Reading Strategies among Saudi EFL Students

Prof. Hashem A. Alsamadani
hasamadani@uqu.edu.sa
Umm Al-Qura University

Abstract

This study was initially conducted to explore Saudi students' use of reading strategies and their relationship to their reading comprehension level. The study employed quantitative methods to obtain information about Saudi students' perceived use of reading strategies and their comprehension levels. The results showed that EFL learners in Saudi Arabia use planning strategies more than attending strategies and evaluating strategies. Saudi students also perceived the environment as the most critical factor affecting their reading comprehension. There was no significant relationship between Saudi EFL learners' comprehension level and their use of reading strategies. Finally, gender differences favoring female learners were evident in almost all analyses conducted in the current study. Significant differences were found favoring female students in overall strategy use, comprehension level, and the use of evaluating strategies.

Keywords:
reading, strategies, EFL, comprehension, language skills.

1. Introduction

Much of the research that discusses reading focuses on reading rather than on the processes of comprehension. Ryan et al. [1] have concluded that poor and underutilized strategies and limited reader participation and interaction in the reading process lead to comprehension problems, even among students who have adequate knowledge of vocabulary and basic reading skills.

Thus, these results indicate that EFL students' problems of lack of reading proficiency may not be related to individual behavioral factors. Several studies of reading in English as a foreign language conducted in Saudi Arabia show that learners have positive attitudes toward learning English and towards reading in English as a foreign language [2],[3],[4],[5],[6]. Thus, these students' problems can be attributed to poor linguistic knowledge or poor reading strategies. In this regard, Sheorey and Mokhtari believe that awareness of reading strategies and observation of comprehension is an essential characteristics of good readers: "to understand a text, readers need to use their metacognitive knowledge about reading and "call up conscious and deliberate strategies" [7]. This may mean that if readers are not familiar with specific strategies, they will not use them in reading, so good readers know who uses appropriate reading strategies.

Reading strategies are categorized according to when they are used into pre-reading skills, while-reading skills, and after-reading skills. According to the part of the text, they focus on [8]. Researchers also generally distinguish between cognitive and metacognitive strategies where Garner says: "If cognition involves perceiving, understanding, remembering, etc., then metacognition involves thinking about perceiving, understanding, and the rest" [1]. Flavel asserts that "cognitive strategies are invoked to make cognitive progress and metacognitive strategies to monitor it" [9]. Furthermore, Sheorey and Mokhtari suggest that readers' metacognitive knowledge includes awareness of reading strategies [7].

Despite all of the above, there is an unclear picture of the common uses of reading strategies by learners of English as a foreign language in Saudi public universities. Until the preparation of this research study, some local studies were conducted on the effectiveness of reading strategies in understanding reading of English as a foreign language in Saudi Arabia. However, there is a lack of empirical studies examining the success of EFL learners who use reading strategies compared to those who do not. The scarcity of such studies has made it difficult to draw conclusions, generalizations, or firm knowledge about the effectiveness or success of teaching reading strategies. Without this knowledge, it is not easy to understand the factors that affect reading comprehension and the critical factors in teaching reading. In this study, the researcher maintained the first classification. Reading strategies were grouped into three main types: planning strategies (before reading), attending strategies (while reading), and evaluating strategies (after reading).

Planning Strategies (before-reading strategies) include selecting (learning goals), preparing (activating relevant memory schemata), gauging (determining the difficulty of tasks and depth of processing involved), and estimating (predicting the information processing demands of the task). Attending Strategies (while-reading strategies) include focusing (on materials), searching (relating presented information to memory), contrasting (comparing presented information to memory), and validating (confirming presented information with existing knowledge). Encoding strategies include elaborating (linking presented information with existing knowledge) and qualitatively

relating (linking presented information with more profound levels of existing knowledge).

Evaluating Strategies (after-reading strategies) include testing (determining the consistency of new information) and judging; reviewing strategies include confirming (using new information), repeating (practice recall), and revising. This study investigates how Saudi EFL learners in Saudi public universities use reading strategies to improve comprehension. Given the relative paucity of research in this area, this study should be of particular interest when addressing how Saudi EFL learners in public universities use reading strategies to improve comprehension.

