Investigating the Relationship between Self-Efficacy and Reading Comprehension Strategy Use in the Algerian EFL Class

The Case of Third Year Students at Oum El Bouaghi University.

A Dissertation Submitted to the Faculty of Letters and Languages, Department of English, in Partial Fulfilment of the Requirements for the Degree of Master in Language Sciences and Teaching English as a Foreign Language.

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DEDICATION

In the Name of Allah, the Most Merciful, the Most Compassionate

I dedicate this work:

To the memory of my father, brother and uncle.

To all the members of my family, particularly my mother, my brother and sister.

To my nephews.

To my favourite teachers.

I thank you all for your help and encouragement along my English studies, realizing my dream.

Thank you all
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Praise be to Allah, Lord of the Universe

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ABSTRACT

The current study investigated whether there is a relationship between self-efficacy as a motivational construct in learning and reading comprehension strategies used by third year EFL students at Oum El Bouaghi University, Algeria. Two main hypotheses were formulated. The first hypothesis stated that there is a significant positive relationship between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of reading comprehension strategies. The second one stated that high self-efficacious readers significantly use more reading comprehension strategies than low self-efficacious readers. By means of a students’ questionnaire, the scores of reading self-efficacy and reading comprehension strategy use, including cognitive, metacognitive and socioaffective reading strategy use of fifty students, were collected. The data were then computed using Spearman Correlation Coefficient and independent samples t-tests. The results show that the reading strategy use positively correlates with the increased self-efficacy beliefs and high self-efficacious readers use more reading comprehension strategies than low self-efficacious readers. These results confirm the findings of previous studies conducted in different contexts. Therefore, encouraging students to develop their reading self-efficacy and to use different reading strategies can be helpful for them to achieve higher scores in reading comprehension.

Keywords: self-efficacy, reading self-efficacy, reading comprehension strategies, reading strategy use.
LIST OF ABBREVIATIONS

α: Level of Risk.

ANOVA: Analysis Of Variance.

d: Eta Squared

Dep V: Dependent Variable.

df: degree of freedom.

EFL: English as a Foreign Language.

e.g.: Example.

ESL: English as a Second Language.

FL: Foreign Language.

GSE: General Self-Efficacy.

H: Hypothesis.

i.e.: It means.

Ind V: Independent Variable.

L1: First Language.

L2: Second Language.

M: Mean.

MD: Mean Difference.

N: Number of Students/ Sample Size.

P: Page.

(p) value: Probability value.
Q: Question.

*r*: Pearson Product-Moment Correlation Coefficient.

*r* or *ρ*: Spearman Correlation Coefficient.

**RSES**: Reading Self-Efficacy Scale.

**SD**: Std. Deviation.

**SED**: Standard Error of the Difference.

**SEM**: Standard Error of the Mean.

**SL**: Second Language.

**SORS**: the Survey Of Reading Strategies.

**SPSS**: the Statistical Package for the Social Sciences.

**SSE**: Specific Self-Efficacy.

**TAPs**: Think-Aloud Protocols.

**U.K.**: United Kingdom.

**U.S.**: United States.

**Vs**: Versus.

%: Percentage of Students.

Σ: Sum of.
### LIST OF TABLES

<table>
<thead>
<tr>
<th><strong>TABLE</strong></th>
<th><strong>PAGE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 1:</strong> Differences between Strategies and Skills (Manoli &amp; Papadopoulou, 2012, p. 819)</td>
<td>16</td>
</tr>
<tr>
<td><strong>Table 2:</strong> Self-Efficacy in Relation to Other Self-Constructs (Smith, Gardner, &amp; Michie, n.d., p. 4)</td>
<td>37</td>
</tr>
<tr>
<td><strong>Table 3:</strong> Self-Efficacy and Academic Learning (Schunk, 2003, Self-Efficacy and Academic Learning)</td>
<td>46</td>
</tr>
<tr>
<td><strong>Table 4:</strong> The SORS Case Processing Summary</td>
<td>59</td>
</tr>
<tr>
<td><strong>Table 5:</strong> The SORS Reliability Statistics</td>
<td>59</td>
</tr>
<tr>
<td><strong>Table 6:</strong> The RSES Case Processing Summary</td>
<td>60</td>
</tr>
<tr>
<td><strong>Table 7:</strong> The RSES Reliability Statistics</td>
<td>60</td>
</tr>
<tr>
<td><strong>Table 8:</strong> Students’ Gender</td>
<td>62</td>
</tr>
<tr>
<td><strong>Table 9:</strong> Students’ Choice of Studying English</td>
<td>63</td>
</tr>
<tr>
<td><strong>Table 10:</strong> Students’ Attitudes towards their English Class</td>
<td>63</td>
</tr>
<tr>
<td><strong>Table 11:</strong> Students’ Views of the Importance of Reading</td>
<td>64</td>
</tr>
<tr>
<td><strong>Table 12:</strong> Students’ Reading Comprehension Level</td>
<td>65</td>
</tr>
<tr>
<td><strong>Table 13:</strong> The most Hindering Factor to Reading</td>
<td>66</td>
</tr>
<tr>
<td><strong>Table 14:</strong> Means and Standard Deviations of Cognitive Reading Strategies</td>
<td>67</td>
</tr>
<tr>
<td><strong>Table 15:</strong> Frequency Use of Cognitive Reading Strategies</td>
<td>68</td>
</tr>
<tr>
<td><strong>Table 16:</strong> Means and Standard Deviations of Metacognitive Reading Strategies</td>
<td>69</td>
</tr>
<tr>
<td><strong>Table 17:</strong> Frequency Use of Metacognitive Reading Strategies</td>
<td>69</td>
</tr>
</tbody>
</table>
Table 18: Means and Standard Deviations of Socioaffective Reading Strategies

Table 19: Frequency Use of Socioaffective Reading Strategies

Table 20: Means and Standard Deviations of Reading Strategy Categories

Table 21: The Importance of the Reading Strategy Use

Table 22: The Necessity of Teaching Reading Strategies

Table 23: Students’ Perceptions of Self-Efficacy Beliefs

Table 24: Self-Efficacy Sources

Table 25: Means and Standard Deviations of Students’ Reading Self-Efficacy

Table 26: Frequency of Students’ Reading Self-Efficacy

Table 27: Means and Standard Deviations of Students’ Reading Self-Efficacy Components

Table 28: The Reading Self-Efficacy Effect

Table 29: The Necessity of Fostering Reading Self-Efficacy through Instruction

Table 30: Kolmogorov-Smirnov and Shapiro-Wilk One Sample Tests Results of Reading Self-Efficacy

Table 31: Descriptive Statistics of Reading Self-Efficacy

Table 32: Correlation between Students’ Reading Self-Efficacy and their Use of Overall Reading Strategies

Table 33: Correlation between Students’ Reading Self-Efficacy and their Use of Cognitive Reading Strategies

Table 34: Correlation between Students’ Reading Self-Efficacy and their Use of Metacognitive Reading Strategies

Table 35: Correlation between Students’ Reading Self-Efficacy and their Use of Socioaffective Reading Strategies
Table 36: Students’ Level of Reading Self-Efficacy

Table 37: Kolmogorov-Smirnov and Shapiro-Wilk One Sample Tests Results of High and Low Self-Efficacious Readers in Overall Reading Strategy Use

Table 38: Comparing Mean Score of High and Low Self-Efficacious Readers in Overall Reading Strategy Use

Table 39: Determining the Significance of the Mean Score Difference of High and Low Self-Efficacious Readers in Overall Reading Strategy Use

Table 40: Kolmogorov-Smirnov and Shapiro-Wilk One Sample Tests Results of High and Low Self-Efficacious Readers in Cognitive Reading Strategy Use

Table 41: Comparing Mean Score of High and Low Self-Efficacious Readers in Cognitive Reading Strategy Use

Table 42: Determining the Significance of the Mean Score Difference of High and Low Self-Efficacious Readers in Cognitive Reading Strategy Use

Table 43: Kolmogorov-Smirnov and Shapiro-Wilk One Sample Tests Results of High and Low Self-Efficacious Readers in Metacognitive Reading Strategy Use

Table 44: Comparing Mean Score of High and Low Self-Efficacious Readers in Metacognitive Reading Strategy Use

Table 45: Determining the Significance of the Mean Score Difference of High and Low Self-Efficacious Readers in Metacognitive Reading Strategy Use

Table 46: Kolmogorov-Smirnov and Shapiro-Wilk One Sample Tests Results of High and Low Self-Efficacious Readers in Socioaffective Reading Strategy Use

Table 47: Comparing Mean Score of High and Low Self-Efficacious Readers in Socioaffective Reading Strategy Use

Table 48: Determining the Significance of the Mean Score Difference of High and Low Self-Efficacious Readers in Socioaffective Reading Strategy Use

viii
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1: The Cognitive Foundations of Learning to Read: A Framework (Wren, 2000; in Zheng, 2014, p. 18)</td>
<td>14</td>
</tr>
<tr>
<td>Figure 2: The Conceptual Model of Triadic Reciprocal Determinism</td>
<td>38</td>
</tr>
<tr>
<td>Figure 3: Major Sources of Self-Efficacy (Bandura, 1977, p. 195)</td>
<td>41</td>
</tr>
<tr>
<td>Figure 4: The study design</td>
<td>58</td>
</tr>
<tr>
<td>Figure 5: Students’ Gender</td>
<td>62</td>
</tr>
<tr>
<td>Figure 6: Students’ Choice of Studying English</td>
<td>63</td>
</tr>
<tr>
<td>Figure 7: Students’ Attitudes towards their English Class</td>
<td>63</td>
</tr>
<tr>
<td>Figure 8: Students’ Views of the Importance of Reading</td>
<td>64</td>
</tr>
<tr>
<td>Figure 9: Students’ Reading Comprehension Level</td>
<td>65</td>
</tr>
<tr>
<td>Figure 10: The most Hindering Factor to Reading</td>
<td>66</td>
</tr>
<tr>
<td>Figure 11: The Importance of the Reading Strategy Use</td>
<td>72</td>
</tr>
<tr>
<td>Figure 12: The Necessity of Teaching Reading Strategies</td>
<td>72</td>
</tr>
<tr>
<td>Figure 13: Students’ Perceptions of Self-Efficacy Beliefs</td>
<td>73</td>
</tr>
<tr>
<td>Figure 14: Self-Efficacy Sources</td>
<td>74</td>
</tr>
<tr>
<td>Figure 15: The Reading Self-Efficacy Effect</td>
<td>77</td>
</tr>
<tr>
<td>Figure 16: The Necessity of Fostering Reading Self-Efficacy through Instruction</td>
<td>77</td>
</tr>
<tr>
<td>Figure 17: Frequency Distribution Histogram of Reading Self-Efficacy</td>
<td>80</td>
</tr>
</tbody>
</table>
Figure 18: Correlation between Students’ Reading Self-Efficacy and their Use of Overall Reading Strategies

Figure 19: Correlation between Students’ Reading Self-Efficacy and their Use of Cognitive Reading Strategies

Figure 20: Correlation between Students’ Reading Self-Efficacy and their Use of Metacognitive Reading Strategies

Figure 21: Correlation between Students’ Reading Self-Efficacy and their Use of Socioaffective Reading Strategies

Figure 22: The Mean Score of High and Low Self-Efficacious Readers in Overall Reading Strategy Use

Figure 23: The Mean Score of High and Low Self-Efficacious Readers in Cognitive Reading Strategy Use

Figure 24: The Mean Score of High and Low Self-Efficacious Readers in Metacognitive Reading Strategy Use

Figure 25: The Mean Score of High and Low Self-Efficacious Readers in Socioaffective Reading Strategy Use
## CONTENTS

**Introduction**: .................................................................................................................. 1

1- Statement of the Problem ................................................................................................. 2

2- Aims of the Study ............................................................................................................... 3

3- Research Questions and Hypotheses............................................................................... 3

4- Research Means ................................................................................................................ 4

5- Structure of the Study ..................................................................................................... 4

**Chapter One: Reading Comprehension and Strategies** ................................................. 5

Introduction .......................................................................................................................... 8

1.1. Reading Comprehension .............................................................................................. 8

1.1.1. Nature of Reading comprehension ........................................................................... 8

1.1.1.1. Definition of Reading .......................................................................................... 8

1.1.1.2. Reading Comprehension Construct .................................................................... 9

1.1.1.3. Levels of Comprehension .................................................................................. 10

1.1.1.3.1. Literal Comprehension ................................................................................. 10

1.1.1.3.2. Inferential Comprehension .......................................................................... 10

1.1.1.3.3. Critical/Evaluative Comprehension ............................................................... 10

1.1.2. Difficulties of Reading Comprehension .................................................................... 11

1.1.2.1. Text-Level Difficulties ...................................................................................... 11

1.1.2.1.1. Word-Level Deficits .................................................................................... 11

1.1.2.1.2. Sentence-Level Deficits .............................................................................. 12
1.3.3. Strategies Based on Local and Global Information Processing

1.3.3.1. Local Reading Strategies

1.3.3.2. Global/General Reading Strategies

1.4. Reading comprehension Strategy Instruction

1.4.1. The Role of Strategy Instruction

1.4.2. Approaches to Teaching Reading Comprehension Strategies

1.4.2.1. Guided Reading Approach

1.4.2.2. Reciprocal Teaching Approach

1.4.3. Measurement of Learners’ Use of Reading Comprehension Strategies

Conclusion

Chapter Two: Self-Efficacy

Introduction

2.1. Nature of Self-Efficacy Beliefs

2.1.1. Self-Efficacy and Reading Self-Efficacy

2.1.2. General Self-Efficacy and Specific Self-Efficacy

2.1.3. Self-Efficacy and Related Constructs

2.1.3.1. Self-Efficacy and Self-Esteem

2.1.3.2. Self-Efficacy and Self-Concept

2.1.3.3. Self-Efficacy and Self-Confidence

2.2. Sources of Self-Efficacy

2.2.1. Performance Accomplishments

2.2.2. Vicarious Experience
2.2.3. Verbal Persuasion ................................................................. 40
2.2.4. Emotional Arousal ............................................................ 40
2.3. Self-Efficacy and Culture ....................................................... 42
   2.3.1. Collectivist Culture ......................................................... 42
   2.3.2. Individualist Culture ..................................................... 42
2.4. Self-Efficacy and Learning/Teaching .................................... 44
   2.4.1. Influence of Self-Efficacy on Academic Learning ............. 44
   2.4.2. Self-Efficacy and Reading Comprehension Strategy Use .... 46
   2.4.3. Developing Learners’ Reading Self-Efficacy .................... 51
   2.4.4. Measurement of Learners’ Reading Self-Efficacy ............. 52
      2.4.4.1. Magnitude ............................................................. 53
      2.4.4.2. Generality ............................................................ 53
      2.4.4.3. Strength ............................................................. 53
Conclusion ................................................................................. 54

Chapter Three: Field Investigation ........................................... 55

Introduction .............................................................................. 57
3.1. Participants ......................................................................... 57
   3.1.1. Population .................................................................. 57
   3.1.2. Sampling .................................................................... 57
3.2. Research Questions and Hypotheses .................................. 57
3.3. Research Means ................................................................. 58
3.3.1. Type of Research Means ................................................................. 58
3.3.2. Measurement of Research Means ....................................................... 59
3.4. Procedures .......................................................................................... 60
3.5. Descriptive Statistics ........................................................................... 60
  3.5.1. Students’ Questionnaire Description ................................................. 60
  3.5.2. Results and Discussion .................................................................. 62
  3.5.3 Conclusion ....................................................................................... 81
3.6. Correlational Statistics ......................................................................... 81
  3.6.1. Data Analysis ............................................................................... 81
  3.6.2. Results and Discussion .................................................................. 81
  3.6.3. Conclusion ....................................................................................... 101
3.7. Limitations of the Study ................................................................. 101
3.8. Implications and Recommendations ................................................... 102
Conclusion .................................................................................................. 103
GENERAL CONCLUSION ......................................................................... 104
References ................................................................................................ 106
Appendices ............................................................................................. 113
  - Appendix A: Students’ Questionnaire .................................................. 114
  - Appendix B: Students’ Justifications/Further Suggestions or Comment ...... 121
  - Appendix C: Total Statistics of the SORS Items- Case Summaries ........... 127
  - Appendix D: Total Statistics of the RSES Items- Case Summaries ........... 128
  - Appendix E: The SORS Responses- Case Summaries ............................ 129
- **Appendix F**: The RSES Responses- Case Summaries

- **Appendix G**: Students’ Scores of Reading Self-Efficacy Components- Case Summaries

- **Appendix H**: Students’ Global and Ranked Scores of Reading Self-Efficacy and Overall Reading Strategy Use- Case Summaries

- **Appendix I**: Students’ Global and Ranked Scores of Cognitive, Metacognitive and Socioaffective Reading Strategy Use- Case Summaries

- **Appendix J**: Reading Comprehension Strategy Users- Case Summaries

- **Appendix K**: Boxplots of Reading Self-Efficacy and Overall Reading Strategy Use

- **Appendix L**: Boxplots of Reading Self-Efficacy and Cognitive Reading Strategy Use

- **Appendix M**: Boxplots of Reading Self-Efficacy and Metacognitive Reading Strategy Use

- **Appendix N**: Boxplots of Reading Self-Efficacy and Socioaffective Reading Strategy Use

- **Appendix O**: Brief Biography of Albert Bandura
Introduction

1- Statement of the Problem

2- Aims of the Study

3- Research Questions and Hypotheses

4- Research Means

5- Structure of the Study
1- Statement of the Problem

In the field of teaching English as a foreign language (EFL), reading is so valuable that every learner needs to master the reading skill in order to succeed academically, especially at the university level. In fact, comprehension of written texts forms the stepping stone in language learning. Comprehension is considered as the ability to go beyond words to understand the main ideas in a text and the relationships which link these ideas. Reaching a high level of comprehension depends on the learners’ use of reading comprehension strategies. So, students should understand the meaning of a text, monitor their comprehension, and evaluate the message. In other words, students should become skilled in the reading process.

As reading has a crucial role in the foreign language learning context, EFL teachers at Oum El Bouaghi University vary the reading activities. Yet, many students struggle with the comprehension process. They face difficulties in reading comprehension due to many factors, and seem not proficient enough to use reading comprehension strategies which are inseparable from all reading activities and tasks. This leads to their poor academic performance. According to some researchers such as Bandura (1977), Schunk (1995) and Pajares (1996), most of students’ learning difficulties are due to their self-beliefs; there is a significant relationship between language learning and self-efficacy. Self-efficacy beliefs are personal beliefs in one’s own ability to manage new or difficult tasks. Many students encounter difficulties in learning such as reading comprehension not because they are unable to perform successfully, but because they are unable to believe that they can perform successfully (Bandura, 1977).

As self-efficacy has a significant relationship with language learning, and as reading comprehension strategies are an important part of the reading process, different types of research have been carried out to investigate the correlation between self-efficacy and reading comprehension strategy use in order to improve the situation of learning/teaching English. The findings have revealed the positive effect of self-efficacy beliefs on reading comprehension strategy use. So, exploring the relationship between the two variables can be immensely beneficial to both the teachers who instruct, and the students who learn. In the light of the above, the present study seeks to investigate whether there is a relationship between reading self-efficacy and reading comprehension strategy use in the Algerian EFL class, particularly at Oum El Bouaghi University.
2- Aims of the Study

In the present study, the first aim is to have a better understanding of self-efficacy and its effectiveness as a motivational construct in learning, especially in reading comprehension. Particularly, this study aims at investigating the relationship between self-efficacy and reading comprehension strategy use in the Algerian context, taking the case of EFL students at Oum El Bouaghi University. As the previous studies conducted in different contexts suggest the existence of a strong positive correlation between reading self-efficacy and reading comprehension strategy use, similar results would confirm the previous findings that self-efficacy positively correlates with reading comprehension strategy use whatever the context investigated. In doing so, this study also aims at providing practical suggestions that may enable language teachers to develop their students’ self-efficacy to become proficient readers.

3- Research Questions and Hypotheses

Since the present study aims at investigating the relationship between self-efficacy and reading comprehension strategy use, the following research questions are addressed:

Q1: Is there any significant relationship between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of reading comprehension strategies?

Q2: Do high self-efficacious readers significantly use more reading comprehension strategies than low self-efficacious readers?

In the light of these research questions, the following hypotheses are formulated:

H1: There is a significant positive relationship between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of reading comprehension strategies.

H2: High self-efficacious readers significantly use more reading comprehension strategies than low self-efficacious readers.
4- Research Means

Given the nature and aims of this study, a questionnaire is designed for third year EFL students, who are expected to have more important background knowledge of reading comprehension strategies and the way to use them compared to first and second year students. The students’ questionnaire aims at measuring both students’ reading strategy use and their reading self-efficacy. Hence, the questionnaire includes sections about these issues.

To measure the variable of reading strategy use, the Survey of Reading Strategies (SORS) is applied (Sheorey & Mokhtari, 2001). As self-efficacy questionnaires are usually developed in each study due to the specificity of the self-efficacy beliefs measured in each study (Pajares, 2002), our study questionnaire is developed to respond to the specificity of the local context.

5- Structure of the Study

The present study consists of three chapters: The first two chapters are theoretical; the third one is practical and represents the core of the research.

Chapter one deals with ‘Reading Comprehension and Strategies’. It defines ‘reading’, ‘reading comprehension’ and ‘reading comprehension strategies’, and determines the levels of comprehension, reading comprehension difficulties and the differences between strategies and skills. The chapter also examines the place of strategies in comprehension theories focusing on different models, and sheds light on reading comprehension strategies, including different strategy classifications. Finally, the main approaches to teaching reading comprehension strategies are discussed.

Chapter two deals with ‘Self-Efficacy’. It tackles the nature of self-efficacy, and determines its types. Moreover, it provides a distinction between self-efficacy and related constructs. The chapter also examines the sources of self-efficacy and its relationship with culture, and sheds light on the influence of self-efficacy on learning/teaching. Finally, developing learners’ reading self-efficacy through instruction is discussed.

