

Investigating EFL Learners' Reading Self-Efficacy and Reading Strategy Use: A Correlational Study

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Abstract—This study aimed to explore the level of Saudi EFL female senior high school students' reading self-efficacy beliefs and perceived use of reading strategies, and assess the correlational relationship between the two study variables. Using a quantitative research design, the study data were collected by administering two questionnaires: The Reader Self- Perception Scale (RSPS) questionnaire adapted from Henk and Melnick (1995), and the Survey of Reading Strategies (SORS) adapted from Li and Wang (2010). The two instruments were administered to 90 Saudi senior high school female students randomly selected from three different public schools in Riyadh, Saudi Arabia. The data were analyzed using Pearson correlation coefficient and regression analysis to determine the relationship between self-efficacy and EFL learners' perceived use of reading strategies. The study findings revealed that Saudi senior high school students achieved more than moderate levels than high levels of reading self-efficacy, and that metacognitive processes were the most frequently used strategies among cognitive and compensation strategies. In addition, a positive relationship between students' reading self- efficacy and perceived use of reading strategies was detected in the data analysis. Pedagogical implications of the study findings and its recommendations were presented and discussed.

Index Terms—self-efficacy, reading strategies, cognitive strategies, metacognitive strategies

I. INTRODUCTION

Researchers from diverse fields of inquiry (e.g., Bandura, 1986, 1997; Schunk & Rice, 1991; Wong, 2005) have long examined the notion of self-efficacy and its impact on students' self-beliefs, and self-regulatory abilities to become efficient readers (Bandura, 1997). That is, students' sense of self-efficacy as readers, their passion for reading and motivation to get involved in reading tasks are all components of successful literacy learning environments (Wong, 2005). But it would be more interesting to observe how students' self-efficacious abilities can be projected in their perceived reading strategy use and whether readers' higher or lower self-efficacy levels correlate with their knowledge of reading strategies resorted to when reading English texts.

Given that English is an obligatory subject in Saudi high schools, senior high school students are obliged to pass English exams to secure college acceptance. Researchers and practitioners (e.g., Alharbi, 2015; Al-Qahtani, 2016; Rajab & Al-Sadi, 2015) have long noted that in the educational field many Saudi students find it hard to struggle to attain high proficiency levels in EFL classrooms, in general, and reading in particular. This incompetence in foreign language (FL) learning might be a result of some low self-efficacy and a lack of effective reading skills and strategies used in language classrooms. Thus, these problems often result in academic failures and negative reflections about learning English. Hence the numerous numbers of studies inspecting the relationship between self-efficacy and reading strategies in EFL contexts (e.g., Al Ghraibeh, 2014; Li & Wang, 2010; Naseri & Zaferanieh, 2012; Tobing, 2013; Zare & Mobarakeh, 2011), the correlation between L2/FL reading self-efficacy and use of reading strategies got so little attention in the Saudi tertiary levels to the researchers' knowledge. Hence, our study aimed to fill this gap in previous research on the relationship between Saudi EFL students' level of reading self-efficacy and their perceived use of EFL reading strategies.

The significance of our study emerges from the importance of FL reading as an essential skill for Saudi EFL learners. Students with achieved EFL reading proficiency often embrace positive perceptions and attitudes towards their reading abilities. On the other hand, students with low reading self-efficacy and inadequate reading strategies might fail to attain academic achievements due to poor self-esteem and language learning difficulties. Investigations in EFL reading domains have shown that lack of exposure to the target language (Alharbi, 2015), lack of reading skills training and content familiarity (Al-Shumaymeri, 2006), limited teacher training programs (Alrabai, 2016), and limited vocabulary and unfamiliar reading topics (Al-Qahtani, 2016) are among the reasons behind students' difficulties in EFL reading

comprehension in various Saudi educational contexts. Hence, it is necessary to bear in mind the importance of observing and measuring students' self-efficacious abilities and reading strategies when setting up course objectives and learning outcomes of implemented reading courses and programs in the Saudi context.

Review of Related Studies

A considerable body of research has inspected the relationship between self-efficacy and other readers' factors, such as language learning strategies, gender differences, reading anxiety and reading attitudes. Other studies aimed to establish how strategic reading and self-efficacy are intrinsically related, and that students' reading performance can be increased by developing their self-efficacy (Schunk & Rice, 1991; Wong, 2005). Of the many studies investigating L2 reading comprehension and reading strategies (Jimenez et al., 1996; Kong, 2006; Sheorey & Mokhtari, 2001), a few studies, however, have been conducted in EFL contexts to investigate the impact self-efficacy beliefs have on the processes of language learning. Overall, results of these studies have shown a positive correlation between self-efficacy and strategic reading in EFL contexts (Alsuhaibani, 2019; Li & Wang, 2010; Naseri & Zaferanieh, 2012; Tobing, 2013; Wang & Pape, 2004; Zare & Mobarakeh, 2011).