This study explores the use of reading strategies among Saudi EFL college-level learners and the relationship between strategy use and Saudi EFL reading comprehension. Thus, the study attempts to answer the following research questions:

- What reading strategies do Saudi EFL learners most often use in Saudi public universities?
- Do reading strategies (planning, attending, and evaluating) predict college-level Saudi students' achievement in English reading comprehension as a foreign language?

2. Methodology
2.1 Sample
The primary study was conducted in three major universities in Saudi Arabia: King Abdul-Aziz University, King Faisal University, and Jeddah University. The current paper is part of the researcher's original study for the Ph.D. degree. The reason for publishing this section is the vital importance of the topic. Although the major study was conducted in 2009, there is still a considerable debate on the main topic: whether good readers are strategic ones or not! Besides, the studies conducted in the Saudi context after 2009 have not yet come to a common conclusion about Saudi learners. Publishing this section might stimulate new research on the topic, especially in this modern age of social media. Stevens points out that the sample size is determined by several factors: the desired power, alpha level for controlling Type I error (the probability of rejecting the null hypotheses when it is true), effect size, and the number of variables used in the analysis (regression model) [10]. Since the major design of this study has one independent variable with three sub-variables and only one dependent variable, the desired power of 0.8, medium effect size ($f2 = 0.15$), and an alpha level of 0.05 were maintained for this study. Using Faul, Bucher, Erdfelder, and Lang, the desired sample for this study maintaining these criteria is 77 students [11]. However, the researcher decided to have a sample of 140 students to ensure more adequate and reasonable effects; the power with N = 140 is .98.

Finally, a reading comprehension test was used in this study to evaluate student's comprehension levels. The test consisted of two reading comprehension passages followed by seven multiple-choice reading comprehension questions. This reading test was part of the TOEFL test, a standardized test for ESL/EFL students who intend to study in the United States and Canada. Throughout the time being used, TOEFL tests show high reliability and validity [12]. The maximum point for the test was 14 (one point for each correct answer).

2.2 Instrumentation
2.2.1 Reading Strategies Questionnaire (RSQ)

The structure and content of the current instrument are based on Tseng et al.'s Self-Regulating Capacity in Vocabulary Learning Scale (SRCvoc) [13]. The researcher developed the new instrument using the same theoretical construct that Tseng et al. used. This is a system of self-regulatory strategies from the area of educational psychology developed by Do¨rnyei [14]. This system consists of five facets. These are:

- Commitment control helps to preserve or increase the learners' original goal commitment.
- Metacognitive control: This involves the monitoring and controlling of concentration.
- Satiation control helps eliminate boredom and adds extra attraction or interest to the task.
- Environmental control: This helps eliminate negative environmental influences and exploit positive environmental influences by making the environment an ally in pursuing a problematic goal [13].
- Emotional control: This concerns the management of disruptive emotional states or moods and the generation of emotions that will be conducive to implementing one's intentions (self-encouragement; using relaxation and meditation techniques).

2.2.2 Design of the Questionnaire Instrument (RSQ)

One of the reasons for publishing this part of the study is to shed light on the RSQ. The Reading Strategies Questionnaire (RSQ) was used as a major instrument in this study. This questionnaire was used to gain insights into Saudi students' use of reading strategies. The researcher designed the RSQ and reviewed it by a panel of judges that included college professors, teachers, and graduate students. The researcher also pilot-tested the questionnaire to ensure its validity and reliability.

The questionnaire uses a six-point Likert scale. Subjects were asked to respond to each statement by choosing from among six answers: (strongly agree), (agree), (partly agree), (slightly disagree), (disagree), or (strongly disagree). The RSQ consists of 34 statements related to the three types of reading strategies and the five measures of self-regulation capacity. Strategy types are planning, attending, and evaluating, while the self-regulating components are commitment, emotional, metacognitive, satiation, and environmental control.

The survey instrument was tested for both validity and reliability. A pilot study was conducted to determine the instrument's reliability, validity, and usability. The questionnaire was distributed to 30 EFL students from different countries. They were told that they would not be part of the original study. The participants were given sufficient time to complete the questionnaire and return it along with their comments and feedback. From their responses, unclear questions were identified and corrected. Twenty-eight out of thirty participants returned the completed questionnaire with a response rate of 93%. The demographic characteristics of the pilot study respondents were comparable to the intended population of this study. More details are shown in Table 1

Table 1: Demographic Characteristics of the Participants in the Pilot Study.