Chapter three checks the above mentioned hypotheses via a students’ questionnaire, and tackles the analysis and the interpretation of the findings.
Chapter One: Reading Comprehension and Strategies

Introduction

1.1. Reading Comprehension

1.1.1. Nature of Reading comprehension

1.1.1.1. Definition of Reading

1.1.1.2. Reading Comprehension Construct

1.1.1.3. Levels of Comprehension

1.1.1.3.1. Literal Comprehension

1.1.1.3.2. Inferential Comprehension

1.1.1.3.3. Critical/Evaluative Comprehension

1.1.2. Difficulties of Reading Comprehension

1.1.2.1. Text-Level Difficulties

1.1.2.1.1. Word-Level Deficits

1.1.2.1.2. Sentence-Level Deficits

1.1.2.1.3. Discourse-Level Deficits
1.2. Reading comprehension Strategies

1.2.1. Nature of Reading comprehension Strategies

1.2.1.1. Reading comprehension Strategy Construct

1.2.1.2. Strategies Vs Skills

1.2.2. The Place of Strategies in Comprehension Theories

1.2.2.1. The Bottom-Up Model

1.2.2.2. The Top-Down Model

1.2.2.3. The Interactive Model

1.2.2.4. The Construction-Integration Model

1.2.2.5. The Constructionist Model

1.3. Reading comprehension Strategy Classifications

1.3.1. Strategies Based on their Functions

1.3.1.1. Cognitive Reading Strategies

1.3.1.2. Metacognitive Reading Strategies

1.3.1.3. Socioaffective Reading Strategies
1.3.2. Strategies Based on Time of Use

1.3.2.1. Pre-Reading Strategies

1.3.2.2. While-Reading Strategies

1.3.2.3. Post-Reading Strategies

1.3.3. Strategies Based on Local and Global Information Processing

1.3.3.1. Local Reading Strategies

1.3.3.2. Global/General Reading Strategies

1.4. Reading comprehension Strategy Instruction

1.4.1. The Role of Strategy Instruction

1.4.2. Approaches to Teaching Reading Comprehension Strategies

1.4.2.1. Guided Reading Approach

1.4.2.2. Reciprocal Teaching Approach

1.4.3. Measurement of Learners’ Use of Reading Comprehension Strategies

Conclusion
Introduction

Reading is an essential skill and a complex process in the language learning context. It becomes more complex and difficult when readers encounter factors that may negatively influence their level of comprehension. In fact, it has become a well-established belief among most researchers that reading comprehension is a crucial element for academic success, and reaching a high level of comprehension depends on the learners’ use of reading comprehension strategies. Thus, teaching reading comprehension strategies should take place in second/foreign language teaching/learning.

This chapter tackles the nature of reading comprehension and strategies, and determines reading comprehension difficulties. It also examines the place of strategies in comprehension theories, and sheds light on different reading comprehension strategy classifications. Finally, it discusses the role of strategy instruction and the main approaches to teaching reading strategies.

1.1. Reading Comprehension

1.1.1. Nature of Reading Comprehension

1.1.1.1. Definition of Reading

Many scholars have provided different definitions for reading. A great number of them such as Goodman (1967), Smith (1971), and Clarke and Silberstein (1977) define reading focusing on the psycholinguistic perspective because reading is considered as a complex process, which includes a combination of perceptual, psycholinguistic and cognitive abilities. Goodman (as cited in Wang, 2011) sees reading as a psycholinguistic guessing game and a process in which a reader reconstructs a given text by sambling, predicting, testing and confirming. According to Wixon and Peters (as cited in Wang, 2011), the reading process is considered as a dynamic interaction between the reader’s background knowledge, the information suggested by the written language and the context of the reading situation. Yet, Brassell and Rasinski (2008) define reading as “the ability to comprehend or make meaning from written text” (p. 15). For Manoli and Papadopoulou (2012), reading is the process of receiving and interpreting information encoded in language form via the printed medium.

From the above mentioned views and definitions important points can be inferred. Firstly, reading is a process that creates an interaction between the reader and the reading
materials in order to get full comprehension of the meaning anticipated. Secondly, the reader receives messages through a written text and then transforms these messages into meanings on the basis of his/her prior knowledge, trying to guess the writer’s intended meaning from the written language clues. In other words, reading is a complex cognitive process that involves decoding written symbols and constructing meaning in order to comprehend what is read.

1.1.1.2. Reading Comprehension Construct

Reading comprehension means to understand or comprehend the reading text. For many researchers, comprehension is the essence of reading and its primary purpose (Brassell & Rasinski, 2008). Urquhart and Weir (as cited in Manoli & Papadopoulou, 2012) assert that comprehension remains the objective of reading, and it consists of the recovery of the author’s meaning. Brassell and Rasinski (2008) trace back the origins of the term ‘comprehension’ to the Latin word ‘prehendere’ which signifies ‘to grasp’. They state that ‘comprehension’, ‘understanding’ and ‘grasping the meaning’ are all vague concepts that require ‘an active reader’. Yet, Dorn and Soffors (2005) distinguish between the two terms ‘comprehension’ and ‘comprehending’. While ‘comprehending’ is the process of reading and grasping the meaning, ‘comprehension’ is the by-product of that intellectual process (Dorn & Soffors, 2005). According to Greene (2001), comprehension is perceived as relative to how a reader is able to identify the author’s intended meanings as presented in the written text. It means that Greene sees comprehension in relation to a reader’s ability to follow the pattern of thinking structured and intended by the author’s discourse. RAND Reading Study Group (as cited in Zheng, 2014) considers comprehension as the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. It means that the readers build understanding and get meaning by engaging in a series of interactions between their mind and the written text. Thus, reading comprehension is an interactive process, and the ultimate aim of this process is to grasp the meaning that is being communicated to the readers. In other words, comprehension is the outcome that is supposed to be attained from reading. Graesser (2007) focuses on the importance of comprehension skills. Recognizing letters, pronouncing them accurately, or even understanding many sentences do not lead to comprehension, but reading comprehension requires more skills (Graesser, 2007). Among these skills, “Inferences, linking ideas coherently, scrutinizing the validity of claims with a critical stance, and sometimes understanding the motives of authors” (Graesser, 2007, p. 4).
So, reading and comprehension are two terms that complement each other. Reading is the tool and comprehension is the product. While the first is related to the written text, the second is related to the readers themselves, depending on their prior knowledge and their attitudes towards reading. This means that comprehension can be achieved only if the readers have some basic intellectual equipment in order to comprehend and understand what is read. Thus, the main concept in the reading skill is comprehension which enhances the process of language acquisition, and comprehension is a complex higher level skill.

1.1.1.3. Levels of Comprehension

Barrett (as cited in Brassell & Rasinski, 2008) suggests three level taxonomy of reading comprehension.

1.1.1.3.1. Literal Comprehension

This level of comprehension is considered as the ‘lowest’ level in which the reader can recite or repeat information found in a text. This information is related to “names of characters and details of setting” (Brassell & Rasinski, 2008, p. 17). In addition, this level of comprehension is related to the text; it means that it is dependent on the presence of the text itself.

1.1.1.3.2. Inferential Comprehension

Comprehension is well established at this level compared to the previous one. At this level, the reader’s understanding is related to the text, depending on his/her prior knowledge in order to infer the meaning. For example, “If a text indicates that a character is carrying an umbrella while walking down a street on a cloudy day, you can infer that the character is expecting rain” (Brassell & Rasinski, 2008, p. 17). For Brassell and Rasinski (2008), inferential comprehension is more sophisticated than literal comprehension as it involves the manipulation of information from both the text and the reader’s prior knowledge.

1.1.1.3.3. Critical/ Evaluative Comprehension

This level of comprehension is the highest level in the taxonomy, which involves activating the reader’s critical thinking to answer questions about the value, authenticity, and the quality of the content of the text (Brassell & Rasinski, 2008). According to Brassell and Rasinski (2008), “Answers to such questions require a high level of interaction between information from the text, the reader, perhaps other people with whom the reader has interacted, or even other texts the reader has read” (p. 17).
These three levels of comprehension, especially inferential and critical comprehension are important and need to be fostered through instruction.

1.1.2. Difficulties of Reading Comprehension

Throughout the process of reading, many factors may intervene and negatively influence the level of comprehension, making the reader’s attempts to repair comprehension difficult. Bernhardt (1991) states that the two major factors that affect reading are known as ‘text-driven operation’ and ‘knowledge-driven operation’. While the first factor consists of variables in a text such as word recognition, vocabulary, syntax, phonology, and text structure, the second one is related to the readers’ prior knowledge, attitudes toward reading, and reading strategies used (Bernhardt, 1991). Since reading comprehension means making sense of different aspects of a text, difficulty may appear at the text-level including word-level, sentence-level and discourse-level difficulties as well as difficulties related to individuals themselves.

1.1.2.1. Text-Level Difficulties

According to Cain and Oakhill (2003), text comprehension is a complex task, which involves many different cognitive skills and processes. Although readers attempt to manage well with a given text to achieve comprehension, they may encounter many difficulties at different text-levels: at the word-level, sentence-level and discourse-level.

1.1.2.1.1. Word-Level Deficits

According to Cain and Oakhill (2003), the main difficulties that may appear at the word-level while reading are three aspects: speed and automaticity of decoding, phonological skills, and vocabulary and semantic knowledge.

Wren (as cited in Zheng, 2014) describes decoding or word recognition as the ability to identify written words. In the simple view of reading model, decoding had been seen as one of important skills that contribute to reading comprehension, in addition to language comprehension. For Cain and Oakhill (2003), “Word decoding and reading comprehension are highly related skills” (p. 313). As slow and inaccurate reading of words may negatively affect reading comprehension, readers should recognize words at a glance. In other words, readers should be skilled at rapid word recognition and decoding letters automatically. Burn et al. (as cited in Westwood, 2008) state that “for a child to read fluently, he or she must recognize words at a glance, and use the conventions of letter-sound correspondences
automatically. Without these word recognition skills, children will never be able to read or understand text comfortably and competently” (p. 16). Readers with word recognition automaticity problems cannot develop their reading comprehension since they focus on word decoding, reading the text letter-by-letter and forgetting these words meaning as well as the whole text meaning.

Westwood (2008), discusses the importance of phonemic awareness -“that is, sensitivity to the speech sounds contained within words” (Westwood, 2008, p. 6). According to Eldredge (as cited in Westwood, 2008), “Learning and using phonic skills (the ability to associate letters with sounds for decoding words in print) relies entirely upon good phonemic awareness – and good teaching” (p. 6). For Cain and Oakhill (2003), the reader has the ability to identify the phonemic elements of words at this type of level that is related to the word development. This entails that phonological skills deficits reduce the reader’s ability to maintain verbal information in working memory which, in turn, is the reason of poor comprehension (Cain & Oakhill, 2003).

As vocabulary is a key for comprehension, which has a major role in enhancing reading comprehension, lack of vocabulary knowledge has been proved to hinder comprehension in reading. The rich vocabulary the reader has, the better his/her reading comprehension will be. Moreover, Cain and Oakhill (2003) suggest that limited semantic knowledge may lead to comprehension difficulties.

1.1.2.1.2. Sentence-Level Deficits

At the sentence-level, a reader should have the ability to identify all the elements of the sentence such as the subject, verb and object, and the relationship between one another in order to achieve reading comprehension. Therefore, syntactic knowledge is very important in facilitating text understanding, and the reader’s failure in detecting ‘who did what to whom’ hinders his/her comprehension. It is important for the reader to detect “who did what to whom” (Cain & Oakhill, 2003, p. 318).

1.1.2.1.3. Discourse-Level Deficits

As text genres elicit different types of processing, the discourse type is a major factor that influences reading comprehension. According to Cain and Oakhill (2003), the major reading comprehension difficulties that the reader may face at the text-level are mostly found at discourse-level skills, which are making inferences, the use of discourse-level context,
and metacognitive knowledge and processes. Readers should depend on their general knowledge to make links between all parts of a text in order to understand the author’s intended meaning. So, the readers’ failure in making inferences leads to comprehension difficulties. Cain and Oakhill (2003) state that “less skilled comprehenders are poor at making inferences when reading” (p. 320). Moreover, for Cain and Oakhill (2003),

> Less skilled comprehenders experience particular difficulty with the use of story context to facilitate understanding of unknown words and phrases in text. This higher-level process may be an important mechanism for acquiring information from context in everyday reading and, thus, impairment in the use of context may affect vocabulary growth. (p. 324)

So, focusing on the context at the text-level is very important for readers to understand any type of texts. Particularly, metacognitive skills are very important for reading comprehension because they support the monitoring and repairing of comprehension while reading. Consequently, readers having difficulty in regulating their knowledge while reading will experience comprehension difficulties (Cain & Oakhill, 2003).

### 1.1.2.2. Individual Difficulties/Differences

Individual difficulties/differences can emerge from variations in skills and impairments at many levels of the reading process. In other words, this type of difficulty is related to the readers themselves instead of the text-level. Any difficulty in word recognition or decoding, for example children with dyslexia, will have a negative effect on reading comprehension. Moreover, some readers are described as ‘poor comprehenders’ because they have specific comprehension difficulties such as the lack of the ability to store and process information while they read a text. The way of reaching comprehension could be impossible if the reader’s ability to store information is weak and slow. This ability was proved to be correlated with intelligence since more intelligent readers will find it easy to understand and store information (Cain & Oakhill, 2003). In discussing the factors that each individual’s process of comprehending texts relies on, researchers focused on comparing good readers with poor ones, identifying the main characteristics of skilled readers. When talking about ‘good readers’, Dodge (2013) states that:
They read more, become better readers, and this cycle proceeds in a cumulative, positive manner. Poor readers, on the other hand, experience low achievement, feel they will perform poorly in the future, read less, and continue to do poorly, and this downward spiral continues. (p. 6)

According to Dodge (2013), skilled readers have many advantages compared with less skilled readers as they have more skills and strategies that can be used while processing a text, and more knowledge of language, text structure and the world that can be integrated with the text input to help comprehension.

Wren (as cited in Zheng, 2014) has summarized the cognitive domains that contribute to reading comprehension into a framework, and the readers’ failure at any stage leads to comprehension difficulties (see Figure 1). In addition to decoding abilities, the reader should also demonstrate language comprehension by understanding word meanings, relationships between words and language context. Moreover, there are contributions of background knowledge and linguistic knowledge, including phonology, syntax and semantics.

![Figure 1: The Cognitive Foundations of Learning to Read: A Framework](Wren, 2000; in Zheng, 2014, p. 18)
1.2. Reading comprehension Strategies

1.2.1. Nature of Reading comprehension Strategies

1.2.1.1. Reading comprehension Strategy Construct

According to Oxford (as cited in Cohen, 2005), the word ‘strategy’ comes from the Greek word ‘strategia’, which means generalship or the art of war and implies planning, conscious manipulation and movement toward a goal. The term ‘strategy’ is used by numerous researchers (O’Malley & Chamot, 1990; Oxford, 1990; Cohen, 2005) to refer to the mental processes or behaviours that language learners employ in L2 acquisition, L2 use, or L2 testing situations. Reading comprehension strategies are defined as “deliberate, conscious procedures used by readers to enhance text comprehension” (Sheory & Mokhtari, 2001, p. 433). According to Cohen (2005), reading comprehension strategies refer to mental processes that readers consciously choose in order to use in accomplishing reading tasks. In the same way, Brantmeier (as cited in Naseri & Zaferanieh, 2012) views reading comprehension strategies as the comprehension processes that readers use in order to make sense of what they read. Similarly, Abbott (2006) views reading comprehension strategies as “the mental operations or comprehension processes that readers select and apply in order to make sense of what they read” (p. 637). For Graesser (2007), “A reading comprehension strategy is a cognitive or behavioral action that is enacted under particular contextual conditions, with the goal of improving some aspect of comprehension” (p. 6). For example, looking up an unfamiliar word in a dictionary. Graesser (2007) explains that the strategic behavioural actions would be to locate the word in the dictionary by turning pages, and “the strategic cognitive actions would be to read the word’s definition in the dictionary, to reread the sentence in a text with the word, and then to comprehend the sentence as a whole” (p. 7).

So, reading comprehension strategies are procedures consciously used by readers to better comprehend what is read. They are used as plans or actions by readers in attempt to achieve a particular objective, and they are an important part of learning strategies.

1.2.1.2. Strategies Vs Skills

Some researchers such as Duffy et al. (1987), Carrell (1989), Robb (1996), and Alexander and Jetton (2000) do not trace a boundary between strategies and skills; “they assume that a reading skill becomes a strategy when the reader can use it independently, reflect on it, and understand what it is, how it works, and when to apply it to new texts”
(Abbott, 2006, p. 637). However, others differentiate strategies from other processes such as skills. As reading comprehension strategies are procedures consciously used by readers to better comprehend what is read, some researchers such as Urquhart and Weir (1998), Williams and Moran (1989) and Cohen (2005) distinguish strategies from other processes based on the element of consciousness. Cohen (2005) differentiate the term strategy from those processes that are not strategic. While processes are general, subconscious or unconscious and more automatic, strategies are subject to control, intentional and used to act upon the processes (Cohen, 2005).

Specifically, some researchers such as Williams and Moran (1989), and Urquhart and Weir (1998) distinguish strategies from skills. For Williams and Moran (1989), much of the reading process is automatic in nature; therefore, it is defined as a skill and is beyond our conscious control. However, readers do exert a significant level of active control over their reading process using strategies that are conscious, deliberate and purposeful procedures (Williams & Moran, 1989). Urquhart and Weir (as cited in Manoli & Papadopoulou, 2012) distinguish the two concepts: A skill is an ability which is considered as routinized, almost automatic behaviours that can be unconsciously selected through practice and repetition, and applied across different kinds of texts; however, a strategy is a conscious procedure carried out in order to solve a problem, or a way of getting around difficulties encountered while reading.

Manoli and Papadopoulou (2012) summarize the differences between strategies and skills in the following table.

**Table 1: Differences between Strategies and Skills (Manoli & Papadopoulou, 2012, p. 819)**

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Deliberate</td>
<td>- Automatic</td>
</tr>
<tr>
<td>- Conscious</td>
<td>- Unconscious</td>
</tr>
<tr>
<td>- Mindful/Effortful</td>
<td>- Effortless</td>
</tr>
<tr>
<td>- Goal/Problem-Oriented</td>
<td>- Goal/Problem free</td>
</tr>
<tr>
<td>-Teach, explain, model through think aloud, guided application- gradual release of responsibility-independent practice</td>
<td>-Teach, practice to mastery, assess, reteach, if necessary</td>
</tr>
</tbody>
</table>
1.2.2. The Place of Strategies in Comprehension Theories

During the last four decades, a number of theoretical models of text comprehension have been developed. These models make different commitments on the role of reading comprehension strategies in driving comprehension (Graesser, 2009). The main theoretical models that have been proposed are five: the bottom-up model, the top-down model, the interactive model, the construction-integration model and the constructionist model.

1.2.2.1. The Bottom-Up Model

Gough (as cited in Liu, 2010) proposed a bottom-up model that portrays the reading process as proceeding in serial fashion, from letter to sound, to words, to meaning. The reader starts with the written texts and derives the meaning in a linear way. It means that a reader is going to move through successive stages to comprehend the reading text: letters/sounds (character level) to words (lexical level) then sentences or (deep structure) to grasp the meaning (Liu, 2010, p. 156). According to Stanovich (as cited in Wang, 2011), bottom-up reading is the mechanical, word-driven process in which the readers move from lower-level processes, (e.g., interpreting graphic symbols) to higher-level processes (e.g., assigning meaning to words). It means that a reader considers individual letters and words, sounds them out, and decodes the meaning from the structure handled (i.e., decoding, processing of syntax). So, “bottom-up strategies focus primarily on word meaning, sentence syntax, or text details and are associated with attending to lower level cues” (Abbott, 2006, p. 637).

As studies have found that reading is not simply a decoding process, another explanation to the reading process has been developed in which the reader should read for meaning, not just for decoding words in order to comprehend their combination into sentences which affects the whole text comprehension.

1.2.2.2. The Top-Down Model

According to this model, the readers are involved in the reading process, using their prior knowledge and experiences to make inferences, predicting what will be read next, and testing their predictions. According to Liu (2010), the top-down processing emphasizes the reconstruction of meaning from reader’s prior experiences rather than the decoding of words from the written texts. “It contends that reading is driven by meaning and proceeds from whole to part” (Liu, 2010, p. 154). It means that a reader starts from general to specific, and
the meaning precedes the structure in which the top is the higher mental order and the bottom is the physical text on the page. So, “top-down strategies focus primary on text gist, background knowledge, or discourse organization and are associated with attending to higher level cues” (Abbott, 2006, p. 638).

As studies have found that good readers do not necessarily rely on conscious predictions in word recognition, another alternative model has been developed to explain how comprehension is built in the reading process.

### 1.2.2.3. The Interactive Model

Some researchers such as Van Dijk and Kintsch (as cited in Wang, 2011) argue that both models, the bottom-up and the top-down models, should be combined together as parts of the reading process to achieve comprehension because the readers should use information from both levels simultaneously. Davis (1995) explains the operation of this model:

The model developed from laboratory research on fluent skilled readers, which demonstrate the interaction between different sources of information. They include examples of the identification of a letter being determined by the word in which it appears, and of a text being dependent upon the schematic framework within which it is presented. (p. 63)

According to Stanovich (as cited in Wang, 2011), readers construct meaning from a text using multiple tools in a highly interactive parallel processing system where stronger skills or less ‘resource-intensive skills’ can compensate for weaker or more ‘resource-intensive skills’. Reading is interactive in two senses. On the one hand, there is the interaction between the reader (the reader’s background knowledge and experiences about the language being read and themes of reading) and the text (direct information such as vocabulary). On the other hand, there is the simultaneous processing interaction between many component skills ranging from lower-level (bottom-up) automatic skills to higher-level (top-down) strategic comprehension skills.

As reading comprehension relies on the analysis and integration of many different kinds of information to yield complex mental representations of the text message, another alternative model of the reading process has been developed.
1.2.2.4. The Construction-Integration Model

Kintsch’s (1998) Construction-Integration Model is considered as the most comprehensive model of reading comprehension (Graesser, 2007). According to this model, the analysis of information occurs at different levels in which various processes contribute and interact with the readers’ prior knowledge and their goals to construct mental representations or situation models. This model includes different levels of cognitive mental processes of representation that occur during reading comprehension: the ‘surface code’, the ‘propositional textbase’, the ‘situation model’ and the ‘text genre’.

According to Kintsch (1998), the surface code includes the reader’s processing of exact wording of syntax and clauses encountered in a particular text. It means that while reading a text the sequence of propositions (the smallest units of meaning within individual sentences and clauses) is directly constructed from words and phrases in the text. The propositional textbase includes an explicit but simplified form of propositions that can be found in a given text; these propositions allow a reader to make inferences and retain meaning from a text. It means that this level involves deeper processing than the surface representation as it links more information in the text, and indicates relative importance. The two previous levels are the construction phase of the construction-integration model; the situation model is an integration process in which the constructed textbase is integrated with the reader’s prior knowledge to form a coherent mental representation of the text (situation model). It is a more elaborated level; it involves deeper processing than the textbase as it incorporates information from long-term memory (prior knowledge) to make sense of the text and because it is more related to meaning. Moreover, the situation model represents the reader’s mental representation of all the components of the situation represented in the text. According to Graesser and Zwaan (as cited in Dodge, 2013), the components of the situation represent “people, setting, actions, and events that are explicitly mentioned or inferentially suggested by the text” (p. 5). Graesser and Zwaan (as cited in Dodge, 2013) also state that “situation models may vary in abstractness from bare-bone conceptual sketches to lifelike renditions of episodes in the real world” and that “most inferences generated during text comprehension are part of the constructed situation model” (p. 5). The text genre is the type of discourse.

