	.655	.630	.705	.166
Supptotal_exp	Prob_cont	7.640	6	1.273	.601	.726	.160
GlobTotal_exp	Glob_cont	12.873	4	3.218	2.315	.095	.328
* Probtot_exp	Supp_cont	4.811	4	1.203	1.157	.361	.196
	Prob_cont	4.113	4	1.028	.485	.746	.093
Supptotal_exp	Glob_cont	6.770	6	1.128	.812	.574	.204
* Probtot_exp	Supp_cont	4.189	6	.698	.672	.674	.175
	Prob_cont	4.489	6	.748	.353	.899	.100

 Table 17. MANOVA- Tests of Between subjects Effect

GlobTotal_exp	Glob_cont	3.968	4	.992	.713	.593	.131
*	Supp_cont	1.200	4	.300	.289	.882	.057
Supptotal_exp * Probtot_exp	Prob_cont	3.686	4	.921	.435	.782	.084
Error	Glob_cont	26.417	19	1.390			
	Supp_cont	19.750	19	1.039			
	Prob_cont	40.250	19	2.118			
Total	Glob_cont	568.000	50				
	Supp_cont	446.000	50				
	Prob_cont	505.000	50				
Corrected	Glob_cont	68.720	49				
Total	Supp_cont	42.720	49				
	Prob_cont	72.820	49				

a. R Squared = .616 (Adjusted R Squared = .009)

b. R Squared = .538 (Adjusted R Squared = -.192)

c. R Squared = .447 (Adjusted R Squared = -.425)

The above table clearly mentions that there are no statistical significant associations found among pre-test and post-test scores among students. None of the combinations scores achieved statistical significance emphasizing that there is a remarkable increase in scores post and pre-test scenario.

A paired sample t-test was run to assess the level of effects between pre-test and post-test scores among experimental and control groups of the present study.

 Table 18. Paired Sample Statistics

					Std. I	Error
		Mean	Ν	Std. Deviation	Mean	
Pair 1	GlobTotal_exp	4.0200	50	.93656	.13245	
	Glob_cont	3.1600	50	1.18425	.16748	
Pair 2	Supptotal_exp	3.3800	50	1.15864	.16386	
	Supp_cont	2.8400	50	.93372	.13205	
Pair 3	Probtot_exp	4.0400	50	.87970	.12441	
	Prob_cont	2.9400	50	1.21907	.17240	

The scores of MARSI questionnaire during post and pre-test after explicit training for experimental students were assessed using paired sample t-test. 100 students were grouped equally into experimental (n = 50 nos) and control (n=50) were chosen from the survey subjects. Only experimental students were given special training in this study. The above table clearly points out in every pairs, mean scores of experimental subjects seem to be high than control groups. Mean Global scores for experimental 4.0200 whereas for control is 3.1600, supporting strategies score among experimental groups 3.3800 and control is 2.8400 and finally for problem solving scores is 4.0400 and its respective control had only 2.9400 at 95% C.I.

	Paired Differences							
	Mean	Std.	Std. Error	95% Confidence Interval of the Difference		Т		Sig. (2-
Dain ClabTatal ann	Mean	Deviation	Mean	Lower	Upper	1	df	tailed)
Pair GlobTotal_exp 1 - Glob_cont	.86000	1.48475	.20998	.43804	1.28196	4.096	49	.000
Pair Supptotal_exp 2 - Supp_cont	.54000	1.35842	.19211	.15394	.92606	2.811	49	.007
Pair Probtot_exp - 3 Prob_cont	1.10000	1.34392	.19006	.71806	1.48194	5.788	49	.000

 Table 19. Paired Samples Test

The above table mentions the significant mean difference among experimental and control groups where F(49) = p<0.05 at 95% C.I. Hence, hypothesis 3 stating *Explicit training of metacognitive reading strategies enhances University EFL learners' reading proficiency* based on MANOVA and paired sample t-test analysis is accepted.

# **CHAPTER 5**

# **DISCUSSION AND CONCLUSION**

- 5.1 Discussion
- 5.1.1 Research question 1
- 5.1.2 Research question 2
- 5.1.3 Research question 3
- 5.1.4 Research question 4
- 5.2 Conclusion
- 5.3 Recommendation and Study limitations
- 5.3.1 Recommendation
- 5.3.2 Limitations of the study

#### **5.1 Discussion**

This research is dedicated to assess the metacognitive awareness of reading strategies employed by EFL students from five different Kosovo universities such as University of Gjakova, University of Prizren, University of Pristina, University of Peja and AAB. The study has four major research questions namely

1. How metacognitively aware are University EFL learners in Kosovo with respect to the reading strategies they employ?

2. Which reading strategies are most frequently used by University EFL learners in Kosovo?

3. Is there a relationship between training University EFL learners to use metacognitive reading strategies and their achievement in reading?

4. Do University EFL teachers train their learners to use specific reading strategies?

In order to answer the above research questions, a survey study among 473 students from five Kosovo universities were conducted. Each university contributed approximately similar number of students (~ 95) nearly 20% in the present study. While comparing the course of the study, students pursuing their education in faculty of education and faculty of economics participated highly in this study (19.66% and 19.45% respectively). Upon analyzing the subscale scores, students from University of Peja earned high scores in global reading and supporting strategies whereas students from University of Pristina scored high in problems solving strategies. Upon comparing the three subscale scores from five universities, it was observed that students have high awareness towards global reading strategies and reduced awareness over supporting and problem-solving strategies.

The survey data was assessed for reliability and validity scores, Cronbach's reliability score is  $\alpha = 0.75$  at 95% C.I. and Pearson's Chi-Square validity analysis also emphasized that Chi square (4) = 0.01, p<0.005 at 95% C.I. Therefore, there is a significant difference between

variables in the scale based on the chi square goodness of fit test at 95% C.I. Hence, the current survey data have successfully passed in reliability and validity analysis. In a study conducted by the Ismail and Tawalbeh (2014) have assessed the metacognitive reading strategy awareness among female University students from Saudi Arabia. The three types of subscale item validity have achieved 0.70, p<0.05 and the present study have achieved 0.75 score, p<0.05. The internal consistency of the total scale and item after deleted has ( $\alpha = 0.75$  (GlOB),  $\alpha = 0.75$  (SUPP),  $\alpha = 0.75$  (PROB), p<0.05) for three subscales in the MARSI questionnaire used by Ismail and Tawalbeh (2014) and the present study have achieved ( $\alpha = 0.76$  (GlOB),  $\alpha = 0.74$  (SUPP),  $\alpha = 0.78$  (PROB), p<0.05) in the present study. Thus, the scores and its validity obtained in the current dataset was found to be reliable and valid. The results of the reliability and validity were also similar and consistent as described in earlier studies conducted by the Auerbach & Paxton, 1997; Rusciolelli, 1995; Al Faramaway, 2004; Huang & Newbern, 2012)

The descriptive analysis clearly suggests that the highest mean values of global reading strategies are circling the information ( $4.222\pm1.07$ SD), having specific purpose for reading ( $4.125\pm0.90$ SD), attempting to get back soon during distraction ( $4.112\pm0.97$ S.D), reading slowly and carefully ( $4.082\pm1.06$ S.D), paying close attention when text is difficult ( $4.038\pm0.99$ S.D) is largest scored mean and standard deviation values in problem solving strategies and finally support strategy re-reading the text with poor understanding has scored high mean and standard deviation values ( $4.209\pm0.959$ S.D). Also, the descriptive analysis of experimental and control groups after the training session shows remarkable difference in mean values of both groups. Mean values for experimental groups for Glob (M  $4.0200 \pm 0.93$  SD), SUPP is (M $3.3800\pm1.15$ SD), PROP (M  $4.0400\pm0.87$ SD) and whereas control group earned less mean scores such as Glob (M $3.1600\pm1.18$ SD), SUPP (M $2.8400\pm0.93$ SD) and PROP (M $2.9400\pm2.9$ SD).

Study conducted by Ismail and Tawalbeh (2014) and Huang & Newbern (2012) also exhibited similar results for high mean values after training among experimental groups than control groups. This infers that training has important role in EFL metacognitive reading strategies. Being an exploratory study, three hypotheses were generated to answer the above four research questions. Among these, hypothesis 1 answers first two research questions.

#### 5.1.1 Research question 1

1. How metacognitively aware are University EFL learners in Kosovo with respect to the reading strategies they employ?

One way ANOVA analysis reveals there exists a statistical significant difference between and within groups for global strategies and supporting strategic awareness among different courses since p=0.03, p=0.01 < 0.05 at 95% C.I. On the other hand, problem solving strategies and study branches of students fail to achieve statistical significant difference p=0.17>0.05, 95% C.I. Hence, hypothesis stating University EFL learners in Kosovo are metacognitively aware with respect to the reading strategies they employ can be accepted due to the statistical significant association with different courses and metacognitive strategies applied. However, the problem arises with problem-solving strategies that shows negative association.

Due to the rejection of null hypothesis, the first research question can be answered that Kosovo university EFL students are metacognitively aware about the English comprehension reading strategies. Similar result was observed by Alhaqbani (2012) among Arabian EFL students from African background revealed that domain of expertise plays vital role in deciding the metacognitive awareness since most of the students were unfamiliar about problem solving strategies like the present study. This suggests that difference domain of expertise or branch of the study causes statistical significant relationships with the awareness over the metacognitive reading strategies. (Malcolm, 2009) also argued that metacognitive reading awareness develops over the time and level of subject expertise.

Sheorey and Mokhtari (2001) compared the metacognitive awareness of the reading strategies of ESL college students with native speakers represented by American students. They sought to answer three questions: 1) are there any differences between ESL and US students in their perception of using strategies? 2) Are there any gender differences? And 3) is there a relationship between reported strategy and self-rated reading ability? Students provided information about their backgrounds including rating their reading ability. Then they answered the

*Survey of Reading Strategies* (SORS) which is divided into three categories: 1) metacognitive, 2) cognitive, and 3) support strategies. Results showed that ESL students reported using more support strategies. In addition, both ESL and the US high reading ability speakers reported more use of support strategies than the low-reading ability ones.

Also, the gender analysis showed that female students in general reported using certain strategies more than the males. However, the researchers stated that because of the unequal numbers of females and males in the study, gender differences were not statistically significant. An important finding was that reading ability was significantly related to students' reported usage of strategies. Sheorey and Mokhtari state that "students who gave themselves a high rating on reading ability, regardless of their language background, reported a higher use of all the reading strategies in the survey than did those students who gave themselves a low reading ability rating." (p. 446).

There are several points can be drawn from the above discussion regarding to the descriptive studies in the L2. First, proficient L2 readers are more focused on extracting meaning from texts and report greater frequency in (largely top-down) strategy use than less-proficient readers. Second, less proficient readers tend to focus more attention on decoding or bottom-up processes when reading a text. Third, reading strategies themselves are neither inherently good nor bad. Forth, proficient or less proficient L2 readers do not significantly differ in terms of the number and types of unique strategies used in reading. Fifth, whether language backgrounds account for the reading strategy use is inconclusive. Last, but not least, metacognition, as it relates to a readers' overall approach to the reading task, appears to be important for successful comprehension by means of planning, monitoring, and evaluating reading, and coordinating use of strategies.

Most studies found for this literature with regard to Chinese speakers learning English are descriptive in nature. Several western L2 reading researchers have studied Chinese EFL learners and found that Chinese EFL readers are unable to use their conceptual abilities to the fullest potential due to difficulty in transfer of reading skills from L1 to L2. As such, because the traditional method of learning is to memorize, they were unable to use the more abstract process

strategies, such as guessing contextual meaning to attain "fluent levels of reading skill." (Field, 1985, p.175). For example, Chinese EFL readers' reading strategies were greatly different from those of their American counterparts (Kohn, 1992). According to Kohn's observation, American readers tend to read rapidly, while Chinese readers tended to reading slowly. This comment has later been criticized of being from Kohn's perspectives because he didn't ask his students how they themselves conceptualized their knowledge of or actual use of reading strategies.