For instance, Li and Wang (2010) conducted an empirical study on 182 sophomore English majors in the University of China to examine the relationship between self-efficacy from a motivational perspective and reading strategies from a cognitive perspective. The results of the two questionnaires administered revealed a significant and positive relationship between learners' self-efficacy and use of reading strategies, in general, and use of the three types in particular: namely: cognitive, metacognitive, and social/affective strategies. In addition, Li and Wang (2010) asserted that readers with high self-efficacy beliefs set goals, manage their reading time, monitor their reading during the process of inference making, note-taking, elaboration, grouping, deduction, and transferring.

Other reading studies have exhibited how reading self-efficacy beliefs are essential in increasing students' reading strategy use. For instance, Naseri and Zaferanieh (2012) conducted correlational research to examine the relationship between self-efficacy beliefs, reading strategy use, and L2 reading comprehension among a group consisting of 80 Iranian junior and senior students. After administering the Michigan Reading Comprehension Test, a Reading Strategy Use Questionnaire, and a Reading Self-Efficacy Questionnaire, the researchers identified which reading strategies were the most frequently used strategies. Moreover, the researchers found significant correlations between self-efficacy beliefs and reading comprehension, and between self-efficacy and L2 reading strategies. Li and Wang (2010) and Zare and Mobarakeh (2011) explored 45 Iranian high school students' reading self-efficacy and their use of reading strategies using two questionnaires on 7-point Likert-type scale. The results indicated how both self-efficacy and all types of reading strategies were positively correlated and that metacognitive strategies were most frequently used. In a different context, Muche et al. (2023) inspected the impact of metacognitive strategy use and self-efficacy at a moderate level, and problem-solving strategies at a high level. The study findings showed how participants used metacognitive reading strategies and self-efficacy at a moderate level, and problem-solving strategies as the most frequently used strategies compared to global and support reading strategies. In addition, a significant positive relationship was detected among all the study variables.

With regards to the Arabian context, Al Ghraibeh (2014) explored the predictive relationship between self-efficacy in reading comprehension, age, and meta-comprehension among EFL learners. A reading self-efficacy test, and a meta-comprehension test were administered to 63 participants randomly selected from enrolled students in a Saudi University. The results indicated that academic self-efficacy in the reading comprehension tests and age. In a different context, Alsuhaibani (2019) inspected the relationship between 191 Saudi female students' use of reading strategies and their reading self-efficacy. Using two questionnaires (a SORS questionnaire (adopted Mokhtari & Sheorey, 2002) and a self-efficacy reading self-efficacy questionnaire), and retrospective interviews, the study revealed that moderate-frequency use of both reading strategies and reading self-efficacy but a positively correlated relationship between the two factors. Also, the researcher found a significant difference between high self-efficacious versus low self-efficacious students in the overall use of reading strategies, although the two groups differed in their use of the subscales of reading strategies.

Despite the substantial amount of research in foreign language contexts that has been conducted to explore the relationship between self-efficacy and L2 reading strategies, there is still, however, a considerable lack of research examining the influence of these factors combined in the Saudi context. Also, although previous studies concerning the Saudi context revealed some interesting findings regarding the interactions of various variables in relation to students' self-efficacy, they did not fully address Saudi readers' strategy use in relation to their reading self-efficacy in high school level, which is the focus of our study. Hence, to address this lack of research, the present study aimed to answer the following research questions:

1. What is the level of Saudi EFL female senior high school students' reading self-efficacy beliefs and their perceived use of reading strategies?
2. Is there a significant relationship between Saudi EFL female senior high school students' reading self-efficacy beliefs and their perceived use of reading strategies?

II. METHOD

A. Research Design

This is a correlational study with a between-subject design since our study focused on examining the correlation

between English reading strategies and English reading self-efficacy across Saudi EFL female senior high school students.

B. Participants and Setting

The study participants involved 90 Saudi EFL female senior high school students of Natural Sciences concentration randomly selected from three public schools in Riyadh. The rationale behind our target for natural science majors was due to students' exposure to a variety of English materials they were required to read in their classrooms. These students, whose ages ranged between 17 and 19, had learned English for seven years as a subject in all the schools included and covered subjects and content areas using the Traveller 5 textbook in all of the three schools selected. All the students shared similar English background, although each class had a mixture of high and low English language proficiency (according to school proficiency test data) affecting all senior high school students. Three classes of students, each consisting of 35-40 students (and a total of 90 participants) participated in our study. Given the minimum necessary sample size in relation to the study variables should be equal to $50+(8*4)=82$, our sample out-passed this range. Hence the sample size was determined to be large enough to conduct both simple and multiple correlation and regression analysis using the study data (Green, 1991).

