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Strategies Used in English Reading Comprehension by Gender of University Students

Thuy Nguyen Thi Bich

Faculty of English, Phenikaa University, Vietnam
Corresponding Author: - Thuy Nguyen Thi Bich

ABSTRACT : According to Lin (2011:296), gender plays a crucial role in the utilization of strategies for learning a second language. The present paper aimed to investigate whether male and female university students differed significantly in their use of reading strategies. A total of 564 students from three universities in Vietnam were involved in the research. They completed a reading strategy questionnaire adapted from Oxford's 2013 Self-Strategic Regulation model. The study findings indicated that gender did not affect the participants' use of reading strategy categories overall. However, females reported using strategies more often than males in three categories, with the exception of the Cognitive category. Considering individual strategy use, female students were found to use the two strategies "Obtaining and Using Resources" and "Activating Supportive Emotions, Beliefs, and Attitudes" more frequently than male students. The study did not find any significant statistical differences in the use of the other reading strategies between male and female students.

Keywords:- gender, reading comprehension, reading strategies, differences

I.   INTRODUCTION

Reading comprehension, which is considered the core aspect of reading, is an essential factor for English language learners of all levels (Durkin, 1993). Developing effective reading is crucial for academic success, as reading is often the primary way in which students acquire knowledge and learn new information in their courses. Being able to read and comprehend a text efficiently and effectively can lead to improved understanding, retention, and application of the material (Alderman & Earle, 2003). Additionally, reading comprehension is deemed as the primary method for accessing a wide range of information, which allows students to develop essential skills such as synthesis and critical evaluation (Kelce-Murcia, 2001:187). To attain reading comprehension objectives, learners must be equipped with reading strategies and instructed on their utilization to enhance their learning process.

Being one of important variables which affects second language learning, gender has been the focus of many studies examining the differences between males and females in the use of language learning strategies. As stated by Lin (2011: 296), gender has been identified as a noteworthy aspect in the employment of strategies for acquiring a second language. Reading and comprehension strategies, in particular, exhibit variations in the way males and females use them (Saidi, 2012: 231).

Research on the impact of gender on the utilization of reading strategies is significant as it can offer valuable information on the most effective ways to assist language learners of diverse genders in improving their reading skills.

In this paper, the researcher had an attempt to investigate whether there were any notable dissimilarities in the utilization of strategies between male and female students in their English reading comprehension. Specifically, it aimed to give an answer to the question: "Are there any significant differences in the use of strategies between male and female students in their English reading comprehension?"

II.   LITERATURE REVIEW

1. Reading Strategies

Reading strategies are cognitive processes that readers apply when they intentionally approach a text (Barnett, 1989). Indeed, reading strategies are essential in determining how readers approach a reading task, which textual cues they prioritize, how they make sense of the text, and how they overcome comprehension

difficulties. These strategies enable readers to comprehend texts better by actively engaging with the material and adjusting their reading process based on their understanding (Block, 1986; Brantmeier, 2002).

The acquisition of a second or foreign language is believed to be significantly impacted by language learning strategies, as these may assist learners in mastering the forms and functions necessary for comprehension and production in the target language, and thus impact their achievement. Blachowicz and Ogle (2008) share this perspective and state that proficient readers have learned that they can control the reading process by using appropriate strategies and monitoring their understanding.

Different authors have proposed different classifications of reading strategies based on various factors, such as the purpose of reading, cognitive processes involved, or the nature of the text being read. These classifications can vary in the number and types of strategies they identify, and there is ongoing debate in the field about the most useful and accurate way to categorize reading strategies. In this study, the researcher used the reading strategy taxonomy by Oxford (2013) known as the Self-Strategic Regulation (S2R) model.

In S2R model, reading strategies are described as "deliberate, goal-directed attempts to manage and control efforts to read the L2" (p.12). The S2R model sees readers as strategically self-regulated learners who use different strategies to approach challenging reading tasks and problems. These readers choose from a range of tactics to find the best strategies that align with the situation and purpose of their reading (Oxford, 2013).

The S2R model is a comprehensive approach to self-regulated learning that incorporates strategies from three distinct dimensions: Cognitive, Affective, and Sociocultural-Interactive. The Cognitive dimension consists of strategies that assist the reader in constructing, transforming, and applying knowledge of a second/foreign language. The Affective dimension includes strategies that generate positive emotions and attitudes, as well as maintaining motivation. The Sociocultural-Interactive dimension involves strategies that support the learner in navigating communication, sociocultural contexts, and identity.