Based on Kintsch’s model, information can be processed at different levels. Graesser (2007) states that “when comprehension succeeds the representations at all of these levels
are harmoniously integrated, yet there is no intentional strategy on the part of the reader to make this happen” (p. 12). According to Graesser (2007), strategies have no role in this model. He states that:

Strategies take a back seat in the CI model. Strategies exist, but they do not drive the comprehension engine. Instead, the front seat of comprehension lies in the bottom-up activation of knowledge in long-term memory from textual input (the construction phase) and the integration of activated ideas in working memory (the integration phase). (p. 11)

1.2.2.5. The Constructionist Model

Graesser et al. (1994) developed the constructionist model which is based on the importance of comprehension strategies. According to Graesser (2007), reading comprehension strategies play a prominent role in the constructionist theoretical framework. This model has three principal assumptions: Reader goals assumption which states that a reader attends to content in the text that addresses the goals of reading the text, coherence assumption which states that a reader tries to construct the coherent meaning representations at both local and global levels, and explanation assumption which states that a good comprehender tends to generate explanations about the text (Graesser, 2007). Graesser (2007) states that “the notion that coherence and explanation strategies are the hallmarks of good comprehension places constraints on comprehension. These strategies determine the selection of content that gets encoded, the inferences that are generated, the time spent processing text constituents” (p. 14). In this theoretical framework, good readers try to link the text content with their prior knowledge, generate explanation, and they are driven by why-questions, which are fundamental to the construction of meaning. According to Magliano et al. (as cited in Graesser, 2007),

When readers are asked to monitor why-questions during comprehension, their processing and memory for the text are very similar to normal comprehension without such orienting questions; however, when asked to monitor how-questions and what happens-next-questions, their processing and memory shows signs of being disrupted. (p. 14)

Over time, the views about how to build comprehension in the reading process have developed in different ways, and the reader’s role has changed from a passive role to an active one. Reading comprehension strategies seem having an important place in the
constructionist model in contrast to the other models in which the strategies seem having no special role. Eventhough they exist, comprehension is not always reached. Yet, reading comprehension strategies are very important to reach a high level of comprehension.

1.3. Reading comprehension Strategy Classifications

Since 1979, most researchers have viewed reading as an active process in which learners actively interact with a text by applying different aspects such as reading strategies. Therefore, language learning strategies, generally, and reading strategies, particularly, have been the focus of a great deal of studies. As reading comprehension strategy use leads to reading comprehension, and reading comprehension strategy analysis provides insights to how readers interact with a text and how their choice of strategies influences their comprehension, researchers have discussed a variety of reading comprehension strategies, and have given some suggestions to classify them.

1.3.1. Strategies Based on their Functions

According to O’Malley’s and Chamot’s (1990) classification of language learning strategies, other researchers’ classification of reading strategies and globally accepted taxonomy, reading strategies are classified on the basis of their functions into: cognitive, metacognitive and socioaffective reading strategies.

1.3.1.1. Cognitive Reading Strategies

Williams and Burden (as cited in Ozek & Civelek, 2006) state that cognitive strategies are viewed as mental processes concerned with the processing of information directly in order to learn; they are used for obtaining, storing, retrieving or using information. In terms of reading, cognitive strategies are mental processes, which enable readers to construct meaning from a reading text directly. Cognitive reading strategies are divided into six primary components: making prediction; translating; summarizing; referring to prior knowledge experience; applying grammar rules, and inferring meaning from context (O’Malley & Chamot, 1990).

Making prediction is thinking about the text from one’s vision and background. It involves thinking about what might be coming next in the text. Good readers anticipate meaning and what is coming based on their prior knowledge. According to Duffy (2009), learners sometimes look forward, trying to predict what is coming; they sometime make assumptions or guess the content from their initial glance as they try to apply their schemata.
to what is in front of them. Readers also use the strategy of summarizing which is the creation of a brief retelling of a text. According to Duffy (2009), “While it may include the main idea or theme, the focus is on describing in brief from the text’s major points” (p. 153). Duffy (2009) defines inferring as “the ability to ‘read between the lines’ or to get the meaning an author implies but does not state directly” (p. 122). Making inferences is the process of linking ideas and understanding the relations between separate sentences in a text, and then relating that to one’s life in order to create a wholly original interpretation which, in turn, becomes part of one’s beliefs or knowledge. According to McNamara (2009), “Making inferences is critical to text comprehension because texts normally do not (or cannot) state all of the relevant information” (p. 36). For Kintsch (as cited in McNamara, 2009), deep comprehension requires more than just interpreting individual sentences; the reader must also be able to integrate individual sentence meanings into a coherent text level representation. Therefore, the use of knowledge and textual clues to draw conclusions and form unique interpretation is the core of the inferring strategy, in which reading between lines, using imagination and reflecting on reading are highly activated.

1.3.1.2. Metacognitive Reading Strategies

Metacognitive strategies mean ‘thinking about thinking’. According to Zhang and Seepho (2013), “In reading, metacognitive strategies are self-monitoring and self-regulating activities, focusing on both the process and the product of reading” (p. 55). Metacognitive strategies have been defined by many scholars such as Chamot and O’Malley (1990), Oxford (1990), Ellis (1994) and Cohen (2005). Zhang and Seepho (2013) state that:

They include the readers’ awareness of whether or not they can comprehend what they read; their ability to judge the cognitive demands of reading task; and their knowledge of when and how to employ a specific cognitive reading strategy according to text difficulty, situational constraints, and the reader’s own cognitive abilities. (p. 55)

In other words, metacognitive reading strategies are divided into five primary components: preparing and planning for effective reading; deciding when to use particular reading strategies; knowing how to monitor reading strategy use; learning how to orchestrate various reading strategies, and evaluating reading strategy use (Anderson, 2003). According to Anderson (2003), each of these components interacts with each other, as metacognition is not any one of the five components in isolation, and is not a linear process moving from
preparing and planning to evaluating. “It is the blending of all five into a kaleidoscopic view that may be the most accurate representation of metacognition” (Anderson, 2003, p. 10). The use of metacognitive strategies in the reading process has been generally supported as a valuable aid. Many studies (Carrell, 1995; Wenden, 2001; Chamot, 2005) have illustrated the positive relationship between the metacognitive strategies and reading comprehension.

Planning is a pre-reading strategy. Good readers determine the nature of a reading task, and plan the objectives of reading, the content of each task and the parts of specific reading tasks. They also plan and select the appropriate reading strategies for completing specific tasks. “Monitoring is a process of talking to oneself about whether the meaning being encountered is the meaning anticipated— that is, whether the original prediction is coming true” (Duffy, 2009, p. 107). Duffy (2009) explains that the monitoring strategy looks like a questioning strategy because the latter is also a process of talking to oneself about whether the meaning makes sense. According to Block (1986), comprehension monitoring consists of any attempt that helps readers to judge whether comprehension is reached and to act accordingly. In other words, readers monitor and control their comprehension, as they are aware about what they have understood and what they do not. Evaluating is considered as a crucial comprehension strategy. For Duffy (2009), “Good comprehension is not limited to determining an author’s message. Comprehension also involves making judgments about the message” (p. 169).

Discussing cognitive and metacognitive reading strategies, O’Malley and Chamot (1990) distinguish between them in two perspectives, namely, the macro perspective and the micro one. According to them, metacognitive reading strategies, from a macro perspective, deal more with how to plan, monitor, select and evaluate in one’s process of reading. However, cognitive reading strategies, from a micro perspective, focus more on how to make inference, deduction, summary or organization in a specific content area.

1.3.1.3. Socioaffective Reading Strategies

Socioaffective reading strategies involve interaction between the readers and other individuals (such as teachers, peer learners, or native speakers of the target language) during the reading process. Social reading strategies include questioning for clarification, or eliciting from a teacher or peer additional explanation, rephrasing, or examples, and working together with peers (O’Malley & Chamot, 1990). In other words, they include seeking out requests for assistance from teachers, and asking help and cooperation from peers or native
speakers of the target language in order to understand the materials being read. Affective reading strategies include self-talk to reduce anxiety, self-reinforcement when a reading activity has been successfully completed and self-encouragement in order to feel more confident (O’Malley & Chamot, 1990). Communicating and interacting with others during the reading process means that the readers are using a social strategy, whereas trying to take steps to lower anxiety while reading difficult materials means that the readers are using an affective strategy.

While learners use cognitive reading strategies to achieve a particular goal and to complete cognitive tasks such as inference and word-part analysis, metacognitive reading strategies are used to control the cognitive processes such as comprehension monitoring. However, socioaffective reading strategies are used by learners to reduce anxiety, and to interact and cooperate with others during the reading process such as asking assistance, clarification and help from others like teachers, peers and/or native speakers of the target language.

1.3.2. Strategies Based on Time of Use

Paris et al. (as cited in Tobing, 2013) classified reading strategies based on time of use into three categories: before reading strategies, during reading strategies and after reading strategies. Similarly, Ozek and Civelek (2006) classified reading strategies into these three categories:

1.3.2.1. Pre-Reading Strategies

Pre-reading strategies, or before reading strategies are used to activate the readers’ background knowledge in relevance to a reading text. Examples of pre-reading strategies are using the title to anticipate the text content; skimming the text quickly to get the gist; reading the first line of every paragraph to understand what the text is about, and thinking about previous knowledge on the topic of the text (Ozek & Civelek, 2006).

One strategy of this type is using the title to anticipate the text content. Similarly, relating the pictures/illustrations to the text content allows a reader to have a general idea about what the text is about (Ozek & Civelek, 2006). Skimming is a reading strategy that is used to get a quick gist of a section or a chapter (Warner, 2010). Readers use eye movements to move rapidly through a text in order to construct a general overview of a material.
According to Warner (2010), skimming includes other strategies such as looking at the title, the heading and subheadings, and identifying the topic sentences.

1.3.2.2. While-Reading Strategies

While-reading strategies, or during reading strategies are used to identify main idea, make reference and cross-reference. Examples of while-reading strategies are using a dictionary for important words; guessing the meaning of a word from the context; guessing the meaning of a word from the grammatical category; skipping some unknown words; taking notes on the important points of the text, and making guesses about what will come next based on the information already given in the text (Ozek & Civelek, 2006).

Checking up a dictionary is a reading strategy that is generally used by students. Nation (1990) states that “dictionaries are used primarily to check meaning. The next most frequent uses are to check spelling and pronunciation” (p. 135). Guessing the meaning is a reading strategy based on information available in the text itself. For Nation (1990), “Guessing from context is the most important vocabulary learning strategy. Its aim is for learners to be able to make a well-informed guess at the meaning of an unknown word in context” (p. 130).

1.3.2.3. Post-Reading Strategies

Post-reading strategies, or after reading strategies are used to review the text content. Examples of post-reading strategies are summarizing the main ideas; rereading the text to remedy comprehension failures, and rereading the text to remember important information (Ozek & Civelek, 2006).

Restating the main ideas and rereading a text are reading strategies, which have important influence on the reading process. Rereading a text either aloud or silently gives a reader time to reflect on the content in order to overcome reading difficulties.

1.3.3. Strategies Based on Local and Global Information Processing

Following Block (1986), reading strategies can range from local to general strategies. Similarly, Abbott (2006) classifies reading strategies into two categories which range from bottom-up (or local) to more top-down (or global) strategies.
1.3.3.1. Local Reading Strategies

According to Block (1986), “Local strategies deal with attempts to understand specific linguistic units” (p. 473). Abbott (2006) states that local strategies focus on the details of a given text and are associated with attending to lower level cues. For Anderson (as cited in Tobing, 2013), paraphrase strategy is considered as a local strategy because it involves local information processing such as using cognates and word-analysis, in contrast to strategies that establish coherence in a text which involve global text information processing. Examples of local strategies are breaking words into smaller parts; using knowledge of syntactic structures or punctuation scanning for specific details; paraphrasing or rewording the original text, and looking for key vocabulary or phrases (Abbott, 2006).

1.3.3.2. Global/General Reading Strategies

According to Block (1986), general strategies include comprehension-gathering and comprehension-monitoring strategies. Abbott (2006) states that global strategies focus on the organization of a discourse and are associated with attending to higher-level cues. For Mokhtari and Sheorey (2002), Anderson (2003), and Zhang and Wu (2009), global reading strategies are strategies in which the readers use their prior knowledge to comprehend a text. They review the length, organization and main idea, and use typographical features like bold face and italics to identify key information. Examples of general/global strategies are recognizing the main idea; integrating scattered information; drawing an inference; predicting what might happen in a related scenario, and recognizing text structure (Abbott, 2006).

Other scholars proposed other taxonomies, key strategies, or lists of effective reading strategies which support comprehension most (e.g., Oxford, 1990; Pressly & Afflerbach, 1995; Jimenez, Garcia, & Pearson, 1996; Tang, 1997; Salataci, 2002; Duke & Pearson, 2002; Phakiti, 2006; Graesser, 2007; Grabe, 2009). Thus, reading comprehension strategies have different names and classifications. Knowing these strategies is important; however, knowing how and when to use them while reading is more important for learners to become proficient readers.
1.4. Reading Comprehension Strategy Instruction

1.4.1. The Role of Strategy Instruction

‘Reading comprehension strategy instruction’ or ‘strategy instruction’ is defined as a direct and an explicit teaching method of comprehension strategies that helps students to develop the ability to apply effective reading strategies in order to become more proficient readers (Lai, Tung, & Luo, 2008). There is a common belief among educators that training students to apply effective comprehension strategies has a good effect on their reading comprehension achievement. The primary purpose of strategy instruction is not only raising learners’ awareness of strategies, but allowing them to select appropriate strategies to accomplish their learning goals. So, comprehension strategy instruction focuses on teaching reading strategies to students to help them become strategic readers. Koda (as cited in Fan, 2010) points out that strategic reading cannot only compensate for learner’s comprehension deficiency, but also develop their critical thinking.

Janzen and Stoller (as cited in Fan, 2010) maintain that strategic reading instruction is rewarding to both second language learners and their teachers. They argue that strategy instruction cultivates learners’ autonomy and self-awareness of the meaning constructing process, and provides an efficient method for teachers to motivate their students and teach them how to read effectively. Block (1986) supports the idea that reading strategies help learners to execute a task identifying which textual cues they have to focus on in order to make sense of what they read, and to overcome problems of understanding a text. For Block (1986), the reading strategies involved in this process range from the simplest (e.g. scanning, guessing word meaning, previewing), to the most complex (e.g. summarizing, making inferences, and identifying tone).

Wenden and Rubin (as cited in Medina, 2012) discuss the process of strategy instruction. According to them, it consists of two important issues: The first one is the description of strategies that successful language learners use; these strategies are presented as typologies. The second one is training SL/FL students in how to apply strategies that are proven to be effective. Janzen (as cited in Anderson, 2003) states that five features should be embedded in the course syllabus to improve reading. These features are explicit discussion of what reading strategies and how to use them; teacher modeling of strategic reading behaviour; students reading and thinking aloud while practicing targeted strategies;
classroom discussion, and the course content, which allows for multiple opportunities to practice the strategies that are being taught (Anderson, 2003).

In order to guide students to use helpful strategies when they read in a SL/FL, teachers need to understand the importance of strategy instruction through the educational theories and approaches that support it. Thus, they can design tasks to facilitate the reading process in order to reach language learning objectives.

1.4.2. Approaches to Teaching Reading Comprehension Strategies

Teaching reading comprehension strategies explicitly is very important because learners will be provided with the tools that develop a more positive attitude towards reading, enabling them to become independent, skilled and strategic comprehenders. In recent years, the emphasis has shifted from the identification and classification of reading comprehension strategies to their actual application in the language classroom. Antoniou and Souvignier (2007) maintain that “effective reading requires the use of strategies that are explicitly taught” (p. 43). Among the approaches that focus on teaching reading comprehension strategies are ‘Guided Reading’ and ‘Reciprocal Teaching’ approaches (DeBoer, 2003).

1.4.2.1. Guided Reading Approach

This method emerged in the 1980s as a form of small-group reading instruction in New Zealand and Australia, and then it became familiar in the U.K., the U.S. and Canada (Fountas & Pinnell, 1996). Mooney (as cited in Fountas & Pinnell, 1996) states that the purpose of this approach is helping readers to become independent, to use appropriate strategies to their reading abilities, and to question and construct meaning from a text. The aim is to encourage students to use reading strategies independently to facilitate their development as readers. As the guided reading approach is grounded in the interactive model of reading, it focuses on the importance of the interaction between the reader and a text in the creation of meaning.

The guided reading procedure involves planned, intentional and focused instruction where the teacher helps students to acquire reading skills and strategies within small-group settings consisting of students with similar reading abilities (Fountas & Pinnell, 1996). In guided reading, the teacher plans the teaching/learning interaction carefully, considering small group composition and text selection, selecting intentional lesson objectives, and supporting strategic behaviour with teaching prompts, demonstrations, and
questions. Independent reading provides students with opportunities to extend their reading control, strengthen their strategic behaviours, and effectively process information or comprehend (Fountas & Pinnell, 1996).

1.4.2.2. Reciprocal Teaching Approach

The reciprocal teaching approach advocated by Palincsar and Brown, in 1984, is one of the most influential approaches (Fan, 2010). Three theoretical perspectives underpin reciprocal teaching: interactive, cognitive constructivist and the social constructivism perspectives. This approach is a form of multiple strategy instruction based on four specific comprehension strategies: predicting, questioning, seeking clarification, and summarizing. Palincsar and Brown (as cited in DeBoer, 2003) describe this approach as a procedure where a teacher and students take turns leading a dialogue concerning sections of a text. The teacher models the key activities of summarizing (self-review), questioning (making up a question on the main idea), clarifying and predicting. Then students are encouraged to participate guided by their teacher’s instructions and feedback. It means that this instructional model involves the teacher’s and students’ interaction and collaborative work to construct text meaning. In practice, a teacher models the four cognitive reading strategies by using the thinking aloud technique to help students improve their comprehension. In classroom settings, students gradually assume the role of being ‘the teacher’ when they become more proficient. This aims to make them more independent in their learning.

Both Guided Reading and Reciprocal Teaching approaches were developed to enhance learners’ reading comprehension abilities in learning English as a first language through the use of reading comprehension strategies; however, their use has been extended to improve reading comprehension abilities of students learning English as a SL/FL.

1.4.3. Measurement of Learners’ Use of Reading Comprehension Strategies

To identify the reading strategies that language learners use, researchers collect data through direct and indirect methods. Generally, researchers use more than one collection instrument to overcome the shortcomings that may be presented by the use of a single method. Moreover, validity and reliability (Cronbach alpha for internal consistency) of the collection instrument should be taken into consideration when measuring learners’ use of reading strategies. Direct methods include keeping diaries, verbal reports and interviews; indirect methods include questionnaires, discourse analysis and checking inventories. Learners are asked about the frequency use of some reading strategies, or the extent of their
agreement with proposals concerning statements of strategic behaviour. Moreover, Think-Aloud Protocols (TAPs) are used to assess the students’ use of reading strategies. In the think-aloud sessions, participants are asked to think-aloud in front of a tape recorder as they read a text. According to Block (1986), Think-Aloud Protocols or TAPs, a version of verbal report in which participants state their thoughts and behaviours, have become increasingly popular as a means of examining the comprehension strategies used by both native and non-native speakers of English as they read a material in reading classes.

**Conclusion**

This chapter has particularly tackled the place of strategies in different comprehension theories in attempt to clarify this abstract process and how comprehension can be reached through cognitive activities. It has also tackled the different reading comprehension strategy classifications and the main approaches to teaching reading comprehension strategies. Comprehension is essential in the reading process, and is the reason for reading. Hence, reading comprehension is not an easy process, but involves using different reading strategies that must be taught. The next chapter discusses self-efficacy as a motivational construct in learning, and its relationship with reading comprehension strategy use.
Chapter Two: Self-Efficacy

Introduction

2.1. Nature of Self-Efficacy Beliefs

2.1.1. Self-Efficacy and Reading Self-Efficacy

2.1.2. General Self-Efficacy and Specific Self-Efficacy

2.1.3. Self-Efficacy and Related Constructs

2.1.3.1. Self-Efficacy and Self-Esteem

2.1.3.2. Self-Efficacy and Self-Concept

2.1.3.3. Self-Efficacy and Self-Confidence

2.2. Sources of Self-Efficacy

2.2.1. Performance Accomplishments

2.2.2. Vicarious Experience

2.2.3. Verbal Persuasion

2.2.4. Emotional Arousal
2.3. Self-Efficacy and Culture

2.3.1. Collectivist Culture

2.3.2. Individualist Culture

2.4. Self-Efficacy and Learning/Teaching

2.4.1. Influence of Self-Efficacy on Academic Learning

2.4.2. Self-Efficacy and Reading Comprehension Strategy Use

2.4.3. Developing Learners’ Reading Self-Efficacy

2.4.4. Measurement of Learners’ Reading Self-Efficacy

2.4.4.1. Magnitude

2.4.4.2. Generality

2.4.4.3. Strength

Conclusion
Introduction

There are many variables that affect the development of reading comprehension in ESL/EFL contexts; however, the link between self-efficacy beliefs and reading is particularly important (Naseri & Zaferanieh, 2012). As self-efficacy is the foundation for academic areas, particularly for reading, it has gained more attention in research related to student achievement. Diverse studies have reported the positive influence of self-efficacy beliefs on learners’ language learning achievement (Gahungu, 2007). Specifically, some studies have reported the importance of self-efficacy in the use of reading comprehension strategies (Kargar & Zamanian, 2014). Therefore, it is important for students to develop a strong sense of self-efficacy, and to believe in their ability to comprehend texts in order to experience success as readers.

This chapter tackles the nature and the sources of self-efficacy. It also sheds light on how self-efficacy influences learning/teaching. Finally, the chapter discusses developing learners’ reading self-efficacy through instruction and how reading self-efficacy is measured.

2.1. Nature of Self-Efficacy Beliefs

2.1.1. Self-Efficacy and Reading Self-Efficacy

Bandura (1977) defines self-efficacy as a specific type of expectancy concerned with a person’s beliefs in his/her ability to perform a certain action or a set of behaviours required to produce an outcome. Self-efficacy is “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (Bandura, 1986, p. 391). Bandura (1986) clarifies that self-efficacy “is concerned not with the skills one has but with judgments of what one can do with whatever skills one possesses” (p. 391). This notion supports Bandura’s claim of distinction between self-efficacy and other self-constructs. Bandura (1986) states that self-efficacy differs from other self-constructs because it is centered around judgments of capabilities to perform a certain task.

According to Zimmerman (1995), self-efficacy has five distinctive features: First, self-efficacy is used as a judgment of capabilities; it means how well people believe they can do something. Second, multiple dimensions of research participants are included. Third, judgments of capabilities are examined in various contexts. Fourth, self-efficacy is based on mastery criteria; it means that self-efficacy researchers specify how well learners believe
they can accomplish tasks. Finally, self-efficacy is measured before learners actually perform their tasks. Moreover, self-efficacy beliefs are not static. The beliefs may be altered as a result of contextual factors. For example, an individual may have a positive self-efficacy belief for driving on country roads; however, the belief may change as a result of driving in the city (see Bandura, 1982; Pajares, 2002; Smylie, 1990).