C. Instruments

(a). Reading Self-Efficacy Questionnaire

The Reader Self-Perception Scale (RSPS) questionnaire devised by Henk and Melnick (1995) was adapted as baseline for reading self-efficacy questionnaire used in our study (see Appendix A). This scale has 4 subscales (Table 1) which allow us to measure different aspects of self-efficacy relevant to Bandura's (1997) four-sources model that affect self-efficacy: performance accomplishments (the history of success or failure, mastery experience), vicarious experiences (comparison to others' success), verbal persuasion (encouragement or discouragement received from other persons, social feedback), and particularly items 1, 5, 8, 12, 17, 18, 28, and 32 of their RSPS), and other items were rephrased and used while new items were added in our modified questionnaire into 20 instead of the 30-item scale of the original scale. This is due to the apparent overlapping of its statement items. e.g., 14 vs 20 of the original scale resulted in reducing the number of items in our modified questionnaire into 20 instead of the 30-item scale of the original scale. But these modified changes in our adapted reading self-efficacy questionnaire were discussed and validated with two experts who were actively involved in FL reading research in the English department at the time.

TABLE 1
SELF-EFFICACY CATEGORIES

| Categories | Items |
|--------------------------|-------|
| Observational Comparison | 1-2 |
| Mastery Experience | 3-11 |
| Psychological State | 12-17 |
| Social Feedback | 18-19 |

(b). Reading Strategy-Use Questionnaire

Although constructed upon different studies in L2 reading strategies, the main resource for our strategy-use questionnaire is the survey of reading strategies (SORS) (originally constructed by Mokhtari & Sheorey, 2008), adapted and administered by Li and Wang's (2010) study, with 48 items scale to measure the use of different categories of L2 reading strategies (metacognitive, cognitive and compensation strategies). The scale constructed in the original study was reviewed while others statements were added from Shang's (2010) study to measure compensatory strategies (e.g., ignoring unknown words or phrases, using the structure of the text (titles, subtitles, content table), over-viewing the text, and planning the reading process to ease the Understanding of the text). The final revised questionnaire contained 32 items (Table 2). Also, the final grouping of the statements can be seen in Appendix B.

TABLE 2
READING STRATEGIES CATEGORIES

| Categories | Items |
|---------------|-------|
| Cognitive | 1-13 |
| Compensation | 14-21 |
| Metacognitive | 22-32 |

A comprehensive statistical analysis was used to validate the measurement tools used in our study. The reliability of the scale was tested by calculating the Cronbach's alpha (Table 3), a statistical tool that measures the internal consistency or reliability of the data. Values of Cronbach's alpha range from 0.00 to 1.00, in which 0.00 indicates no consistency in the measurements and 1.00 indicates perfect consistency. The internal consistency on the self-efficacy instrument was 0.893 while that of reading strategy-use instrument was 0.913; hence, these values are appropriate indicators of high consistency and reliability of our study instruments.

TABLE 3
INTERNAL CONSISTENCY CHECK

| Instruments | Cronbach's Alpha | Number of Items |
|-----------------------------|------------------|-----------------|
| Self-Efficacy Questionnaire | 0.893 | 19 |
| Strategy-Use Questionnaire | 0.913 | 32 |

Both reading self-efficacy and reading strategy-use questionnaires were first translated into Arabic by the researchers and five native Arabic experts in translation judged the translated versions. The two questionnaires were then tested for validity by providing them to four faculty raters to validate the language used, the items clarity, and the appropriateness of statements to measure the study variables. Furthermore, both questionnaires were pilot tested for validity by administering them to a different sample of 12 female students randomly chosen from other public schools. The results of the pilot study showed that the participants did not encounter problems to understanding and answering the items.

Hence, our study questionnaires were tested out and validated to be administered for the main part of the study.

D. Data Collection

Having obtained permission to conduct our study from the three designated public schools' administration in Riyadh, the researchers began conducting their main study. First, the female researcher introduced the study, explained the participants' roles in the data collection procedures (after assuring them that their participation was voluntary and their anonymity and confidential information were protected) and provided instructions concerning the questionnaires completion (Al-Shulayil & Alkhaleefah, 2025). Ninety students took part in the survey and completed both questionnaires. The participants were allowed enough time to carefully read the items and rate their responses according (as instructed by the female researcher). After the data collection stages were completed, the responses were cross-checked and calculated according to the assigned scales.

E. Data Analysis

After data cleansing, mean scores for all the scales and subscales were computed using Statistical Package for Social Sciences (SPSS). Here, the scores for every scale in each question in the research instruments administered were added together independently and the values were used for further analysis. Furthermore, the sum of scales on reading strategy use was also calculated: values less than or equal to 53 were indicative of a low use of reading strategies, 54-107 as moderate use and values greater than 107 as high use of reading strategies. Correlation analysis was also used to compare the scores of scales on self-efficacy and reading strategies to determine the direction and significance of the relationship between senior high school students' reading self-efficacy beliefs and their perceived use of reading strategies. A linear regression model was developed to predict our students' self-efficacy given their perceptions on the reading strategies and vice versa.

III. RESULTS

Concerning the first research question (What is the level of Saudi EFL female senior high school students' reading self- efficacy beliefs and their perceived use of reading strategies?), the mean and standard deviations of the descriptive data analysis showed that students' self-efficacy beliefs with their perceived use of the reading strategies, as seen in Table 4, varied in results. Here, 39 (43.8%) of students had low self-efficacy, 38 (42.7%) displayed a moderate self-efficacy, while the remaining 12 (13.5%) showed high reading self-efficacy in using two words of reading strategies, 5 (5.6%) were high users, while the majority of the students (84.3%) reported using reading strategies moderately.