The three dimensions of the S2R model are significantly impacted by three types of metastrategies. Metacognitive strategies extend beyond Cognitive strategies and include strategies that facilitate general management and control of Cognitive strategies. Similarly, Meta-affective strategies enable the reader to regulate their Affective strategy use, and Meta-Sociocultural-Interactive strategies facilitate control over Sociocultural-Interactive strategies.

Metastrategies play a critical role in the S2R model by offering executive control and management functions that guide the reader in deciding whether and how to deploy a given strategy, as well as assessing the effectiveness of the strategy. The strategies and metastrategies in the S2R model are adaptable and responsive to the changing needs of the learner in different sociocultural contexts and for diverse purposes.

2. Gender and reading strategy use

As gender is an issue with important theoretical and pedagogical implications in second language learning, it has received a lot of attention in language learning strategy research (Oxford, 1993; Oxford, et al. 1993; Oxford, 1995; Young & Oxford, 1997).

Some studies have found out that although sometimes males suppressed females in the use of a particular strategy, females employ more learning strategies and employ strategies more effectively than males (Oxford & Nyikos, 1989; Poole, 2009; Sheorey & Baboczky, 2008; Young & Oxford, 1997). Oxford and Nyikos (1989) investigating strategies used by 1200 university students have concluded that gender differences had a "profound influence" on strategy use, and that females used strategies more frequently than males (p.296). Ghavam (2011) tried to explore the possible significant differences between one hundred and three males and females Iranian EFL learners regarding achievement goals and metacognitive reading strategy use. The study's results indicate a notable dissimilarity in the utilization of reading strategies between male and female students regarding their achievement goals. Females were found to have higher scores of achievement goals. Regarding metacognitive reading strategy use and gender, no significant differences were found between males and females.

Showing the same result that a significant gender difference was found in the usage frequency of particular strategies, Liontas' study (1999) reveals that males monitored their reading pace and paraphrased more often than females. Females utilized "vocabulary problems solving" strategy more often than males while reading the texts. However, with regard to the recall scores, no significant differences by gender were reported for all three text topics, and furthermore, there were no differences reported by gender in the familiarity ratings with passage topics or background knowledge of any of the passages.

In contrast, in a study that examined the relationship between readers' gender, passage content, comprehension and strategy use, Brantmeier (2000) has found out no significant effects of gender-based content on local strategy use, but on global strategy use. The study result reveals that males reported using more global strategies than females with the male-oriented passage while the same number of local strategies was reported to be used with this kind of passage. In addition, both genders reported employing the same number of local and global strategies to process the female-oriented passage. This study provides evidence that gender differences

did not account for differences in strategy use during a second language reading process. The results echo Young and Oxford's (1997) findings in that there were no differences by men and women in their strategy use. This is also a conclusion of AL-Sohbani (2013) and Sheorey& Mokhtari's (2001) studies after their exploration of the reading strategies use of one hundred Yemeni university learners (female=70; male=30) to find whether females and males significantly varied in their utilization of reading strategies; and one hundred and fifty-two (60 females, 92 males) ESL students studying at a North American university, respectively.

III. METHODOLOGY

1. Participants

This study involved 564 university students from Hanoi, Vietnam, with 256 male and 308 female participants. The participants were chosen based on a variety of factors including their gender, academic majors, English learning time, and self-assessment of English reading proficiency.The students were in their second or third year of university and aged between 20 and 22.

2. Instruments

The study used a questionnaire designed by Thuy (2021) based on Oxford's (2013) Self-Strategic Regulation model to collect data. The questionnaire had two parts. The first part gathered participants' ethnographic data such as age, gender, major, English learning time, and self-assessed English and reading proficiency. The second part consisted of nineteen statements related to different reading strategies, which were categorized into Meta-strategies, Cognitive strategies, Affective strategies, and Socio-cultural Interactive strategies. To ensure the questionnaire's reliability, all nineteen items were taken from the Strategy Inventory for Language Learning (SILL) by Oxford (1990), which has been widely used in research in the field.