Later, a few other authors have attempted to define self-efficacy, but they all paraphrased and referred to Bandura’s definition. For instance, Huang and Shanmao (as cited in Gahungu, 2007) define self-efficacy expectations as “the beliefs about one’s ability to perform a given task or behavior successfully” (p. 69). According to Pajares (1996), self-efficacy is a person’s beliefs to perform a specific task successfully, and is linked closely to initial task engagement, persistence and achievement. Schunk (as cited in Gahungu, 2007) also defines this term as “beliefs about one’s capabilities to learn or perform behaviors at designated levels” (pp. 68-69). So, when individuals believe in their ability to perform an activity, they are more likely to engage in it, working hardly in order to successfully reach the goal.

Reading self-efficacy is a subset of general learning self-efficacy. Freedman (2006) asserts that readers’ beliefs about themselves as readers often impact their literacy development. In other words, reading self-efficacy shows what learners believe about their capabilities to understand a text, their choices in strategy use, their interest and stance toward a text, and the purpose for their reading (Freedman, 2006). It means that reading self-efficacy is learners’ perception of their reading abilities to perform various reading tasks, such as understanding the main idea, guessing the meaning of an unknown word, and inferring the authors’ attitudes toward their own written text as well as the use of reading comprehension strategies.

2.1.2. General Self-Efficacy and Specific Self-Efficacy

Researchers found that there are two types of self-efficacy: General Self-Efficacy (GSE) and Specific Self-Efficacy (SSE), and their effects can be measured independently of each other. General self-efficacy is viewed as the “individuals’ tendency to view themselves as capable of meeting task demands in a broad array of contexts” (Chen, Gully, & Eden, 2001, p. 63). In other words, it is the belief about one’s ability to achieve goals and to overcome obstacles in daily living. It is viewed as a global construct and is drawn from the internal averaging of all successes and failures that are attributed to the self: “The concept
of general self-efficacy provides an important conceptual tool for viewing healthy functioning” (Shelton, 1990, p. 992). On the other hand, specific self-efficacy refers to beliefs in one’s ability to perform specific tasks. It deals with the individual’s confidence in performing a specific task such as reading comprehension, and it does not extend to other situations. Wood and Bandura (as cited in Burrows, 2014) define specific self-efficacy as “beliefs in one’s capabilities to mobilize the motivation, cognitive responses, and course of action needed to meet given situation demands” (p. 61).

These two distinct constructs develop out of different experiences in an individual’s life. GSE accumulates from a variety of different life experiences, each leading to a sense of success or failure. However, SSE forms as a result of past successes or failures (or at least of the perception of success or failure) when performing a particular task (Chen et al., 2001). Moreover, the two constructs are measured differently. According to Chen et al. (2001), GSE scales abandon items concerning specific tasks in favor of items assessing a general expectation of success as a result of effort and ability (e.g., when facing difficult tasks, I am certain that I will accomplish them). Shelton (1990) states that GSE forms when the successes and failures of varied situations allow the individual to generalize his/her feelings of competence to unfamiliar situations. It means that GSE develops from more numerous and pervasive life experiences than does SSE. While GSE emerges as a useful means of predicting someone’s performance across a variety of domains, some academics such as Bandura (1977, 1986) and Chen et al. (2001) argue that specific self-efficacy is more useful than general self-efficacy for understanding how people think, feel and act.

2.1.3. Self-Efficacy and Related Constructs

There are some constructs that seem to constitute a conceptual overlap with self-efficacy. De Fraine, Van Damme and Onghena (as cited in Liu, 2008) compare three concepts: self-efficacy, self-esteem and self-concept, and suggest that they vary in their specificity level. Liu (2008) distinguish between the three concepts: “Self-esteem represents a person’s general perception of his or her self-worth. Self-concept is domain-specific, whereas self-efficacy is regarded as a person’s expectation of his or her competence in a given task” (p. 166). In fact, self-efficacy is not exactly the same as other self-phenomena such as self-esteem, self-concept and self-confidence.
2.1.3.1. Self-Efficacy and Self-Esteem

Self-efficacy is the perception of one’s own ability to reach a goal; however, self-esteem is the sense of self-worth. The main difference between self-esteem and self-efficacy is that self-esteem is a personal trait; self-efficacy is not (Maddux, 1995). According to Maddux (1995), self-efficacy is not a ‘trait’ that one possesses, or does not possess; it is a capacity that is developed and shaped through time and experience, and could thus be subject to change and enhancement. Some researchers distinguish GSE from self-esteem in that the former is actually a component of the latter, and that GSE-related items should be included in measures of self-esteem (Chen, Gully, & Eden, 2004). Chen et al.’s (2004) findings support the notion that GSE relates to motivational traits while self-esteem relates to affective traits. Bandura (1977) notes that it is possible conceptually to have high self-efficacy about a capability that one does not particularly esteem as well as the reverse.

2.1.3.2. Self-Efficacy and Self-Concept

Self-efficacy is often confused with self-concept. Unlike self-efficacy beliefs which are ‘context-specific’ self appraisals of capacities, self-concept is a ‘global description of one’s personal essence’. For Pajares (2002), it is a general conception, consisting of a body of attitudes and values, that one comes to develop about his/her ‘being’ as a result of social transactions. Self-efficacy refers to personal judgments about an individual’s ability; however, self-concept is based on an individual’s feelings of self-worth as they relate to the values of society (Pajares, 2002). Additionally, Zimmerman (1995) draws a clear cut between the two constructs. Self-concept is related to ‘normative assessment of ability’, which involves establishing external comparisons, stimulated by the desire to outperform others. However, self-efficacy is associated with ‘mastery criteria’, focusing on one’s own assets and limitations and evaluating one’s own personal competence to succeed in a given domain (Zimmerman, 1995). In a study published in 2000, Zimmerman (as cited in Kargar & Zamanian, 2014) states that self-efficacy items focus exclusively on how you can do something; it means focusing on task-specific performance expectations. However, self-concept items focus more on how good you are in something, and it has a relation with self-esteem.

2.1.3.3. Self-Efficacy and Self-Confidence

According to Stevens (as cited in Alias & Hafir, 2009), self-confidence refers to a person’s expectation of his/her ability to achieve a goal in a given situation. Academic self-
confidence refers to a person’s self-confidence in the context of academic achievement which is different from the general self-confidence (Alias & Hafir, 2009). Self-efficacy is a situation specific self-confidence (Bandura, 1986). While self-confidence refers to a general sense of confidence, self efficacy relates to a general sense of confidence in one’s abilities to achieve a desired outcome (Smith et al., 2010). According to Bandura (1994), the self-efficacy construct differs from the colloquial term ‘confidence’. Confidence is a nonspecific term that refers to strength of belief but does not necessarily specify what the certainty is about; perceived self-efficacy refers to belief in one’s agentive capabilities that one can produce given levels of attainment (Bandura, 1994). Therefore, self-efficacy belief includes both an affirmation of a capability level and the strength of that belief.

Researchers have attempted to distinguish the concept of self-efficacy from closely related concepts such as self-esteem, self-concept and self-confidence. In fact, self-efficacy as a construct is distinctive from related motivational constructs because it has specific dimensions, and it focuses on performance capabilities.

These distinctions can be summed up in the following table.

<table>
<thead>
<tr>
<th>Self-Constructs</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Confidence</strong></td>
<td>A general belief in yourself.</td>
<td>Do I feel confident in myself?</td>
</tr>
<tr>
<td><strong>Self-Efficacy</strong></td>
<td>Belief in one’s capacity to handle and succeed in performing tasks.</td>
<td>Can I do this task?</td>
</tr>
<tr>
<td><strong>Self-Esteem</strong></td>
<td>Refers to general feelings of self worth or self value.</td>
<td>How do I feel about myself? Am I worthy?</td>
</tr>
</tbody>
</table>

### 2.2. Sources of Self-Efficacy

Within the framework of social cognitive theory, individuals possess a system of self-beliefs that enables them to exercise control over their thoughts, feelings and actions, and the concept of achieving self-efficacy is dependent upon interactions between the environment, personal factors and behaviour (Bandura, 1977, 1986). Pajares (2002) describes how an individual operates within the triadic reciprocity to form his/her self-efficacy beliefs, and how individuals are “capable of exercising a degree of control over their
thoughts, feelings, motivation, and actions” (p. 7). It is this ‘control’ that affects and has the potential to affect subsequent actions. The conceptual model of Triadic Reciprocal Determinism is shown in Figure 2.

![Figure 2: The Conceptual Model of Triadic Reciprocal Determinism](image)

In Bandura’s theory, self-efficacy beliefs are influenced in four ways, ranked in order of most to least influential on behaviour. These four ways are: performance accomplishments, vicarious experience, verbal persuasion and emotional arousal (see Figure 3 in p. 41).

### 2.2.1. Performance Accomplishments

Performance accomplishments are also known as mastery experiences. A mastery experience is the first and the greatest source of self-efficacy, which is gained when individuals are challenged and experience success through effort. According to Bandura (1977, 1986), the most effective way of developing a strong sense of efficacy toward a particular task is through mastery experiences; success leads toward additional successes, and failure can cast doubt on the outcome of future attempts. It means that our achievements raise our level of self-efficacy, or the perception that a performance has been successful enhances perceived self-efficacy and ensures future proficiency and success; however, the perception that a performance has been a failure weakens efficacy beliefs and leads to the expectation that future performance will also be inefficient (Bandura, 1977, 1986).
In the educational domain, those who have a strong sense of self-efficacy in a learning environment tend to try harder, persevere when engaging in a task, even if it seems difficult, and tend to attain higher levels of success (Bandura, 1977). For example, students who judge their own past academic results as being successful often develop a high sense of confidence about their abilities while those who view their academic outcomes as unsuccessful are likely to experience feelings of doubt and uncertainty about their own effectiveness.

### 2.2.2. Vicarious Experience

It is also known as social modeling. It is another important source of self-efficacy that originates in observing other similar people performing a behaviour successfully. It relates to self-evaluation that individuals derive from observing and comparing themselves with a given ‘social model’ such as peers or friends etc. According to Bandura (1977), seeing people similar to oneself succeed by sustained effort reinforces the observers’ belief that they can also accomplish the same task. It means that other individuals’ achievements motivate us to believe that we have the same ability in gaining achievements. People can develop high or low self-efficacy vicariously through other people’s performances. A person can watch another perform and then compare his own competence with the other individual’s competence (Bandura, 1977). In other words, observing the successes and failures of peers perceived as similar in capability contributes to beliefs in one’s own capabilities (i.e., “If he can do it, so can I!”). For example, a student who sees a student similar to himself perform well in an exam can be expected to have a high sense of self-efficacy that he also can do well on this task.

Schunk (2003) states that the observed response of others to the behaviour, whether it is rewarded or punished, has a significant impact on the likelihood of the behaviour being exhibited by the observer. However, reinforced behaviours are more likely to be copied than behaviours that are punished (Schunk, 2003). According to Schunk (2003), models not only provide information by showing a sequence of actions which will cause success if followed correctly, but also increase motivation for the observer to attempt the task. Some students excel with teachers as models while others relate better to student models. For students who are more socially motivated, peer models can provide motivation and help build self-efficacy (Schunk, 2003).
2.2.3. Verbal Persuasion

Verbal persuasion is also known as social persuasion. It is a third way of strengthening people’s self-efficacy beliefs, and refers to the feedback that individuals receive from others (Bandura, 1977). Bandura (1977) asserts that people could be persuaded to believe that they have the skills and capabilities to succeed. It means that what others say can influence our beliefs about our abilities. In other words, getting verbal encouragement from others helps people overcome self-doubt and instead focus on giving their best effort to the task at hand to achieve a goal. Teachers can influence their students’ self-efficacy to engage in activities.

According to Schunk (2003), the teacher not only can be the principal aid in helping students be convinced they can accomplish certain tasks or assignments, but s/he can arrange for successful circumstances to occur and prevent placing students in situations where they will most likely fail. Successful persuaders foster people’s beliefs in their capabilities while, at the same time, ensure that visualized success is achievable. Negative persuasion, on the other hand, may tend to defeat and lower self-beliefs. The most contributing effect of social persuasion pivots around initiating the task, attempting new strategies, and trying hard to succeed (Pajares, 2002). While mastery experience refers to an individual looking at his own past experiences and vicarious experience refers to an individual looking toward others’ experiences in order to self-appraise, social persuasion is others’ assessment of the individual.

2.2.4. Emotional Arousal

Emotional arousal is also known as emotional states or physiological states that describe the emotional conditions that play into beliefs about one’s performance or anticipated performance with a certain task. Our own responses and emotional reactions to situations also play an important role in self-efficacy. It means that physiological and emotional states such as anxiety, stress and fear can all influence how people feel about their personal abilities in a particular situation. Bandura (1977) notes that the effect on self-efficacy lies more in how an individual perceives these reactions versus the physical reactions themselves. In general, a positive mood enhances perceived self-efficacy; negative moods diminish it. Therefore, the minimization of negative emotional states such as stress can be used to strengthen self-efficacy beliefs. Yet, it is not always the negative emotions such as stress, anxiety or fear that negatively affect performance, but it is rather the faulty interpretations that students make about the purported causes of those psychological states
(Bandura, 1977). Bandura (1977) sums it up, “Because high arousal usually debilitates performance, individuals are more likely to expect success when they are not beset by aversive arousal than if they are tense and viscerally agitated” (p. 198). As psychological and affective states provide information about efficacy perception and boost the feeling of proficiency, trying to reduce individual’s stress and anxiety and to change negative debilitative states to positive ones plays an influential role in amending perceived self efficacy beliefs.

Self-efficacy beliefs are developed from four sources. First, successes build a strong belief in one’s personal efficacy and failures undermine it. Second, if others can do it, so I also can as a method of developing self-beliefs. Third, persuasive encouragements in perceived self-efficacy lead people to work hard to succeed. Fourth, people depend partly on their emotional states in judging their capabilities.

![Diagram of Efficacy Expectations](image)

Figure 3: Major Sources of Self-Efficacy (Bandura, 1977, p. 195)
2.3. Self-Efficacy and Culture

Many researchers such as Schwarzer, Klassen, Oettingern and Scholz have investigated the differences in self-efficacy across cultures. According to Klassen (as cited in Woulfe, n.d), self-efficacy is influenced by cultural perspectives and aspects such as individualism and collectivism. For Oettingern and Zosuls (as cited in Shellberg, 2009), individualism and collectivism define how much or little individuals and groups within a culture are connected to one another or separated from each other. As researchers have made distinction between collectivist and individualist cultures, they suggest the differences between levels of self-efficacy across these cultures.

2.3.1. Collectivist Culture

According to Oettingen (1995), “Collectivist cultures promote the view that people belong to in-group that demand lasting loyalty from which members cannot easily free themselves” (p. 151). For Oettingern and Zosuls (as cited in Shellberg, 2009), in collectivist cultures, one belongs to a certain group receives loyalty from the other members of that particular group. In addition, members receive protection from the group. According to them, collectivist societies emphasize the importance of the identity of the group, unity and sense of duty. Klassen (as cited in Woulfe, n.d) describes collectivist cultures as more realistic and individualist cultures as more optimistic; collectivist cultures tend to have a more realistic view of their abilities and therefore tend to have lower self-efficacy levels. In other words, the reason that creates a variation in self-efficacy between cultures is that individualist cultures are more optimistic in their ratings of self-efficacy, and collectivist cultures are more realistic.

2.3.2. Individualist Culture

According to Oettingen (1995), “Individualist cultures promote the view that people look primarily after their own welfare and their immediate family’s interests. They value an autonomous definition of the self and individual goals more than group goals” (p. 151). For Oettingern and Zosuls (as cited in Shellberg, 2009), individualist cultures promote a more independent system in which people care for themselves and their own families; they place a higher value on the individual rather than the group. Some tendencies of individualist cultures emphasize a focus on the self, being independent, taking initiative and insisting on privacy (Shellberg, 2009). According to Scholz, Gutiérrez-Doña and Schwarzer (as cited in Woulfe, n.d.), those in individualist cultures have been found to have higher levels of self-
efficacy; however, those from collectivist cultures, such as Asian cultures, have lower self-efficacy levels despite the fact that they are more successful in academics.

According to Oettingen (1995), children in cultures high on collectivism pursue performance goals demonstrating required competencies more than learning goals of expanding one’s competencies. However, children in cultures high on individualism are expected to learn how to learn (Oettingen, 1995). Accordingly, Markus and Kitayama (as cited in Oettingen, 1995) see that children in individualist cultures may be more in tune with their private emotional states, whereas children socialized in collectivist cultures should be more responsive to the preference of their in-group, and thus emotions are used more strategically. So, “emotional states should be a more immediate and thereby more prominent source for the self-efficacy appraisals of children raised in individualist systems than in collectivist systems” (Oettingen, 1995, p. 153).

Self-efficacy and its relation to culture has been widely studied by Western researchers such as Triandis (1989), Oettingen (1995) and Oettingern and Zosuls (2006), who believe that individualist cultures support building up strong individuals and therefore strong efficacy beliefs than collectivist cultures. However, reality shows that self-efficacy for non-Western groups operates in somewhat the same way as self-efficacy for Western groups because being realistic does not necessarily predict poor performance. So, the claim that self-efficacy would only be evident in Western individualist cultures is not necessarily true. In any society, no one is completely individualist or collectivist all the time. There is a variation within groups and among individuals in every society. Moreover, collectivists must also have personal self-efficacy which is important for improvement. While there is collective or group efficacy, it is not a replacement for self-efficacy; group efficacy works in conjunction with and is based upon self-efficacy (Bandura, 1977). The ways of developing self-efficacy through performance accomplishments, vicarious experience, verbal persuasion and emotional arousal can be found in both the individualist and collectivist cultures (Bandura, 1977). Being culturally aware and sensitive is the key to understand how efficacy may differ in learners from various backgrounds.
2.4. Self-Efficacy and Learning/Teaching

2.4.1. Influence of Self-Efficacy on Academic Learning

According to the Social Cognitive Theory, self-efficacy is one of the most important variable, which influence academic performance and achievement. Self-efficacy theory states that an individual’s perceived efficacy in a particular area will determine the amount of effort that will be put forth, and the degree the individual will continue in the incidence of obstacles (Bandura, 1977). In a study published in 1982, Collins demonstrates the importance of self-efficacy beliefs and skill application in academic performance. This study shows that people may perform poorly on tasks not necessarily because they lack the ability to succeed, but because they lack the belief in their capabilities. Bandura (1986) states that learners only continue the tasks that they think are able to do well and keep away from those they believe they do not have the ability to execute effectively.

Self-efficacy is hypothesized to influence many things: choice of activities, effort expenditure, persistence and achievement. It means that self-efficacy determines the choice of the task, effort, perseverance, resilience and achievement in learning a language (Bandura, 1986). Generally, according to Pajares (1996), self-efficacy beliefs influence motivational and self-regulatory processes in several ways:

- **Choices:** Self-efficacy beliefs influence the choices people make and the courses of action they follow. Most people take part in tasks in which they feel competent and confident and avoid those in which they do not.

- **Effort:** They also help determine how much effort people will expend on an activity.

- **Perseverance:** How long they will persist when dealing with obstacles and failures.

- **Resilience:** How resilient they will prove in the face of adverse situations (the higher the sense of efficacy, the greater the effort, persistence, and resilience).

- **Stress and Anxiety:** Efficacy beliefs also influence the amount of stress and anxiety individuals experience as they engage in a task and the level of accomplishment they realize.

In other words, self-efficacy beliefs influence the activities that individuals choose to participate in, the effort that they put forth, and how they persist when faced with difficulties.
The way students think, feel and behave in academic situations is largely influenced by beliefs in their own abilities. However, there is a major difference in the way individuals think, feel and act depends on whether they have low or high level of self-efficacy. Individuals suspicious of their own abilities tend to avoid challenges and difficult tasks (Bandura, 1986). It means that while students who doubt their abilities avoid engaging in difficult tasks, those with a high level of self-efficacy cope with challenging situations in a more mature way.

Self-efficacy beliefs have been shown to have a significant impact on learning, especially language learning. Within the language learning context, self-efficacy refers to a learner’s cognitive process in judging his/her language abilities and organizing them in order to perform specific language tasks. Compared with students who doubt their learning capabilities, those with high self-efficacy for acquiring a skill or performing a task participate more readily, work harder, persist longer when they encounter difficulties, and achieve at higher levels (Bandura, 1986). Zimmerman (1995) explains more how students’ perceived self-efficacy influences their skills acquisition. Perceived self-efficacy could influence them both directly and indirectly by reinforcing their persistence; therefore, motivation is directly related to self-efficacy in that if someone perceives him/herself as able to handle a situation (high self-efficacy), s/he will be more motivated to work hard successfully perform in that situation (Zimmerman, 1995).

Self-efficacy is also an important factor in school performance and success. Students with high self-efficacy expend more effort in school, persist with tasks in the face of challenges, set challenging goals for themselves, and have better academic skills (Pajares, 2002). The efficacy beliefs of students are also directly associated with the learning environment. Students with high efficacy may be challenged by an assignment and exert effort to complete it. This behaviour contributes to a productive, engaged classroom environment. The reverse may also be true in that students with low efficacy may try to avoid tasks. This often results in a disruptive, disengaged classroom environment (Pajares, 2002). Moreover, Schunk (1995) states that while successes cause increases and failures cause decreases in self-efficacy, once a strong sense of self-efficacy is established, experiencing failure will not have as great an impact on the learner.

According to Oxford (as cited in Wang, 2011), language learners are believed to have different competence-related judgments based on their prior learning experiences, and these
judgments influence how they use a range of learning strategies during the learning process. Bandura (as cited in Gahungu, 2007) has also found that the perceived self-efficacy increases academic achievement in a direct and an indirect way, by influencing individuals’ goals. Self-efficacy, together with the goals, influences academic performance. Individuals with a high level of self-efficacy assign higher goals to themselves and exercise more effort and willingness to have them accomplished.

Table 3 portrays the operation of self-efficacy during academic learning. According to Schunk (1995), Schunk and Ertmer (2000), and Zimmerman (2000), students have goals and a sense of self-efficacy for learning at the outset of a learning activity. Learners’ self-efficacy sustains their motivation and promotes learning. During periods of self-reflection, learners evaluate their progress by comparing their performances to their goals. Self-evaluation of progress enhances efficacy and maintains motivation. Learners may decide to continue pursuing their goals, modify them, or set new ones (Schunk, 2003).