TABLE 4
FREQUENCY OF STUDENTS' LEVELS OF SELF-EFFICACY AND PERCEIVED USE OF READING STRATEGIES

| Level | Reading self-efficacy | Reading strategy use |
|----------|-----------------------|----------------------|
| Low | 39 (43.8) | 9 (10.1) |
| Moderate | 38 (42.7) | 76 (84.3) |
| High | 12 (13.5) | 5 (5.6) |

Also, the results show the participants' levels of reading self-efficacy as relatively high ($M=3.73$, $SD=1.00$), with all the subscales scores exceeding the 3.5 level.

TABLE 5
MEANS AND STANDARD DEVIATIONS OF STUDENTS' SELF-EFFICACY (N=89)

| Variables | M | SD | Cronbach's α |
|--------------------------|------|------|---------------------|
| Observational Comparison | 3.58 | 0.95 | .662 |
| Mastery Experience | 3.88 | 0.69 | .824 |
| Psychological state | 3.53 | 0.81 | .677 |
| Social feedback | 3.84 | 0.92 | .809 |

* $p<0.001$

As can be observed in Table 5, mastery experience and social feedback were higher compared to observational

comparison and psychological state (M=3.88, SD=0.69 and M=3.84, SD=0.92 vs M=3.58, SD=0.95 and M=3.53, SD=0.81), with a range of .35, but not statistically significant.

As revealed in students' responses to perceived self-efficacy statements (see Table 6), the highest rates respondents had was detected on the overall description of their English reading abilities where they gave more than average lowest score was spotted on the statement concerning reading aloud to siblings (item 17) (M=2.94, SD=1.46). Hence, the overall range of the questionnaire items was calculated as: Max (4.33) -- Min (2.94) = 1.39.

TABLE 6
READING SELF-EFFICACY QUESTIONNAIRE WITH SUBSCALES GROUPING AND CORRELATION FOR APPROPRIATE SUBSCALE (N=89)

| | | | | | |
|--------------------------|----|--|------|------|--------|
| Observational Comparison | 1 | I read faster and better than my classmates. | 3.52 | 1.17 | .883** |
| | 2 | I understand what I read better than my classmates. | 3.65 | 1.03 | .847** |
| Mastery Experience | 3 | I can read and understand all the topics in English course book pretty good. | 3.61 | 1.20 | .756** |
| | 4 | When I read, I learn many new words. | 3.48 | .97 | .493** |
| | 5 | I can identify the main idea of a reading passage. | 3.84 | 1.08 | .752** |
| | 6 | I can understand the writer's purpose in a text. | 3.66 | 1.10 | .715** |
| | 7 | I can finish my homework of English reading all by myself. | 4.15 | 1.01 | .619** |
| | 8 | I can read and understand short stories. | 4.33 | .72 | .656** |
| | 9 | When my teacher asks a question about the text, I can answer. | 4.09 | .87 | .522** |
| | 10 | I can read and understand English newspapers. | 3.35 | 1.28 | .699** |
| | 11 | I can guess the meaning of a difficult word while reading. | 3.62 | 1.23 | .618** |
| Psychological state | 12 | I enjoy reading. | 3.69 | 1.22 | .704** |
| | 13 | I like to read aloud. | 4.13 | 1.37 | .448** |
| | 14 | I think reading is easy for me. | 4.01 | 1.03 | .549** |
| | 15 | I feel good inside when I read. | 3.57 | 1.28 | .754** |
| | 16 | I would be happy if someone gave me a book as a present. | 3.55 | 1.45 | .645** |
| | 17 | I often read to my little sister or brother. | 2.94 | 1.46 | .626** |
| Social Feedback | 18 | People in my family think I am a good reader. | 3.94 | .99 | .913** |
| | 19 | My teacher thinks I am a good reader. | 3.74 | 1.01 | .918** |

**p < .01 level (2-tailed)

As for students' reading strategies (see Table 7), they consisted of three categories, namely cognitive, metacognitive and compensatory strategies. The mean values of reading strategy usage were larger than 3.5 (on a 5-point Likert scale). All three strategies were more frequently used on an item level, but metacognitive strategies were more frequently used at the group level than others (M= 3.67 vs 3.57 and 3.52 for cognitive and compensative strategies). This can be interpreted when considering that students might have perceived using isolated cognitive strategies to cope with some word and text-level difficulties, but might still reflected on their metacognitive choices and use of strategies in combination as part of their comprehension monitoring. But this explanation is again limited to what we can infer from their perceived responses to the questionnaire items, which might or might not reflect their actual strategy use in some direct elicitation methods (e.g., concurrent think-aloud reading tasks) which our study did not involve in its design.