For each questionnaire statement in part Two, participants were required to select one from five alternative options as follows:

1 - The statement is Never or rarely true for me;
2 - The statement is Usually not true for me;
3 - The statement is Somewhat true for me;
4 - The statement is Usually true for me;
5 - The statement is Always or almost true for me.

3. Data collection and analysis

The researcher personally organized a meeting with the students at each university, where she explained the purpose of the study. The students were then asked to provide written consent and complete the questionnaire. The completed questionnaires were manually reviewed for completeness before being submitted for data analysis.

The collected questionnaire data was then analyzed using version 20.0 of the Statistical Package for the Social Science (SPSS). The internal consistency reliability of the questionnaire statements was measured by Cronbach's Alpha score. The Cronbach's Alpha coefficient for the nineteen questionnaire items was calculated to be .855, indicating good internal consistency reliability. The individual item reliability, measured by the Cronbach's Alpha score when each item was deleted from the set, ranged from .901 to .842, further confirming the reliability of the questionnaire (Cronbach, 1951).

To analyze the types and frequencies of strategies used, the study added up individual scores from each participant to calculate the cumulative score for each category in the strategy questionnaire. The strategy questionnaire used in the study was divided into four subscales: Meta-strategies, Cognitive strategies, Affective strategies, and Socio-cultural Interactive strategies.

After obtaining the total score for each subscale in the strategy questionnaire, the average score for each subscale was calculated by dividing it with the number of items in that category. A higher average score indicated a higher frequency of usage of the corresponding strategy by the participants. The interpretation of the scores was interpreted based on a scale for measuring the frequency of general learning strategies, as defined by Oxford in 1990, presented in Table I.

TABLE 1: FREQUENCY SCALE DELINEATED (Oxford, 1990)

Mean score	Frequency scale	Evaluation
1.0-1.4	Low	Never or rarely used
1.5-2.4		Generally, not used
2.5-3.4	Medium	Sometimes used
3.5-4.4	High	Usually used
4.5-5.0		Always or almost always used

IV. RESULTS

The study examined the participants' reports on the reading strategy questionnaire to address the research question. Descriptive statistics, including means and standard deviations, were applied to examine the overall utilization of reading strategies, the implementation of each strategy category, and the usage of each strategy.

Descriptive statistics, including means and standard deviations for overall use of reading strategies for male and female participants are summarized in Table II.

TABLE II: OVERALL STRATEGY USE BY GENDER

Gender	Overall strategy		
	N	Mean	S.D
Male	256	2.87	1.06
Female	308	2.91	1.19

The means and standard deviations of the dependent variables for male and female students in the use of the four strategy categories are presented in Table III.

To assess the impact of gender on the four dependent variables, namely Metastrategies, Cognitive, Affective, and Socio-cultural Interactive strategies, an independent samples test was performed. The results of group statistics show that females used strategies more frequently than males in three categories (M=2.65 for males vs 2.70 for females for Metastrategy category; M=2.77 for males vs 2.93 for females for the Affective category; M=2.76 for males vs 2.82 for females for Socio-cultural Interactive category). The only Cognitive category was reported being used more frequently by males than by females.

TABLE III: USE OF EACH CATEGORY STRATEGY BY GENDER

Category	Gender	Mean	Std. Deviation	N
Metastrategies	Male	2.65	0.675	256
	Female	2.70	0.879	308
Cognitive Strategies	Male	*3.26*	0.868	256
	Female	*3.23*	0.837	308
Affective Strategies	Male	2.77	0.982	256
	Female	2.93	0.965	308
Social-cultural Interactive Strategies	Male	2.76	0.836	256
	Female	2.82	0.857	308

To further examine the effect of gender on the participants' scores in the use of reading strategy categories, a one-way MANOVA was conducted. Statistically significant differences were not found on the dependent variables between male and female students (p=0.079 >0.05) indicating that there was no significant effect of gender on the use of reading strategy categories overall.

However, the results of the between-subjects effects test showed a statistically significant difference in the use of the Affective strategy category between males and females (p= 0.025<0.05), and effect size is small.

The utilization of individual strategies by male and female students was also analyzed by examining their respective scores. The means for the use of each strategy were within the range of 2.40 to 3.48 for males and 2.41 to 3.38 for female students. Table IV shows the five most and least used strategies by males and females.