However, later a study conducted by Parry (1996) confirmed Kohn's conclusion. Parry (1996) analyzed 25 Chinese trainee-teachers' written journal entries and indicated that Chinese tended to use "bottom-up" strategies more than "top-down" strategies and this tendency was closely linked to their L1 literacy tradition and their understanding of the reading process. In contrast, Zhang's (2008) study investigated Chinese EFL readers' perceived use of reading strategies with an EFL reading strategies inventory (subject N=312 from China). This finding suggested that, by and large, the Chinese readers actually use both "local" and "global" strategies for meaning-construction. The results of this study differed because readers who demonstrated higher levels of comprehension reported using more "global" strategies such as guessing meaning through inferences, while the readers who demonstrated lower levels of comprehension reported using more "local" strategies such as detailed word meaning. Similarly, the present study also emphasized the global strategies with high mean scores than other two.

Reading in a foreign language is very complex and many factors impact the foreign readers' reading processes and their comprehension of texts. These factors include their background knowledge, language proficiency in the L1 and L2, and metacognitive knowledge. Therefore, it takes time for language learners to achieve improvement in reading, especially for learners who learn English in foreign language environment.

Since English is neither spoken at home nor in daily communications in Kosovo, the only opportunities EFL students have to learn English occur in English classes. So, the average Kosovo university students' reading ability in English usually delays far behind their first language reading competence. According to Eskey (2005), many EFL students may not need to speak English in their daily lives but they need to read it to access the richness of information in English.

Successful L2 readers engage in a high level of metacognition, or monitoring of their own thinking, during the process of reading. For example, they make predictions, test hypotheses, and monitor their comprehension while extracting meaning from text. Less proficient L2 readers, however, tend to focus heavily on word recognition and word-for-word translation (Auerbach & Paxton, 1997; Rusciolelli, 1995). As a result, they may employ fewer higher-order thinking processes while reading and may tend to be less metacognitively aware (Rusciolelli, 1995).

Teaching students to read English is a major goal. Research has shown that skills in comprehension and strategies can be taught (Zarrillo, 2007), some students are successful in learning to read English, yet others remain at a low proficiency level throughout their school years. Many different activities are needed to enhance reading. However, poor readers are found not only among EFL learners but also among students reading in their native language (L1). Many adult readers in the United States, for example, have been diagnosed as failing to develop fifth grade level reading skills (Micklos, 1990). These students, often termed "low literate readers" (Gambrell & Heathington, 1981), have inspired extensive research investigating the reasons for their unsuccessful learning.

Muñiz-Swicegood (1994) investigated the impacts of metacognitive reading methodology preparing on bilingual Spanish understudies. The bilingual Spanish predominant undergraduates in the research were educated to utilize metacognitive reading techniques while reading in Spanish. Post talk with consequences of the Burke Reading Meeting, converted into Spanish, and indicated incensement in the recurrence of Spanish reading techniques following metacognitive intercession.

The investigation found that huge upgrades in the sorts and recurrence of metacognitive methodologies that the students were utilizing among their Spanish reading examination were recorded. Wenden (2001) has completed metacognitive preparing with cutting edge undergraduates in Columbia College. In her test, she disseminates undergraduate studies which are identified with critical thinking reading systems, and learning language states of mind. Following 7 weeks of preparing, from the outcomes in the survey, the greater part of the subjects

thought the preparation was pointless. Wenden clarified that the immaculate metacognitive preparing has no perfect viability, the subjects thought of it as additional thing in understanding; they couldn't deliberately and effectively apply the metacognitive procedures to their reading appreciation.

Salataci and Akyel (2002) explored the reading methodologies of Turkish EFL understudies in Turkish and English and the conceivable impacts of reading guideline on reading in Turkish and English. The members comprised of 8 Turkish understudies enlisted in a pre-intermediate level class of a one-year serious English course offered at a Turkish-medium specialized college. The information originated from verbally process conventions, perception, a primary survey, a semi-organized meeting and the reading part of the PET (the Preparatory English Test). The outcomes demonstrated that methodology guideline positively affected both Turkish and English reading techniques and reading perception in English.

Mustafa (2004) directed an examination to find the effect of the utilization of metacognitive reading techniques on inspiration, which brings about scholastic accomplishment. His examination included 208 optional school understudies. He utilized three polls to gauge the metacognitive familiarity with reading systems, inspiration and self–worth origination. The discoveries of his examination demonstrated that there was a positive connection between scholastic accomplishment and metacognitive familiarity with reading systems. His outcomes likewise showed that the most prescient variable of the scores of the scholarly accomplishment was metacognitive familiarity with reading procedures.

Meng (2004) announced an investigation of reading methodology preparing in a continuous English classroom and explored the impacts of the preparation on undergraduates' reading capacity by methods for breaking down test outcomes and the survey.

Results demonstrated that technique preparing was viable in improving EFL undergraduates' general reading capability and reading rate. The mediation had noteworthy impact on the change of understudies' capacities to get a handle on primary thoughts and to make worldwide and lexical derivations from both given entries and information of the world; be that as it may, it had no undeniable impact on the change of their capacity to extract of slope data from the writings.

Karbalaei (2010) made an investigation to look at between the utilization of metacognitive reading procedures by EFL and ESL readers. His examination included 189 college undergraduates; among them 96 Iranians as EFL readers and 93 Indians as ESL readers. He utilized a 30-thing survey to quantify metacognitive attention to reading methodologies stock which investigates three arrangements of metacognitive procedures: (1) summed up or worldwide reading techniques, (2) critical thinking techniques, and (3) supporting reading methodologies. The consequences of his examination indicated critical contrasts: Indian undergraduates revealed utilizing most sorts of systems more regularly than did the Iranian understudies. He revealed that Indians are more keen on utilizing top-down procedures for better perception, for example, summarizing, note-taking while Iranians are more centered around utilizing base up methodologies, for example, utilizing a word reference to understand meaning.

Karbalaee (2012) completed an examination on Iranian secondary school EFL 114 male and female understudies to inspect the connection between reading procedure utilize and reading accomplishment. The outcomes uncovered that the Iranian EFL secondary school understudies announced general reading procedure utilize was observed to be an indicator of reading understanding test scores.

## 5.1.2 Research question 2

2. Which reading strategies are most frequently used by University EFL learners in Kosovo?

The second research question inquiries about type of the strategies largely used by the students. The mean values of global strategies ( $46.03\pm5.9$ ) are high when compared with mean

values of supporting  $(32.64\pm4.9)$  and problem – solving strategies  $(30.07\pm3.5)$ . Thus, global reading strategies are largely used by the students. Study from Liyanage, Grimbeek, and Bryer (2010) also stressed that the type of reading behavior and activities that non-native Arabic university students tend to use while reading Arabic academic texts.

Given that the majority of studies of reading comprehension strategy use are focused on the English language, this study, which investigated reading comprehension strategy use in an under-researched language (Albanian), can expand our understanding of strategy use awareness. Our results illustrate that learners in this group have a high level of metacognitive awareness and can be considered active readers due to their high usage of reading strategies. This result could be attributed to several factors, including the students' bi/trilingualism, motivation, academic major, as well as the nature of reading acquisition in Albanian language with regard to problem-solving strategies in particular, as suggested by Abu-Rabia (2002) and Hansen (2008). Similarly, the reduced scores obtained by students in problem solving strategies might be associated with bilingualism, lack of motivation, different branch and courses in the study.

Also, earlier study from Block (1992) investigated the use of reading strategies with regard to proficient and non-proficient readers. There were eleven native speakers and fourteen Chinese speakers of college level. They were further categorized as 16 proficient readers (8 ESL and 8 native speakers) and 9 less proficient readers (6 ESL and 3 native speakers). She used a thinkaloud method to compare the comprehension-monitoring processes of native speakers and second language learners of English as they dealt with reference and vocabulary problems in an expository passage. The findings showed that ESL speakers with more English proficiency took more actions to solve problems and check solutions. Block reported that "differences that existed in monitoring seemed more due to reading proficiency than to language backgrounds of the readers.

Anderson's study (1991) indicated that the same kinds of strategies were used by both high and low comprehension readers. Therefore, there is no one-to-one relationship between particular strategies and success or lack of success in reading comprehension. Moreover, or perhaps in contrast to apparent group differences in terms of proficiency and general approaches to L2 reading findings in the studies of Anderson (1991), Block (1986), Hosenfeld (1977), Knight, Padron, and Waxman (1985), and Sarig's (1987) suggested a great degree of variability between individual learners. Anderson's (1991) findings and conclusion echoed Sarig's (1987) in two important perspectives. First, strategy use was found to be highly individualistic and no strategy was found to be inherently good when checked against subjects' test scores. Second, successful use of strategies, that is, using strategies strategically, requires a metacognitive approach to and control of the reading process. In closing, Anderson (1991) suggests that effective reading strategies instruction aims to foster language learners' development as strategic readers, which is best achieved through explicit reading strategy instruction of not only *the what* and *how* of individual strategy but, equally important *the when* and *why* as well. To be specific, that is the metacognitive awareness in the reading process.

Similar to Sarig (1987) and Anderson's findings, Kern (1997) carried out a case study of two American college juniors who learned French as a second language. The two students have different proficiency levels in French reading. The measurement consisted of a reading task interview. After analyzing their reading strategies, Kern found that the two readers of different language proficiencies used similar reading strategies, but they revealed differences in how they used these strategies in certain instances. Kern, once again, noted that no strategy has an inherently bad or good quality. The effectiveness of some strategies is dependent on a variety of contextual factors, including a reader's purpose, language competence, learning style, and L1 literacy background, as well as features of the particular text being read (Kern, 1997).

Stanovich (2000[1980]), it consists meta-review and helps the adult L1 readers. He found that "Skill at recognizing words is strongly related to the speed of initial reading acquisition... among adults word recognition efficiency accounts for a sizable amount of variance in reading ability... word recognition skill predicts reading comprehension ability in adults", Mitchell and Green (1978 in Stanovich, 1980) find that "Reading rate is more dependent on the speed with which a reader can recognize words and construct a representation than on the ability to use predictions to facilitate word recognition." It is in the Stanovich, 2000[1980], p.26.

Goodman's says that the expert readers use context more. Weber (1970 in Stanovich, 1980) and Biemiller (1970 in Stanovich, 1980) say that the good reader must use more words and letters. L1 readers, who have the first grade, have more attention to words and letters. Juel (1980)

in Stanovich, 1980) says that the third and second graders also use the words correctly. The poor readers are only guessing the words and meanings. A good reader must have the good understanding of the text. L2 readers can understand the text easily (Grabe, 2009)

L1 readers of different ages were investigated by Meyer, Brandt and Bluth (1980) and Meyer and Poon (2001) to know about the explicit training of the text structure. They used many structures like a comparison, description, problem-solution and collection [Meyer, Brandt, & Bluth: 74]. L2 readers need the comprehension and structure of the text. They have to understand about the segment and structure of a text. Carrell 1984; Lahuerta, (2002) talks about the effects of structure awareness of L2 understanding.

To sum up, no straightforward relationship appears to exist between strategy use and reading ability. As research evidence indicated, "use of certain reading strategies does not always lead to successful reading comprehension, while use of other strategies does not always result in unsuccessful reading comprehension." (Carrell, 1991, p.168). In addition, "strategies may not be inherently good or bad for a given reader. Rather, they may or may not promote successful comprehension of a text, depending on the particular reader, the particular text, the context in which the reading is going on, and the choice of other strategies in conjunction with the chosen one." (Cohen, 1987, pp. 132-133). Therefore, to be strategic readers, students not only need to know what strategies to use but they also need to be aware of when, why, and how to use these strategies according to their individual preference appropriately and effectively. This kind of knowledge is called metacognitive awareness or metacognitive reading strategies.

#### 5.1.3 Research question 3

3. Is there a relationship between training University EFL learners to use metacognitive reading strategies and their achievement in reading?