<table>
<thead>
<tr>
<th>Self-Efficacy for Learning</th>
<th>Task Engagement</th>
<th>Self-Efficacy Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals</td>
<td>Self-Evaluations</td>
<td>Achievement</td>
</tr>
</tbody>
</table>

2.4.2. Self-Efficacy and Reading Comprehension Strategy Use

As EFL students in many countries face difficulties in reading comprehension, and seem not proficient enough to use reading comprehension strategies, researchers point out the influence of many factors, including internal factors and the learning context and its variables. Among these influential variables is self-efficacy belief. Bandura (1977) believes that high efficacy is a vital factor in helping students to select challenging tasks, increase effort, and persist when encountering difficulties especially in language domains such as reading for understanding. His studies came with the results showing the positive impact of self-efficacy in language domains. Although researchers such as Schunk and Rice (1991), Shang (2010), Wang (2011) and Tobing (2013) agree about the importance of this motivational construct in reading comprehension particularly in reading comprehension strategy use, they followed different methodologies to confirm Bandura’s findings.
Some researchers such as Schunk and Rice (1991), McCrudden, Perkins and Putney (2005) and Shang (2010) carried out experimental studies to investigate the relationship between reading self-efficacy and reading comprehension strategy use as experimental evidence better aids in clarifying effects. In some studies such as in Shang’s study (2010), other independent variables were included as another source of evidence on the important role played by self-efficacy in reading achievement. Other studies such as Schunk’s and Rice’s study (1989) focused on modeling as observing models can raise children’s self-efficacy for learning, and models provide information about learners’ self-efficacy. Schunk and Rice (1989) worked with fourth and fifth grade children who had low reading comprehension skills. They pretested them on the comprehension of main ideas, and then assigned them to one of three conditions: process goal, product goal and general goal during thirty five (35) minute sessions each day for fifteen (15) consecutive school days. Compared with control children, process and product goal children judged self-efficacy for answering comprehension questions higher, and process goal children demonstrated better comprehension.

Schunk and Rice carried out another study in 1991. They focused on reading strategies instruction and its role in improving self-efficacy in reading comprehension. Schunk and Rice (1991) worked with three groups of remedial readers at an elementary school. They taught a comprehension strategy for the first group in order to find main ideas in a text, and gave them feedback on their progress. The second group received the same instruction, but did not get feedback. However, the third group did not receive the reading strategy instruction. The results showed that the students who received instruction in reading strategies and progress feedback had significantly higher performance on reading tasks and self-efficacy than the other two groups. Schunk and Rice (1991) stress the belief that students who perceive the importance of reading strategies apply the strategies effectively, which then improves their reading skills, gives them greater control over their learning, and improves their self-efficacy. On the other hand, students who perceive reading strategies as less important than other factors neither apply the strategies effectively nor have a high level of self-efficacy in regard to their reading skills.

Another study carried out by McCrudden, Perkins and Putney (2005) investigated the impact of reading strategy instruction on self-efficacy, focusing on the students’ use of reading strategies. They delivered three sessions of strategy instruction and practice for twenty three fourth graders with low reading ability at an elementary school. The reading
strategy instruction involved using different strategies such as questioning, predicting, creating mental images and summarizing. The results showed that there is a significant increase in students’ self-efficacy and interests in using the reading strategies. Moreover, reading strategy instruction has a significant positive impact on students’ reading self-efficacy, and students who have low reading ability benefited from reading strategy instruction.

Similarly, in Taiwan, Shang (2010) examined the relationship between self-efficacy in reading and reading strategies, and added reading comprehension as another variable. In this study, reading strategies are classified into cognitive, metacognitive and compensation strategies. After a semester of reading strategy instruction in the form of a reading course for fifty-three freshmen majoring in English. The results indicated that there is a significant correlation between all categories of reading strategy with self-efficacy, and a positive correlation between self-efficacy and reading achievement. However, there is no correlation between reading strategies and reading achievement. The results also indicated that the reading strategy instruction is very important in helping students to use reading strategies more frequently, which makes them more confident about reading English texts. Due to some language difficulties, some students still have problems applying reading strategies and that would require the teachers to teach the reading strategies.

The findings of those experimental studies revealed that reading self-efficacy is positively related to reading comprehension strategy use. This is in line with Bandura’s suggestion that one of the powerful factors that increases effort and predicts an individual performance is self-efficacy belief. Moreover, the learners’ high level in reading self-efficacy matched more with the item ‘I can understand what I read’ as believed by Bandura; therefore, high self-efficacious readers used more reading comprehension strategies as their self-efficacy was raised than low self-efficacious readers.

Other researchers such as Li and Wang (2010), Zare and Mobarakhe (2011), and Kargar and Zamanian (2014) carried out non-experimental studies to investigate the relationship between self-efficacy in reading and reading comprehension strategy use. They used different means to gather data such as questionnaires, surveys and interviews. Some researchers such as Magogwe and Oliver (2007), and Naseri and Zaferanieh (2012) focused not only on investigating students’ reading self-efficacy and their use of reading comprehension strategies, but included variables such as gender, reading proficiency, or
reading comprehension. As the latest studies are replication of the previous ones with different participants and in different contexts, their results allow for generalizability of the original findings. Moreover, the latest studies focus more on the content validity of the reading self-efficacy questionnaire used to measure self-efficacy.

There are some studies such as Li’s and Wang’s study (2010), which focused only on investigating the use of reading strategies in relation to self-efficacy. The findings reveal that reading self-efficacy is positively related to the use of reading comprehension strategies. Accordingly, students with high self-efficacy use more reading strategies compared to those with low self-efficacy. At an Iranian high school, another study conducted by Zare and Mobarakhe (2011) who classified the reading strategies into three categories: cognitive, metacognitive and socioaffective reading strategies. The results show that the overall reading strategies in general and in each category positively correlate with reading self-efficacy. However, cognitive strategy use has slightly a stronger correlation than metacognitive and socioaffective strategies. They conclude that students who believe that they can successfully use reading tasks would apply more reading strategies to accomplish the task than those who do not believe.

Focusing on gender, Magogwe’s and Oliver’s study (2007), in Botswana, show that the relationship between reading self-efficacy beliefs and reading strategy use is not affected by gender eventhough learners differ from each other with respect to their reading comprehension ability, reading self-efficacy beliefs and the use of reading comprehension strategies. Ghezlou, Kordi and Nasrabady (2014) also investigated gender differences in reading strategy use, reading self-efficacy and perceptual learning styles among Iranian high intermediate EFL learners. The findings show that gender does not have any significant effect on the performance of the participants. While Kargar and Zamanian (2014) assert the same results that there is a positive relationship between reading self-efficacy beliefs and reading strategy use, and gender differences regarding these variables are not significant, Wang (2011) asserts significant differences in favour of Taiwanese females in English self-efficacy and English reading strategy use; however, students’ gender has no significant relationship with their English reading proficiency.

In a study carried out in 2012, Naseri and Zaferanieh investigated the relationship between reading self-efficacy beliefs, reading strategy use and reading comprehension level of Iranian EFL learners. They administered a reading self-efficacy questionnaire, a self-
reported reading strategy use questionnaire, and reading comprehension test to eighty junior and senior EFL students. The findings reveal that there are significant strong positive correlation between reading self-efficacy beliefs and reading comprehension, and also between reading self-efficacy beliefs and reading strategy use. Similarly, Tobing (2013) investigated the relationship of reading strategies and self-efficacy with the reading comprehension of high school students in Indonesia. The findings give information that students may be aware of reading strategies, but they may not know how to use them effectively. Therefore, they need explicit instruction on how to use them effectively. This study shows also that the use of reading strategies has a small significant effect on reading comprehension; however, the use of reading strategies is a non-significant variable to predict reading comprehension when used as one of multiple independent variables with self-efficacy. As an independent variable, the use of reading strategies has produced inconsistent results in its correlation to reading ability as previous studies also revealed.

Most of the non-experimental studies came with results showing positive correlation between self-efficacy and reading comprehension strategy use. It means that the findings of these studies also support the hypothesis that students who are more efficacious about their ability to read comprehend significantly better, and use more reading strategies than those lower in reading self-efficacy. As students may not know how to use the strategies effectively, they need explicit instruction. So, these studies are also in line with Bandura’s findings.

Although researchers differently investigated the effectiveness of self-efficacy belief in reading and the correlation of reading self-efficacy and reading comprehension strategy use, results of both types of research, experimental and non-experimental, reveal to what extent self-efficacy belief is very important in reading comprehension, and demonstrate the strong positive correlation between the two variables. As understanding English texts is crucial in learning English language, studies have been conducted not only in ESL/EFL settings, but also in English as a first language setting. As developing students’ reading self-efficacy is important, being aware of the origins and consequences of the notion of self-efficacy and its relationship with reading comprehension strategy use which is the key to academic success is very important for both teachers and students, especially for teachers who are the best determinants for fostering their students’ self-efficacy, leading to a great academic achievement among them.
So, investigating the relationship between the reading self-efficacy of EFL students at Oum El Bouaghi University and their use of reading comprehension strategies is important, especially that the Algerian context has not been the focus in my knowledge.

2.4.3. Developing Learners’ Reading Self-Efficacy

According to Bandura (1993),

A major goal of formal education should be to equip students with the intellectual tools, self-beliefs, and self-regulatory capabilities to educate themselves throughout their lifetime. These personal resources enable individuals to gain new knowledge and to cultivate skills either for their own sake or to better their lives. (p. 136)

Unlike other psychological constructs which have a trait-like stability, self-efficacy is ‘a malleable construct’ that could be enhanced through providing students with motivational assistance and guidance (Bandura, 1986). In a school setting this sense of efficacy is extremely important for students in all areas of education such as reading. Antoniou and Souvignier (2007) state that “similarly important for increased reading comprehension is enhancement of self-efficacy by prompting motivational aspects of self-regulation (goal setting, attributions of success and failure, self-monitoring and judgements, etc.)” (p. 43). In a study published in 2006, Freedman suggests that according to Bandura’s four elements, students need the practice, the teacher modeling, teacher’s encouragement, and an affective state that will allow for their literacy self-efficacy to develop. Along with such development, students’ cognitive abilities will be also increased (Freedman, 2006). So, teachers should foster the sources of self-efficacy that help learners to create a sense of efficacy to complete different foreign language tasks such as reading for understanding.

This might underline the crucial role that teachers play in instilling positive self-perceptions of efficacy in their students through training them to make use of a variety of learning strategies (Schunk, 1995) such as reading strategies. As students are acquiring a foreign language, it may be necessary to provide additional support in order for them to gain general self-efficacy, and the belief in their ability to be a good reader with strong comprehension skills. Therefore, teachers should encourage students to become strategic readers by modeling the use of various reading comprehension strategies, using a variety of texts, and gradually giving students the responsibility for employing the strategies in order to become more capable readers. Encouraging students to become strategic readers leads them to engage in increasingly more difficult reading tasks with more effort and
perseverance. So, success in these reading tasks provides the experiential-based evidence that students need to build higher levels of reading self-efficacy.

Chen and Graves (as cited in Shellberg, 2009) state that self-efficacy in reading can also be supported by explicit instruction in previewing materials prior to reading. It means that reading self-efficacy can be supported by using reading materials. These reading materials should be appropriate for the level of students, giving them tasks which will result in success by starting with easier tasks then gradually building up to more challenging ones, modeling expected behaviours, setting attainable goals and assisting students in meeting those goals, and finally, having students participate in paired reading and repeated readings. For Chen and Graves (as cited in Shellberg, 2009), these simple steps can provide the necessary scaffolding to help ESL/EFL students engage better with texts and improve comprehension.

Teachers can use these suggested ideas to build students’ self-efficacy in reading, but they can also contribute with their personal ideas and insights about what they can do based on their experiences and local context in order to increase their students’ sense of reading self-efficacy.

2.4.4. Measurement of Learners’ Reading Self-Efficacy

As self-efficacy beliefs are task specific and can vary from domain to domain, Bandura (2006) cautioned that:

There is no all-purpose measure of perceived self-efficacy. The “one measure fits all” approach usually has limited explanatory and predictive value because most of the items in an all-purpose test may have little or no relevance to the domain of functioning. (p. 307)

Items on self-efficacy measures should be phrased in terms of what people believe they ‘can do’. Therefore, phrasing items in this way brings the focus on capabilities, instead of feelings of self-esteem or self-concept (Bandura, 2006). Thus, researchers should use items that assess students’ beliefs about their capabilities, and include items that focus on students’ self-beliefs about their specific reading ability rather than their beliefs about general reading skills and tasks items.

Bandura (1977) stresses that the study of efficacy should take into account three main dimensions: magnitude, generality and strength. According to Bandura, (1977), magnitude
means the difficulty and complexity of the task, generality refers to whether the task is associated with a general or specific sense of efficacy, and strength simply means how weak or strong a person’s efficacy is.

2.4.4.1. Magnitude

Magnitude or level of self-efficacy refers to the number of steps of increasing difficulty that a person feels s/he is capable of performing. Magnitude deals with the belief about performance in increasingly difficult aspects of the task. There are different levels of task demands which are necessary to accomplish a task successfully. Task demands can be labeled as simple, moderate, or difficult. In other words, reading self-efficacy magnitude measures the difficulty level (e.g. easy, moderate, and hard) an individual feels is required to read and comprehend a certain text. How difficult is this passage? Is the vocabulary easy or hard?

2.4.4.2. Generality

Generality concerns the broadness of applicability of the belief. Generality of self-efficacy refers to the extent to which success or failure experiences influence self-efficacy expectancies in similar situations or contexts. It includes the range of activities included in the perception. When tasks are similar in nature, situation and capability, they become more generalizable to individuals.

2.4.4.3. Strength

Strength of self-efficacy refers to the resoluteness of people’s convictions that they can perform the behaviour in question (Maddux, 1995). Strength involves the effort placed on maintaining the behaviour in spite of obstacles. Bandura (2006) designed a scale where the subjects are presented with items describing some task demands, and are asked to rate the strength of their beliefs in their ability to perform those activities such as reading capability. The wording of the items includes the phrase ‘can do’ instead of ‘will do’ because ‘can’ is a judgment of ability, and ‘will’ is an expression of intention. In Bandura’s scale the subjects are asked to record their self-efficacy strength on a 100-point scale that ranges in 10-unit intervals. The lowest number is 0, meaning that the subject assures he cannot perform the task; there are intermediate degrees of efficacy, such as 50, meaning that the subject is moderately certain he can accomplish the task, and finally there is complete or absolute
assurance, represented on the scale by 100, which means that the subject is completely certain he can succeed in performing the task.

<table>
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<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
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</tr>
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<tbody>
<tr>
<td>Cannot do at all</td>
<td>Moderately certain can do</td>
<td>Highly certain can do</td>
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Bandura’s scale of self-efficacy beliefs was criticized for two main reasons. The first reason is that the scale is not clear and a 10 can be interpreted at varied levels. While one may consider a 10 to be very uncertain, another may interpret it as virtually impossible. The second reason was the use of a 100 point probability scale with the ability to only select between 10 possible numbers. Moreover, the numbers listed on the scale can account for a large difference on a 100 point probability scale. As a result, other scales have been developed to measure self-efficacy such as reading self-efficacy. For example, a scale that focuses on students’ rating the strength of their beliefs in their ability to perform a specific task such as reading comprehension strategy use, and range from 1 to 5; 1 equals = I cannot do it at all and 5 equals = I can do it well, or it focuses on measuring perceived level of confidence and range from 1 to 5; 1 equals = No Confidence and 5 equals = Complete Confidence, or on the extent of students’ agreement with proposals concerning statements of their beliefs in their ability to perform a specific task and range from 1 to 4; 1 equals = Not at All True and 4 equals = Exactly True (The 4-point scale: Not at All True, Hardly True, Moderately True and Exactly True).

**Conclusion**

The chapter has focused on how self-efficacy beliefs influence learners’ general academic learning, and how researchers differently investigated the correlation of reading self-efficacy and reading comprehension strategy use. As the findings stress the strong positive correlation between the two variables, developing students’ reading self-efficacy through instruction becomes crucial. As there are different procedures to measure self-efficacy beliefs, students’ reading self-efficacy can be measured differently. The next chapter investigates the relationship between self-efficacy and reading comprehension strategy use in the Algerian EFL class, particularly at Oum El Bouaghi University.
Chapter Three: Field Investigation

Introduction

3.1. Participants

3.1.1. Population

3.1.2. Sampling

3.2. Research Questions and Hypotheses

3.3. Research Means

3.3.1. Type of Research Means

3.3.2. Measurement of Research Means

3.4. Procedures

3.5. Descriptive Statistics

3.5.1. Students’ Questionnaire Description

3.5.2. Results and Discussion

3.5.3 Conclusion
3.6. Correlational Statistics

3.6.1. Data Analysis

3.6.2. Results and Discussion

3.6.3. Conclusion

3.7. Limitations of the study

3.8. Implications and Recommendations

Conclusion

GENERAL CONCLUSION
Introduction

This chapter represents the core of the research; it aims at investigating the relationship between self-efficacy and reading comprehension strategy use in the Algerian EFL class, particularly at Oum El Bouaghi University. The chapter describes the various components comprised in the method of investigation including, participants, type and measurement of research means, procedures, descriptive and correlational statistics, and the statistical analysis of the results. The chapter ends with the presentation of the limitations of the study, implications and recommendations.

3.1. Participants

3.1.1. Population

The population for this correlational study consists of third year EFL students at Oum El Bouaghi University. They were targeted on the basis that they are expected to have more important background knowledge of the reading comprehension strategies and the way to use them compared to first and second year students. The total number of third year EFL students at Oum El Bouaghi University during the 2015-2016 academic year is approximately 121 students divided into three groups.

3.1.2. Sampling

As larger sizes contribute to less error variance and better claims of representativeness, the sample size in this study is more than the one fifth of the total number. Fifty students (16 males and 34 females) were randomly selected among the three groups in order to represent the sample of this study.

3.2. Research Questions and Hypotheses

The study design includes two variables: One independent variable, that is, reading self-efficacy, and one dependent variable, namely reading strategy use. The study attempts to determine how the independent variable correlates with the dependent one. The latter includes overall reading strategy use, cognitive reading strategy use, metacognitive reading strategy use and socioaffective reading strategy use.

We hypothesize that there is a significant positive relationship between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of reading comprehension strategies, and that high self-efficacious readers significantly use more reading comprehension strategies than low self-efficacious readers.
The design for the current study is illustrated in the following figure.

Research Questions

- Is there any significant relationship between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of reading comprehension strategies?
- Do high self-efficacious readers significantly use more reading comprehension strategies than low self-efficacious readers?

Figure 4: The study design

3.3. Research Means

3.3.1. Type of Research Means

The research means is a students’ questionnaire, which aims at measuring both students’ reading comprehension strategy use and their reading self-efficacy. Hence, it includes the Survey of Reading Strategies (SORS) and Reading Self-Efficacy Scale (RSES) adapted from the studies of Zare and Mobarakeh (2011) and Tobing (2013) in order to respond to the local context. Participants indicate the degree of their agreement with each item in the SORS on the basis of a 3-point Likert-scale ordered from ‘Never’ (with a score of 1) to ‘Usually’ (with a score of 3), and in the RSES on the basis of a 3-point Likert-scale ordered from ‘Not at All True’ (with a score of 1) to ‘Exactly True’ (with a score of 3). Therefore, the minimum and maximum score possible would be 24 and 72, respectively for the 24 items of the SORS, and 15 and 45, respectively for the 15 items of the RSES. Thus, a score for each respondent for each variable was created based on the sum of the values of each selected option or Likert item on each Likert scale. A 3-point Likert-scale was chosen because other-point Likert scales were not needed. The 3-point was sufficient to respond to the specificity of the targeted sample and to the type of statements posed.
3.3.2. Measurement of Research Means

In order to assure the quality of data collection, the criteria of validity and reliability were applied. Reading comprehension strategies and reading self-efficacy statements were clearly stated to avoid any ambiguity. The questionnaire was corrected by the researcher’s supervisor, and then piloted by five students in order to ensure that the questions were clearly worded. According to Baker (as cited in Li & Wang, 2010), a sample size of 10% - 20% of the sample size for the actual study is a reasonable number of participants to consider enrolling in a pilot. The revised version was then administrated to the sample.

The criterion of reliability was applied to the study in order to determine the extent to which the data collection procedures can be considered accurate and the results can be considered stable. It means that “each item on a multi-item scale should correlate with the other items and with the total scale score, which has been referred to as Likert’s criterion of internal consistency” (Dörnyei, 2007, p. 206). Internal consistency reliability is measured by the Cronbach’s alpha Coefficient (Dörnyei, 2007). Thus, the internal consistency of the SORS and the RSES was checked with Cronbach’s alpha using the Statistical Package for the Social Sciences (SPSS) version 20.0, which is the basis for all the current study statistical procedures. This tool has been utilized in numerous self-efficacy studies (Pajares, 1996).

Cronbach’s alpha Coefficient assumes a value somewhere between 0 and +1, with 0 representing totally inconsistent and +1 representing totally consistent; it should be above 0.7 to be considered as reliable (Dörnyei, 2007).

In this study, Cronbach alpha reliability coefficient for the SORS is 0.764 as shown below.

Table 4: The SORS Case Processing Summary

<table>
<thead>
<tr>
<th>Cases</th>
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</tr>
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<tbody>
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<td>100</td>
</tr>
<tr>
<td>Excluded</td>
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</tr>
<tr>
<td>Total</td>
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Table 5: The SORS Reliability Statistics

<table>
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<tr>
<th>Cronbach's Alpha</th>
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<tr>
<td>0.764</td>
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</table>
The Cronbach alpha reliability coefficient for the RSES is 0.875 as shown below.

![Table 6: The RSES Case Processing Summary](image)

<table>
<thead>
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<th>N</th>
<th>%</th>
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<tr>
<td>Cases Valid</td>
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</tr>
<tr>
<td>Excluded*</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
</tr>
</tbody>
</table>

*Listwise deletion based on all variables in the procedure.

![Table 7: The RSES Reliability Statistics](image)

<table>
<thead>
<tr>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.875</td>
<td>15</td>
</tr>
</tbody>
</table>

The SORS and the RSES used in this study were found to be reliable, which means that the items in each scale correlate with one another and with the total scale score.

In the SORS, the item which was found to reduce Cronbach alpha reliability is the item 19; i.e., I work together with my classmates to complete a reading task. Cronbach alpha reliability coefficient for the SORS will be 0.778 if item 19 is deleted. As Cronbach alpha reliability coefficient for the SORS is above 0.7 (it is 0.764), this item was not deleted (see Appendix C). In the RSES, the items correlate with one another and with the total scale score (see Appendix D).

3.4. Procedures

Data collection took place in the Department of English during the second semester with the three groups in different sessions. The questionnaire was distributed to the students, who were randomly selected from each group. Verbal explanations were given to the participants before they respond, including purpose, procedures and confidentiality. Students were given adequate time by their teachers to complete the questionnaire, and the researcher was present in all classes to observe them responding. The participants took no more than one hour to complete the questionnaire.

3.5. Descriptive Statistics

3.5.1. Students’ Questionnaire Description (see Appendix A)

In the introduction, the aim of the questionnaire, the procedures and confidentiality of the answers are illustrated to the participants. The students’ questionnaire includes nineteen questions organised in four sections: ‘General Information’, ‘Reading Comprehension and Strategies’, ‘Self-Efficacy in Reading’ and ‘Further Suggestions/Comments’. The questions...
varied between open-ended questions and closed-ended questions including ‘Yes/No’ questions and options questions, in addition to the two surveys of reading strategies and reading self-efficacy in which students are asked to choose one point option.

**Section I: General Information (Q1-Q4)**

This section fundamentally aims to elicit general information about the participants: gender (Q1), their choice of studying English (Q2), and if they enjoy their English class (Q3) with justifications in case of ‘No’ answer (Q4).