TABLE IV: FIVE MOST AND LEAST USED STRATEGIES BE MALES AND FEMALES

Male (256)				Female (308)		
Strategy	Mean	S.D		Strategy	Mean	S.D
S10 Activating Knowledge	3.48	1.059		**S10 Activating Knowledge**	3.38	1.013
S9 Using the Senses to Understand and Remember	3.34	1.109		**S3 Obtaining and Using Resources**	3.36	1.090
S12 Conceptualizing with Details	3.22	1.092		**S9 Using the Senses to Understand and Remember**	3.26	1.012
S14 Going Beyond the Immediate Data	3.22	1.123		**S14 Going Beyond the Immediate Data**	3.20	1.047
S13 Conceptualizing Broadly	3.16	1.092		**S13 Conceptualizing Broadly**	3.18	1.065

S7 Monitoring	*2.56*	*1.050*		*S6 Orchestrating Strategy Use*	*2.60*	*3.792*
S5 Implementing Plans	*2.46*	*1.036*		*S7 Monitoring*	*2.56*	*1.050*
S6 Orchestrating Strategy Use	*2.45*	*1.047*		*S4 Organizing*	*2.49*	*1.004*
S2 Planning	*2.42*	*0.988*		*S5 Implementing Plans*	*2.44*	*1.029*
S4 Organizing	*2.40*	*0.992*		*S2 Planning*	*2.41*	*1.010*

Upon closer inspection of the top five most frequently used strategies among male and female students, it was found that the strategy "Activating Knowledge" had the highest average frequency for both groups.

The study found that three other strategies "Using the Senses to Understand and Remember, Going Beyond the Immediate Data, and Conceptualizing Broadly" were reported as being used the most by both male and female participants, but in a different order. Males reported a mean score of 3.34 for the strategy "Using the Senses to Understand and Remember" as their second most used strategy, whereas female students reported a mean score of 3.36 for the strategy "Obtaining and Using Resources" as their second most used strategy.

It is noticeable that both male and female participants reported using the same five strategies at the lowest frequency level though they were in different order. Those were Monitoring, Implementing Plans, Orchestrating Strategy Use, Planning, and Organizing strategies with the mean scores from 2.56 to 2.40 for males and M= from 2.60 to 2.41 for females.

Another independent samples t-test for each reading strategy was conducted to determine if there were any significant differences in the use of each strategy and the results are presented in Table V. As shown in the table, only two strategies indicated in bold exhibit a significant difference between genders. Female students used the two strategies "Obtaining and Using Resources "and "Activating Supportive Emotions, Beliefs, and Attitudes" more frequently than male students (p=.011 and .024, respectively). All the other strategies do not show any statistically significant differences between the male and their counterparts.

TABLE V: DIFFERENES IN READING STRATEGY USED BETWEEN MALES AND FEMALES

Strategy	Gender	N	Mean	S.D	F	Sig.
S1 Paying attention	Male	256	3.09	1.096	.661	.417
	Female	308	3.03	1.033		
	Total	564	3.04	1.050		
S2 Planning	Male	256	2.42	0.988	.015	.903
	Female	308	2.41	1.010		
	Total	564	2.41	1.004		
S3 Obtaining and Using Resources	Male	256	3.14	1.126	7.127	**.008**
	Female	308	3.36	1.090		
	Total	564	3.30	1.103		
S4 Organizing	Male	256	2.40	0.992	1.302	.254
	Female	308	2.49	1.004		
	Total	564	2.47	1.001		
S5 Implementing Plans	Male	256	2.46	1.036	.048	.827
	Female	308	2.44	1.029		
	Total	564	2.45	1.030		
S6 Orchestrating Strategy Use	Male	256	2.45	1.047	.419	.518
	Female	308	2.60	3.792		
	Total	564	2.56	3.289		
S7 Monitoring	Male	256	**2.56**	1.050	.006	.939
	Female	308	**2.56**	1.050		
	Total	564	2.56	1.049		
S8 Evaluating	Male	256	2.65	1.107	1.239	.266
	Female	308	2.73	1.056		