A sample of 100 students were categorized into two groups namely experimental = 50 and control = 50 for assessing the role of training on use of metacognitive reading strategies among

Kosovo EFL students. Results from Pearson's and Spearman's rho correlation clearly points out the enhancement in reading performance after the use of metacognitive strategies among experimental groups. Likewise, earlier studies suggest that there would be significant differences between the mean scores of the pre-test and post-test of metacognitive reading strategies and the English language reading comprehension test for the experimental group. This can be interpreted as the role of reading strategy's usefulness in helping readers achieve better comprehension when reading a passage, which is emphasized in the realm of EFL (Macaro, 2003; Pressley & Harris, 2006; Sinatra, Brown, & Reynolds, 2002,).

The use of a reading strategy can help readers deal with the problems which arise while reading in a foreign language, and consequently, individuals' reading comprehension can be improved. The results of a number of experimental studies (e.g., Wenden, 2001; Cubukcu, 2008; Karbalaei, 2010; Huang & Newbern, 2012) have indicated significant gains in reading proficiency of adult EFL learners following metacognitive strategy training. Notably, in all of the aforementioned studies, the experimental group significantly outperformed the control group on objective assessments which measured reading proficiency gains. Moreover, Anderson (2003) asserted that reading develops gradually as the reader does not become fluent suddenly or immediately following a reading course.

#### 5.1.4 Research question 4

4. Do University EFL teachers train their learners to use specific reading strategies?

With regard to the fourth research question was that there would be no significant differences between the mean scores of the post-test and follow up of Metacognitive reading strategies and the English Language reading comprehension test for the experimental group. The data showed that the effects of the reading training program continued and had a great benefit to EFL students. This finding agrees with Shinn (1998), and Gordon and Lu (2008). This study can be seen as further evidence to the idea that learners should be provided with a training program to train them how to read and how to choose the best strategies to help their reading. Successful

reading programs should provide activities that challenge the students (Meng, 2004; Zarillo, 2007).

Results from MANOVA analysis states that Wilks' Lambda was 0.94, p= 0.06 with the Partial Eta Squared of 0.063 for nationality group and 0.91, p= 0.02 with Partial Eta Squared = 0.085 for the level in university study group.

Tests of between-subject effects revealed a significant difference in the global strategy use category for the nationality group (F= 7.11, df = 1, p < 0.05) with a Partial Eta Squared of 0.03). Moreover, significant results were found for global (F = 3.85, df= 1, p< 0.05, Partial Eta Squared = 0.03), problem-solving (F = 3.83, df= 1, p< 0.05, Partial Eta Squared = 0.03), and support strategy use (F= 10.42, df= 1, p< 0.01, Partial Eta Squared = 0.084) for the level in university study.

No significant results were found for the interaction of university and branch of the study in the university study across the three dependent variables such as GLOB, SUPP and PROP scores. Given the significant findings from the MANOVA, follow-up analysis of variance (ANOVA) was warranted. Because we were looking at a number of separate analyses here, we employed the recommendation of Pallant (2007) and used the Bonferroni adjustment. Accordingly, we set the level of significance to 0.02 or less for each of the three variables (0.05/3=0.02). Some studies have found that direct instruction of reading strategies were of greater help to students with lower proficiency in the L2. Based on the success of teaching students summarization strategies in L1, Cordero-Ponce (2000) conducted a study to test the effects of L2 metacognitive strategy training in summarization on the ability to comprehend and summarize expository texts. Thirty university level students enrolled at an intermediate French course were divided into the experimental and control groups. Testing included pretest, immediate posttest, and delayed posttest with all of them involving two tasks written recall and summarization. The training was conducted on two periods of sixty minutes. The researcher introduced the following rules to teach summarization: collapse list, use topic sentences, get rid of unnecessary detail and collapse paragraphs. Results indicated that students significantly improved their comprehension and recalled more ideas in the immediate posttest. In addition, training had positive effects on students' ability to summarize French texts incorporating the rules introduced to them in the immediate and delayed posttest. The author concluded that these summarization strategies can be taught to college students with low levels of L2 proficiency to provide them with cognitive resources to rely on during comprehension. Cordero-Ponce (2000) comments this training study with intermediate-level French students that "such training programs may provide students with compensatory cognitive resources to rely upon during comprehension, thereby offsetting, to a certain degree, their limited L2 linguistic knowledge and lessening the cognitive load." (p.346).

Salataci and Akyel (2002) examined the impact of teaching reading strategies to preintermediate Turkish EFL students. They used the experience-text-relationship and reciprocal teaching methods. The instruction lasted four weeks (three hours a week). The strategies introduced and practiced by students included: using prior knowledge, summarizing, finding main ideas, prediction, clarification, and some other repair strategies. The findings indicated that students' use of bottom-up strategies such as using dictionaries and questioning meanings of word decrease when reading in English because they were not focused on word level understanding after the treatment. On the other hand, the instruction had a positive effect on students' use of topdown strategies when reading in English and Turkish. The strategies of prediction, summarizing, and using prior knowledge were used significantly more frequently. In addition, the use of metacognitive strategies was higher when reading in English after instruction. What's more, the reading comprehension scores increased after instruction.

Another line of L2 reading strategy training study has focused on providing L2 readers with knowledge of text structure. Research has found that different cultures have different ways of representing ideas in written text and this difference often causes certain amount of impact on L2 readers' reading comprehension while approaching English reading task. In response to this effect, Carrel (1985) conducted a training study with 25 high-intermediate proficiency college ESL students of various L1 backgrounds studying intensively at a large university in the US. Over five one-hour class sessions in one week, subjects in the experimental group (N=14) received instruction which raised awareness of four types of English top-level structures (macrostructures) found in expository texts (comparison, causation, problem/solution, and collections of descriptions). Training for the experimental group initially centered on explicit and extensive explanations by the instructor concerning the nature of reading expository texts, the benefit of using the top-level structure strategy in supporting comprehension, and how to use the strategy with different top-level structure texts. In addition, students were given study packets with instructor explanations as well as practice texts and exercises for subjects to work on at their own pace. Checklists were also included in the packet so that subjects could "monitor and regulate their own learning." (p.736). During this period, a control group (N=11) read the same texts as the experimental group but engaged in various other linguistic and comprehension activities. Data collection instruments included pretest, posttest, and delay posttests on which subjects read two passages (one passage of comparison and one of collection of descriptions top-level structure) and produced written recalls without referring to the original texts. Recalls were done in the subjects' L2, English. For each test passage, subjects were also asked to identify the "organizational plan" the authors of each passage employed in writing through an open-ended question.

L2 reading is very much related to L1 reading. (Bernhardt, 1991, 2011; Grabe, 2009; Cummins, 1979, 1981, 1991).L1 and L2 reading consist the strategies of reading and strategies of meta-cognitive development (Chiappe, Siegal, & Gottardo, 2002; Geva, 2006, Yaghoub Zahenn, & Schuster, 2000 in Grabe, 2009). L2 comprehension is different from L1 because of the different system study. The different syntax, pragmatics, Vocabulary and culture-specific texts chosen by Linguistic communities (Grabe, 2009). It shows that the study of L2 is not bound to the grammar

and vocabulary of it. The meaning of the text and the purpose of reading the texts included in this study.

L2 is important learning but it is not easy to learn for the readers. One research proves, thought the English learners in school spoke English well, they struggled to get the meaning in the sentence when they read complicate texts (Eskey, 1973; Ciadt, 1979 in Grabe, 2009; Gibbons, 1991; Grabe, 1991; Cazden, 1992; Grabe & Gardner, 1995). Even the small children (Buly & Valencia) and college students (Stanley, 1984; Pretorious, 2005) have the same problem. Because of this lack of understanding the texts, the students will trouble when they will read paragraphs (Goigoux, 1999; in Vakilifard & Armand, 2011, 118). Vakilifard and Armand said, "Les lecteurs novices, en particulier, onttendence a ĕtre "trop colles aux mots." It may occur in spite of readers' victory.

The insufficient knowledge of these language learners in vocabulary and syntax, they may fail to understand the things. There are many strategies and reading skills to enrich their skills. The readers do not understand the meaning of the sentence because of their lack of knowledge in the basic. The cause of the problem may come from the social and culture agents (Grabe, 2009). L1 reading capability aspects (Cummins, 1979, 1981, 1991 in Grabe, 2009) and teaching aspects (Gibbons, 2002).

The Mexican students are showed L1 reading capability aspects and it found the difficulties in L2 reading. They are most significant the reading of L1 rather than L2. In 2006, PISA test presented that the most of the Mexican students who got 1 grade in elementary school were struggling to get 1 grade at the high school level. Their performance became dull because of some issues and they can perform only basic reading assignment (Dĺaz Gutierrez et al., 2007).

One studies talk about the Mexican universities and the students of them. The students create implication when reading and non-narratives types in the L1 readings (Vaca Uribe, 2003; Perales Escudero 2010, 2011). The Mexican readers have the most basic skills (Peredo Merlo, 2011). The teachers have the big task to improve the students from L1 reading skills to L2 reading skills and it must be a tough job to the teachers to give a proper basic skill. The teaching methods of EFL are very poor. They just guess the unknown words and the teachers give background skill of the text (Grabe, 2009 and Han and D'Angelo, 2007).

Teaching the language to the students does not an easy matter and it needs some improvement. By teaching guessing unknown words and giving activities is not only the method of teaching. Some Mexican universities are teaching EFL in a different way (Perales Escudero, 2011). Many issues based on this matter do not directly affect and some techniques (Gibbons, 2001).

The mental representation defines the text and it comes from the two different components. C-I model, Kintsch, 1998 says about this construction of the reading text., "Comprises those nodes and links in the mental representation of the text that have direct correspondences in the text itself" (McNamara & Kintsch, 1996, 251), the reading text is the main thing and the text base represents mental representation. The syntactic and semantic skill very much useful to the students to understand the text base. The text reading is based on understanding it.

The parsing of sentence pattern and lexis is important to create a perfect representation of the meaning of a text. It is also representing the cognitive process and the text. That interact the status model (Nasajji, 2002). It is also to get knowledge and assigns for great deeds. The reader can interpret the text because of this. The vocabulary and syntax in a text are important and they may differ according to the culture. The knowledge of text will give "Complete picture" of the text. It also called "Situation model".

The C-I involves in creating correct text base and analysis the process of background knowledge. The reader must interpret and create situation model. The role of top-down and bottom-up are explicit in C-I model. The models are not saying about the processes of understanding.

(Stanovich, 2000 [1980], 2000 [1984]) The model of understanding explains the process of top and bottom. The understanding of a text has many levels and it is regarding the words and assumptions. There are many types of assumptions and firstly that "Recognition takes place via the simultaneous amalgamation of information from many different knowledge sources" [2000 (1980), p.49]. Some topic has higher and some have lower knowledge.

Syntactic skill is very important and there is some assumption that "Deficiencies at any level in the processing hierarchy can be compensated for by greater use of information from other levels irrespective of the level of the deficient process". The semantic and syntactic analysis is playing a vital role in understanding the text. The top-down and the bottom-up based on many processes.

ESL also contributes many skills to understanding the text (Carrell's [1984]). Plans define as "Interacting knowledge structures" (Rumelhart & Ortony, 1977, 100; in Carrell, 1983). The schema is a structure of knowledge and it will useful like how the menus in the restaurants useful to know about the dishes.

Carrell differentiates the two various schemata as content and formal schemata. The content schemata refer to the topic of the text and the formal schemata define that "Knowledge of the rhetorical structures of different types of texts". The knowledge based on a text is very important to a reader. Jiang and Grabe (2007) talked about the text structures and organization of it. The students need the L2 guidance for reading play and texts according to Carrell (1984). Bernhardt's (1991, 2000, and 2011) is also talked about the L2 and it focuses. It has some awareness of the model of understanding. She talks about the L2 reading ideas and reading cognition. A comprehension has many views on literature (Koda, 2005). She has many views on language learning. The US college students learn English as well as other foreign languages. She thought that L1 reading must improve the L2 reading. And remaining of reading may improve because of motivation and other things. There are some from problem went it come to conclusion.

