Strategic Reading of Undergraduate Students at Philadelphia University

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ABSTRACT

The enticing change in learning language modes and mediums dictates an update of learning strategies profile. Using descriptive analysis, this study set out to explore reading strategies (RSs) at the undergraduate level in Jordan. Data were gleaned from a conveniently-sampled cohort of learners (n=54) enrolled in a BA program at the Faculty of Arts, Philadelphia University. The initial sample responded to a questionnaire, and a sub-sample of this cohort were observed reading academic texts to strengthen the investigation. Findings showed that, irrespective of gender, learners of English read strategically. They tend to employ most of the strategies on the RSs inventory. However, they attribute relatively high value to problem-solving strategies than global and support strategies (μ=4.1682, 3.8622, 3.7547, respectively). Besides, they tend to use strategies during and less frequently before and after reading, which signals some implications for pedagogues and course description designers.

الملخص

إن تغير أساليب ووسائط تعلم اللغات يُحتّم تحديث استراتيجيات تعلّمها، ومن هذا المنطلق هدفت هذه الدراسة لمعرفة استراتيجيات القراءة التي يستخدمها طلبة المرحلة الجامعية باستخدام منهجية التحليل الوصفي، إذ تم جمع البيانات من عينة من طلبة قسم اللغة الإنجليزية وآدابها المسجلين بكلية الآداب في جامعة فيلادلفيا، وتم استخدام استبيان لجمع البيانات إلى جانب الملاحظة الاستقصائية لمعرفة كيفية توظيف استراتيجيات قراءة النصوص الأكاديمية، وأظهرت النتائج أن الطلبة في السياق المذكور يقرأون بشكل عام وفق استراتيجيات عامة ويميلون إلى استخدام معظم الاستراتيجيات الواردة في أداة الدراسة، وبالنظر الى قائمة الاستراتيجيات قيد الدراسة فإن نسبة عالية منهم يوظفون استراتيجيات حل المشكلات مقارنة بالاستراتيجيات العامة واستراتيجيات الدعم، حيث جاءت المتوسطات الحسابية **4.1682,3.8622,3.7547** على التوالي، إلى جانب ذلك فإنهم يميلون إلى استخدام الاستراتيجيات أثناء قراءة النصوص وفي كثير من الأحيان قبل وبعد القراءة، وبناء على نتائج الدراسة فقد قدمت الدراسة مجموعة من التوصيات والاقتراحات لأساتذة ومصممي مقررات القراءة الاستيعابية

KEYWORDS: Reading Comprehension, Reading strategies (RSs), Reading strategies inventory, Philadelphia University

Introduction

Human beings habitually acquire oral skills but need some training to read and write (Kocaman & Beşkardeşler, 2016). An array of researchers, including Oxford (1990, 2011) and Mitchell, Myles & Marsden (2019), conceded that learning strategies are foundational to language learning skills. In terms of reading skills, learners need to develop cognitive and metacognitive strategies to effectively read academic texts (Magliano et al., 2007; Mitchell et al., 2019; Mokhtari et al., 2018). Without proper strategies, they likely confront difficulties in understating what they read, making reading boring rather than a sizzling activity (Villanueva, 2022).

Language Learning Strategies (LLSs) have been a subject of exploration for more than half a century. Given the learner-centered approach to second language learning, language learning researchers celebrate LLSs for learners (Almaktary, 2018; Mohseni1, Seifoori1 & Ahangari, 2020; Oxford, 2011). From the 1970s onwards, numerous researchers have tried to identify strategies that learners at different levels tend to deploy in their L2 learning (Dörnyei & Ryan, 2015). A more detailed understanding of strategies LLSs has been substantiated but hardly saturated.

As far as reading strategies are concerned, reading in a new language other than the mother tongue is, arguably, a challenge. Lems, Miller, and Soro (2010) contend that English reading difficulties stem from (a) the opacity of English orthography, (b) incomplete knowledge of the syntax and grammatical structures of the language, and (b) the limits of working memory. Learners enrolled in English language programs need to use such strategies to do well in their studies. They read and understand materials to pass examinations and do well in real-life situations that involve reading tasks. The enormous information allied with the

emergent technological reading mediums stipulate proper reading comprehension skills (Villanueva, 2022).