	Total	564	2.71	1.070		
S9 Using the Senses to Understand and Remember	Male	256	3.34	1.109	1.171	.280
	Female	308	3.26	1.012		
	Total	564	3.29	1.039		
S10 Activating Knowledge	Male	256	3.48	1.059	1.589	.208
	Female	308	3.38	1.013		
	Total	564	3.41	1.026		
S11 Reasoning	Male	256	3.14	1.046	.077	.781
	Female	308	3.16	1.051		
	Total	564	3.16	1.049		
S12 Conceptualizing with Details	Male	256	3.22	1.092	.552	.458
	Female	308	3.16	1.084		
	Total	564	3.18	1.086		
S13 Conceptualizing Broadly	Male	256	3.16	1.092	.111	.739
	Female	308	3.18	1.065		
	Total	564	3.18	1.072		
S14 Going Beyond the Immediate Data	Male	256	3.22	1.123	.038	.846
	Female	308	3.20	1.047		
	Total	564	3.21	1.067		
S15 Activating Supportive Emotions, Beliefs, and Attitudes	Male	256	2.78	1.131	6.016	**.014**
	Female	308	2.97	1.077		
	Total	564	2.92	1.095		
S16 Generating and Maintaining Motivation	Male	256	2.76	1.024	2.548	.111
	Female	308	2.88	1.042		
	Total	564	2.85	1.038		
S17 Interacting to Learn and Communicate	Male	256	2.74	1.066	1.757	.185
	Female	308	2.84	1.065		
	Total	564	2.81	1.066		
S18 Overcoming Knowledge Gaps in Communicating	Male	256	2.78	1.012	1.516	.218
	Female	308	2.87	1.018		
	Total	564	2.84	1.017		
S19 Dealing with Socio-cultural Contexts and Identities	Male	256	2.76	1.036	.024	.876
	Female	308	2.74	1.045		
	Total	564	2.75	1.042		

V.   DISCUSSION

The findings have shown that female participants reported using overall strategies more frequently than male students (M=2.91 for females and M=2.87 for males).

Considering the use of the strategy categories, the results reveal that female students used all three reading strategy categories at higher frequencies than male students except for Cognitive category. This result supports the review by Cantrell and Carter (2009) but contradicts to the studies by Veloo, et al. (2015) and that by Xu (2004) which reveal that female students scored higher grades in the use of Cognitive strategies than male counterparts.

The findings indicate that significant gender differences were found in the use of Affective category only. In terms of the frequency order of the use of each strategy category, both groups showed the highest frequency in the use of the Cognitive strategy category, followed by the Affective, Socio-cultural Interactive, and Metastrategies categories.

Concerning the use of individual strategy, the results show that male students used eight strategies more frequently than females, while ten strategies were at higher grades by females than males, and one strategy was found to be used equally by both groups was Monitoring with M=2.56. However, significant gender differences were found in the use of two strategies only- Obtaining and Using Resources (p=0.008<0.05), and

Activating Supportive Emotions, Beliefs, and Attitudes (p=0.014<0.05), which the female participants reported using more frequently than the male students. This result supports Fenfang's (2010) study when he found out females are more careful and considerate in their reading compared to males who are more adventurous and bolder due to differences in nurturance given to both genders in their culture. In addition, Logan and Johnston (2010), and Swalander and Taube (2007) report that females showed a more positive attitude toward reading. Because of their carefulness female students tend to obtain and use resources such as dictionaries, glossaries frequently in their reading to determine the meaning of new words and new phrases. Furthermore, whenever they deal with difficulties in reading female students activate their emotions, beliefs, and attitudes to reading, which help them much to gain comprehension success.

This result is also in coincidence with the difference between EFL and EMI participants in the use of Affective strategy category demonstrated previously. On one hand, affective strategies have a significant impact on the success of language learning, as "the way we feel about our abilities and ourselves can either facilitate or impede our learning" (Arnold & Brown, 1999, p. 8). On the other hand, whenever students become more proficient readers they may rely more on cognitive and meta-cognitive strategies, but not affective strategies as much as before (Oxford, 2003; Ehrman et al., 2003). It is possible that the difference in the use of affective strategies between male and female participants is related to their self-rated reading proficiency since the data from this study shows that a higher percentage of female participants (26.3%) rated their reading proficiency as poor compared to male participants (19.8%). This finding is consistent with the results of a study by Park (2010), which suggested that gender differences in reading strategy use may be linked to differences in reading proficiency between males and females. Therefore, female students, who rated their reading proficiency lower than male students, relied more on affective strategies to compensate for their perceived weaknesses in reading skills.