L2 readers are made some mistakes in the contribution and the study must need the terms of the C-I textual understanding. The L2 reading students do well when they understand the concept. The background knowledge is very important while teaching. "Difficult if not impossible" it refers to the new skill of texts. L2 reading processes need some correct process rather than provide background knowledge of the text.

The model of understanding consists the formal and content schemata in the schemata knowledge, in Widdowson's (1984; in Lahuerta, 2002). The reading full texts give the most significant knowledge of the language. They are hard and complex. It also connects with sounds and letters. The think-aloud protocols are mainly used in it and process a language. In the 1970s to 1990s the reading and understanding text was taken by the scholars. They understand it clearly and labelled cognitive (Hiebert & Raffael, 1996). The scholars were doing some mental activities and interact. So that they get the point of text easily. The schools are giving programs to these scholars to improve them. Widdowson (1984) says about the skills and plans. Which he calls "Interpretive processes" and the texts are connected knowledge (Lahuerta, 2002).

L1 readers give some meta-review and Stanovich (2000 [1980]) found that "Skill at recognizing words is strongly related to the speed of initial reading acquisition... among adults

word recognition efficiency accounts for a sizable amount of variance in reading ability... word recognition skill predicts reading comprehension ability in adults". Mitchell and Green (1978 in Stanovich, 1980) discovered that [in Stanovich, 2000 (1980), p.26] "Reading rate is more dependent on the speed with which a reader can recognize words and construct a representation that on the ability to use predictions to facilitate word recognition".

Better readers can understand the context easily and guess the words easily. Some readers are expert in understanding the text because of the comprehension of words. Here some example Biemiller (1970 in Stanovich, 1980) and Weber (1970 in Stanovich, 1980) is found that best learners of L1 who understands the words and letters clearly. And Juel (1980 in Stanovich, 1980) talks about the errors in second graders and third graders. Poor readers have no guess of the meaning of the text and understanding of it. L2 readers understand very well and they have graphic facts and reports. L2 is having lexicon and comprehension (Grabe, 2009).

The readers can read and understand the text. We can get assertion and segments of the text, Duckett (2003). The supporters do not study the whole thing according to Pressley (2004). The children can understand some few words in the text by the pictures. The L1 English learners are careful in reading and able to understand the text. The text focuses on some few words and the presence of pictures. Because of this, the young children can read the text easily, in results of Stanovich (2000) and Grabe (2009).

The EFL learners are against the schema and Goodman's model, McNeill (2011). Topdown models are used to understand the constructed meaning. 20 college-level learners of EFL report a study. The paper consists the prior research and EFL learners as low or high commands in the language. Their need background knowledge and text processing (Calpham, 1996; Yuet Hung Chan, 2003; Al-Shumameiri, 2006; all in McNeill, 2011). EFL learners of L2 are efficient at languages and reconstruct the meaning. Linguistic do not need background knowledge (Carrell, 1991; Al-Shumaimeiri, 2006; both in McNeill, 2011).

McNeill says that the knowledge of EFL readers is highly helpful to them to understand the background and strategies of language learning. The EFL learners have good reading skills and a specific kind of strategy. Self-questioning is very important to a reader and it needs some understanding of the text. The background knowledge of text used to help the questioning attitude of the readers and it also helps to analyse the text. Bernhardt's (2003) asserts that L2 readers mostly do not use the background understanding. Good L1 readers also need the understanding of a text and using background understanding. These studies do not show off the careful language analyzing in the understanding of language.

Goodman's admired and approaches the skills and the understanding strategies of language and it would not be taught clearly. Goodman says that the understanding and strategies of language cannot teach by others. It must need continuous studies and then only L1, L2 readers get the clear meaning of the text. The processes reading a text must be explicit and interpret by the readers. The students must get the benefit because of this clear understanding of the text.

Pressley and Afflerbach (1994) claim that good L1 learners get strategies correctly. When L1 readers get a good knowledge of a text, they will be good analyses of the text. A research says that the readers become employed because of their skills. It is based 38 think-aloud research studies. They are interpretative and have the richness of text bases knowledge.

Like L1 readers, L2 readers also do their work properly and without seeing the background knowledge of texts they come to their own conclusion according to the Alptekin (2006). The EFL learners have some strategies and when they read the English text they can understand it clearly because their culture resembles English culture. They may have some problem with an understanding text but they have the clear idea about the text.

The teachers wanted to do something different to the slow learners of the language. They experimented with the students who have a problem in understanding the texts, Palincsar and Brown (1984). They conducted some tests like paraphrasing, summarizing, writing answers for the questions. Before the students started to write the teachers gave some models to them. Then they wrote explicitly and trained well. This investigation of students results (Song, 1998; Zhang, 2008 in McNeil, 2011), lead us to Taylor et al (2006) end with L2 learners understanding and strategies. This structure developed by linguists like M.A.K Halliday and Michael Hoey from British. It relates to Jiang & Grabe, 2007, 2010. The structure awareness helped to understand the text for both learners L1 and L2.

Stanovich (2000[1980]), it consists meta-review and helps the adult L1 readers. He found that "Skill at recognizing words is strongly related to the speed of initial reading acquisition... among adults word recognition efficiency accounts for a sizable amount of variance in reading ability... word recognition skill predicts reading comprehension ability in adults", Mitchell and Green (1978 in Stanovich, 1980) find that "Reading rate is more dependent on the speed with

which a reader can recognize words and construct a representation than on the ability to use predictions to facilitate word recognition." It is in the Stanovich, 2000[1980], p.26.

Goodman's says that the expert readers use context more. Weber (1970 in Stanovich, 1980) and Biemiller (1970 in Stanovich, 1980) say that the good reader must use more words and letters. L1 readers, who have the first grade, have more attention to words and letters. Juel (1980 in Stanovich, 1980) says that the third and second graders also use the words correctly. The poor readers are only guessing the words and meanings. A good reader must have the good understanding of the text. L2 readers can understand the text easily (Grabe, 2009)

L1 readers of different ages were investigated by Meyer, Brandt and Bluth (1980) and Meyer and Poon (2001) to know about the explicit training of the text structure. They used many structures like a comparison, description, problem-solution and collection [Meyer, Brandt, & Bluth: 74]. L2 readers need the comprehension and structure of the text. They have to understand about the segment and structure of a text. Carrell 1984; Lahuerta, (2002) talks about the effects of structure awareness of L2 understanding. They focus on the text structure awareness.

Carrell (1984) also investigates the model and schemata. Her reports on the rhetorical organization and experimental study on ESL readers. 80 college-level proficient readers who came from four various language groups like Arabic, Spanish, Oriental and other languages. This experiment has four versions of passage. English text structure represents problems, comparison and descriptions. The experiment was done in two sessions. The subjects who utilize the structure of the text and give more information. The Spanish speakers mainly did the subjects, 8 out of 21. There is some similarity between English and Spanish speakers because of the subjects.

Lahuerta's (2000) claims the quasi-experimental to know about the text structure use. It is the tool to improve EFL readers' to read and understand. Her study on the subjects consists 60 ESP speakers of Spanish at the college level. Carrell 's study also included in it. Because of this, she came to know that the disorganized text did not give support to understand the text but the organized text can help the reader to understand the text easily.

Tang (1992) about the quasi-experimental study and effect on graphic representation. The students of ESL (ages 13-14) took for the test. They gave some tests to them to understand the text. The graphic organizer represents the content of the text. They gave some key vocabulary and asked the students to understand the text. This is better and great than the control group. The graphic organizer aids the student's comprehension.

Vakilifard and Armand (2011) claim a graphic organizer study and they call it as "Carte Conceptuelle". It different from graphic organizers because of some structural differences. The experiment consists 69 college-age readers and they had French as second language. It is similar to the Tang (1992). But both have some difference in the effects and comprehension. The students in this group had a good understanding. The experimental group got transfer effects for literal comprehension.

Jiang and Grabe (2010) say about an experiment which talks about the effectiveness of graphic organizers (DS-GOs) and text structures to understand the ESL. The students who came from 76 college readers of English as well as another language. It compared the understanding and vocabulary of two different groups. The teaching methods of them recognized because of text structures. The organizer matched the text structure because of the visual representation. The result shows that the experimental group's score better than the tow control groups. The two control groups have different because there are no statistical variations between them.

All written recalls were scored for the quantity and quality (in terms of top-level vs. lowerlevel ideas) of ideas recalled, with a reported interrater reliability of r = .96. In addition, the organization of each subject's recall was noted to check for subjects' use of the original top-level structure in the text in writing their recalls. Results of Chi-square and one-way ANOVA tests with the treatment as independent variable and text structure recognition, text structure recall use and posttest and delay posttest score (quantity and quality) as dependent variables, showed significant differences in terms of recognition and use of top-level structures on the experimental group. In addition, a significant difference in posttest scores was found between the experimental and control groups in favor of the former, which appears to have held for the delayed posttest as well (although type of test employed was unspecified and statistics were not presented). Overall, the contribution of this study supports the notion that the explicit instruction in the top-level structures of English texts can enhance ESL students' comprehension and recall. It appears that based on the evidence presented in this conclusion is supported for the teaching of this particular strategy (use of knowledge of text structure) for strategy-based instruction as an instructional approach.

However, this study has been questioned for the following aspects. First, this study didn't specify how subjects were taught to actually use a text-structure based strategy (procedural

knowledge), as opposed to merely being taught about text structure. Second, only 5 days of one hour per day training is a rather short training period (although this does appear to have produced significant results). Third, having subjects perform written recalls in their L2 rather than in their first language produced a potential violation of test content validity and likely had potential for producing confounding effects, although no differences were indicated between experimental groups on the pretest. Forth, the sample size (N= 25) of this study is small.

Modeled closely to Carrell's (1985) study with ESL students discussed above, Raymond (1993) studied the effects of text structure strategy training with French as a second language learners' recall. Forty-three native English speakers of French as a second language of highintermediate proficiency levels were in the study. They ranged in ages from 18 to 23 and had completed five semesters (a total of 260 hours) of college level language study at a large Canadian university. Participants in the study volunteered to participate, but were paid for the study. Subjects were divided into one experimental and one control group and were determined to be of equal proficiency by means of a pre-treatment standardized test. The study took place outside of the regular language class and was conducted by an outside instructor. During five one-hour training sessions spread over a two-week period, the experimental group received strategy training in the identification and use of five French top-level structures found in expository texts (description, sequence, causation, problem solution, and comparison) and accompanying signal words in order to promote recall. Instruction for the structure was designed to be metacognitive and included explicit instruction in: what was the strategy, why the strategy should be learned, how to use the specific strategy and when to use it. Short quizzes were provided to help the subjects to evaluate the use of the structure strategy. During the five sessions, the experimental group received strategy instruction, while another instructor taught the control group using the same texts as the experimental group for the same amount of time, but with standard questions and answers tasks. Data was gathered by means of pre- and post- tests on which subjects read one of two texts with the problem-solution top-level structure and determined to be roughly equivalent in terms of difficulty through readability measures, counterbalanced and randomly distributed so that half of the subjects read a given text on the pretest and the other half read the same text on the posttest. When subjects had finished reading the text, they answered 10 Likert-scale questions regarding their perceptions of text difficulty, memorability, affect, interest, background

knowledge, and clarity of argument, organization, recommendations, content, and discussion of content (Raymond, 1993). After this was completed, subjects placed the text in an envelope and then recalled in L1 as much of the information in the text as possible in writing. Each subject's text reading time and recall writing time were also recorded. The posttest, given one month after the end of training, used the same format as the pretest.

Recalls were scored using an idea unit protocol, with scores calculated as ratios with the sum of the number of idea units present in a recall divided by the total number of units present in the original for each text. Because it was found that some of the subjects in both the experimental and control group "spontaneously" used the text top-level structure in their pretest recalls (that is, before the experimental group received explicit training on the structure strategy), it was determined that there was a difference in subjects' prior knowledge in the use of the text structure and signal words. Consequently, an analysis of covariance was first conducted on the data, with treatment condition as the independent variables, posttest recall score as dependent variable, and pretest recall score as a covariate. A mixed design repeated measure ANOVA was then performed with treatment, text, and text time (pretest stands for "Time I" while posttest stands for "Time II") as independent variables, and text recall mean (adjusted for pretest) as the dependent variable.