TABLE 7
READING STRATEGIES QUESTIONNAIRE WITH SUBSCALES GROUPING AND CORRELATION FOR APPROPRIATE SUBSCALE (N=89)

| Strategy | # | Statement | M | SD | Correlation |
|---------------|----|--|------|------|-------------|
| Cognitive | 1 | I can identify what type of text it is, such as a newspaper article, a scientific paper, or a novel. | 4.00 | .92 | .390** |
| | 2 | I use the title to help me predict the content. | 4.08 | 1.02 | .617** |
| | 3 | I make up questions that might be helpful to help me understand what I read. | 3.18 | 1.12 | .611** |
| | 4 | I skim the whole passage quickly and then reading selectively according to my reading purpose. | 3.67 | 1.22 | .684** |
| | 5 | I write down some notes and keywords. | 3.37 | 1.33 | .521** |
| | 6 | I critically analyze and evaluate the information presented in the text while reading. | 3.35 | 1.22 | .625** |
| | 7 | I re-read to recollect information of text while reading. | 3.10 | 1.42 | .536** |
| | 8 | I think about what I know to help me understand what I read. | 3.44 | 1.14 | .488** |
| | 9 | I use typographical aid (i.e. bold face) to identify and highlight key words while reading. | 3.33 | 1.25 | .658** |
| | 10 | I visualize information to help me remember what I read. | 3.70 | 1.16 | .502** |
| | 11 | After I read the text, I summarize it in my own words. | 3.37 | 1.24 | .615** |
| | 12 | I ignore words that I do not understand. | 3.15 | 1.34 | .192 |
| | 13 | I use the content table and the diagrams to summarize the passage after reading. | 3.30 | 1.37 | .689** |
| Compensative | 14 | I find the meaning of an English word by dividing it into parts that I understand. | 3.62 | 1.37 | .535** |
| | 15 | I use my general knowledge to guess the meaning of the text. | 3.67 | 1.08 | .624** |
| | 16 | I use the context to guess the meaning of a difficult word. | 3.78 | 1.15 | .589** |
| | 17 | I use pictures and images to understand better. | 3.89 | .98 | .463** |
| | 18 | When I do not understand some parts, I skip them and keep reading. | 3.44 | 1.23 | .412** |
| | 19 | I translate from English into Arabic to understand the passage. | 3.56 | 1.28 | .398** |
| | 20 | I try to guess what comes next in the text. | 3.33 | 1.19 | .567** |
| | 21 | I use my knowledge of the topic to help me understand the text. | 3.67 | 1.11 | .598** |
| Metacognitive | 22 | I preview the text before reading by looking at its organization. | 3.78 | 1.05 | .624** |
| | 23 | I have a purpose in mind when I read. | 3.89 | .98 | .587** |
| | 24 | I adjust my reading pace according to the type of text. | 3.67 | 1.12 | .598** |
| | 25 | I pay close attention to reading when text becomes difficult. | 3.44 | 1.18 | .656** |
| | 26 | I try to remain focused on reading when distracted. | 3.78 | 1.08 | .634** |
| | 27 | I stop from time to time and think about what I am reading. | 3.56 | 1.15 | .678** |
| | 28 | I try to picture or visualize information to help remember what I read. | 3.33 | 1.22 | .598** |
| | 29 | I make deduction about the content of the passage from the title. | 3.55 | 1.17 | .545** |
| | 30 | I get rationalized when text becomes difficult. | 3.67 | 1.20 | .418** |
| | 31 | I change my reading speed depending on the difficulty and importance of a text. | 3.96 | 1.14 | .506** |
| | 32 | I check to see if my guesses about the text are right or wrong. | 3.61 | 1.18 | .589** |

To find out the most popular reading strategies being reported the mean scores for every strategy usage were compared to overall reading strategy usage mean score. According to our results (Table 7), certain cognitive strategies (e.g., using the title to help predict the text content (M=4.08, SD=1.02), identifying the type of text (newspaper article, scientific paper, or a novel) (M=4.04, SD=.92) revealed some higher frequency meaning than other strategies.

As for the second research question (Is there a significant relationship between Saudi EFL female senior high school students' reading self-efficacy beliefs and their perceived use of reading strategies?), the results of the inferential analysis ($r=0.692$, $p\text{-value}=0.000$) revealed a strong positive relationship between the students' self-efficacy and their perceived use of reading strategies. Given the $p\text{-value}$ (0.000) is less than the alpha value (0.05), there is a significant relationship being detected between Saudi senior high school students' reading self-efficacy beliefs and their perceived use of reading strategies.

TABLE 8
PEARSON CORRELATION BETWEEN SELF-EFFICACY AND USE OF READING STRATEGIES

| | Pearson Correlation | Self-efficacy |
|----------------------|---------------------|----------------------|
| Reading strategy use | .692 | Sig. (2-tailed) .000 |
| | | N 89 |

TABLE 9
LINEAR REGRESSION OF SELF-EFFICACY ON READING STRATEGY USE

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| (Constant) | 30.179 | 5.454 | | 5.534 | .000 |
| Self-efficacy | 1.042 | .116 | .692 | 8.944 | .000 |

Table 9 shows the results of the linear regression of self-efficacy on reading strategies which indicate that an increase in students' reading self-efficacy led to an increase in students' reading strategies (1.042).