**Section II: Reading Comprehension and Strategies (Q5-Q12)**

In this section, the aim is to explore students’ viewpoints about reading comprehension as well as their frequency use of reading comprehension strategies. Students are asked about the reading importance (Q5), their reading comprehension level in English (Q6) with justifications (Q7) and the most hindering factor to reading (Q8). After that, they are asked about the frequency use of some reading strategies organized in a survey (Q9). The survey of reading strategies or the SORS consists of twenty four (24) items with corresponding 3-point Likert-scale response options (Never, Sometimes and Usually). It includes three major categories of reading comprehension strategies: cognitive reading strategies (items 1-10), metacognitive reading strategies (items 11-17) and socioaffective reading strategies (items 18-24). This classification was chosen because it is more convenient for the local context compared to other classifications or taxonomies. A set of statements is followed by three numbers, each one corresponding to the respondent’s frequency use of a reading strategy. Next, students are asked about the importance of the reading strategies (Q10) and if teaching reading strategies is necessary (Q11) with justifications (Q12).

**Section III: Self-Efficacy in Reading (Q13-Q18)**

The aim of this section is to examine students’ viewpoints about self-efficacy and how they judge their competencies in reading in English. Students are asked about personal beliefs in their own ability to manage difficult tasks (Q13) and about self-efficacy sources (Q14). The reading self-efficacy scale or the RSES includes fifteen (15) items in which students are asked to express the extent to which they are capable of accomplishing reading tasks successfully (Q15). The RSES is based on two dimensions: the self-efficacy strategic awareness, including knowing how to handle a reading task (items 1-6) and overcome its difficulties (items 7-10), and challenge/willingness to do challenging reading tasks (items
11-15). Statements are followed by three numbers, each one corresponding to the extent to which the respondent agrees with each statement (Not at All True, Moderately True and Exactly True). Next, students are asked about the reading self-efficacy effect (Q16) and if reading self-efficacy should be fostered through instruction (Q17) with justifications (Q18).

**Section IV: Further Suggestions/Comments (Q19)**

The last section includes one optional question (Q19). It provides students with some space where they can add any further suggestions or comments.

**3.5.2. Results and Discussion**

- **Questionnaire Statistics**

  - **Section I: General Information**

  1- Gender:
     a- Male
     b- Female

  **Table 8: Students’ Gender**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>34</td>
<td>68,0</td>
</tr>
<tr>
<td>Male</td>
<td>16</td>
<td>32,0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100,0</td>
</tr>
</tbody>
</table>

  **Figure 5: Students’ Gender**

  As indicated on Table 8 and Figure 5, the sample is not balanced in terms of gender (68% and 32% for females and males, respectively). At the Department of English at Oum El Bouaghi University, the majority of students are females.

  2- Are you studying English because it was
     a- Your personal choice
     b- Imposed by your parents
     c- Imposed by the Ministry of Higher Education
     d- Other: Please specify
Table 9: Students’ Choice of Studying English

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>36</td>
</tr>
<tr>
<td>b</td>
<td>5</td>
</tr>
<tr>
<td>c</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
</tr>
</tbody>
</table>

Figure 6: Students’ Choice of Studying English

Table 9 and Figure 6 show that the majority of students, 72%, personally chose to study English at the university. The family and the Ministry of Higher Education also had a role in students’ choice of studying English (10% and 18%, respectively). Students did not specify other factors.

3- Do you enjoy your English class?
   a- Yes
   b- No

Table 10: Students’ Attitudes towards their English Class

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>14</td>
</tr>
<tr>
<td>Yes</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
</tr>
</tbody>
</table>

Figure 7: Students’ Attitudes towards their English Class

As indicated on Table 10 and Figure 7, the majority of students (72%) responded positively to the question. They stated that they did enjoy their English class. This is evident since English is a personal choice of many of them. However, fourteen (14) students (28%) answered this question negatively as almost all of them are studying English because it was imposed by the Ministry of Higher Education. Therefore, these results denote that the majority of third year EFL students at Oum El Bouaghi University displayed a positive attitude towards English learning.
4- If ‘No’, why?

Twelve (12) students out of fourteen (14), i.e. 85%, justified their answers. The majority claimed that the teaching methodology of some teachers makes learning English language difficult, and some modules are not interesting, which makes the English class boring for them. For others, studying English was not their choice, and they still cannot adjust to their English class (see Appendix B).

- Section II: Reading Comprehension and Strategies

5- To what extent do you think reading is important to learn English?

a- To a great extent
b- To some extent
c- Not important at all

Table 11: Students’ Views of the Importance of Reading

Table 11 and Figure 8 show that the majority of students, i.e. 74%, believe that reading is important to a great extent to learn English. For three (3) students, i.e. 6%, reading is not important at all to learn English. They perhaps mean that they can learn English depending on other sources such as watching movies, for instance.

6- How do you rate your current level of reading comprehension in English?

a- High
b- Above average
c- Average
d- Low
As indicated on Table 12 and Figure 9, students vary in their level of reading comprehension in English. While the majority of students, precisely 56%, think that they have an average level in reading comprehension in English, the rest, i.e. 44%, vary between high, above average and low level (8%, 30% and 6%, respectively).

7- Please justify your answer

Only thirty one (31) students out of fifty (50), i.e. 62%, justified their answers; they provided several reasons according to their level. Students who rated their level of reading comprehension in English as high and above average gave approximately similar explanations. They read much which helped them to develop their reading skills; therefore, they understand what they read easily. Students who rated their level as low stated that they hate reading in English and one prefers watching Youtube videos than reading. The majority of students who rated their level as average focused on the limitation of time. As they have several modules, they focus on learning to pass exams instead of reading books; therefore, they face difficulties in comprehension, especially literary texts such as novels (see Appendix B).

8- Which one of the following factors mostly hinders you when reading?
   a- Lack of vocabulary knowledge
   b- Structural complexity of a text
   c- Inability to store information while reading
   d- Inability to process information while reading
   e- Other: Please specify
Table 13: The most Hindering Factor to Reading

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>21</td>
</tr>
<tr>
<td>b</td>
<td>19</td>
</tr>
<tr>
<td>c</td>
<td>6</td>
</tr>
<tr>
<td>d</td>
<td>3</td>
</tr>
<tr>
<td>e</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
</tr>
</tbody>
</table>

Figure 10: The most Hindering Factor to Reading

Table 13 and Figure 10 show that the most hindering factor to reading for students is the lack of vocabulary knowledge with 42%, and then the structural complexity of a text with 38%. Only one student stated another factor which is lack of concentration. It means that the most hindering factor to reading for the majority of students (i.e. 80%) is related to text difficulties not to individual difficulties such as inability to store or process information while reading.

9- The Survey Of Reading Strategies (SORS)

In this part, students indicated their frequency use of the different reading comprehension strategies, including cognitive, metacognitive and socioaffective reading strategies.

In the cognitive reading strategy category, four strategies out of ten were highly used based on their mean (M) and standard deviation (SD) scores as shown on Table 14. The mean is the sum of all the values in a set, divided by the number of values. Standard deviation is a measure of the dispersion of a set of data from its mean. It is calculated as the square root of variance, which is the average of the squared differences from the mean divided by $N - 1$ (instead of $N$) when calculating the variance of a sample.

$$s = \sqrt{\frac{1}{N - 1} \sum_{i=1}^{N} (x_i - \overline{x})^2}$$

(S) is the standard deviation of a sample, ($\overline{x}$) is the mean of a sample and ($N$) is the sample size (From Wikipedia, the free encyclopedia).
These four strategies are item 3; i.e., to reread a text for better understanding (M=2.70/SD=0.505), item 2; i.e., to predict or guess the meaning of a text (M=2.50/SD=0.580), item 5; i.e., to highlight or underline information in a text to remember it (M=2.48/SD=0.646) and item 6; i.e., to depend on resources such as a dictionary (M=2.30/SD=0.614). However, item 7; i.e., translating English passages into Arabic to remember information was the least strategy used by the participants (M=1.48/SD=0.614). In addition to item 9; i.e., to paraphrase information presented in a text and item 4; i.e., to take notes while reading, which were infrequently used (M=1.78/SD=0.679; M=1.98/SD=0.685, respectively).

As shown on Table 15, the majority of students, i.e. 72%, usually reread a text for better understanding, and 58% of them never translate English passages into Arabic. Students, as shown on Table 15, indicated that they sometimes use different cognitive reading strategies. In other words, the majority of third year EFL students at Oum El Bouaghi University indicated that they do not usually use this type of reading strategies while reading.

Tables 14 and 15 show the results from this category as used by the participants.

**Table 14: Means and Standard Deviations of Cognitive Reading Strategies**

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item1</td>
<td>2.10</td>
<td>.614</td>
<td>50</td>
</tr>
<tr>
<td>Item2</td>
<td>2.50</td>
<td>.580</td>
<td>50</td>
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<tr>
<td>Item3</td>
<td>2.70</td>
<td>.505</td>
<td>50</td>
</tr>
<tr>
<td>Item4</td>
<td>1.98</td>
<td>.685</td>
<td>50</td>
</tr>
<tr>
<td>Item5</td>
<td>2.48</td>
<td>.646</td>
<td>50</td>
</tr>
<tr>
<td>Item6</td>
<td>2.30</td>
<td>.614</td>
<td>50</td>
</tr>
<tr>
<td>Item7</td>
<td>1.48</td>
<td>.614</td>
<td>50</td>
</tr>
<tr>
<td>Item8</td>
<td>2.10</td>
<td>.707</td>
<td>50</td>
</tr>
<tr>
<td>Item9</td>
<td>1.78</td>
<td>.679</td>
<td>50</td>
</tr>
<tr>
<td>Item10</td>
<td>2.12</td>
<td>.659</td>
<td>50</td>
</tr>
</tbody>
</table>
In the metacognitive reading strategy category, two strategies out of seven were highly used, as shown on Table 16, namely to try to get a general idea about the organization of a text (M= 2.24/SD= 0.716) and to evaluate how well one benefited from information presented in a text (M= 2.14/SD= 0.670) (Items 2 and 7, respectively). However, item 6; i.e., critically evaluating the author’s opinions and ideas was the least strategy used by the participants (M= 1.44/SD= 0.675). In addition to item 4; i.e., to try to understand the author’s organizational strategies, which was infrequently used (M= 1.58/SD= 0.673).

As shown on Table 17, the item 2 was the most used frequently as 40% of students usually try to get a general idea about the organization of a text. However, the majority of them, i.e. 66%, never evaluate what they read. The majority of third year EFL students at Oum El Bouaghi University, as shown on Table 17, indicated that they sometimes use metacognitive reading strategies while reading.

Tables 16 and 17 show the results from this category as used by the participants.
In the socioaffective reading strategy category, two strategies out of seven were highly used, as shown on Table 18, namely to ask a classmate for clarification to understand difficulties presented in a text (M= 2.02/SD= 0.622) and to encourage oneself while reading in order to feel more confident (M= 1.92/SD= 0.634) (Items 1 and 6, respectively). However, items 5 and 7; i.e., using special techniques such as deep breathing to reduce anxiety about a particular reading task and motivating oneself by rewarding oneself when having successfully completed a reading task were the least strategies used by the participants (M= 1.50/SD= 0.580 ; M= 1.54/SD= 0.706, respectively).

As shown on Table 19, only 4% of students usually try to reduce anxiety about a particular reading task and only 8% consult teachers when encountering difficulties in the
reading process. Socioaffective reading strategies were found to be not used frequently as some students indicated that they never use such type of reading strategies. Third year EFL students at Oum El Bouaghi University, as shown on Table 19, indicated that they sometimes use some type of socioaffective reading strategies, and they never use other types.

Tables 18 and 19 show the results from this category as used by the participants.

Table 18: Means and Standard Deviations of Socioaffective Reading Strategies

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>2.02</td>
<td>.622</td>
<td>50</td>
</tr>
<tr>
<td>Item 2</td>
<td>1.84</td>
<td>.710</td>
<td>50</td>
</tr>
<tr>
<td>Item 3</td>
<td>1.72</td>
<td>.607</td>
<td>50</td>
</tr>
<tr>
<td>Item 4</td>
<td>1.82</td>
<td>.748</td>
<td>50</td>
</tr>
<tr>
<td>Item 5</td>
<td>1.50</td>
<td>.580</td>
<td>50</td>
</tr>
<tr>
<td>Item 6</td>
<td>1.92</td>
<td>.634</td>
<td>50</td>
</tr>
<tr>
<td>Item 7</td>
<td>1.54</td>
<td>.706</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 19: Frequency Use of Socioaffective Reading Strategies

<table>
<thead>
<tr>
<th>Options</th>
<th>Never 1</th>
<th>Sometimes 2</th>
<th>Usually 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
<td>N</td>
</tr>
<tr>
<td>Item 1</td>
<td>9</td>
<td>18%</td>
<td>31</td>
<td>62%</td>
</tr>
<tr>
<td>Item 2</td>
<td>17</td>
<td>34%</td>
<td>24</td>
<td>48%</td>
</tr>
<tr>
<td>Item 3</td>
<td>18</td>
<td>36%</td>
<td>28</td>
<td>56%</td>
</tr>
<tr>
<td>Item 4</td>
<td>19</td>
<td>38%</td>
<td>21</td>
<td>42%</td>
</tr>
<tr>
<td>Item 5</td>
<td>27</td>
<td>54%</td>
<td>21</td>
<td>42%</td>
</tr>
<tr>
<td>Item 6</td>
<td>12</td>
<td>24%</td>
<td>30</td>
<td>60%</td>
</tr>
<tr>
<td>Item 7</td>
<td>29</td>
<td>58%</td>
<td>15</td>
<td>30%</td>
</tr>
</tbody>
</table>
As shown on Table 20, the mean and standard deviation scores of the overall reading strategy use or the SORS (N of Items 24) statistics are $M= 47.38/SD= 6.144$; this mean is the sum of all students’ scores in overall reading strategy use divided by the number of scores, i.e., $M= 2369/50= 47.38$. As to individual strategy categories, the mean and standard deviation scores of cognitive, metacognitive and socioaffective reading strategy use are $M= 21.54/SD= 3.072$, $M= 13.48/SD= 2.779$ and $M= 12.36/SD= 2.562$, respectively. The mean of each category is the sum of all students’ scores in that category divided by the number of scores, i.e., $M= 1077/50= 21.54$, $M= 674/50= 13.48$ and $M= 618/50= 12.36$, respectively. So, cognitive reading strategies were highly used to overcome reading difficulties, followed by metacognitive reading strategies to control reading. However, socioaffective reading strategies were reported as the least frequent reading strategies.

**Table 20: Means and Standard Deviations of Reading Strategy Categories**

<table>
<thead>
<tr>
<th></th>
<th>Cognitive Reading Strategy Use</th>
<th>Metacognitive Reading Strategy Use</th>
<th>Socioaffective Reading Strategy Use</th>
<th>Overall Reading Strategy Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Mean</td>
<td>21.54</td>
<td>13.48</td>
<td>12.36</td>
<td>47.38</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>3.072</td>
<td>2.779</td>
<td>2.562</td>
<td>6.144</td>
</tr>
</tbody>
</table>

All the results suggest that, on average, participants sometimes used reading comprehension strategies as the mean scores and frequency use are close to ‘2’, which stands for ‘sometimes’.

**10- To what extent do you think the use of the strategies in question nine (Q9) reduces reading comprehension difficulties?**

- **a**- To a great extent
- **b**- To some extent
- **c**- No effect at all
Table 21: The Importance of the Reading Strategy Use

![Table 21: The Importance of the Reading Strategy Use](image)

Table 21 and Figure 11 show that the majority of students, i.e. 62%, believe that the use of reading comprehension strategies is important to a great extent as it helps them to overcome reading difficulties. This is evident since the study shows that the participants frequently used many strategies from different categories, especially cognitive reading strategies. Nobody stated that reading comprehension strategies are useless even those who stated that reading is not important to learn English.

11- Do you think that teaching EFL students how to use reading strategies is necessary?
   a- Yes
   b- No

Table 22: The Necessity of Teaching Reading Strategies

![Table 22: The Necessity of Teaching Reading Strategies](image)

Since the majority of the participants believe that the use of reading comprehension strategies is important, they agreed on the necessity to train EFL students how to use different reading strategies. Only six (6) students, i.e. 12%, answered negatively.
12- Please justify your answer

Thirty (30) students out of fifty (50), i.e. 60%, justified their answers. While the five (5) students who answered ‘No’ find that teaching EFL students how to use reading strategies is boring, difficult or is not needed given that each student has his/her own strategies, the twenty five (25) students who answered ‘Yes’ find that this teaching is important since the majority are not skilled readers. They need their teachers to help them to learn how to use the reading strategies and differentiate them (see Appendix B).

Section III: Self-Efficacy in Reading

13- Do you agree with this statement: “If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning”.
   a- Yes
   b- No

Table 23: Students’ Perceptions of Self-Efficacy Beliefs

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>3</td>
<td>6,0</td>
</tr>
<tr>
<td>Yes</td>
<td>47</td>
<td>94,0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100,0</td>
</tr>
</tbody>
</table>

Figure 13: Students’ Perceptions of Self-Efficacy Beliefs

As indicated on Table 23 and Figure 13, the majority of the participants, i.e. 94%, believe in the self-efficacy power. It means that personal beliefs in one’s own ability to accomplish a difficult task plays an important role in one’s life.

14- Which one of the following factors affects more your belief in your capabilities to perform tasks?
   a- Your prior experiences
   b- A ‘social model’ such as peers
   c- Others’ encouragement and feedback
   d- Your emotional states such as anxiety and stress
Prior experiences seem to be the most important source of self-efficacy for the majority of the participants, i.e. 58%. Emotional states such as anxiety and stress with 12% seem to be less important as a source of self-efficacy.

15- The Reading Self-Efficacy Scale (RSES)

On the reading self-efficacy scale, as shown on Tables 25 and 26, the participants rated themselves highly on certain items of the survey and considered themselves as able to accomplish these tasks. The item which received the highest rating is item 15, i.e., the ability to understand the English subtitles of films (M= 2.54/SD= 0.613). The lowest rating was given to item 11 which asked students if they can sit and read (electronic or printed) books/articles for a long time (M= 1.66/SD= 0.717). It was not surprising to notice that these two items received such kind of rating as watching films is less challenging for learners than reading for a long time. Items 7 and 13 which asked students if they can motivate themselves to accomplish a hard reading task, and if they can do different reading homeworks without depending on their classmates, respectively, received the same rating (M= 2.26), and also items 3 and 9 which asked students if they can anticipate novel content using the title, and if they can find a solution to complete reading assignments without becoming bored, respectively, received the same rating (M= 1.86), which means that there is a balance in students’ ability in performing reading tasks. Only one student, i.e. 2%, indicated that he cannot understand what he reads if there are some unknown vocabulary items. It means that the majority of students rated themselves whether highly or moderately as able to understand texts with unknown words.

Tables 25 and 26 show the detailed students’ self rating of their reading self-efficacy.
Table 25: Means and Standard Deviations of Students’ Reading Self-Efficacy

<table>
<thead>
<tr>
<th>Options</th>
<th>Mean</th>
<th>Std. Deviation</th>
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</tr>
</thead>
<tbody>
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<td>50</td>
</tr>
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<td>Item 2</td>
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<td>.594</td>
<td>50</td>
</tr>
<tr>
<td>Item 3</td>
<td>1.86</td>
<td>.700</td>
<td>50</td>
</tr>
<tr>
<td>Item 4</td>
<td>2.40</td>
<td>.535</td>
<td>50</td>
</tr>
<tr>
<td>Item 5</td>
<td>2.30</td>
<td>.707</td>
<td>50</td>
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<tr>
<td>Item 6</td>
<td>2.24</td>
<td>.744</td>
<td>50</td>
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<td>Item 7</td>
<td>2.26</td>
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<td>2.34</td>
<td>.626</td>
<td>50</td>
</tr>
<tr>
<td>Item 11</td>
<td>1.66</td>
<td>.717</td>
<td>50</td>
</tr>
<tr>
<td>Item 12</td>
<td>1.72</td>
<td>.701</td>
<td>50</td>
</tr>
<tr>
<td>Item 13</td>
<td>2.26</td>
<td>.600</td>
<td>50</td>
</tr>
<tr>
<td>Item 14</td>
<td>2.28</td>
<td>.573</td>
<td>50</td>
</tr>
<tr>
<td>Item 15</td>
<td>2.54</td>
<td>.613</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 26: Frequency of Students’ Reading Self-Efficacy

<table>
<thead>
<tr>
<th>Options</th>
<th>Not at All True</th>
<th>Moderately True</th>
<th>Exactly True</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
</tr>
<tr>
<td>Item 1</td>
<td>8</td>
<td>16%</td>
<td>31</td>
<td>62%</td>
</tr>
<tr>
<td>Item 2</td>
<td>6</td>
<td>12%</td>
<td>32</td>
<td>64%</td>
</tr>
<tr>
<td>Item 3</td>
<td>16</td>
<td>32%</td>
<td>25</td>
<td>50%</td>
</tr>
<tr>
<td>Item 4</td>
<td>1</td>
<td>2%</td>
<td>28</td>
<td>56%</td>
</tr>
<tr>
<td>Item 5</td>
<td>7</td>
<td>14%</td>
<td>21</td>
<td>42%</td>
</tr>
<tr>
<td>Item 6</td>
<td>9</td>
<td>18%</td>
<td>20</td>
<td>40%</td>
</tr>
<tr>
<td>Item 7</td>
<td>8</td>
<td>16%</td>
<td>21</td>
<td>42%</td>
</tr>
<tr>
<td>Item 8</td>
<td>15</td>
<td>30%</td>
<td>18</td>
<td>36%</td>
</tr>
<tr>
<td>Item 9</td>
<td>19</td>
<td>38%</td>
<td>19</td>
<td>38%</td>
</tr>
<tr>
<td>Item 10</td>
<td>4</td>
<td>8%</td>
<td>25</td>
<td>50%</td>
</tr>
<tr>
<td>Item 11</td>
<td>24</td>
<td>48%</td>
<td>19</td>
<td>38%</td>
</tr>
<tr>
<td>Item 12</td>
<td>21</td>
<td>42%</td>
<td>22</td>
<td>44%</td>
</tr>
<tr>
<td>Item 13</td>
<td>4</td>
<td>8%</td>
<td>29</td>
<td>58%</td>
</tr>
<tr>
<td>Item 14</td>
<td>3</td>
<td>6%</td>
<td>30</td>
<td>60%</td>
</tr>
<tr>
<td>Item 15</td>
<td>3</td>
<td>6%</td>
<td>17</td>
<td>34%</td>
</tr>
</tbody>
</table>
As mentioned before, the RSES is based on two dimensions: the self-efficacy strategic awareness, including knowing how to handle a reading task (items 1-6) and overcome its difficulties (items 7-10), and challenge/ willingness to do challenging reading tasks (items 11-15). From the above mentioned results and as shown on Table 27, the mean and standard deviation scores of handling a reading task, overcoming a reading task problem and doing a challenging reading task are $M = 12.98/SD = 2.567$, $M = 8.50/SD = 2.270$ and $M = 10.46/SD = 2.279$, respectively. The mean of each component is the sum of all students’ scores in that component divided by the number of scores, i.e., $M=649/50=12.98$, $M=425/50=8.50$ and $M=523/50=10.46$, respectively. So, the participants indicated that they are more able to handle reading tasks such as the ability to anticipate novel content using the title, and to do challenging reading tasks such as the ability to understand the content of most handouts based on chapters of books than to overcome a reading task problem such as the ability to motivate and relax oneself when becoming anxious and nervous in reading to accomplish a hard reading task. Thus, the mean and standard deviation scores of the reading self-efficacy are $M = 31.94/SD = 6.096$; this mean is the sum of all students’ scores in reading self-efficacy divided by the number of scores, i.e., $M = 1597/50 = 31.94$.