Besides, looking at the use of individual strategy in Metastrategy category we found that female students outperformed on the strategy "Organizing", "Orchestrating strategy use", and "Evaluating", which means female students were more interested in the use of strategies while reading. They organized what strategies to use and how to combine such the strategies to gain the best comprehension. This is consistent with Weiying's (2006) findings when she claims that girls seemed to pay more attention to the use of strategies. In addition, they evaluated the use of strategies so that they could adjust them to fit particular purposes of their reading. With this result, if the female students used such the strategies at the higher level of frequency their reading competency would be much better. Meanwhile, male students outperformed their counterparts on "Paying Attention", "Planning", and "Implementing Plans". This is in line with the findings of Poole (2005) when he found out that males were more engaged in "paying close attention to reading". It can be inferred from this result that male students seemed to prefer doing things with plans and concentrating on completing intended tasks.

Among six cognitive strategies male participants showed outperformance in the use of four strategies-Using the Senses to Understand and Remember, Activating Knowledge, Conceptualizing with Details, and Going Beyond the Immediate Data. This reveals that male students were better than females in remembering and processing the foreign/second language, especially in applying previous knowledge to gain the comprehension.

As previously noted, there were significant gender differences only in the use of Affective strategy category, with female students showing greater use of both Activating Supportive Emotions, Beliefs, and Attitudes, and Generating and Maintaining Motivation strategies. While the explanation for this difference was already mentioned, it is noteworthy that female students had a stronger preference for generating and maintaining motivation strategies.

Regarding the five most and least used strategies by male and female participants, the figures reveal that both groups showed the same results for the least used strategies, appearing both in the strategy types and the usage mean scores. All of the five least used strategies belonged to Metastrategies, which confirmed the previous result that both groups showed the lowest level of usage of Metastrategies. With the fact that the average mean scores of the five least used strategies were M= 2.5 for both groups, this finding reveals that the students, neither males nor females were good at controlling and managing their reading process, as Oxford (2013) emphasizes "Metastrategies, by virtue of their executive-control and management function, help learners know whether and how to deploy a given strategy and aid in determining whether the strategy is working or has worked as intended" (p.18). Furthermore, Metastrategies in Oxford's (2013) model, which means metacognitive, meta-affective, and meta-sociocultural interactive, serve as the orchestra conductor, and various section of the orchestra are cognitive, affective, and sociocultural interactive strategies, guided by the conductor (p.18). This might be the reason why both male and female participants reported using all strategies at the medium level of frequency.

Returning to the top five most frequently used strategies, both groups of participants demonstrated similar results. Most of the strategies used by the females were of the Cognitive category, except for one

strategy- Obtaining and Using Resources- belonged to Metastrategy category. This is also the second most used strategy by female students. The Activating Knowledge strategy was reported as the most frequently used by both groups, but male students had a significantly higher mean score for the use of this strategy than females (M=3.48 for males vs M=3.38 for females). This result is consistent with that by Weiying (2006) when she states although there is no significant difference in the use of this strategy when it comes to use background knowledge or schema, boys even used them more frequently than girls.

To sum up, the current study's results are consistent with previous research that has shown gender-based differences in the use of reading strategies, with females generally employing more strategies than males (Al-Nujaidi, 2003; Ehrman & Oxford, 1989; Green & Oxford, 1995; Mochizuki, 1999; Nyikos, 1990; Park, 2010; Peacock & Ho, 2003; Poole, 2005; Sim, 2007; Sheorey, 1999; Wu, 2005). Affective strategies were found to be a particular area of strength for females, as supported by numerous earlier studies. However, this study's findings contradict some prior research that has found no gender differences in reading strategy use (Fenfang, 2010; Ozkan & Hatice, 2013). It is worth noting that not all strategy categories show gender differences, as shown in previous studies (Brantmeier, 2000; Poole, 2005; Young & Oxford, 1997; Park, 2010). Regarding individual strategies, male students scored higher in the use of Activating knowledge, while female students scored higher in Obtaining and Using Resources and Activating Supportive Emotions, Beliefs, and Attitudes.