IV. DISCUSSION

In answering the first research question (RQ1), the results of our study indicated that Saudi female senior high school

students exhibited more low and moderate levels than high levels of reading self-efficacy which might suggest their attitudes towards FL reading activities. This does not often lack assessing students' own beliefs on their reading abilities prior to reading instruction. Similarly, our findings revealed our students' moderate perceived use of reading strategies, as compared to other trait of reading strategy use. This has been expected since it's reported that most Saudi students in public schools do not often receive enough exposure to explicit instruction on a variety of reading strategies aimed at dealing with comprehension breakdowns at various levels (Alkhaleeah, 2017). In conclusion, Saudi students' awareness of reading strategies seems low or moderate since the majority have not been taught enough strategies to help them comprehend well on content.

Our results here are in line with those findings drawn from previous similar studies which revealed a moderate use of reading self-efficacy amongst FL readers (Alsuhaibani, 2019; Al-Qahtani, 2016; Alzahrani, 2009; Muche et al., 2023; Rajab & Al-Sadi, 2015). However, our results contradict those drawn from previous studies (e.g., Al Ghraibeh & Ali) that reported high levels in their students' reading self-efficacy beliefs that encourage motivation scores based on the tests administered to foreign language learners. But it is important to note that Al Ghraibeh's (2014) study focused on male language learners enrolled in undergraduate programs of a major university. Thus, researchers should students' high reading self-efficacy scores to various reasons, including FL learners' creating efforts to learn new Arabic words, their increased motivation, and high expectations of success in effective language learning programs of university levels. But given the different language-learning conditions and reading context of Al Ghraibeh's (2014) study, it is not surprising that our findings were inconsistent with those reported in his study.

As for the second research question (RQ2), our findings revealed a positive relationship between Saudi EFL students' reading self-efficacy beliefs and perceived use of reading strategies. As shown in the results from the two questionnaires (see Tables 8 and 9), students' perceptions of reading strategy use are impacted by their low to moderate self-efficacy beliefs. This has been seen as consistent with those findings reported by other studies (Alsuhaibani, 2019; Li & Wang, 2010; Mohammed, 2022; Naseri & Zaferanieh, 2012; Tobing, 2013; Wang & Pape, 2004; Zare & Mobarakeh, 2011) which provided some positive relationship between reading self-efficacy and reading strategy use.

Notably, a comparison to previous research using similar questionnaires for reading self-efficacy is not straightforward, as two of the studies, namely Henk and Melnick (1995), and Zare and Mobarakeh (2011) provided some mean scores, and sums for scale. In Li and Wang (2010), the researchers used a 7-point Likert scale and Tobing (2013) used a 100-point scale to be administered in the Indonesian setting.

Nevertheless, it was possible to calculate mean values of self-efficacy for these two studies and the results showed that the rates of Saudi students were similar to those of Iranian senior high school students ($M=3.36$), as investigated by Zare and Mobarakeh (2011). Furthermore, our results revealed that metacognitive strategies were the most frequently used strategies; hence, consistent with those drawn from previous studies (Li & Wang, 2010; Zare & Mobarakeh, 2011), despite different types of questionnaires and different measurement analyzing the data were administered. However, the findings which showed metacognitive strategies being the most frequently used strategies contradicted those of Naseri and Zaferanieh (2012). This can be interpreted to consider participants' proficiency and reading abilities levels (as senior English major students) in past studies as opposed to the limited reading comprehension exposure of our high school students. This might explain the differences between our findings and those reported in Naseri and Zaferanieh (2012), for instance, wherein their participants were more cognitively engaged in their strategic reading than our subjects.

V. CONCLUSION

Conducted in the Saudi EFL setting, the aim of our study is twofold: exploring the level of Saudi EFL female senior high school students' reading self-efficacy beliefs and perceived use of reading strategies, and assessing the correlational relationship between the two study variables. Despite the low to moderate levels of reading self-efficacy and reading strategy use found in our results, the study still revealed a positive relationship between Saudi learners' reading self-efficacy and perceived use of reading strategies, and that metacognitive strategies were more frequently used than cognitive and compensatory processes.

A. Pedagogical Implications of the Study

The findings of our study provide insights to educators and practioners of the importance of enhancing students' self-efficacy in educational settings. Furthermore, the study findings suggest the need to develop target language instructors who help efficacious students in language classrooms. Hence, developing teachers who highly efficacious teachers should begin with cultivating positive self-efficacious language instructors. That is, highly efficacious teachers strive to encourage their students to develop some interests in their reading activities; for instance, to consistently motivate them by producing some enjoyable reading tasks that can help them become self-efficacious readers. For instance, Scott (1996), in a review of past studies on self-efficacy, drew special attention to some suggestions raised by Henk and Melnick (1995) for teachers who seek to promote positive reading self-efficacy for their students. First, individual differences, especially those exhibiting poor self-efficacy, should be treated with tolerable, desirable, and encouraging approaches. Second, teachers should raise their positive reinforcement and encourage students to perform tasks in less intimidating contexts. Third, language instructors should monitor their students' progress and provide frequent