In contrast to Carrell's (1985) study, results of the analysis showed no main effect for treatment between groups. However, a within-group two-way interaction was found between text and time and a three-way within-group interaction was found between treatment, text, and time. That is, on the pretest, the two texts produced significantly different mean recall scores (analysis of difficulty and prior knowledge Liker items revealed significant differences between texts), which was also true on the posttests, but the text means reversed their relative position. This means that there was a higher recall mean for the more difficult text on the posttest and a corresponding drop for the easier text. For the experimental group, Raymond interpreted this interaction as the result of subjects' need to consciously apply a text structure strategy on the more difficult text in order to comprehension and recall it and it was not the case with the comparatively easier text. For the most part, no major problems were noted for this study. However, as in the case of other intervention studies, the training period was short and may have contributed to the absence of main instructional effects. Besides, Raymond didn't offer any information regarding its

validity in terms of the measurements used in the study. Moreover, using idea unit as a measurement of students' reading comprehension might not really be accurate since idea unit is affected by memory. Furthermore, the sample was selected through cluster randomization and thus more participants were needed. However, a significant gain was found on one text and as noted above, it was actually found to be the one that was more difficult. Findings from this study also make clear that reading comprehension is a complex interaction between reader, test, and task and that instruction in reading strategies may not offer quick solutions.

In the study, students were reported to possess medium use of strategies on reading. That is, students adapted strategies to help comprehend written text, either intentionally or spontaneously. It comes to an agreement that better readers are often strategic and skilful (Celce-Murcia, 2001; Tompkins, 2005). Besides, since the 1970s, a number of models and strategies of reading comprehension have been developed. Research for the National Reading Panel has identified five effective reading comprehension strategies which are "summarization, self-questioning, story structure instruction, graphic and semantic organizer, and comprehension monitoring" (Taylor, et al., 2006, p.305). To this point, Brown and Palincsar (1989) provided four reading strategies, called reciprocal teaching, that should be taught to students; summarizing, predicting, clarifying, and asking questions. According to the research findings, reciprocal teaching (RT) has been reported a significance on promoting metacognition (Huang, 1996; Yang, 2002) and reading comprehension. Thus, teachers in Kosovo must use specific strategies to make EFL learners to read English comprehension.

### **5.2** Conclusion

This study has identified that EFL students of Kosovo universities possess considerable amount of awareness over metacognitive strategies while reading English comprehension. The study achieved the research objectives by answering the research questions through survey analysis among 473 students pursuing their education in five different Kosovo universities. This study was

carried out in part because the researchers were unable to find studies which examine the effectiveness of metacognitive reading strategies on the low reading achievers by experiment, especially in Kosovo. The results have implications for EFL teachers, which should motivate them to provide their learners with reading strategy training which can lead to better achievement in reading comprehension. Thus, if readers are aware of what is involved in the reading process and what is necessary to read effectively, then it is possible for them to take steps to meet the demands of the reading situation. The results of the current study have implications for language learners, encouraging them to become more conscious of their own strategy use.

### **5.3 Recommendation and Study limitations**

### 5.3.1 Recommendation

The study showed that Kosovo university students seem to use larger variety of reading strategies when reading authentic expository/technical texts than when reading authentic narrative texts, and they seem to use certain reading strategies, such as 'previewing text before reading', 'underlining information in text', 'using context clues', 'going back and forth in text', 're-reading for better understanding', and 'analyzing and evaluating what is read', more frequently when reading authentic expository/technical texts than when reading authentic narrative texts. Therefore, it is suggested that Kosovo EFL teachers help their students who are not familiar with authentic expository/technical English texts be aware that they might need larger variety of reading strategies than they used to employ, and they might need certain reading strategies that they have not often employed previously in order to comprehend the authentic expository/technical texts.

Especially university freshmen, who are forced to read authentic expository/technical English texts as soon as they enter university, might have problems to comprehend the texts with their linguistic knowledge and reading strategies that used to be effective enough for nonauthentic texts. After all, Kosovo EFL teachers should help the students recognize that they might have to be active strategic reader to comprehend their demanding authentic expository/technical texts and to achieve academic success in their university live.

#### 5.3.2 Limitations of the study

#### This study has some limitations which are discussed below:

- 1. Less sample size is remarkable limitation of the present study.
- 2. The sample size chosen for experimental and control group is very less to generalize to the population data set.
- 3. Time is another limitation
- 4. The nativity background and language proficiency as well as number of languages known by the students were important dependent factors which are not included in this experimental study.

# REFERENCES

- Abbott, M. L. (2006). ESL reading strategies: Differences in Arabic and Mandarin speaker test performance. Language Learning, 56(4), 633-670.
- Adams, M.J. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: Massachusetts Institute of Technology.
- Aebersold, J.A. & Field, M.L. (1997). From reader to reading teacher: Issues and strategies for second language classrooms. Cambridge University Press.

Alderson, J.C. (1984). Reading in a foreign language. (Ed.) Longman.

Alderson, J.C. (2000). Assessing reading. Cambridge, UK: Cambridge University.

Almasi, J.F. (2003). Teaching strategic processes in reading. New York: Guilford Press.

- Allen, M.B. & McLaughlin, M. (2002). Guided comprehension. A teaching model for grades 3-8. Newark, DA: International Reading Association.
- ALLEA All European Academies c/o Berlin-Brandenburg Academy of Sciences and Humanities Jaegerstr "The European Code of Conduct for Research Integrity" Revised Edition. Published in Berlin by. 22/23 10117 Berlin Germany
- Aghaie R., Zhang L. J. (2012): Effects of explicit instruction in cognitive and metacognitive reading strategies on Iranian EFL students' reading performance and strategy transfer. Instructional Science, Volume 40, Number 6, pp. 1063 1081.
- Anderson, N.J. (1991). Individual differences in strategy use in second language reading and testing. Modern Language Journal, 75, 460-472.

- Anderson, N.J.(1985). Role of the readers' schema in comprehension, learning, and memory. In Singer & R.B. Ruddell (Eds.), Theoretical models and processes of reading (pp. 372-384). Newark, NJ: International Reading Association.
- Anderson, R.C., & Freebody, P. (1981). Vocabulary Knowledge. In J. Guthrie (Ed.), Comprehension and teaching: research reviews (pp.77-117). Newark, DE: International reading association.
- Anderson, R.C., & Pearson, P.D. (1984). A schema-theoretic view of reading comprehension. In P.D. Pearson(Eds.), Handbook of reading research (pp.225-291). New York: Longman.
- Anderson, R.C., & Pearson, P.D. (1993). A schema-theoretic view of basic process in reading comprehension. In Carrell, P.L., Devine, J. & Eskey, D.E. (Eds.), Interactive approached to second language reading (pp. 37-55). Cambridge: Cambridge University Press.
- Anderson, N.J. (2002). The role of metacognition in second language teaching and learning. ERIC Digest, April, 2002, 3-4.
- Anderson, N.J. (2003). Metacognitive reading strategies increase L2 performance. The Language Teacher Online, 27(7).
- Anderson, N.J. (2003). Scrolling, clicking, and reading English: online reading strategies in a second/ foreign language. Reading in a Foreign Language, Vol. 3, No. 3.
- Anderson, N. J. (2002). "The role of metacognition in L2 teaching and learning," ERIC Digest. Retrieved August 7, 2004 from http://www/-ericdigests.org/
- Anderson N. J. (2004): Metacognitive Reading Strategy Awareness of ESL and EFL Learners. The CATESOL Journal, Volume 16.
- Andreassen, R. (2014). «Undervisning som fremmer leseforståelse». In: Lundetræ, K. og Tønnessen, F. E. (red). Å lykkes med lesing. Tidlig innsats og tilpasset opplæring. Oslo: Gyldendal Akademisk.

- Andrusyszyn, M. A. & Davie, L. (1997). "Facilitating reflection through interactive journal writing in an online graduate course," Journal of Distance Education, 12 (1-2), pp. 103-126.
- Auerbach, E. R., & Paxton, D. (1997). "It's not the English Thing:" Bringing reading research into the ESL classroom. TESOL Quarterly, 31, 237-261.
- Autrey, J. H. (1999). Effects of direct instruction and precision teaching on achievement and persistence of adult learners. Dissertation Abstracts International, 60 (06), 1863A. (UMI No. 9932955)
- Baker, L (2002). Metacognition in comprehension instruction. In C. C. Block & M. Pressley (Eds.), Comprehension Instruction: Research based best practices, 77-95, New York: Guilford.
- Baker, L. (2004). Reading comprehension and science inquiry: Metacognitive connections. In W. Saul (Ed.), Crossing borders in literacy and science instruction: Perspectives on theory and practice (pp. 239-257). Newark, DE: International Reading Association.
- Baker, L. (2005). Developmental differences in metacognition: Implications for metacognitively oriented reading instruction. In S. Israel, C. C. Block, K. L. Bauserman, & K. Kinnucan-Welsch (Eds.), Metacognition in literacy learning: Theory, assessment, instruction, and professional development (pp. 61-79). Mahwah, NJ: Erlbaum.
- Baker, L. & Brown, A. (1984). Mrtacognitive skills and reading. In P.D. Pearson, R. Barr. M.L. Kamil, & P. Modrnthal, (Eds.). Handbook of Reading Research (pp. 353-394). New York: Longman.
- Barber, Theodore Xenophon, (1973). "Pitfalls in research: nine investigator and experimenter effects", in Robert M. W. Travers (ed.), Second handbook of research on teaching (Chicago: Rand McNally), pp. 382-404.
- Bartlett, F.C. (1932). Remembering: A study in experimental and social psychology. Cambridge: Cambridge University press.

- Barnett, M. A. (1988). Reading through context: How real and perceived strategies use affects L2 comprehension. Modern Language Journal, 72, 150-162.
- Baumann, J.F. and Kameenui, E.J. (1991). Research on vocabulary instruction: Ode To Voltaire. In J. Flood, J.J. Lapp, and J.R. Squire (Eds.), Handbook of research on teaching the English language arts (pp. 604-632). New York: MacMillan.
- Baumann, J., Jones, L., Seifert-Kessell, N. (1993). Using think-alouds to enhance children's comprehension monitoring abilities. The Reading Teacher, 47 (3), p. 184-193.
- Bernat E., Gvozdenko I. (2005): Beliefs about Language Learning: Current Knowledge, Pedagogical Implications, and New Research Directions. TESL-EJ, Volume 9, Number 1, available at: http://tesl-ej.org/ej33/a1.pdf
- Bidabadi, F. S., Yamat, H. (2013). EFL learners' perceptions towards meta-cognitive strategy use in English language listening. GEMA Online Journal of Language Studies, Volume 1, Number 3, pp. 31 – 43.
- Birjandi P., Rahimi A. H. (2012): The Effect of Metacognitive Strategy Instruction on the Listening Performance of EFL Students. International Journal of Linguistics, Volume 4, Number 2, pp. 495 – 517.
- Blakey, E., & Sheila, S. (1990). "Developing metacognition," ERIC Digest. Retrieved August 7, 2004 from http://www.ericfacility.net/ericdigests/ed327218.htm
- Borkowski, J., Carr, M., & Pressly, M. (1987). "Spontaneous strategies use: Perspectives from metacognitive theory," Intelligence, 11, pp. 61-75.

Bernhardt, E.B. (1991). Reading development in a second language. Norwood, NJ: Ablex.