Arguably, struggling with reading in a new language takes cognitive energy, and using workable strategies directs this energy towards fruitful outcomes. In other words, appropriate language learning strategies drive successful learning (Abu-Snoubar, 2017; Al-Maktari, 2018; Mitchell et al., 2019; OECD, 2011). Numerous studies of successful learners lend credence to appropriate learning strategies (Almaktary, 2018; Mitchell et al., 2019; Mokhtari & Sheorey, 2002; OECD, 2011). Almaktary (2018) asserted that successful language learners tend to use helpful strategies, and if less successful learners employ such strategies, they would lead them to successful learning. In a similar vein, Lems et al. (2010) advocated that successful learners "orchestrate a repertoire of strategies that serve them as they read different kinds of texts for a variety of purposes" (p. 172). They tend to use more and better strategies and thus enjoy high-reading abilities. Such abilities predict high learners' performance in L2 learning (Mokhtari & Sheorey, 2002).

What is more, the variation of LLSS is expected to be gender-based (OECD, 2011) which is tempting to explore whether male and female students use reading strategies differently when it comes to reading academic texts. Bin-Hady et al. (2020) examined LLSs in technology-based environments to ascertain whether the gender variable affects technology-based strategies in recruiting learners from the Saudi and Yemeni contexts. The study found no statistically significant differences in terms of gender.

Inventories of Reading Strategies

Early research was grounded in observation and interviews with successful learners. Subsequent research developed more detailed learning strategy taxonomies, then incorporated them into

questionnaires to elicit learners' reported behaviors. Rebecca Oxford, one of the premier language learning strategies researchers, addressed L2 learners' strategies used in learning the four skills of the target language – listening, speaking, reading and writing. Over the 1990s, Oxford's inventory remained a reference point for many other researchers who adopted and adapted it in subsequent studies. Several LSs inventories were designed after Oxford (1990). Mokhtari and Reichard (2002), Mokhtari and Sheorey (2002), Anderson (2003), Mokhtari, Dimitrov and Reichard (2018) advanced LLSs research with ample consideration to reading strategies.

Although Oxford's inventory of LLSs gained a wide recognition in second language learning communities, some other researchers came up with detailed descriptions of reading strategies. For instance, Mokhtari and his fellow researchers developed a reading profile between 1998 and 2000 after several modifications. It was revised in 2018 by Mokhtari, Dimitrov and Reichard. This revision made it more reliable and valid. Many other researchers have widely used and acknowledged it thereafter. The inventory encompasses three categories of strategies: global, problem-solving, and support reading strategies. It was initially inappropriate for non-native speakers because it was designed for native English speakers (Mokhtari & Sheorey, 2002). Mokhtari and Sheorey (2002) developed Survey of Reading Strategies (SORS) to re-appropriate it to EFL and ESL learners. It is based on relationship between metacognitive awareness of reading inventory (MARI) and comprehension. For reading comprehension to take place, learners' background and linguistic knowledge foreground what and how they comprehend the content they read (Villanueva, 2022). In other words, reading becomes an evolving interaction between the text and the reader's background knowledge so long as the prerequisite skills are in

place. Numerous researchers have used Mokhtari et al.' RSs profile (Abu-Snoubar, 2017; Anderson, 2003; Do & Phan, 2021; Klingner et al., 2007; Kocaman & Beşkardeşler, 2016; Mohseni et al., 2020; Villanueva, 2022). Some researchers such as Anderson adapted it for online reading. Some others incorporated additional items.

Rationale

Despite decades of research and a heightened understanding of LLSs, findings on RSs across contexts remain less consistent. Accumulating research findings help to understand better how L2 learners devise strategies for their language learning, with a primary focus on reading skills, the thrust of the present study. It builds on several studies that used the same RSs inventory at home and abroad. For instance, Abu-Snoubar (2017) surveyed the metacognitive reading strategies of 86 university students from twelve majors at the University of Al-Balqa. Drawing on Mokhtari and Sheorey's (2002) RSs inventory, Abu-Snoubar measured the frequency of metacognitive reading strategies. Findings show that the participants used the strategies' on Mokhtari and Sheorey's inventory at a relatively high rate. The mean values varied between 3.5169 and 3.8081, with a prominence of problem-solving strategies. Additionally, Bataineh and Al-Sakal (2021), in a ten-week experiment, underlined the effects of flipped learning on reading comprehension in terms of scanning, skimming, paraphrasing, and opinion stating at the tenth-grade level in UNRWA schools. Findings showed that the learners taught through flipped learning models outperformed their counterparts. In a relevant research landscape, Al-Momani, Hussin, and Hamat (2015) examined how Jordanian students read on smartphones. The study showed that the participants had a positive attitude towards phone-based reading.