VI. CONCLUSION

This study is an attempt to investigate whether there were any significant variances in the reading strategy usage between male and female university students. The relationship between gender and the use of reading strategy categories was examined and it was found that there was no significant difference between males and females in their overall usage of reading strategies. However, when looking at individual strategy categories, female participants reported using strategies more frequently than males in three categories, except for the Cognitive category. Moreover, when analyzing the usage of specific strategies, female students were found to use the strategies of "Obtaining and Using Resources" and "Activating Supportive Emotions, Beliefs, and Attitudes" more frequently than their male counterparts. However, no statistically significant differences were found in the two types of participants' reading strategy utilization.

The results of the study suggest that female students may benefit from additional support in the Cognitive strategy category, while male students may benefit from additional support in the Obtaining and Using Resources and Activating Supportive Emotions, Beliefs, and Attitudes categories. English teachers and educational administrators can use this information to design gender-specific instruction and support that targets the specific reading strategy needs of male and female students.

Moreover, the findings of this study can inform educational administrators in universities in Vietnam in the development of language programs and policies that promote the application of reading strategies among students. By encouraging reading strategy usage and providing appropriate support and resources, universities can help students become more effective and efficient readers, which can lead to improved academic achievement and success in their future careers.

REFERENCES

[1].   Lin, H. (2011). Facilitating Learning from Animated Instruction: Effectiveness of Questions and Feedback as Attentiondirecting Strategies. Journal of Educational Technology & Society, 14(2), 3142.
[2].   Durkin, D. (1993). Teaching them to read (6th Ed.). Boston: Allyn & Bacon.
[3].   Alvermann, D., & Earle, J. (2003). Comprehension instruction. In A. P. Sweet & C. Snow (Eds.), Rethinking reading comprehension (pp. 12-30). New York: Guilford Press.
[4].   Celce-Murcia, M. (2001) Teaching English as a Second or foreign Language. 3rd Edition, Heinle & Heinle Publisher, Boston.
[5].   Saidi , A.A.(2012).The Influence of Gender On Omani College Students' English Language Learning Strategies, Comprehension and Motivation. International Journal of Applied LinguisƟcs &English Literature.4(1),230- 244
[6].   Block, E. (1986). The comprehension strategies of second language readers. TESOL Quarterly, 20, 463-494. doi:10.2307/3586295
[7].   Brantmeier, C. (2002). Second language reading strategy research at the secondary and university levels: Variations, disparities, and generalizability. The Reading Matrix, 2(3), 1-13
[8].   Blachowicz, C. & Ogle, D. (2008). Reading Comprehension: Strategies for Independent Learners. Second Edition. New York, NY: The Guilford Press.
[9].   Oxford, R.L. (2013). Teaching and researching language learning stratgies. Pearson. Harlow. UK.

[10]. Oxford, R., Young, P.O., Ito, S., & Sumrall, M. (1993). Japanese by satellite: Effects of motivation, language learning styles and strategies, gender, course level, and previous language learning experience on Japanese language achievement. Foreign Language Annals,26, 359-71.

[11]. Oxford, R. L. (1993). Instructional implications of gender differences in second/foreign language learning styles and strategies. Applied Language Learning, 4(1&2), 65-94.

[12]. Oxford, R. L. (1995). Gender differences in language learning styles: What do they mean? In J. M. Reid (Ed.): Learning styles in the ESL/EFL classroom. New York: Heinle and Heile.

[13]. Young, D. J., & Oxford, R. (1997). A gender-related analysis of strategies used to process written input in the native language and a foreign language. Applied Language Learning, 8, 1-20.

[14]. Oxford, R.L., & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. Modern Language Journal, 73, 291-300.

[15]. Poole, A. (2009). The Reading Strategies Used by Male and Female Colombian University Students. Profile Journal, 11, 29-40.

[16]. Sheorey, R., & Baboczky, E. (2008). Metacognitive awareness of reading strategies among Hungarian college students. In K. Mokhtari & R. Sheorey (Eds.), Reading strategies of first-and second language learners. (pp. 161-173). Norwood, MA: Christopher-Gordon.

[17]. Ghavam, M. R. (2011). Iranian EFL Learners' Achievement Goals in Relation with Their Metacognitive Reading Strategy Use. Open Journal of Modern Linguistics, 1(2), 39-44.

[18]. Liontas, J. I. (1999). Developing a pragmatic methodology of idiomaticity: The comprehension and interpretation of . Unpublished doctoral dissertation. The University of Arizona.