- Bernhardt, E.B. (2003). Challenges to reading research from a multilingual world. Reading Research Quarterly, 38, 112-117.
- Bernhardt, E.B. (2005). Progress and procrastination in second language reading. Annual Review of Applied Linguistics, 25, 133-150.
- Benedetto, R. A. (1984). A psycholinguistic investigation of the use of top-level organizational strategies in first and second language reading: Five case studies. Dissertation Abstracts International, 45. 2049-A.
- Black, D. J. (1995). An investigation into the knowing and regulating comprehension behaviors of skilled and less skilled seventh grade readers. Masters Abstracts International, 33 (03), 717. (UMI No. MM92150)
- Block, E. (1986). The Comprehension strategies of second language readers. TESOL Quarterly, 20, 463-494.
- Block, E.L. (1992). See how they read: Comprehension monitoring of L1 and L2 readers. TESOL Quarterly, 26, 2.
- Brantmeier, C. (2002). Second language reading strategy research at the secondary and university levels: Variations, disparities and generalizability. The Reading Matrix: An International Online Journal, 3 (2), 1-14. http://www.readingmatrix.com/current.html
- Brooks, J. G., & Brooks, M. G. (1993). In search of understanding: The case for constructivist classrooms. Alexandria, VA: Association for Supervision and Curriculum Development.
- Brown, T.S. (1991). A comparison of three learning strategies for ESL vocabulary acquisition. TESOL Quarterly, Vol.25, No.4.
- Brown, A.L., Campione, J.C., & Day, J.D. (1981). Learning to learn: On training students to learn from texts. Educational Researcher, 10, 2, 14-21.

- Brunning, H. R. Schraw, G. J. & Ronning, R. R. (1999). Cognitive psychology and instruction (3rd Ed.). NJ: Prentice-Hall.
- Calero-Breckheimer, A., & Goetz, E.T. (1993). Reading strategies of biliterate children for English and Spanish texts. Reading Psychology, 14, 177-204.
- Casanave, C.P. (1988). Comprehension monitoring in ESL reading: a neglected essential. TESOL Quarterly, 22, 283-302.
- Carrell, P.L. (1983). Three components of background knowledge in reading comprehension. Language Learning, 33, 183-207.
- Carrell, P. L. (1985). Facilitating ESL reading by teaching text structure. TESOL Quarterly, 19, 727-752.
- Carrell, P. L. (1989). Metacognitive awareness and second language reading. Modern Language Journal, 73, 120-134.
- Carrell, P.L. (1991). Second language reading: reading ability or language proficiency? Applied Linguistics, 12, 159-179.
- Carrell, P.L., & Eisterhold, J.C.(1993). Schema theory and ESL reading pedagogy. In P.L. carrel, J. Devine, & D.E. Eskey(Eds.), Interactive approaches to second language reading (pp. 73-92). Cambridge: Cambridge university press.
- Carrell, P.L., Devine, J. & Eskey, D.E. (Eds.) (1993). Interactive approached to second language reading. Cambridge: Cambridge University Press.
- Carrell, P. L., Pharis, B. G., & Liberto, J. C. (1989). Metacognitive strategy training for ESL reading. TESOL Quarterly, 23, 647-678.

- Carrell, P.L., Gajdusek, L., & Wise, T. (1998). Metacognition and EFL/ESL reading. Instructional Science, 26, 97-112.
- Cameron, D., Frazer, E., Harvey, P., Rampton, M. B. H., & Richardson, K. (Eds.). (1992). Researching language: Issues of power and method. London, UK: Routledge.
- Canagarajah, A.S. (1993). Critical ethnography of a Sri Lankan classroom: ambiguities in opposition to reproduction through ESOL. TESOL Quarterly 27, 4.
- Carriedo, N., & Alonso-Tapia, J. (1995). Comprehension strategy training in content areas. European Journal of Psychology of Education, 10(4), 411-431.
- Chamot, A.U. (2004). Issues in language learning strategy research and teaching. Electronic Journal of Foreign Language Teaching, 1(1). 14-26. Retrieved September 27, 2007, from http://eflt.nus.edu.sg/v1n2004/chamot.htm
- Chamot, A.U. (2005). Language learning strategy instruction: Current issues and research. Annual Review of Applied Linguistics, 25, 112-130.
- Chamot, A.U., & Keatley, C.W. (2003). Learning strategies of adolescent low-literacy Hispanic ESL students. Paper presented at the 2003 Annual Meeting of the American Educational Research Association, Chicago, IL.
- Chamot, A.U., & O'Mallety, J.M. (1994). Children's learning strategies in language immersion classrooms. Modern Language Journal, 83, 319-338.
- Chia, H.L., & Chia, H.U.(2001). English reading concepts held by Taiwanese EFL readers. English Teaching and Learning, 26, 23-44.
- Cheng, C. K. (1998) A descriptive study of reading strategies used by Chinese ESL students from Taiwan, R. O. C. Unpublished doctoral dissertation, University of Kansas.

- Chern, C.L. (1993). Chinese students' word-solving strategies in reading in English in T. Huckin, M. Haynes, & C.Coady (Eds.), Second language reading and vocabulary learning (pp.67-85). Norwood, NJ: Ablex.
- Chern, C.L. (2003). English language teaching in Taiwan today. In H.W. Kam & Y. L.Wong (Eds.), English language teaching in East Asia today: Changing policies and practices (pp. 427-439). Singapore: Times Academic Press.
- Choochom, O. (1995). Text comprehension as a function of motivational orientation and reading strategy. Dissertation Abstracts International, 55(07), 1874A. (UMI No. 9431605)
- Chaplin, M (1982). Rosenblatt revisited: The transaction between reader and text. Journal of Reading, November, 150-154.
- Clarke, M.A. (1980). The short circuit hypothesis of ESL reading: or when language competence interferes with reading performance. Modern Language Journal, 64, 203-209.

Clark, M. (1979). Reading in Spanish and English. Language Learning, 29, 121-150.

Clay, M. (1991). Becoming literate: The construction of inner control. Portsmouth, NH: Heinemann

- Clark, B. L. (1985). "Talking about writing: A guide for tutor and teacher conferences," Ann Arbor: University of Michigan Press.
- Cook, V. (2001). "Using the first language in the classroom." Canadian Modern Language Review 57(3): pp 402-23.

Cook, V. (2008). Second Language Learning and Language Teaching. Oxford: Oxford University Press.

Council of Europe. (n.d.). Common European Framework of Reference for languages: Learning, teaching, assessment. Strasbourg: Language Policy Unit. Retrieved from:

http://www.coe.int/t/dg4/linguistic/source/framework\_en.pdf (retrieved 05.05.2016).

- Coady, J. (1979). A psycholinguistic model of the ESL reader. In R. Mackay, B. Barkman, & R.R. Jordan (Eds.). Reading in a Second Language (pp.5-12). Rowley, MA: Newbury House.
- Cohen, A.D. (1990). Strategies in second language learning: Insight from research. In R. Phillipson. E. Kellerman, L. Selinker, M.S. Smith, and M. Swain (eds,): Foreign/Second Language Pedagogy Research. Cleve: Multilingual matters.
- Cohen, A.D. (2003). The learner's side of foreign language learning: Where do style, strategies, and tasks meet? International Review of Applied Linguistics, 41, 279-291.
- Cohen, A.D. (2007). Coming to terms with language learner strategies: Surveying the experts. In A.D.Cohen & E. Macaro (Eds.), Language learner strategies: Thirty years of research and practice (pp. 29-46). Oxford, England: Oxford University Press.
- Cornford, I.R. (2002). Learning-to-leran strategies as a basis for effective lifelong learning. International Journal of Lifelong Education, 21, 4, p.357-368.
- Cook, V. (2001). Using the first language in the classroom. Canadian Modern Language Review, 57, 402-423.
- Cooper, J. M. (1998). An exploratory study of the metacognition of verbally gifted/learning disabled learners with and without reading difficulties. Dissertation Abstracts International, 58(12), 4559A. (UMI No. 98183223)
- Cordero-Ponce, W.L. (2000). Summarization instruction on foreign language comprehension, Reading Research and Instruction, 39 (4), 329-350.
- Cziko, G.A. (1980). Language competence and reading strategies: A comparison of first and second language oral reading errors. Language Learning, 30, 101-114.

- Dabarera C., Renandya W. A., Zhang L. J. (2014): The impact of metacognitive scaffolding and monitoring on reading comprehension. System: An International Journal of Educational Technology and Ap-plied Linguistics, Volume 42, pp. 462 – 473.
- Day, R.R., & Bamford, J. (1998). Extensive reading in the second language classroom. Cambridge University press.
- Daniels, D. (2002). "Metacognition and reflection," Retrieved June 22, 2004 from http://dennisgdaniels.com
- Doughty, C. & Williams, J. (2008). "Pedagogical choices in focus on form." In: Doughty, C. &Williams, J. (Eds.). Focus on form in classroom second language acquisition. Cambridge University Press. pp 197-261.
- DiVesta, F. J., Hayward, K. G., & Orlando, V. P. (1979). "Developmental trends in monitoring for comprehension," Child Development, 50, pp. 97-105.
- Eskey, D. E. (1988). Holding in the bottom: An interactive approach to the language problems of second language readers (pp93-100).In Carrell.
- Eskey, D. E. (2005). Reading in a second language. In E. Hinkel (Ed.), Handbook of research in second language teaching and learning (pp. 563-580). Mahwah, NJ: Lawrence Erlbaum Associates.
- Farahian M. (2015): Assessing EFL learners' writing metacognitive awareness. Journal of Language and Linguistic Studies, Volume 11, Number 2, pp. 39 – 51.
- Flavell, J. (1976). "Metacognitive aspects of problem solving. In L. G. Resnick (Ed.)," The nature of intelligence (pp. 231-236). Hillsdale, NJ: Erlbaum.

- Flavell J. H. (1979): Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. American Psychologist, Volume 34, pp. 906 911.
- Flavell, J. (1979). "Metacognition and cognitive monitoring," American Psychologist, 34, pp. 906-911.
- Frederikesen, J. R. (1980). Component skills in reading: measurement of individual differences through chronometric analysis. In P. F. R. Snow, & W. Montague (Ed.), Cognitive process analyses of aptitude (pp. 105-138). Hillsdale, NJ: Erlbaum Associates, Inc.
- Fong, Y. S. (2002, December). "Heightening EFL students' metacognitive awareness through learner diaries," Paper presented at the 13th World Congress of Applied Linguistics, Singapore.
- Garcia, G. E. (2000). Bilingual children's reading. In M. L. Kamil, et. al. (Eds.), Handbook of reading research (pp. 913-834). Mahwah, NJ: Lawrence Erlbaum.
- Garner, R. (1987). Metacognition and reading comprehension. Norwood, NJ: Ablex.
- Gates, A. (1949). Character and purpose of the yearbook. In N. Henry (Ed.), The forty-eighth yearbook of the National Society for the Study of Education: Part II. Reading in the elementary school (pp. 1-9). Chicago: University of Chicago Press.
- Gardner, H. (1993). Creating Minds. New York. Basic Books.
- Gass, S. M. & Selinker, L. (2008). Second Language Acquisition. An Introductory Course. London: Routledge.
- Goodman, K. (1967). Reading: A psycholinguistic guessing game. Journal of the Reading Specialist, 6, 126-135.

Grabe, W. (1991). Current Developments in Second Language Reading Research. TESOL

QUARTERLY, 25(3), 375-406.

- Grabe, W. (2009). Reading in a Second Language: Moving from Theory to Practice. New York: Cambridge University Press.
- Green, S., & Sutton, P. (2003). What do children think as they plan their writing? Reading Literacy and Language, April, 32-38.

Green, S. B., & Salkind, N. J. (2005). Using SPSS for Windows and Macintosh: Analyzing and Understanding Data (4th ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall.

- Guthrie, J., & Wigfield, A. (1999). How motivation fits into a science of reading. Scientific Studies of Reading, 3, 199-205.
- Gough, P. and Tunmer, W. (1986). "Decoding, reading, and reading disability". Remedial and Special Education, 7, 6–10.
- Guthrie, J. T. & Wigfield, A. (2000). "Engagement and motivation in reading." Handbook of reading research, 3, pp. 403-422.
- Guthrie, J. T., Wigfield, A. & Perencevich, K. C. (2004a). "Scaffolding for motivation and engagement in reading". In: J. T. Guthrie, A. Wigfield & K. C. Perencevich (Eds). Motivating reading comprehension: Concept oriented reading instruction (pp. 55-86). Mahwah, NJ: Erlbaum.
- Gambrell, L. B., & Heathington, B. S. (1981). Adult disabled readers' metacognitive awareness about readingtasks and strategies. Journal of Reading Behavior, 13, 215-222.
- Gordon, C., & Lu, Y. (2008). "I hate to Read-Or Do I?" Low Achievers and Their Reading. Research Journal of the American Association of School Librarians, 11, 1-15.