In terms of methodology, a range of previous studies have been undertaken using surveys as a primary data collection tool. Many RSs profiles largely depend on data solicited from questionnaires, and this tool largely leaves some intricately connected unchallenged. A questionnaire per se barely provides a comprehensive and one-size-fits-all inventory for all contexts. Despite substantial LSs research, there is room for further exploration of the local situation. In fact, the present study attempts to fill in the methodological gap and gap in the scope of the investigation. Drawing on previous investigations and Mokhtari et al.'s (2018) inventory of reading strategy inventories, it strengthens evidence with observational data based on re-telling techniques. The investigation departs from exiting findings in the local context. It explicitly draws on recommendations emanated from Abu-Snoubar (2017) that called for further investigation of reading strategies in the Jordanian context.

In terms of scope, the exponential RSs research studies were mainly concerned with strategies used during reading. They hence cannot be considered as conclusive to all the reading stages. The pre-reading and post-reading strategies remain largely underrepresented in the literature, particularly in the local situation. There is little recognition of the diversity of reading mediums requiring an array of RSs before, during, and after reading a text. One more thing, prior research focused mainly on public university students, and private institutions have largely remained an area of little interest to researchers. Many previous studies exclusively recruited participants from public institutions. The private education sector is gaining ground and warrants more research.

Therefore, the present study casts more light on such areas with a previous little undertaking. It elaborates on LLSs with a dogged focus on RSs in a relevant context. Using a survey and observations, the study set

out to (a) explore how learners at Philadelphia University (PU) read in English before, during, and after reading, and (b) ascertain if these strategies differ based on gender in the context. Comparing the findings to other local and worldwide contexts would yield valuable data for educational planners and curriculum designers on how learners read and comprehend texts strategically.

Research questions

The central question to be answered in this endeavor relate to the extent to which learners of English in the Jordanian context are strategic readers. In this particular study, the investigation is confined to the following sub-questions.

1. What reading strategies (RSs) do the PU learners use in reading academic texts?
2. How do these strategies vary according to:
   - strategy type (Global, problem-solving, and support strategies?)
   - reading stages (before, during, and after reading?
3. How are these strategies similar to or different from those used by learners in other contexts?

Key terms

1. Kocaman and Beşkardeşler (2016) refer to 'strategies' as conscious and non-automatic actions that readers purposefully choose to help them read.
2. The term 'second language' (abbreviated as L2) stands for any language other than the mother tongue. It stands for English as a foreign language, second language, or other than the mother tongue. In this paper, the term is used as a cover term to denote English as it is used in the Jordanian context (Abu-Snoubar, 2017).

3. Comprehension, defined as an “ability to construct meaning from a given written text” (Lems et al., 2010: 170). It “arises from a series of cognitive processes and activities: word decoding, lexical access, syntactic processing, and inference generation. It involves strategies such as self-explanation, summarization, and argumentation. These activities contribute to a reader’s “ability to connect the meaning of multiple sentences – a coherently connected mental representation of the text's overall meaning” (Magliano et al., 2007:109). This is accomplished by using effective cognitive and metacognitive strategies.

Method

The descriptive research design was adopted for it fittingly corresponds to the nature of this exploratory study of RSs. It took place at Faculty of Arts, PU with a focus on what strategies undergraduates employ when reading academic texts. It deals with perceptional data imbued from structured tools the study used for data collection. On account of that fact that every research tool cannot be devoid of some limitations, the study adopted a mixed-methods research design to deepen the investigation.

Participants

A sample of 54 male and female learners were conveniently assembled. During the time this study was conducted this body of participants were enrolled in a bachelor’s program. They were acceded during the first semester of the academic year 2021-2022. They were categorized as males (45.7%) and females (54.3%), aged between 19 and 24. Their linguistic background was almost homogenous. They were all school graduates pursuing their university studies at the Faculty of Arts and

English was their second language. 11.4% of them were taking some language courses other than English including Turkish and Chinese.

Instruments

Date were gleaned from the sample via two mains tools– survey and observation. This combination was driven by Dörnyei and Ryan (2015) who postulated that methodological triangulation "reduces the inherent weaknesses of individual methods by offsetting them by the strength, thereby maximizing both the internal and external validity of research" (pp. 43-44).