[19]. Brantmeier, C. (2000). The relationship between readers' gender, passage content, comprehension and strategy use in reading Spanish as a second language. Unpublished doctoral dissertation. Indiana University at Bloomington, IN.

[20]. Al-Sobhani, Y. A. (2013). Metacognitive reading strategies use by Yemeni EFL undergraduate university students. Frontiers of Language and Teaching,4, 121-130.

[21]. Sheorey, R., & Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native speakers. System, 29(4), 431-449.

[22]. Thuy, Nguyen Thi Bich. Reading strategies used by students of different levels of English reading proficiency. VNU Journal of Foreign Studies, [S.l.], V. 37, No. 4, Aug. 2021. ISSN 2525-2445.DOI: https://doi.org/10.25073/2525-2445/vnufs.4684

[23]. Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297-334.

[24]. Cantrell, C.S., & Carter, J. C. (2009). Relationships among learner characteristics and adolescents' perceptions about reading strategy use. Reading Psychology, 30, 195-224.

[25]. Veloo, A., Rani, M.A., & Hashim, R.A. (2015). Assessing Matriculation College Students' Metacognitive Awareness Reading Strategies (MARS) in Biology. Review of European Studies,7(7), 453-460.

[26]. Xu, Y.T. (2004). The relationships among junior high school students' foreign language anxiety, EFL learning motivation strategy. National Digital Library of Theses and Dissertations in Taiwan, 092NCKU5331002.

[27]. Fenfang, L. (2010). A Study of English Reading Strategies Used by Senior Middle School Students. Asian Social Science, 6(10), 184-192. http://dx.doi.org/10.5539/ass.v6n10p184.

[28]. Logan, S., & Johnston, R. (2010). Investigating gender differences in reading. Educational Review, 62(2), 175-187

[29]. Swalander, L., & Taube, K. (2007). Influences of family based prerequisites, reading attitude, and self-regulation on reading ability. Contemporary Educational Psychology, 32, 206-230.

[30]. Arnold, J., & Brown, H.D. (1999). A map of the terrain. In Arnold, J. (Ed.). Affect in Language Learning. (pp.1-24). Cambridge: Cambridge University Press.

[31]. Ehrman, M.E., Leaver, B.L., & Oxford, R.L. (2003). A Brief Overview of Individual Differences in Second Language Learning. System, 31, 313-330.

[32]. Park, Y. H. (2010). Korean EFL College Students' Reading Strategy Use to Comprehend Authentic Expository/Technical Texts in English. Unpublished doctoral dissertation. University of Kansas.

[33]. Weiying, W. (2006). Gender Differences in Using Reading Strategies. CELEA Journal,29 (6).

[34]. Poole, A. (2005). Gender differences in reading strategy use among ESL college students. Journal of College Reading and Learning, 36(1), 7-20.

[35]. Al-Nujaidi, A. H. (2003). The relationship between vocabulary size, reading strategies, and reading comprehension of EFL learners in Saudi Arabia. Unpublished doctoral dissertation. Oklahoma State University.

[36]. Green, J. & Oxford, R.L. (1995). A closer look at learning strategies, L2 proficiency, and gender.

TESOL Quarterly, 29, 261-297.

[37].   Mochizuki, A. (1999). Language learning strategies used by Japanese university students. RELC Journal, 30 (2), 101-113.

[38].   Peacock, M. & Ho, B. (2003). Student language learning strategies across eight disciplines. International Journal of Applied Linguistics, 13 (2), 179-200.

[39].   Sim, S. (2007). A study on Reading Strategies in KSL Classes. A thesis submitted in fulfilment of the Requirements for the Degree of Doctor of Philosophy. School of Modern Language Studies University of New South Wales.

[40].   Wu, C.P. (2005). An investigation of metacognitive reading strategies used by EFL Taiwanese college students to comprehend familiar versus unfamiliar Chinese and English texts. Unpublished Doctoral dissertation, University of Idaho.

[41].   Ozkan, C., &Hatice, O. (2013). Investigating science high school students' metacognitive awareness and self-efficacy perceptions with some respect to the same individual and academic variables. International Journal of Human Science, 10(2), 246-259.

Corresponding Author: - Thuy Nguyen Thị Bich
Faculty of English, Phenikaa University, Vietnam