justifications as to how their progress is taking place (Shang, 2010; Zare & Mobarakeh, 2011). Fourth, they should provide rich materials, resources of learning, and consonant support for language learners. Fifth, language instructors should carefully choose the most appropriate techniques to minimize, if not to eliminate, stress and anxiety that may impact students' language learning abilities. Finally, language instructors should try to create a friendly environment wherein group work and collaboration amongst students increase and enforce learners' motivation to learn (Henk & Melnick, 1995; Scott, 1996), as suggested by some previous EFL studies on reading self-efficacy (e.g., Shang, 2010; Zare & Mobarakeh, 2011; Naseri & Zaferanieh, 2012; Jae-woo et al., 2016).

Also, our study findings advocate the need for language learning instructors to help language learners be strategic readers. This involves providing learners with explicit instructions on reading strategies by introducing and practicing specific effective strategies to deal with word and text difficulties in reading (Grabe, 2009; Paris, 2005). Any reading strategy, once introduced and practiced, should be used regularly and in combination with other strategies as a part of pre- during and post reading activities. By predicting, for instance, the text title, engaging in some reading monitoring, relating to prior knowledge, word inferencing, or summarizing text content, language instructors can help FL readers learn and practice their reading strategies in a variety of reading tasks and practices. Helping them advance their reading efficacious abilities, as supported by previous research which examined positive relationship between FL learners' reading efficacy and their reading strategy use (e.g., Alsuhaibani, 2019; Fathi & Soleimani, 2020; Li & Wang, 2010; Mohammed, 2022; Naseri & Zaferanieh, 2012; Shang, 2010; Zare & Mobarakeh, 2011).

In addition, our study results call for syllabus designers to play an essential role in making the process of language learning more accessible and facilitative for learners by incorporating language learning strategies in general and reading strategies in particular in the course materials (Alkhaleeah, 2017; Al-Otaibi, 2004). By integrating appropriate strategies in language learning textbooks, teachers, especially those lacking teaching experience, will be empowered to improve their teaching methods. Moreover, incorporating reading resources that are varied, attractive, interesting, and accessible should be an important aim for syllabus designers. This should help Saudi students' cognitive awareness of the appropriate strategies to utilize and thus improve their self-efficacy and foreign language reading abilities, as has been proposed in previous literature (Alsuhaibani, 2019; Li & Wang, 2010; Mohammed, 2022; Naseri & Zaferanieh, 2012; Shang, 2010; Zare & Mobarakeh, 2011).

B. Limitations of the Study

Our study is one of the few studies investigating the relationship between reading self-efficacy and reading strategies in the Saudi EFL context and its findings promote more awareness of this association of the two reading variables in EFL reading settings. However, this study is not without its limitations.

The first limitation concerns our study design which is correlational in its focus as it does not aim to test any causal relationships between EFL readers' self-efficacy beliefs and their perceived use of reading strategies. And since Zare and Mobarakeh (2011) have recommended that Saudi EFL readers should be trained in strategic reading activities and get involved in tasks aimed to assess their reading self-efficacy beliefs, our study results do not imply that causal relationships being implemented in our design.

The second limitation is about our participants who were Saudi female students only selected from three public schools. Thus, the researchers are cautious not to over generalize the study findings to include students from other domains (e.g., those in the Social Science) from other public schools. In addition, our study is limited to females as no male participants were involved in the data collection procedures.

Another limitation relates to the study instruments. Here, the validity of our study results reported relied on the respondents' own perceptions, but not their actual performance. If some think-aloud reading tasks, followed by retrospective interviews, had been incorporated in the study design, the data might have provided a more representative representation of students' reading strategic abilities in processing the text content. In other words, the data might have provided the researchers with better understanding of how students' self-efficacy beliefs might lead to their reading strategic competence. Unfortunately, we were not able to integrate mixed methods in our study design due to the time and subject-accessibility constraints.

And one remaining limitation is related to the measurement of self-efficacy over a short period of time. Our study, as in most similar studies (e.g., Naseri & Zaferanieh, 2012; Shang, 2010; Jae-woo et al., 2016; Zare & Mobarakeh, 2011) measured learners' reading self-efficacy over a short period of time; hence, our study did not examine whether Saudi students' beliefs and perceptions would have changed over a considerable period of time.

C. Recommendations for Further Research

The findings of the present study and its limitations provide insights for future reading research. Similar studies need to be replicated in different language learning contexts to extend our knowledge of how the integration of foreign language learners' reading self-efficacy and reading strategies might lead to significant improvements in students' L2 reading performance.

Conducting different empirical studies on language learners from different school levels (intermediate and secondary) is highly recommended. Future FL reading researchers should evaluate language learners' own perceptions and beliefs as readers by means of designing validated questionnaires to measure readers' abilities, their past reading experiences, their perceptions of what makes good readers, as well as their awareness and use of reading strategies. Moreover,

standardized reading tests, observations, and interviews should be considered when measuring reading variables to help observe the relationship between them and how they impact EFL learners' reading performance. The results gained afterward should help English reading instructors to develop some motivating learning environments that could impact their students' self- efficacious beliefs and strategic reading performance. Hence, results drawn from this line of research are paramount to determining if effective reading strategies may be acquired over time.