Table 27: Means and Standard Deviations of Students’ Reading Self-Efficacy Components

<table>
<thead>
<tr>
<th></th>
<th>Handling a Reading Task</th>
<th>Overcoming a Reading Task Problem</th>
<th>Doing a Challenging Reading Task</th>
<th>Reading Self-Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Mean</td>
<td>12.98</td>
<td>8.50</td>
<td>10.46</td>
<td>31.94</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>2.567</td>
<td>2.270</td>
<td>2.279</td>
<td>6.096</td>
</tr>
</tbody>
</table>

The RSES (N of Items 15) statistics or the reading self-efficacy scores show that most participants who felt that they could possibly accomplish the reading tasks listed in the RSES have moderate level of self-efficacy as ‘2’ stands for ‘moderately true’

16- **To what extent do you think your belief in your reading capabilities affects your reading comprehension performance?**

a- To a great extent  
b- To some extent  
c- No effect at all
As indicated on Table 28 and Figure 15, the half of the participants, i.e.52%, believe in the reading self-efficacy effect. 46% of them believe that self-efficacy to some extent affect reading comprehension performance. It means that the participants’ personal beliefs in their ability to comprehend texts affect their reading comprehension performance whether to some or to a great extent.

**17- Do you think that EFL students’ belief in their reading capabilities should be fostered by the teacher?**

a- Yes  
b- No

Table 29 and Figure 16 show that the majority of the participants, i.e.72%, agree about the necessity of fostering students’ reading self-efficacy through instruction.
18- Please justify your answer

Only twenty six (26) students out of fifty (50), i.e. 52%, justified their answers. While the nine (9) students who answered ‘No’ find that developing students’ reading self-efficacy is not the teacher’s job because EFL students must rely on themselves to solve reading problems, and EFL students’ belief in their reading capabilities is something personal, the seventeen (17) students who answered ‘Yes’ find that EFL students need to develop their belief in their reading capabilities. For them, teachers should help their students to become confident and able to comprehend what they read since reading is important to learn English (see Appendix B).

Section IV: Further Suggestions/Comments

19- Do you have any further suggestions or comments?

The majority of the participants, i.e. 62%, did not add any further suggestions or comments. Only nineteen (19) students, i.e. 38%, added suggestions. They suggested that reading should be included in other modules since there is not a module for reading as writing and speaking, and teachers should adopt new teaching methods to attract and motivate their students. On the other hand, students should focus on reading even though they encounter difficulties; learning comes bit by bit. Some participants suggested starting with short stories then shift to long texts in order to develop the reading skills without being bored (see Appendix B).

- Data Normality

It is important to check the normality of the data to decide which statistical tests to opt for. This can be achieved using the Kolmogorov-Smirnov and Shapiro-Wilk one sample tests of normality, and through displaying the descriptive statistics of variables.

The reading self-efficacy results of the Kolmogorov-Smirnov and Shapiro-Wilk one sample tests of normality are shown on Table 30.
The Kolmogorov-Smirnov Statistic is 0.127, and the Shapiro-Wilk Statistic is 0.947.

- The degree of freedom (df) is fifty (50) and it is the sample size since there are no restrictions in calculating this statistic as the number of restrictions subtracted from the sample size is the degree of freedom (Frankfort-Nachmias & Leon-Guerrero, 2006).

- The significance \( p \) value or the two tailed probability estimate (sig.) is in both tests 0.042 and 0.025, respectively. In both tests, the value is inferior to 0.05 the level of risk \( \alpha \). A \( p \) value which is smaller than the level of risk indicates an observed sample that is not normally distributed (From Wikipedia, the free encyclopedia).

The reading self-efficacy data also failed to pass the normality test in terms of descriptive statistics as shown on Table 31.

**Table 31: Descriptive Statistics of Reading Self-Efficacy**
The descriptive statistics show that there is no missing data since the recorded sample size, \( N = 50 \), is the same as the number of participants that took part in the study. The Mean, Median and Mode values are 31.94, 30.50 and 29, respectively. In a normal distribution the Mean, Median and Mode values are equal. Moreover, in a normal distribution the skewness and kurtosis equal zero (0). In this study, the skewness is \(-0.149\) and kurtosis is \(-0.920\).

In the case of a normal distribution, the histogram is symmetric; its two halves appear as mirror-images of one another. The following histogram shows that the reading self-efficacy distribution is not normal. It is jumbled up and more peaked than the normal curve (the highest bars extend above the normal curve line).

As the distribution in this study is not normal, the use of nonparametric statistics is required. The Spearman Correlation Coefficient \((r_s)\) was opted for as it is a nonparametric measure of statistical dependence between two variables. The Spearman Correlation Coefficient is not based on a normality assumption as is the case of Pearson Correlation Coefficient \((r)\).

The \( n \) raw scores \((X_i, Y_i)\) are converted to ranks \((x_i, y_i)\), and Spearman Correlation Coefficient \((\rho)\) or \((r_s)\) is then computed based on the following formula:

\[
\rho = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)} \quad \text{or} \quad r_s = 1 - \frac{6\sum D^2}{n(n^2 - 1)},
\]

where \((d_i)\) is the difference between ranks.
\(d_i = x_i - y_i\), and \(n\) is the number of pairs of data (From Wikipedia, the free encyclopedia). This test evaluates the degree to which participants with high rankings on one variable were observed to have similar rankings on another variable.

3.5.3 Conclusion

The analysis of students’ questionnaire shows that the majority of third year EFL students at Oum El Bouaghi University have positive perceptions towards reading comprehension strategies and self beliefs. Although students perceive reading comprehension strategies as an important factor, they do not usually use them while reading, especially socioaffective reading strategies which are not frequently used. The majority of students have a moderate level of self beliefs towards reading as their self rating of their reading self-efficacy stands for ‘moderately true’. As the reading self-efficacy variable is not normally distributed, the use of a nonparametric measure of correlation is required. Therefore, Spearman’s Rho was opted for as a measure of correlation.

3.6. Correlational Statistics

3.6.1. Data Analysis

Data analysis involved the following statistical procedures using SPSS:

1- To find whether there is a significant positive relationship between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of reading comprehension strategies, the Spearman Correlation Coefficient \(r_s\) was conducted.

2- To find whether high self-efficacious readers use more reading comprehension strategies significantly than low self-efficacious readers, independent samples \(t\)-tests were conducted.

3.6.2. Results and Discussion

- Investigating the First Research Question

To investigate the first research question, a Spearman Correlation Coefficient was computed on the ranked scores of the scores obtained in both surveys. Ranks are assigned separately for each variable whether for the independent variable or for the dependent variables. The highest value or score is assigned a rank of 1. If there are similar scores, they are assigned a rank which equals to the sum of their positions divided by the number of positions, and the next score is then assigned a rank of the next position. The results show a
strong association between the participants’ use of reading comprehension strategies and the extent to which they felt capable of accomplishing reading tasks successfully.

The correlation between students’ reading self-efficacy and their use of overall reading strategies was computed using SPSS. Table 32 shows the results.

<table>
<thead>
<tr>
<th>Spearman’s rho (students’ reading self-efficacy)</th>
<th>Correlation Coefficient</th>
<th>Overall Reading Strategies Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Self-Efficacy</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>Spearman’s Rho</strong></td>
<td>1.000</td>
<td><strong>Overall Reading Strategy Use</strong></td>
</tr>
<tr>
<td><strong>Significance (2-tailed)</strong></td>
<td><strong>0.803</strong></td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

**Table 32: Correlation between Students’ Reading Self-Efficacy and their Use of Overall Reading Strategies**

It means that the result of this process is a rank order correlation coefficient of 0.803, which reveals a statistically significant and positive correlation at the 0.01 level of significance. Significance indicates that it is significantly different from zero (0), which is the Null Hypothesis. When the correlation coefficient range is above 0.75, it is called high degree of correlation. It can be concluded that a positive high degree of correlation exists between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of overall reading strategies. This result is confirmed by the following scatter plot.
- **Direction:** As points cluster in a band running from lower left to upper right, there is a positive correlation. As students’ reading self-efficacy increases, so does their use of overall reading strategies.

- **Form:** As points on the scatterplot closely resemble a straight line, there is a linear relationship. Students’ reading self-efficacy and their use of overall reading strategies closely increase by the same rate.

- **Strength:** As correlation coefficient ($r_s$) equals 0.803, there is a strong positive correlation between Students’ reading self-efficacy and their use of overall reading strategies.

- **Outliers:** No outliers, i.e., individual points that fall outside the overall pattern of the scatter plot. It was tested using boxplots of the two variables correlated because “in the boxplot any score that SPSS considers an outlier appears as a little circle with its case number written next to it” (Dörnyei, 2007, p. 203) (see Appendix K).

The results of the correlation between students’ reading self-efficacy and their use of cognitive reading strategies are shown on Table 33.
Spearman’s Rho between students’ reading self-efficacy and their use of cognitive reading strategies is found to be \( r_s = 0.622, N = 50, p = 0.000 \). This correlation was computed as the following:

\[
\begin{align*}
  r_s &= 1 - \frac{6 \sum (x_i - \bar{y})^2}{50 (50^2 - 1)} ; \\
  r_s &= 1 - \frac{6 \times 7871.25}{124950} ; \\
  r_s &= 1 - 0.377971188 ; \\
  r_s &= 0.622.
\end{align*}
\]

This reveals a statistically significant and positive correlation at the 0.01 level of significance. When the correlation coefficient range is between 0.50 to 0.75, it is called in moderate degree of correlation. It can be concluded that a positive moderate correlation exists between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of cognitive reading strategies. This result is confirmed by the following scatter plot.

Table 33: Correlation between Students’ Reading Self-Efficacy and their Use of Cognitive Reading Strategies

<table>
<thead>
<tr>
<th></th>
<th>Reading Self-Efficacy</th>
<th>Cognitive Reading Strategy Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman’s rho</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td>Cognitive Reading Strategy Use</td>
<td>Correlation Coefficient</td>
<td>0.622</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
- **Direction:** There is a positive correlation. As students’ reading self-efficacy increases, so does their use of cognitive reading strategies.

- **Form:** Students’ reading self-efficacy and their use of cognitive reading strategies approximately increase by the same rate.

- **Strength:** As $r_s = 0.622$, there is a moderate positive correlation between Students’ reading self-efficacy and their use of cognitive reading strategies.

- **Outliers:** No outliers (see Appendix L).

The results of the correlation between students’ reading self-efficacy and their use of metacognitive reading strategies are shown on Table 34.

**Table 34: Correlation between Students’ Reading Self-Efficacy and their Use of Metacognitive Reading Strategies**

<table>
<thead>
<tr>
<th></th>
<th>Reading Self-Efficacy</th>
<th>Metacognitive Reading Strategy Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spearmans rho</strong></td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td><strong>Metacognitive Reading Strategy Use</strong></td>
<td>Correlation Coefficient</td>
<td>.742</td>
</tr>
<tr>
<td></td>
<td>Sig (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
</tbody>
</table>

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

Spearman’s Rho between students’ reading self-efficacy and their use of metacognitive reading strategies is found to be $[r_s = 0.742, N= 50, p = 0.000]$. This correlation was computed as the following:

$$r_s = 1 - \frac{\sum (x_i - \bar{y})^2}{50 (50^2-1)} ; \quad r_s = 1 - \frac{6 \times 5372.25}{124950} ; \quad r_s = 1 - 0.257971188 ; \quad r_s = 0.742.$$ 

This reveals a positive correlation at the 0.01 level of significance. It can be concluded that a positive moderate correlation exists between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of metacognitive reading strategies. This result is confirmed by the following scatter plot.
- **Direction:** There is a positive correlation. As students’ reading self-efficacy increases, so does their use of metacognitive reading strategies.

- **Form:** Students’ reading self-efficacy and their use of metacognitive reading strategies approximately increase by the same rate.

- **Strength:** As $r_s = 0.742$, there is a moderate positive correlation between Students’ reading self-efficacy and their use of metacognitive reading strategies.

- **Outliers:** No outliers (see Appendix M).

The results of the correlation between students’ reading self-efficacy and their use of socioaffective reading strategies are shown on Table 35.
Spearman’s Rho between students’ reading self-efficacy and their use of socioaffective reading strategies is found to be \( r_s = 0.381, N = 50, p = 0.006 \). This correlation was computed as the following:

\[
rs = 1 - \frac{6 \sum (X_i - Y)^2}{50 (50^2 - 1)} ;
\]

\[
r_s = 1 - \frac{6 \times 12890.5}{124950} ;
\]

\[
r_s = 1 - 0.618991596 ;
\]

\[
r_s = 0.381.
\]

This reveals a positive correlation at the 0.01 level of significance. When the correlation coefficient range is between 0.25 to 0.50, it is called low degree of correlation. Consequently, it can be concluded that a positive low degree of correlation exists between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of socioaffective reading strategies. This result is confirmed by the following scatter plot.

Table 35: Correlation between Students’ Reading Self-Efficacy and their Use of Socioaffective Reading Strategies

<table>
<thead>
<tr>
<th>Spearman’s rho</th>
<th>Reading Self-Efficacy</th>
<th>Socioaffective Reading Strategy Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation Coefficient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>1.000</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>0.006</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>0.381**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>0.006</td>
<td>N = 50</td>
</tr>
</tbody>
</table>

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

Figure 21: Correlation between Students’ Reading Self-Efficacy and their Use of Socioaffective Reading Strategies
- **Direction:** There is a positive correlation. As students’ reading self-efficacy increases, so does their use of socioaffective reading strategies.

- **Form:** Students’ reading self-efficacy and their use of socioaffective reading strategies approximately do not increase by the same rate.

- **Strength:** As $r_s = 0.381$, there is a weak positive correlation between Students’ reading self-efficacy and their use of socioaffective reading strategies.

- **Outliers:** No outliers (see Appendix N).

The findings of the current study confirm the first hypothesis that there is a significant positive relationship between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of reading comprehension strategies, including cognitive, metacognitive and socioaffective reading strategies although the degree of the association varied. In other words, all correlations were found to be statistically significant and positive, while the strength of these relationships varied between strong, moderate and weak. Generally, based on these findings, when a reader’s self-efficacy increases ones’ success in using reading comprehension strategies increases and conversely when a reader’s self-efficacy decreases ones’ success in using reading comprehension strategies decreases. So, self-efficacy and reading comprehension strategy use are related to each other positively.

Such results confirm and support findings in the literature review which report that the more confidence and personal control students have over their reading skills, the more they use reading strategies. In other words, such results are in agreement with previous findings in which researchers such as Naseri and Zaferanieh (2012) and Tobing (2013) suggest that a positive relationship does certainly exist between self-efficacy beliefs and the reading strategy use. While Zare and Mobarakeh (2011) found that cognitive reading strategy use has slightly a stronger correlation than metacognitive and socioaffective reading strategy use, the current study found that metacognitive reading strategy use has a stronger correlation than cognitive reading strategy use (see p. 85). However, socioaffective reading strategy use has a weak correlation (see p. 87). In other words, the reading self-efficacy of third year EFL students at Oum El Bouaghi University has a stronger correlation with their use of metacognitive reading strategies. The more students believe in their ability to comprehend texts, the more they use metacognitive reading strategies.
- **Investigating the Second Research Question**

To investigate the second research question whether high self-efficacious readers significantly use more reading comprehension strategies than low self-efficacious readers, or whether there is a significant difference between high and low self-efficacious readers in their use of reading comprehension strategies, students were divided into two groups based on their self-efficacy scores: high and low self-efficacious readers. It is worth mentioning that the median of reading self-efficacy scores which is the middle number was used to determine high and low self-efficacious readers. As mentioned before (see p. 79), the median of reading self-efficacy scores equals (30.50); therefore, students with scores above 30.50 were grouped as high self-efficacious readers and those with scores below 30.50 were considered as low self-efficacious readers. As shown on Table 36, the maximum score is (41) and the minimum score is (18); therefore, high self-efficacious readers are 25 students with the score between (41) and (31), and low self-efficacious readers are 25 students with the score between (30) and (18).

<table>
<thead>
<tr>
<th>Table 36: Students’ Level of Reading Self-Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
</tbody>
</table>

To find out whether there is significant differences between the reading comprehension strategy use of high/low self-efficacious readers, independent samples t-tests were conducted between the two categories (high and low self-efficacious readers) using an alpha level of (α= 0.05). The standard level of significance used to justify a claim of a statistically significant effect is 0.05; the term statistically significant has become synonymous with \( P \leq 0.05 \) (From Wikipedia, the free encyclopedia).

The independent samples t-test evaluates the difference between the means of two independent or unrelated groups. It evaluates whether the means for two independent groups are significantly different from each other. The independent samples t-test differs from the analysis of variance (ANOVA) which is applied to compare more than two groups, and from
paired samples t-test which is applied to compare two sets of scores obtained from the same group (Dörnyei, 2007). The results show that there are significant differences in the mean scores of the two groups.

Before conducting an independent samples t-test, it is important to check the normality of the data. This can be achieved using the Kolmogorov-Smirnov and Shapiro-Wilk one sample tests of normality. In this study, the two variables in each reading strategy category met the assumption of normality distribution based on Shapiro-Wilk one sample test.

Table 37: Kolmogorov-Smirnov and Shapiro-Wilk One Sample Tests
Results of High and Low Self-Efficacious Readers in Overall Reading Strategy Use

<table>
<thead>
<tr>
<th>Test of Normality</th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Reading Strategy Users-High</td>
<td>0.125 25 0.200</td>
<td>0.972 25 0.689</td>
</tr>
<tr>
<td>Overall Reading Strategy Users-Low</td>
<td>0.129 25 0.200</td>
<td>0.946 25 0.201</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance.
* a. Lilliefors Significance Correction

The significance $p$ value or the two tailed probability estimate (sig.) is in shapiro-wilk test 0.689 and 0.201, for high and low self-efficacious readers in overall reading strategy use, respectively. As $p$ value is higher than the level of risk (0.05), it indicates an observed sample which is normally distributed.

Table 38: Comparing Mean Score of High and Low Self-Efficacious Readers in Overall Reading Strategy Use

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Reading Strategy Users</td>
<td>High</td>
<td>25</td>
<td>50.92</td>
<td>5.671</td>
</tr>
<tr>
<td>Overall Reading Strategy Users</td>
<td>Low</td>
<td>25</td>
<td>43.84</td>
<td>4.337</td>
</tr>
</tbody>
</table>

Table 38 shows that the mean score of high self-efficacious readers in overall reading strategy use ($M= 50.92/SD = 5.671$) is higher than the mean score of low self-efficacious readers ($M= 43.84/SD= 4.337$). The standard error of the mean (the standard deviation of the sampling distribution of means) is $1.134 (SD/\sqrt{n})= 5.671/ \sqrt{25}= 1.134$ for high self-
efficacious readers, and is 0.867 (4.337/√25=0.867) for low self-efficacious readers. However, since mean score cannot indispensably show the significance of difference between the two groups, an independent samples $t$-test was conducted. Table 39 shows whether this difference in mean scores is significant or not.

**Table 39: Determining the Significance of the Mean Score Difference of High and Low Self-Efficacious Readers in Overall Reading Strategy Use**

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>$t$-test for Equality of Means</th>
<th>15% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$</td>
<td>$\text{Sig.}$</td>
<td>$df$</td>
</tr>
<tr>
<td>Overall Reading Strategy Users</td>
<td>Equal variances assumed</td>
<td>1.197</td>
<td>.279</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>4.959</td>
<td>44.917</td>
</tr>
</tbody>
</table>

The levene’s test for equality of variances does not show any significant differences as it is higher than 0.05 (it is 0.279); we can assume equal variance in the two groups and therefore the first line of the results is relevant. If Levene’s $F$ is statistically significant (Sig., $p < 0.05$), then variances are significantly different and the assumption of equal variances is not met and then the second line is considered (Dörnyei, 2007). The result of the tested significance shows that the $t$-value is 4.959. This test result shows a positive value which denotes that the mean score of high self-efficacious readers in overall reading strategy use is higher than that of low self-efficacious readers. The standard error of the difference (SED) is 1.427; i.e., it is the square root of the sum of the squared standard error of the mean of both groups (SED= $\sqrt{\text{SEM}_1^2 + \text{SEM}_2^2} = \sqrt{(1.134)^2+(0.867)^2} = 1.427$). The $t$-value was computed based on the following formula:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{Sp\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$Sp = \sqrt{\frac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1 + n_2 - 2}}$$

$Sp=5.04825762$; $\overline{X}_1 - \overline{X}_2 = 50.92 - 43.84 = 7.08$;

$t = \frac{50.92 - 43.84}{5.04825762} = 1.427862879$.
As there are two independent groups, the degree of freedom (df) for an independent-samples t-test is \((n_1 - 1) + (n_2 - 1)\), where \(n_1\) and \(n_2\) are the sample sizes for each of the independent groups, respectively, or we can use, \(N - 2\), where \(N\) is the total sample size for the study. It means that we loose (restrict) one \(df\) to the mean for each group (Frankfort-Nachmias & Leon-Guerrero, 2006). Therefore, \(df\) in this study equals 48 (50 –2) since \(N=50\).

Comparing the Sig. \(p\) value to alpha level (\(\alpha = 0.05\)), \(p\) is smaller than \(\alpha\); it is 0.000. The \(t\)-table was used to look up a two-tailed test with 48 degree of freedom and an alpha of 0.05; the critical value was 2.0106. Thus, the decision rule for this two-tailed test is: If \(t\) is less than \(-2.0106\), or greater than \(+2.0106\), the null hypothesis will be rejected. The \(t\)-value equals 4.959; therefore, we reject the null hypothesis of no difference and conclude that there is a real mean difference between the two groups at 5% significance level.

Since there is a significant difference between the two groups, an effect size should be calculated to determine the magnitude of this significant effect. According to Dörnyei (2007), the most common effect size indicator for independent samples \(t\)-tests is ‘eta squared’. “It can be interpreted as the percentage of the variance in the target variable explained by the grouping variable” (Dörnyei, 2007, p. 217). As SPSS does not provide the effect size, eta squared is calculated using the following formula:

\[
d = \frac{t^2}{t^2 + (n_1 + n_2 - 2)} ; \quad d = \frac{(4.959)^2}{(4.959)^2 + (25+25 -2)} ; \quad d = 0.33.
\]

The usual interpretation of eta squared is that 0.01= small effect, 0.06= moderate effect, 0.14= large effect (Dörnyei, 2007, p. 217). So, the effect size is very large, which means that, in effect, high self-efficacious readers used overall reading strategies more than low self-efficacious readers.