Countries	Respondents	Gender
Saudi Arabia	10	M
Jordan	6	M
Palestine	4	F
Sudan	2	F
Morocco	1	F
Kuwait	2	M
Egypt	3	F
Total	28	

2.2.3 Face Validity of the Instrument

One measure of validity is that of face validity. In describing face validity, "researchers attempting to support the interpretation of the measurement and its connection to the construct will seek a professional judgment that there is a plausible connection between the surface features of the measure's content and the construct as theoretically defined" [15]. To ensure face validity, the researcher presented the RSQ to a group of 30 Saudi EFL teachers and faculty members. They were gently asked to comment on the clarity of items and suggest changes. Some changes regarding the wording of statements, their order, and clarity were made to the final draft.

2.2.4 Reliability of the Instrument

Reliability refers to the degree to which the instrument consistently measures phenomena. According to Oppenheim, "reliability refers to consistency; obtaining the same results again" [16]. This consistency can be measured in the form of a statistical coefficient of reproducibility, often Cronbach's alpha, which is similar to a correlation coefficient.

Cronbach's alpha test was run to measure the questionnaire's internal consistency and reliability. The alpha coefficient for the overall questionnaire (34 items) was 0.87, which is considered a high level of reliability. According to Mueller, a well-constructed scale should have a reliability coefficient of 0.80 or higher [17]. Cronbach's alpha was also run for the questionnaire's subscales (types of reading strategies). The alpha coefficient was 0.71 for planning strategies (8 items), 0.81 for attending strategies (16 items), and 0.79 for evaluating strategies (10 items). Alpha coefficients, calculated by deleting each item from the scale, were also examined, but none of the increases in the alpha coefficients was significant enough to justify removing any of the items.

2.3 Data Analysis

After ensuring the normality of the data and deciding which tests to use, the researcher analyzed the data to address the two research questions. Means and standard deviations were run to answer the first research question ("What reading Saudi EFL learners mostly use strategies in Saudi public universities?"). Moreover, a one-way repeated-measures ANOVA was used to check if the difference among the subjects' reported use of the three different types of reading strategies was significant. When addressing the second question, "Do reading strategies (planning, attending, and evaluating) predict Saudi EFL learners' reading comprehension?" the researcher used standard multiple regression analysis to find out if there was a correlation between the use of specific reading strategies and reading comprehension level.

3. Results & Discussion

The first research question was, "What reading strategies do Saudi EFL learners most often use in Saudi public universities?" This research question sought to identify Saudi learners' most widely used strategies to aid comprehension. Descriptive statistics were calculated to determine the means of use for each strategy to answer this question. Strategy use was determined based on the degree of agreement of each participant on the importance of each statement. A mean of 4 and above was considered a high level of use; a student largely agreed on the importance of

the strategy. A 3.00-3.99 was considered a low level of use since this implies that a student almost disagreed on the importance of using specific reading strategies that may affect his/her comprehension.

All but two of the item results fall into the high level. The high category encompassed 32 strategies. Only two attending strategies fall in the low level; however, even these two items have means above 3.5. This result means that EFL Saudi learners perceive all reading strategies reported in the questionnaire as necessary to improve their comprehension. It also implies that they may be inclined to use these strategies when reading English texts. When the overall mean of reading strategy use was examined, the highest overall mean was 5.88, while the lowest was 2.88. The majority of the participants were high strategy users, which means that EFL Saudi learners almost always use various reading strategies (planning, attending, and evaluating) while reading English text. The overall mean of the sample (the mean of the means) was 4.41, with a standard deviation of 0.58.

In addition, the means and standard deviations were calculated for the reading strategy types. The means and standard deviations of the subjects' reported use of planning, attending, and evaluating strategies are reported in Table 2. In general, the subjects showed more use of planning strategies than the other two, and they also seem to use evaluating strategies more frequently than attending strategies.