Furthermore, a large sample of participants (males and females) from different public and private schools, and varying language proficiency levels can certainly provide more insightful findings for future reading strategy use and reading-efficacy studies and help generalize those findings drawn. Also, extending future studies to include Saudi university-level students with varying reading abilities and attitudes can certainly provide us with illuminating data as to how Saudi EFL learners' reading comprehension can be impacted by various factors associated with the reader, the text, and/or the reading instruction in language classrooms.

APPENDIX A. SELF-EFFICACY QUESTIONNAIRE

| # | Statement | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
|----|--|----------------|-------|-----------|----------|-------------------|
| 1 | I think I am a good reader. * | | | | | |
| 2 | I enjoy reading. * | | | | | |
| 3 | I can read and understand all the topics in English course book pretty good. + | | | | | |
| 4 | I like to read aloud. * | | | | | |
| 5 | When I read, I learn many new words. ** | | | | | |
| 6 | I think reading is easy for me. ** | | | | | |
| 7 | I read faster and better than my classmates. ** | | | | | |
| 8 | I can identify the main idea of a reading passage. + | | | | | |
| 9 | I can understand the writer's purpose in a text. + | | | | | |
| 10 | I can finish my homework of English reading all by myself. + | | | | | |
| 11 | I feel good inside when I read. * | | | | | |
| 12 | I can read and understand short stories. + | | | | | |
| 13 | When my teacher asks a question about the text, I can answer. | | | | | |
| 14 | I would be happy if someone gave me a book as a present. + | | | | | |
| 15 | I can read and understand English newspapers. + | | | | | |
| 16 | I often read to my little sister or brother. + | | | | | |
| 17 | People in my family think I am a good reader. * | | | | | |
| 18 | My teacher thinks I am a good reader. * | | | | | |
| 19 | I understand what I read better than my classmates. ** | | | | | |
| 20 | I can guess the meaning of a difficult word while reading. + | | | | | |

APPENDIX B. READING STRATEGIES QUESTIONNAIRE

| # | Statement | Always | Often | Sometimes | Rarely | Never |
|----|--|--------|-------|-----------|--------|-------|
| 1 | I have a purpose in mind when I read. | | | | | |
| 2 | I can identify what type of text it is, such as a newspaper article, a scientific paper, or a novel. | | | | | |
| 3 | I review the text before reading to know its characteristics like length and organization. | | | | | |
| 4 | I skim the whole passage to understand the general idea not the details. | | | | | |
| 5 | I use the title to help me predict the content. | | | | | |
| 6 | I browse the titles and the sub-titles to help me understand the main idea. | | | | | |
| 7 | I read the introduction and the conclusion paragraphs. | | | | | |
| 8 | I skim the whole passage quickly and then reading selectively according to my reading purpose. | | | | | |
| 9 | I write down some notes and key words. | | | | | |
| 10 | I change the text titles into questions in order to answer it while reading. | | | | | |
| 11 | I think about whether the content of the text fits my reading purpose. | | | | | |
| 12 | I critically analyze and evaluate the information presented in the text while reading. | | | | | |
| 13 | I reclassify and reorder information of text while reading. | | | | | |
| 14 | I find the meaning of an English word by dividing it into parts that I understand. | | | | | |
| 15 | I decide what to read and what to ignore while reading. | | | | | |
| 16 | I make detailed plans for reading to improve my reading abilities. | | | | | |
| 17 | I don't try to find the meaning of every single word in a text. | | | | | |
| 18 | I think about what I know to help me understand what I read. | | | | | |
| 19 | I read aloud when the text becomes difficult. | | | | | |
| 20 | I use typographical features like bold face to identify and highlight key words while reading. | | | | | |
| 21 | I change my reading speed depending on the difficulty and importance of the text. | | | | | |
| 22 | I use dictionaries and encyclopedias to help comprehend the passage. | | | | | |
| 23 | I visualize the information in my mind to help remember what I read. | | | | | |
| 24 | I translate from English into Arabic when I read. | | | | | |
| 25 | After I read a text, I summarize it in my own words. | | | | | |
| 26 | I ignore words that I do not understand. | | | | | |
| 27 | I use word formation (prefix, suffix) to guess the meaning of unknown words. | | | | | |
| 28 | I use semantic knowledge (synonym, antonym) to guess the meaning of unknown words. | | | | | |
| 29 | I use the content table and the diagrams to summarize the passage after reading. | | | | | |
| 30 | I predict what will happen next while reading. | | | | | |
| 31 | I try to predict what the writer is going to say. | | | | | |
| 32 | I check to see if my guesses about the text are right or wrong. | | | | | |

ACKNOWLEDGEMENTS

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. The authors wish to thank the study participants for their participation and for the cooperation of some colleagues in the English department.

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