Haberlandt, K. (1988). Component processing in reading comprehension. Reading Research: Advances in Theory and Practice, 6.

Hadley, A. O. (2001). Teaching language in context (3rd ed.). Boston, MA: Heinle & Heinle.

- Hoover, W. A., & Gough, P. B. (1990). The Simple View of Reading. Reading and Writing: An Interdisciplinary Journal, 2, 127-160.
- Hosenfeld, C. (1977). A preliminary investigation of the reading strategies of successful and Unsuccessful second language learners. System, 5(11), 110-123.
- Hagtvedt, B. (2009). "Eksperimenterende skriving i skriftspråklig utvikling». In Frost, J. (Red). Språkog leseveiledning i teori og praksis. (Kap. 10). Latvia: Cappelen Damm AS.
- Hong-Nam, K., Levell, A. G., & Maher, S. (2014). The Relationships Among Reported Strategy Use, Metacognitive Awareness, and Reading Achievement of High School Students. Reading Psychology, 35, 762-790. http://dx.doi.org/10.1080/02702711.2013.807900
- Jacobs, J. E., & Paris, S. G. (1987). Children's metacognition about reading: Issues in definition measurement, and instruction Educational Psychologist, 22, 255-278
- Karbalaee, K. S. (2012). Does reading strategy use predict and correlate with reading achievement of EFL learners? International Journal of Research Studies in Language Learning, 2(2), 29-38.
- Karbalaei, A. (2010). A Comparison of the Metacognitive Reading Strategies Used by EFL and ESL Readers. The Reading Matrix, 2(10), 165-180.
- Kamil, P. B. Mosenthal, P. D. Pearson & R. Barr (Eds.), Handbook of Reading Research (Vol. 3, pp. 545-561). Mahwah, NJ: Lawrence Erlbaum.

- Kinnunen, R., & Vauras, M. (1995). Comprehension monitoring and the level of comprehension in high- and low-achieving primary school children's reading. Learning and Instruction, 5(2), 143-165. http://dx.doi.org/10.1016/0959-4752(95)00009-R
- Kletzien, S. B. (1991). Strategies Use by Good and Poor Comprehenders Read Expository Text of Differing levels. Reading Research Quarterly, 26(1), 67-86. http://dx.doi.org/10.2307/747732
- Kitajima, R. (1997). Referential strategy training for second language reading comprehension of Japanese texts. Foreign Language Annals, 30(1), 84-97.
- Krashen, S. D. (1982). Principles and Practice in Second Language Acquisition. Oxford: Pergamon.
- Koda, K. (2005). Insights into Second Language Reading: A Cross-Linguistics Approach. New York, NY: Cambridge University Press.
- Kucan, L., & Beck, I. L. (1996). Four Fourth Graders Thinking Aloud: An investigation of Genre Effects. Journal of Literacy Research, 28(2), 259-287.
- Kung, S.-S. (2007). A study of the relationship between reading comprehension and the use of reading strategies among EFL college students. Unpublished doctoral dissertation, Texas A&M University Kingsville.
- Lage, M. L. (1993). Metacognition in Native and Foreign Language Reading: A multiple-case study of Brazilian adult readers. Unpublished Doctoral Dissertation, Georgetown University.
- Lee, S. Y., & Krashen, S. D. (1997). Writing apprehension in Chinese as a first language. ITL: Review of Applied Linguistics, 115-116, 27-37.
- Lee, H. (1994). Investigating the factors affecting the use of foreign language learning strategies and comparing the strategy use of EFL students. English Teaching, 48, 51-99.

- Lee, K. R. (2007). Strategy Awareness-Raising for Success: Reading Strategy Instruction EFL context. Unpublished Doctoral Dissertation, University of Maryland, College Park.
- Liang, J. (1997). How college EFL students regulate their cognition and motivation to deal with difficulties in reading comprehension: A case study of Chinese EFL learners' reading strategy use. Unpublished Doctoral Dissertation, University of Texas, Austin.
- Lorch, R. F. Jr., Lorch, E. P., & Klusewitz, M. A. (1993). College Students' Conditional Knowledge About Reading. Journal of Educational Psychology, 85(2), 239-252.
- Lorch, R. F., Jr., Lorch, E. P., & Matthews, P. D. (1985). On-line processing of the topic structure of a text. Journal of Memory and Language, 24, 350-361.

Macaro, E. (2003). Teaching and learning a second language. London. Continuum.

Madkhali, S. (2005). Effects of training ESL Saudi female students on some reading strategies (Unpublished dissertation). Ball State University, Muncie.

McNeil, J. (1987). Reading Comprehension (2nd ed.). Glenview, IL: Scott, Foresman and Company.

Meng, Y. (2004). A statistical research of college English reading strategy training. Foreign Languages and Their Teaching, 2, 24-27.

Mikulecky, P. S. (2008). Teaching Reading in a Second Language. Pearson Education, 0-13-503146-X.

- Mokhtari, K., & Reichard, C. A. (2002). Assessing students' Metacognitive Awareness of Reading Strategies. Journal of Educational Psychology, 94(2), 249-259. http://dx.doi.org/10.1037/0022-0663.94.2.249
- Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students' reading strategies. Journal of Developmental Education, 25(3), 2-10.

- Moustfa, A. M. (2004). The Impact Metacognitive Reading Strategies and Motivation for Scholastic Achievement and Self-Worth protection on Secondary Students' Academic Achievement. Egyptian Journal of Psychological Studies, 14(42), 271-370.
- Muñiz-Swicegood, M. (1994). The effects of metacognitive reading strategy training on the reading performanceand student reading analysis strategies of third grade bilingual students. Bilingual Research Journal, 18,1-2.
- Mushait, S. (2004). The relationship of L1 reading and L2 language proficiency with the L2 reading comprehension and strategies of Saudi EFL university students (Unpublished doctoral dissertation). University of Essex, UK.
- Nikolovska, А. (2006). Усвојување на вокабуларот на англискиот како странски јазик во Р.Македонија со посебен осврт кон стратегиите за учење. Докторска дисертација: Филолошки факултет "Блаже Конески".
- Nikolovska, A. (2015). Integration of Vocabulary Instruction into Foreign Language Teaching. YEARBOOK 2015, Volume 6. Goce Delcev University – Stip Faculty Of Philology, 265-272
- Nikolovska, A. (2015). The Role of Alternative Assessment in Developing Pre-service EFL Teachers' Teaching Skills and Fostering. Learner Autonomy Promoting Learner Autonomy in Higher Education, Tetovo: South East European University . Retrieved 12. 11. 2017, from https://www.seeu.edu.mk/files/research/Book-2015.pdf
- O'Malley, M., & Chamot, A. (1990). Learning strategies in second language acquisition. New York: Cambridge University Press. http://dx.doi.org/10.1017/CBO9781139524490

- Oxford, R. L., & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. Modern Language Journal, 73, 291-300.
- Palmer, J., MacLeod, C. M., Hunt, E., & Davison, J. E. (1985). Information processing correlates of reading. Journal of Memory and Language, 24, 59-88.
- Paris, S. G., Wasik, B. A., & Turner, J. C. (1991). The development of strategic reading. In R.Barr, M. L. Kamil, P. B. Mosenthal & P. D. Pearson (Eds.), Handbook of reading research (Vol. 2, pp. 609-640). New York: Longman
- Polak, K., & Krashen, S. (1998). Do we need to teach spelling? The relationship between spelling and vocabulary and voluntary reading among community college ESL students. TESOL Quarterly, 22, 141-146.http://dx.doi.org/10.2307/3587067
- Phillips, J. K. (1984). Practical Implications of Recent Research in Reading. Foreign Language Annals, 17(4), 285-296.
- Philip B. Gough and William Tunmer (1986) "Metacognitive strategies for helping poor readers in the content areas," Malaysian Journal of Reading, 1, pp. 11-17.
- Poole, A. (2005). Gender differences in reading strategy use among ESL college students. Journal of College Reading and Learning, 36(1), 7-20
- Poole, A. (2006). Gender and academic reading strategies: A survey of adult EFL learners in Mainland China. Hong Kong Journal of Applied Linguistics, 10(2), 38-51

Pressley, M. (2000). What should comprehension instruction be the instruction of? In M. L.

Pressley, M. (2002). Metacognition and self-regulated comprehension. In A. E. Farstrup & S.

- Pressley, M., & Afflerbach, P. (1995). Verbal protocols of reading: The nature of constructively responsive reading. Hillsdale, NJ: Erlbaum
- Pressley, M., & Harris, S. (2006). Cognitive strategies instruction: From basic research to classroom instruction. In P. Alexander, & P. Winn (Eds.), Handbook of educational psychology (2nd ed., pp. 265-286). Mahwah, NJ: Lawrence Erlbaum.
- Rusciolelli, J. (1995). Student responses to reading strategies instruction. Foreign Language Annals, 28(2), 262-273. http://dx.doi.org/10.1111/j.1944-9720.1995.tb00791.x
- Salataci, R., & Akyel, A. (2002). Possible effects of strategy instruction on L1 and L2 reading. Reading in a Foreign Language, 14, 1-17.
- Samuels (Eds.), What research has to say about reading instruction (pp. 291-309). Newark, DE: International Reading Association.
- Smith, H. K. (1967). "The response of good and poor readers when asked to read for different purposes," Reading Research Quarterly, 3, pp. 53-84.
- Sheorey, R., & Mokhtari, K. (2001). Differences in Metacognition Awareness of Reading Strategies Among native and Non-native readers. System, 29(4), 431-449. http://dx.doi.org/10.1016/S0346-251X(01)00039-2
- Shinn, F. (1998). Implementing free voluntary reading with ESL middle school students-improvement in attitudes toward reading and test scores. In R. Constantino (Ed.), Literacy, access, and libraries among the language minority population (pp. 225-234). Lanham, Md. Scarecrow.
- Shokrpour, N., & Fotovatian, S. (2009). The effects of consciousness raising on metacognitive strategies on EFL students' reading comprehension. ITL International Journal of Applied Linguistics, 3, 221-245.

- Sinatra, G., Brown, K., & Reynolds, R. (2002). Implications of cognitive resource allocation for comprehension strategies instruction. In C. Block, & M. Pressley (Eds.), Comprehension instruction: Research-based best practices (pp. 62-76). New York: Guilford Press
- Sheorey, R., & Mokhtari, K. (2001). Differences in Metacognition Awareness of Reading Strategies Among native and Non-native readers. System, 29(4), 431-449. http://dx.doi.org/10.1016/S0346-251X(01)00039-2

Shinn, F. (1998). Implementing free voluntary reading with ESL middle school students-improvement in attitudes toward reading and test scores. In R. Constantino (Ed.), Literacy, access, and libraries among the language minority population (pp. 225-234). Lanham, Md.: Scarecrow.

- Shokrpour, N., & Fotovatian, S. (2009). The effects of consciousness rising on metacognitive strategies on EFL students' reading comprehension. ITL International Journal of Applied Linguistics, 3, 221-245.
- Sinatra, G., Brown, K., & Reynolds, R. (2002). Implications of cognitive resource allocation for comprehension strategies instruction. In C. Block, & M. Pressley (Eds.), Comprehension instruction: Research-based best practices (pp. 62-76). New York: Guilford Press.
- Stanovich, K., & West, R. (1989). Exposure to print and orthographic processing. Reading Research Quarterly,24, 402-433. http://dx.doi.org/10.2307/747605
- Taraban, R., Rynearson, K., & Kerr, M. S. (2000). Metacognition and Freshman Academic Performance. Journal of Development Education, 24(1), 12-20.