Table 2: Descriptive Statistics for Reading Strategies Types. Variables

Type	M	SD
Planning strategies	4.68	.62
Attending strategies	4.48	.70
Evaluating strategies	4.54	.74

Moreover, a one-way repeated-measures ANOVA was used to check if this difference in the subjects' reported use of the three different reading strategies is significant. The Multivariate test (as part of ANOVA output) indicated a significant difference between the means of the three categories with large effect size, Wilks' Lambda = 0.574, F= 51.245, p = 0.000, $\eta2$ = .426. The paired-sample t-test showed significant differences among the three means when run as a post-hoc test. It showed that there is a significant difference between planning strategies and the other two categories; between planning and attending t = 9.107, p = 0.000, $\eta2$ = 0.373; between planning and evaluating t = -2.385, p = 0.018, $\eta2$ = 0.039; and between attending strategies and evaluating strategies t = -7.186 p = 0.000, $\eta2$ = 0.270.

In conclusion, the analysis conducted to answer the first research question showed that EFL Saudi learners use almost all the reading strategies (planning, attending, and evaluating). More specifically, it was shown that Saudi learners use planning strategies more than attending strategies and evaluating strategies. It is also very noticeable, from the descriptive statistics, that EFL Saudi learners perceived the reading environment as the most important factor in their reading process. In addition, Saudi students' evaluating strategies were more widely used than attending strategies.

The second research question was, "Do reading strategies (planning, attending, and evaluating) predict college-level Saudi students' achievement in English reading comprehension as a foreign language?" The relationship between these strategies and comprehension level was examined using standard multiple regression analysis to answer this question. Standard multiple regression analysis helps decide which one of the predictors (independent variables), if any, can predict the dependent variable (predicted). Independent variables were planning strategies, attending strategies, and evaluating strategies. The dependent variable was students' reading comprehension scores. Students' comprehension level was measured using a retired version of the TOEFL reading section. The maximum score expected was 14, and the lowest one was 0. Only four students got the full mark (14) on the test, while three others received the lowest score (2).

A standard regression analysis was conducted to determine the relationship of a linear combination of Factors 1 through 3 with students' reading comprehension scores. The standard regression model summary table (Table 3) indicated that the test was not statistically significant (F (3.136) = 0.783, p = 0.506 (>0.0005); R2 = 0.017; Adjusted (R2) = 0.005 at α =0.05. The value of the multiple correlations, R, which indicates how well the independent factors combined relate with the dependent factor (comprehension score), was R = 0.13. The adjusted R2 = 0.005 means that all the factors combined accounted for 0.5% of the variance in the dependent factor, reading comprehension score.

Table 3: Standard Regression Model Summary

Model	R	R^2	Adjusted R^2	Std. Error
1	.13	.01	.005	2.67

Change Statistics				

R^2 Change	F Change	df1	df2	Sig. F Change
.01	.783	3	136	.506

To ensure that the correlations among the three types of reading strategies did not affect the regression model, correlations between each reading strategy type and reading comprehension scores were obtained individually. No significant correlation was found between the use of any reading strategies or the general use of reading strategies and the reading comprehension level. Therefore, none of the three independent variables (predictors) can predict Saudi students' level of comprehension.

Therefore, the researcher concluded that Saudi students' perceived use of reading strategies did not predict their reading comprehension score in addressing the second question. This goes along with Carrell et al., Brantmeier, Anderson, and Madkhali. Brantmeier found no relationship between the types of strategies that second-language learners use and their reading comprehension level [18]. In addition, Anderson found that no specific strategies were related to successful reading comprehension [19]. His study also showed that no specific strategy, or groups of strategies, contributed more to students' successful comprehension of the texts. All these findings indicate that reading strategies (as reported by learners) do not always result in successful reading comprehension [20].

4. Conclusion

This study aimed to examine and determine how often EFL Saudi learners in public universities use reading strategies to aid their comprehension when reading English texts. It also aimed to investigate the relationship between the use of reading strategies and reading comprehension level. Quantitative research methods were employed to collect the data for this study. The results of the study suggest that EFL Saudi learners are strategic readers. They usually use every reading strategy included in the questionnaire (planning, attending, evaluating). However, Saudi EFL learners' comprehension level does not depend solely on reading strategies. The results of the multiple regression analysis showed that none of the reading strategies types could predict students' comprehension levels. This finding does not mean that high-comprehension level students are not strategic readers; it implies that the opposite is not always true. The use of reading strategies does not guarantee a high level of comprehension because other factors may be considered. More studies are needed to investigate how modern social platforms have changed readers' behaviors and habits.