The test was significant, \(t(48)=4.959, \ p < 0.05, \ d = 0.33\). The 95% confidence interval for the difference between the mean in overall reading strategy use ranged from 4.209 to 9.951; it did not contain zero (0). The mean difference (MD) between the two groups was 7.080 in favour of high self-efficacious readers and was significant.

The following bar shows the mean of both groups.
The significance p value or the two tailed probability estimate (sig.) is in shapiro-wilk test 0.502 and 0.443, for high and low self-efficacious readers in cognitive reading strategy use, respectively. As p value is higher than the level of risk (0.05), it indicates an observed sample which is normally distributed.
Table 41: Comparing Mean Score of High and Low Self-Efficacious Readers in Cognitive Reading Strategy Use

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Reading</td>
<td>25</td>
<td>22.96</td>
<td>2.776</td>
<td>.555</td>
</tr>
<tr>
<td>Strategy Users</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>25</td>
<td>20.12</td>
<td>2.713</td>
<td>.543</td>
</tr>
</tbody>
</table>

Table 41 shows that the mean score of high self-efficacious readers in cognitive reading strategy use (M= 22.96/SD= 2.776) is higher than the mean score of low self-efficacious readers (M= 20.12/SD= 2.713). The standard error of the mean is 0.555 for high self-efficacious readers, and is 0.543 for low self-efficacious readers. Table 42 shows whether this difference in mean scores is significant or not.

Table 42: Determining the Significance of the Mean Score Difference of High and Low Self-Efficacious Readers in Cognitive Reading Strategy Use

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>Levene’s Test for Equality of Variances</th>
<th>95% CI for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig</td>
</tr>
<tr>
<td>Cognitive Reading Users</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.000</td>
<td>.105</td>
</tr>
<tr>
<td>Equal variances not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>assumed</td>
<td>.000</td>
<td>.105</td>
</tr>
</tbody>
</table>

The levene’s test for equality of variances does not show any significant differences as it is higher than 0.05 (it is 0.995); we can assume equal variance in the two groups and therefore the first line of the results is relevant. The result of the tested significance shows that the t-value is 3.658. As it is positive, it denotes that the mean score of high self-efficacious readers in cognitive reading strategy use is higher than that of low self-efficacious readers. The SED is 0.776. The t-value was computed as the following:

\[ S_1 = 2.776 \; ; \; S_2 = 2.713 \; ; \; Sp = 2.744680765 \; ; \; X_1 - X_2 = 22.96 - 20.12 = 2.84 \; ; \]

\[ t = \frac{2.84}{0.776312952} = 3.658. \]
Comparing the Sig. $p$ value to alpha level ($\alpha = 0.05$), $p$ is smaller than $\alpha$; it is 0.001. The $t$-value equals 3.658; it is greater than the critical value 2.0106. Therefore, we reject the null hypothesis of no difference and conclude that there is a real mean difference between the two groups at 5% significance level.

The eta squared is

$$d = \frac{(3.658)^2}{(3.658)^2 + 48}; \quad d = 0.21$$

So, the effect size is large, which means that, in effect, high self-efficacious readers used cognitive reading strategies more than low self-efficacious readers.

The test was significant, $t(48) = 3.658, \quad p < 0.05, \quad d = 0.21$. The 95% confidence interval for the difference between the mean in cognitive reading strategy use ranged from 1.279 to 4.401; it did not contain zero (0). The mean difference between the two groups was 2.840 in favour of high self-efficacious readers and was significant.

The following bar shows the mean of both groups.

Figure 23: The Mean Score of High and Low Self-Efficacious Readers in Cognitive Reading Strategy Use
The significance $p$ value or the two tailed probability estimate (sig.) is in shapiro-wilk test 0.160 and 0.063, for high and low self-efficacious readers in metacognitive reading strategy use, respectively. As $p$ value is higher than the level of risk (0.05), it indicates an observed sample which is normally distributed.

Table 44: Comparing Mean Score of High and Low Self-Efficacious Readers in Metacognitive Reading Strategy Use

Table 44 shows that the mean score of high self-efficacious readers in metacognitive reading strategy use ($M= 14.96/SD= 2.406$) is higher than the mean score of low self-efficacious readers ($M= 12.00/SD= 2.327$). The standard error of the mean is 0.481 for high self-efficacious readers, and is 0.465 for low self-efficacious readers. Table 45 shows whether this difference in mean scores is significant or not.
The levene’s test for equality of variances does not show any significant differences as it is higher than 0.05 (it is 0.896); we can assume equal variance in the two groups and therefore the first line of the results is relevant. The result of the tested significance shows that the $t$-value is 4.421. As it is positive, it denotes that the mean score of high self-efficacious readers in metacognitive reading strategy use is higher than that of low self-efficacious readers. The SED is 0.670. The $t$-value was computed as the following:

$$ S_1 = 2.406 ; S_2 = 2.327 ; Sp = 2.366829631 ; \bar{X}_1 - \bar{X}_2 = 14.96 - 12 = 2.96 ; $$$$ t = \frac{2.96}{0.669440512} ; t = 4.421. $$

Comparing the Sig. $p$ value to alpha level ($\alpha = 0.05$), $p$ is smaller than $\alpha$; it is 0.000. The $t$-value equals 4.421; it is greater than the critical value 2.0106. Therefore, we reject the null hypothesis of no difference and conclude that there is a real mean difference between the two groups at 5% significance level.

The eta squared is

$$ d = \frac{(4.421)^2}{(4.421)^2 + 48} ; d = 0.28 $$

So, the effect size is large, which means that, in effect, high self-efficacious readers used metacognitive reading strategies more than low self-efficacious readers.
The test was significant, \( t(48) = 4.421, \ p < 0.05, \ d = 0.28 \). The 95% confidence interval for the difference between the mean in metacognitive reading strategy use ranged from 1.614 to 4.306; it did not contain zero (0). The mean difference between the two groups was 2.960 in favour of high self-efficacious readers and was significant.

The following bar shows the mean of both groups.

![Figure 24: The Mean Score of High and Low Self-Efficacious Readers in Metacognitive Reading Strategy Use](image)

Table 46: Kolmogorov-Smirnov and Shapiro-Wilk One Sample Tests Results of High and Low Self-Efficacious Readers in Socioaffective Reading Strategy Use
The significance $p$ value or the two tailed probability estimate (sig.) is in shapiro-wilk test 0.338 and 0.081, for high and low self-efficacious readers in socioaffective reading strategy use, respectively. As $p$ value is higher than the level of risk (0.05), it indicates an observed sample which is normally distributed.

**Table 47: Comparing Mean Score of High and Low Self-Efficacious Readers in Socioaffective Reading Strategy Use**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioaffective Reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategy Users</td>
<td>25</td>
<td>13.00</td>
<td>2.500</td>
<td>0.500</td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>25</td>
<td>11.72</td>
<td>2.509</td>
<td>0.502</td>
</tr>
</tbody>
</table>

Table 47 shows that the mean score of high self-efficacious readers in socioaffective reading strategy use (M= 13.00/SD= 2.500) is higher than the mean score of low self-efficacious readers (M= 11.72/SD= 2.509). The standard error of the mean is 0.500 for high self-efficacious readers, and is 0.502 for low self-efficacious readers. Table 48 shows whether this difference in mean scores is significant or not.

**Table 48: Determining the Significance of the Mean Score Difference of High and Low Self-Efficacious Readers in Socioaffective Reading Strategy Use**

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>Test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Socioaffective</td>
<td>1.807</td>
<td>0.10</td>
</tr>
<tr>
<td>Reading Strategy Users</td>
<td>Equal variances assumed</td>
<td>Equal variances not assumed</td>
</tr>
</tbody>
</table>

The levene’s test for equality of variances does not show any significant differences as it is higher than 0.05 (it is 0.810); we can assume equal variance in the two groups and therefore the first line of the results is relevant. The result of the tested significance shows that the $t$-value is 1.807. As it is positive, it denotes that the mean score of high self-
efficacious readers in socioaffective reading strategy use is higher than that of low self-
efficacious readers. The SED is 0.708. The $t$-value was computed as the following:

$$S_1 = 2.5; S_2 = 2.509; Sp = 2.504504043; \bar{X}_1 - \bar{X}_2 = 13 - 11.72 = 1.28;$$

$$t = \frac{1.28}{0.708} = 1.806.$$  

Comparing the Sig. $p$ value to alpha level ($\alpha = 0.05$), $p$ is higher than $\alpha$; it is 0.077. The $t$-value equals 1.807; it is inbetween $-2.0106 \rightarrow +2.0106$. Therefore, we retain the null hypothesis of no difference and conclude that there is not a real mean difference between the two groups at 5% significance level.

The eta squared is

$$d = \frac{(1.807)^2}{(1.807)^2 + 48} = 0.06$$

So, the effect size is moderate, which means that the magnitude of the difference is ignorable.

The test was not significant, $t(48) = 1.807$, $p > 0.05$, $d = 0.06$. The 95% confidence interval for the difference between the mean in socioaffective reading strategy use ranged from $-0.144$ to $2.704$; it contained zero (0). The mean difference between the two groups was 1.280 in favour of high self-efficacious readers but was not significant.

The following bar shows the mean of both groups.

![Figure 25: The Mean Score of High and Low Self-Efficacious Readers in Socioaffective Reading Strategy Use](image-url)
The findings of the current study confirm the second hypothesis that high self-efficacious readers significantly use more reading comprehension strategies than low self-efficacious readers. The independent samples t-tests statistics show the significant differences of high and low self-efficacious readers in reading comprehension strategy use. The data reveal a significant difference in overall reading strategy use in favour of high users (MD= 7.080). As to individual strategy categories, significant differences were detected in metacognitive and cognitive reading strategy use in favour of high users (MD= 2.960 and MD= 2.840, respectively). However, the difference which was found between high and low socioaffective reading strategy users in favour of high users (MD= 1.280) was not significant as \( p > 0.05 \) and the \( t \)-value was inbetween the negative and positive critical value.

These findings indicate that, not only there is a significant difference in the mean score of high and low self-efficacious readers, but also confirm that students’ self-efficacy plays an important role in their reading performance; self-efficacy and reading comprehension strategy use are closely positively related. Students who believe that they can successfully use reading tasks would apply more reading strategies to accomplish the task than those who do not believe. So, this is in line with the previous studies in which several researchers such as Magogwe and Oliver (2007), Li and Wang (2010) and Zare and Mobarakhe (2011) pointed to self-efficacy significant positive influence on reading comprehension strategy use, and therefore on the success of EFL learners.

3.6.3. Conclusion

All correlations between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of reading comprehension strategies were found to be statistically significant and positive; however, the strength of these relationships varied between high, moderate and low. The results showed that metacognitive reading strategy use has a strong correlation compared to cognitive reading strategy use, whereas socioaffective reading strategy use has a weak correlation. Accordingly, high self-efficacious readers used more reading comprehension strategies than low self-efficacious readers, and used more metacognitive reading strategies than the other two strategy categories.

3.7. Limitations of the study

There are some limitations in the current study: First, correlational studies cannot indicate the cause/effect relationship. According to researchers such as Kargar and Zamanian (2014), correlational analyses cannot determine the causal relationship between self-efficacy
and other variables; they simply show the extent of relationships between variables. Second, the questionnaire and the surveys were the only means of data collection as using different methods, such as interviews or focus group interviews, needs more time and efforts. Third, the sample size was relatively small because it was difficult for the researcher to gather data from numerous EFL students and analyze them in a short time. Moreover, the validity of the results relies to some extent on the participants’ honesty.

3.8. Implications and Recommendations

As the use of reading comprehension strategies is very important for learners to become proficient readers, EFL teachers at Oum El Bouaghi University should focus on teaching and training their students to apply different categories of reading comprehension strategies while reading. They should first focus on the description of reading strategies, especially those that are proven to be effective, and then on training their students how to apply those strategies. Because of the infrequent use of socioaffective reading strategies, teachers should teach and encourage the use of this type of reading strategies as the other types. For instance, EFL learners should be taught how to relax so as not to lose concentration while reading, and how to cooperate with each other to accomplish reading tasks.

As self-efficacy is a motivational construct and among influential factors for L2 learning, it is very important for EFL teachers at Oum El Bouaghi University to help their students develop a strong sense of self-efficacy, particularly reading self-efficacy. Several teaching techniques based on self-efficacy sources can be used to enhance the level of students’ reading self-efficacy. Teachers should start with easier reading tasks to perform in order to build successful experiences since repeated experiences of success make learners’ self-efficacy higher than repeated experiences of failure. Students should be provided with positive encouragement and detailed feedback about the reading strategies used and their whole reading performance since teachers’ encouragement is an important factor to enhance students’ self-efficacy. Moreover, teachers should provide students with opportunities to observe their classmates doing reading tasks successfully, these opportunities help them to foster positive beliefs about themselves. This can be achieved through designing different reading activities and assignments which are suitable to each level, purposeful, varied and challenging.

Establishing a simple relationship between self-efficacy and other variables is not enough, more research is required to find the causal relationships. Because of the limitations of the surveys and questionnaires, it seems necessary to conduct qualitative research to
investigate the self-efficacy construct more deeply among Algerian EFL learners. As this study investigated self-efficacy in a short time, it is also necessary to examine self-efficacy construct over long-term periods, especially to investigate how classroom interactions and cooperative learning can enhance Algerian EFL learners’ self-efficacy. Moreover, future research needs to be conducted on a larger sample size in order to make the findings generalization to the entire Algerian EFL learners more valid. In this study, no difference was found between high and low users of socioaffective reading strategies, which is an issue that needs to be investigated. Finally it seems necessary to examine self-efficacy beliefs in the Algerian EFL context, not only with the four language skills such as reading, but with other variables such as learning style, which may help Algerian educational designers pave the way for the development of Algerian EFL learners’ self-efficacy.

**Conclusion**

This practical chapter has tackled the various components comprised in the method of investigation. The internal consistency of the SORS and the RSES was checked with Cronbach’s alpha, and it was found to be reliable. Considering the findings of the students’ questionnaire, students hold positive perceptions about the reading strategies and self-efficacy eventhough they have a moderate level of self beliefs in reading. A possible explanation for the high frequency use of cognitive reading strategies is the ease and popularity of summarizing, paraphrasing, underlining information and depending on prior knowledge, which help EFL learners more overcome difficulties of reading tasks. The infrequent use of socioaffective reading strategies can be due to some EFL learners’ tendency to individuality and their unawareness of affective reading strategies. For the correlation measure, Spearman’s Rho was opted for due to the nature of the data. As a result, the correlation between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of reading comprehension strategies was found to be statistically significant and positive. Accordingly, high self-efficacious readers use more reading comprehension strategies than low self-efficacious readers. These findings confirm what was hypothesized in this study.
GENERAL CONCLUSION

This dissertation has attempted to investigate whether there is a significant positive relationship between the reading self-efficacy of third year EFL students at Oum El Bouaghi University and their use of reading comprehension strategies. The findings prove the existence of a statistically significant positive relationship between self-efficacy and reading comprehension strategy use in the Algerian EFL context, which confirm the previous studies conducted in different contexts.

The first chapter has discussed the place of strategies in different comprehension theories, reading comprehension strategy classifications and the main approaches to teaching reading comprehension strategies. The chapter has concluded that comprehension is the reason for reading and it involves using different reading strategies that must be taught. The second chapter has discussed self-efficacy as a motivational construct in learning, particularly in reading, and its relationship with reading comprehension strategy use. The chapter has concluded that believing in one’s own ability to tackle reading tasks successfully can make learning a second/foreign language more manageable, enjoyable and productive.

For the practical part, the means of data collection was a students’ questionnaire and the surveys of reading strategies and reading self-efficacy. The aim was to explore the relationship between reading self-efficacy beliefs and reading strategy use of third year EFL students at Oum El Bouaghi University. The results demonstrate that students sometimes employ reading strategies when reading in English and they have a moderate level of self-efficacy beliefs in reading. Particularly, students use more cognitive reading strategies to reach a higher level of reading comprehension performance. The correlation coefficient between reading self-efficacy and reading strategy use shows that the two variables have a significant positive relationship, and students with high self-efficacy most frequently use more reading strategies compared to students with low self-efficacy. Furthermore, generally, they use metacognitive strategies more frequently than cognitive and socioaffective reading strategies. Therefore, it is more effective for Algerian EFL students to develop a strong sense of self-efficacy in reading and employ a variety of reading strategies while reading in order to reach their reading goals.

This study shows the importance of both knowing and using reading comprehension strategies, and having a positive attitude by believing in one’s own ability to accomplish reading tasks in order to succeed academically. As self-efficacy beliefs have an important
effect on reading strategy use, it is an effective factor to enhance Algerian EFL students’ reading ability; therefore, the curriculum should be reconstructed to help them become high self-efficacious and strategic readers. Training students to use different reading strategies, and raising their self-efficacy in reading help them to achieve their goals in learning the target language. Increasing students’ reading self-efficacy raises their use of reading strategies; therefore, it develops their language ability. Thus, EFL teachers should use motivational techniques to engage their students in the reading process and to increase their reading self-efficacy.
References


APPENDICES

- **Appendix A**: Students’ Questionnaire.

- **Appendix B**: Students’ Justifications/Further Suggestions or Comments.

- **Appendix C**: Total Statistics of the SORS Items- Case Summaries.

- **Appendix D**: Total Statistics of the RSES Items- Case Summaries.

- **Appendix E**: The SORS Responses- Case Summaries.

- **Appendix F**: The RSES Responses- Case Summaries.

- **Appendix G**: Students’ Scores of Reading Self-Efficacy Components- Case Summaries.

- **Appendix H**: Students’ Global and Ranked Scores of Reading Self-Efficacy and Overall Reading Strategy Use- Case Summaries.

- **Appendix I**: Students’ Global and Ranked Scores of Cognitive, Metacognitive and Socioaffective Reading Strategy Use- Case Summaries.

- **Appendix J**: Reading Comprehension Strategy Users- Case Summaries.

- **Appendix K**: Boxplots of Reading Self-Efficacy and Overall Reading Strategy Use.

- **Appendix L**: Boxplots of Reading Self-Efficacy and Cognitive Reading Strategy Use

- **Appendix M**: Boxplots of Reading Self-Efficacy and Metacognitive Reading Strategy Use.

- **Appendix N**: Boxplots of Reading Self-Efficacy and Socioaffective Reading Strategy Use.

- **Appendix O**: Brief Biography of Albert Bandura
Appendix O: Brief Biography of Albert Bandura

Albert Bandura (born in 1925) is a psychologist who is the David Starr Jordan Professor Emeritus of Social Science in Psychology at Stanford University. He has made great contributions to the field of education and to many fields of psychology, including social cognitive theory, therapy and personality psychology. He is known as the originator of social learning theory and the theoretical construct of self-efficacy. Thus, Bandura is widely described as one of the most influential psychologists of all time and as the greatest living psychologist. In 1977, he published ‘Social Learning Theory’, a book that altered the direction psychology took in the 1980s. While investigating the processes by which modeling alleviates phobic disorders in snake-phobics, he found that self-efficacy beliefs mediated changes in behaviour and in fear-arousal. He launched a major program of research examining the influential role of self-referent thought in psychological functioning. From the late 1970s, he devoted much attention to exploring the role of self-efficacy beliefs in human functioning, and focused more on its influence on the educational setting. In 1997, he published his influential book, Self-efficacy: The exercise of control in which he developed his self-efficacy theory (From Wikipedia, the free encyclopedia).
Cette étude a examiné la possibilité de l’existence d’une relation entre l’auto-efficacité comme moyen de motivation dans l’apprentissage et les stratégies de la compréhension de la lecture employées par les étudiants de troisième année spécialité Anglais à l’université d’Oum El Bouaghi, Algerie. Deux hypothèses ont été formulées. La première hypothèse évoque l’existence d’une relation significative positive entre l’auto-efficacité en lecture des étudiants de troisième année Anglais à l’université d’Oum El Bouaghi et leur emploi des stratégies de la compréhension de la lecture. La deuxième hypothèse évoque que les lecteurs de haut niveau de l’auto-efficacité emploient plus de stratégies de la compréhension de la lecture que ceux de bas niveau. Les données de l’auto-efficacité en lecture et l’emploi des trois stratégies de la compréhension de la lecture: cognitive, métacognitive et socioaffective de cinquante étudiants ont été recueillies au moyen d’un questionnaire. Puis, ces données ont été calculées en utilisant le coefficient de la corrélation Spearman ainsi que les échantillons indépendants t-test. Les résultats révèlent que l’emploi de la stratégie de la lecture a une corrélation positive avec l’augmentation de l’auto-efficacité et les lecteurs de haut niveau de l’auto-efficacité emploient plus de stratégies que ceux de bas niveau. Les résultats obtenus dans cette étude confirment les études précédentes dans des contextes différents. Des recommandations sont donc suggérées pour encourager les étudiants à améliorer leur auto-efficacité en lecture et à employer des stratégies différentes de la lecture afin d’obtenir des résultats satisfaisants en compréhension de la lecture.

**Mots clés:** l’auto-efficacité, l’auto-efficacité en lecture, stratégies de la compréhension de la lecture, l’emploi des stratégies de la lecture.
تناولت هذه الدراسة البحث في العلاقة بين الفاعلية الذاتية كعامل محفز في التعلم واستراتيجيات استيعاب القراءة المستخدمة من طرف طلبة السنة الثالثة لغة إنجليزية بجامعة أم البواقي، الجزائر. حيث طُرحت فرضيتان أساسيتان. تناولت الفرضية الأولى إمكانية وجود علاقة حقيقية إيجابية بين الفاعلية الذاتية في القراءة لطلبة السنة الثالثة لغة إنجليزية بجامعة أم البواقي وبين استخدامهم لاستراتيجيات استيعاب القراءة. أما الفرضية الثانية، فقد تناولت إمكانية استخدام الطلبة الأكثر فاعلية استراتيجيات القراءة أكثر من الطلبة الأقل فاعلية. لقد أُستخدم الاستبيان كوسيلة لجمع نتائج خمسين طالبا حول الفاعلية الذاتية في القراءة واستراتيجيات استيعاب القراءة المستخدمة بأنواعها الثلاثة: المعرفية، والاجتماعية/العاطفية، ثم تم حساب المعطيات باستخدام معامل العلاقة سبيرمان (Spearman) واختبارات العينات المستقلة. بينت النتائج أن استخدام استراتيجيات القراءة له علاقة إيجابية بزيادة الفاعلية الذاتية، وأن الطلبة الأكثر فاعلية يستخدمون استراتيجيات القراءة أكثر من الطلبة الأقل فاعلية، مما يؤكد نتائج الدراسات السابقة التي تم إجراؤها في سياقات مختلفة. على هذا الأساس، يعد تشجيع الطلبة على تطوير فاعلية القراءة الذاتية في القراءة واستخدام استراتيجيات القراءة المختلفة عملا مساعدا على تحقيق نتائج عالية في استيعاب القراءة.

الكلمات المفتاحية: الفاعلية الذاتية، الفاعلية الذاتية في القراءة، استراتيجيات استيعاب القراءة، استخدام استراتيجيات القراءة.