Vacca, R. T., & Vacca, J. (1999). Content area reading. New York: Longman.

Vahdany F., Akbari E., Shahrestani F., Askari A. (2016): The Relationship between Cognitive and Metacognitive Strategy Use and EFL Listening Test Performance. Theory and Practice in Language Stud-ies, Volume 6, Number 2, pp. 385 – 391.

- Vandergrift L. (1997): Orchestrating strategy use: Toward a model of the skilled second language listener. Language Learning, Volume 53, pp. 463 496.
- Vandergrift L., Goh C. C., Mareschal C. J., Tafaghodtari M. H. (2006). The Metacogni-tive Awareness Listening Questionnaire: Development and Validation. Language Learning, Volume 53, pp. 431 – 462.
- Vandergrift L., Tafaghodtari M. (2010): Teaching L2 Learners How to Listen Does Make a Dif-ference: An Empirical Study. Language Learning, Volume 60, pp. 470–467.
- Wang Y. H. (2009): Metacognition in Reading: EFL Learners' Metacognitive Awareness of Reading Strategy Use. International Journal of English Language and Literature Studies, Volume 4, Number 1, pp. 27 – 36.
- Wen, Q. F. (2003). The successful way of learning English. Shanghai: Shanghai Foreign Language EducationPress.
- Wenden, A. L. (2001). Metacognitive knowledge in SLA: The neglected variable. In M. P. Breen (Ed.), Learner contributions to language learning: New directions in research (pp. 44-46). Harlow/Essex, UK: Pearson.
- Winne, P. H., & Nesbit, J. C. (2010). The psychology of academic achievement. New York: Longman
- Young, C., & Yoke, S. F. (2001). Learner diaries as a tool to heighten Chinese students' metacognitive awareness of English learning. Reflections on English Language Teaching, 1, 125-138.
- Zarillo, J. (2007). Are you prepared to teach reading: A practical guide for self-assessment. Upper Saddle River, NJ: Pearson Merrill Prentice Hall.
- Zhang, L., & Seepho, S. (2012). Effects of MST (Metacognitive Strategy Training) on Academic Reading Comprehension of Chinese EFL Students. US-China Foreign Language, 10 (2), 933-943.

Zhang, L., & Seepho, S. (2013). Metacognitive Strategy Use and Academic Reading Achievement: Insights from a Chinese Context. Electronic Journal of Foreign Language Teaching, 10(1), 54-69.

## Appendices

#### **Appendix 1 MARSI questionnaire**

**Metacognitive Awareness of Reading Strategies Inventory** 

(MARSI) Version 1.0

Kouider Mokhtari and Carla Reichard © 2002

**DIRECTIONS**: Listed below are statements about what people do when they read <u>academic or school-related materials</u> such as textbooks, library books, etc. Five numbers follow each statement (1, 2, 3, 4, 5) and each number means the following:

1 means "I never or almost never do this." 2 means "I do this only occasionally."

3 means "I sometimes do this." (About 50% of the time.) 4 means "I usually do this."
5 means "I always or almost always do this."

After reading each statement, **circle the number** (1, 2, 3, 4, or 5) that applies to you using the scale provided. Please note that there are **no right or wrong answers** to the statements in this inventory.

ТҮРЕ	STRATEGIES	SCALE				
GLOB	1. I have a purpose in mind when I read.	1	2	3	4	5
SUP	2. I take notes while reading to help me understand what I read.	1	2	3	4	5

GLOB	3. I think about what I know to help me understand what I read.	1	2	3	4	5
GLOB	4. I preview the text to see what it's about before reading it.	1	2	3	4	5
SUP	5. When text becomes difficult, I read aloud to help me understand what I read.	1	2	3	4	5
SUP	6.I summarize what I read to reflect on important information in the text.	1	2	3	4	5
GLOB	7. I think about whether the content of the text fits my reading purpose.	1	2	3	4	5
PROB	8. I read slowly but carefully to be sure I understand what I'm reading.	1	2	3	4	5
SUP	9.I discuss what I read with others to check my understanding.	1	2	3	4	5
GLOB	10. I skim the text first by noting characteristics like length and organization.	1	2	3	4	5
PROB	11. I try to get back on track when I lose concentration.	1	2	3	4	5
SUP	12. I underline or circle information in the text to help me remember it.	1	2	3	4	5
PROB	13. I adjust my reading speed according to what I'm reading.	1	2	3	4	5
GLOB	14. I decide what to read closely and what to ignore.	1	2	3	4	5
SUP	15. I use reference materials such as dictionaries to help me understand what I read.	1	2	3	4	5
PROB	16. When text becomes difficult, I pay closer attention to what I'm reading.	1	2	3	4	5
GLOB	17. I use tables, figures, and pictures in text to increase my understanding.	1	2	3	4	5
PROB	18. I stop from time to time and think about what I'm reading.	1	2	3	4	5
GLOB	19. I use context clues to help me better understand what I'm reading.	1	2	3	4	5
SUP	20. I paraphrase (restate ideas in my own words) to better understand what I read.	1	2	3	4	5
PROB	21. I try to picture or visualize information to help remember what I read.	1	2	3	4	5
GLOB	22. I use typographical aids like bold face and italics to identify key information.	1	2	3	4	5
GLOB	23. I critically analyze and evaluate the information presented in the text.	1	2	3	4	5
SUP	24. I go back and forth in the text to find relationships among ideas in it.	1	2	3	4	5
GLOB	25. I check my understanding when I come across conflicting information.	1	2	3	4	5
GLOB	26. I try to guess what the material is about when I read.	1	2	3	4	5
PROB	27. When text becomes difficult, I re-read to increase my understanding.	1	2	3	4	5
SUP	28. I ask myself questions I like to have answered in the text.	1	2	3	4	5
GLOB	29. I check to see if my guesses about the text are right or wrong.	1	2	3	4	5
PROB	30. I try to guess the meaning of unknown words or phrases.	1	2	3	4	5

Reference: Mokhtari, K., & Reichard, C. (2002). Assessing students' metacognitive awareness of reading strategies.

•

Journal of Educational Psychology, 94 (2), 249-259.

•

### Appendix 2 Metacognitive Awareness of Reading Strategies Inventory

#### SCORING RUBRIC

Student Name:	Age	:	Dat	e:	
Grade in School:	$\Box 6^{\text{th}} \Box 7^{\text{th}}$	□ 8 <sup>th</sup>	□ 9 <sup>th</sup> □	10 <sup>th</sup>	$\Box 11^{th} \Box 12^{th} \Box College \Box Other$

- 1. Write your response to each statement (i.e., 1, 2, 3, 4, or 5) in each of the blanks.
- 2. Add up the scores under each column. Place the result on the line under each column.
- 3. Divide the score by the number of statements in each column to get the average for each subscale.
- Calculate the average for the inventory by adding up the subscale scores and dividing by 30.
- 5. Compare your results to those shown below.
- 6. Discuss your results with your teacher or tutor.

Global	Problem-	Support	Overall Reading
Reading Strategies	Solving Strategies	Reading Strategies	Strategies
(GLOB Subscale)	(PROB Subscale)	(SUP Subscale)	
1	8	2	GLOB
3	11	5	
4	13	6	PROB
7	16	9	
10	18	12	SUP
14	21	15	
17	27	20	
19	30	24	
22		28	
23			
25			
26			
29			
	PROB Score	SUP Score	
GLOB Mean	PROB Mean	SUP Mean	

**INTERPRETING YOUR SCORES**: The overall average indicates how often you use reading strategies when reading academic materials. The average for each subscale of the inventory shows which group of strategies (i.e., global, problem-solving, and support strategies) you use most when reading. With this information, you can tell if you are very high or very low in any of these strategy groups. It is important to note, however, that the best possible use of these strategies depends on your reading ability in English, the type of material read, and your purpose for reading it. A low score on any of the subscales or parts of the inventory indicates that there may be some strategies in these parts that you might want to learn about and consider using when reading (adapted from Oxford 1990: 297-300).

## Appendix 3:

# Multiple comparison table

### Multiple Comparisons

				Mean			95% Confidence Interva	
		(I)	(J)	Difference	Std.		Lower	Upper
Dependent	Variable	Probtot_exp	Probtot_exp	(I-J)	Error	Sig.	Bound	Bound
Glob_cont	Tukey	3.00	4.00	.5833	.43944	.398	5330	1.6997
	HSD		5.00	.0833	.38309	.974	8899	1.0566
		4.00	3.00	5833	.43944	.398	-1.6997	.5330
			5.00	5000	.43056	.490	-1.5938	.5938
		5.00	3.00	0833	.38309	.974	-1.0566	.8899
			4.00	.5000	.43056	.490	5938	1.5938
	LSD	3.00	4.00	.5833	.43944	.200	3364	1.5031
			5.00	.0833	.38309	.830	7185	.8852
		4.00	3.00	5833	.43944	.200	-1.5031	.3364
			5.00	5000	.43056	.260	-1.4012	.4012
		5.00	3.00	0833	.38309	.830	8852	.7185
			4.00	.5000	.43056	.260	4012	1.4012
	Bonferroni	3.00	4.00	.5833	.43944	.600	5702	1.7369
			5.00	.0833	.38309	1.000	9223	1.0890
		4.00	3.00	5833	.43944	.600	-1.7369	.5702
			5.00	5000	.43056	.780	-1.6303	.6303
		5.00	3.00	0833	.38309	1.000	-1.0890	.9223
			4.00	.5000	.43056	.780	6303	1.6303
Supp_cont	Tukey	3.00	4.00	.0556	.37996	.988	9097	1.0208
	HSD		5.00	.0889	.33124	.961	7526	.9304
		4.00	3.00	0556	.37996	.988	-1.0208	.9097
			5.00	.0333	.37229	.996	9124	.9791
		5.00	3.00	0889	.33124	.961	9304	.7526
			4.00	0333	.37229	.996	9791	.9124
	LSD	3.00	4.00	.0556	.37996	.885	7397	.8508
		4.00	5.00	.0889	.33124	.791	6044	.7822
		4.00	3.00	0556	.37996	.885	8508	.7397
		5.00	5.00	.0333	.37229	.930	7459	.8125
		5.00	3.00	0889	.33124	.791	7822	.6044

			4.00	0333	.37229	.930	8125	.7459
	Bonferroni	3.00	4.00	.0556	.37996	1.000	9419	1.0530
			5.00	.0889	.33124	1.000	7807	.9584
		4.00	3.00	0556	.37996	1.000	-1.0530	.9419
			5.00	.0333	.37229	1.000	9440	1.0106
		5.00	3.00	0889	.33124	1.000	9584	.7807
			4.00	0333	.37229	1.000	-1.0106	.9440
Prob_cont	Tukey	3.00	4.00	3889	.54243	.757	-1.7669	.9891
	HSD		5.00	5889	.47288	.442	-1.7902	.6124
		4.00	3.00	.3889	.54243	.757	9891	1.7669
			5.00	2000	.53147	.925	-1.5502	1.1502
		5.00	3.00	.5889	.47288	.442	6124	1.7902
			4.00	.2000	.53147	.925	-1.1502	1.5502
	LSD	3.00	4.00	3889	.54243	.482	-1.5242	.7464
			5.00	5889	.47288	.228	-1.5786	.4009
		4.00	3.00	.3889	.54243	.482	7464	1.5242
			5.00	2000	.53147	.711	-1.3124	.9124
		5.00	3.00	.5889	.47288	.228	4009	1.5786
			4.00	.2000	.53147	.711	9124	1.3124
	Bonferroni	3.00	4.00	3889	.54243	1.000	-1.8128	1.0350
			5.00	5889	.47288	.684	-1.8302	.6525
		4.00	3.00	.3889	.54243	1.000	-1.0350	1.8128
			5.00	2000	.53147	1.000	-1.5952	1.1952
		5.00	3.00	.5889	.47288	.684	6525	1.8302
			4.00	.2000	.53147	1.000	-1.1952	1.5952

Based on observed means.

The error term is Mean Square (Error) = 2.118.