5. References

[1] Garner, R. (1987). Metacognition and reading comprehension. Norwood, NJ: Ablex.

[2] Alanazi, S. (2021). Investigating Saudi EFL Students' Knowledge and Beliefs Related to English Reading Comprehension. Arab World English Journal, 12 (1) 339-   356.   DOI: https://dx.doi.org/10.24093/awej/vol12no1.23

[3] Altalhab, S. (2019). The Use of Reading Strategies Amongst Saudi University EFL Students. Journal of Education and Learning 8(3):234 DOI: 10.5539/jel.v8n3p234

[4] Al-Arfaj, N. (1996). Factors causing reading difficulties for Saudi beginning students of English as a foreign language. Unpublished doctoral dissertation. Michigan State University. East Lansing.

[5] Al-Samani, A. (1999). Factors related to the reading difficulties of Saudi senior high school students in English as a foreign language. Unpublished doctoral dissertation, University of Kansas—Lawrence.

[6] Al-Akluby, S. (2001). Teaching and learning English vocabulary in Saudi Arabian public schools: An exploratory study of some possible reasons behind students' failure to learn English vocabulary. Unpublished doctoral dissertation, University of Essex, UK.

[7] Sheorey, R., & Mokhtari., K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. System, 29,431-449.

[8] Young, D., & Oxford, R. (1997). A gender-related analysis of strategies used to process input in the native language and foreign language. Applied Language Learning, 8, 43-73.

[9] Flavell, J. (1979). Metacognition and cognitive monitoring: A new era of cognitive development inquiry. American Psychologist, 34, 906-911.

[10] Stevens, J. (1996). Applied multivariate statistics for the social sciences. Mahwah, NF: Lawrence Erlbaum Associates, Publishers.

[11] Faul, F., Buchner, A., Erdfelder, E., & Lang, A. (2008). G*Power. (Version 3.0.10) [Computer software]. Germany: Keil University.

[12] Pierce, B., 1994. The test of English as a foreign language: Developing items for reading comprehension. In C. Hill, & K. Parry (Eds.), From testing to assessment: English as an international language (pp. 39–60). New York: Longman.

[13] Tseng,W., Dörnyei, Z., & Schmitt, N. (2006). A new approach to assessing strategic learning: The case of self-regulation in vocabulary acquisition. Applied Linguistics, 27, (1), 78-102

[14] Do¨rnyei, Z. 2001. Motivational strategies in the language classroom. Cambridge: Cambridge University Press.

[15] Smith, M., & Glass, G. (1987). Research and evaluation in education and the social sciences. Englewood Cliffs, NJ: Prentice-Hall.

[16] Oppenheim, A. (1966). Questionnaire design and attitude measurement. New York: Basic Books.

[17] Mueller, D. (1986). Measuring social attitudes: A handbook for researchers and practitioners. New York: Teachers College Press.

[18] Brantmeier, C. (2002). Second language reading strategy research at the secondary and university levels: Variations, disparities and generalizability. The Reading Matrix: An International Online Journal, 3 (2) (pp.1-14). http://www.readingmatrix.com/current.html.

[19] Anderson, N. (1991). Individual differences in strategy use in second language reading and testing. Modem Language Journal, 75, 460-72.

[20] Al-Nafisah, K. I. (2015). The Effectiveness of an Extensive Reading Program in Developing Saudi EFL University Students' Reading Comprehension. Arab World English Journal, 8 (1). DOI: https://dx.doi.org/10.24093/awej/vol6no2.8

Hashem Alsamadani received his MA and Ph.D. degrees from Ohio Univ. in 2008 and 2009. After working as an assistant teacher (from 2001), an associate professor (from 2014) in the Dept. of Curriculum and Instruction, Umm Al-Qura Univ., he has been a professor at Umm Al-Qura Univ. since 2018. His research interest includes reading instruction in EFL, CALL, and second LL techniques and strategies.