Questionnaire

A questionnaire adopted from Mokhtari et al. (2002, 2018) is an indispensable tool in this query. The survey, used without alterations, consists of 30 items, divided into global strategies (13), problem-solving strategies (8), and support strategies (9). The inventory (see Appendix A) developed through several trials and appropriations that Mokhtari and his research fellows conducted. They measured its validity and reliability, and reported a dependable reliability coefficients of the three categories at Alpha Cronbach ranging from .80 to .83. In the present study, however, it was piloted on a small sample of seven students with similar features to double-check its clarity with the sample in the context at hand.

Observation

Observation is a valuable tool to garner information about reading strategies. It enables tracking learners while they read texts. After surveying the participants' RSs, an observation was used with a subsample from the initial cohort to strengthen the extent to which

learners in focus read strategically. It specifically yields data not collected via the questionnaire. The observational data were recorded on a rubric adapted from Klingner et al. (2007) who suggested the re-telling technique to trace viable information on learners' reading habits and strategies in real situations rather than probing their perceptions through a structured survey. The observational rubric consists of twelve items on a five-point scale with space for further emergent comments (a copy is appended). Five reading specialists validated this scale to ascertain its suitability for the topic. Its reliability on Alpha Cronbach was checked with coefficient 8.2, which is acceptable for a reliable indication. Prior to observations, the scale was piloted on five learners with similar characteristics of the sample to eliminate items on the scale that did not work well. Some alteration in wording was made to clarify the purpose of each point.

Procedures

The data were collected and analyzed in several stages. First, the survey was selected upon contact with its original developer for getting a consent to use it in the present study. Then an electronic version was prepared for participants to respond to it during an ordinary class of reading comprehension. Official approval to conduct this survey was obtained. The researchers were present showing informants how to reply and answer questions that were predictably abound to exit. On the electronic version, at the very beginning, respondents were asked whether they wished to complete the survey or withdraw. If there was any disagreement, the page was automatically unfolded for reading more. The response rate was 97.15 meaning that some respondents discontinued their answer and thus were excluded in the analysis stage.

The responses were converted into a spreadsheet and fed into an SPSS worksheet for statistical analysis.

As for observations, they were conducted by using the observational rubric. Following Klingner et al.' (2007) guidelines in a re-telling technique, the researchers observed the informants according to the following steps:

1. Selecting an appropriate text at the student's readability level with some photos and illustrations. The font in the text included three types – bold, italics and underlined.
2. Getting students to read the text silently, orally, or both silently and orally.
3. After reading the text, they re-tell everything in the reading with a narrative telling as if the researcher had never read it.
4. The researcher directed the respondents to tell as much information as they could remember from the passage.
5. If they provided incomplete information, the researcher prompted them by asking students to tell anything more or anything else.

The data collected via the survey and observational rubric were analyzed quantitatively. The mean scores, standard deviations, and percentages were obtained and arranged in tables. Data collected from the survey were based on a 5-point-Likert scale after Mokhtari and Sheorey (2002) (see Appendix A).

Results and Discussions

By its exploratory nature, the study underlines RSs that students in the Jordanian situation tend to use when reading academic texts. As outlined in Tables 1, 2 and 3, the participants variably use global, problem-solving, and support strategies. An overall observation is that the participants employ the 30 reading strategies out of which the participants stated they used 14 strategies at a high level wherein 4>Mean<5. These 14 strategies are distributed as six global strategies

(S1, S2, S3, S4, S5, S12), six problem-solving (S14, S15, S16, S17, S20, S21), and two support strategies (S26, S29). On the other hand, 16 strategies were used at a lesser rate wherein 3>Mean<4. That is to say, the use of RSs in the inventory were generally used at somehow a considerable rate with mean values between 3 and 5. None of the strategies were used at a lower rate than 3. More pointedly, the set of strategies can be discussed further as follows.

Table 1 displays the first category of strategies (global). According to Mokhtari et al. (2018), global strategies are essentially viewed as 'generalized' to set the reading stage – "setting a purpose for reading, previewing text content, predicting what the text is about" (p. 225) and the like. Within this category, six remarkable strategies rate highest (S1, S2, S3, S4, S5, and S12). The mean values of these strategies fall between three and five. The remaining nine global strategies had lesser mean scores (4<Mean>3), namely, S6, S7, S8, S9, S10, S11,and S13. The overall mean score of this category is 3.8622 which is considerably above the average.

As for problem-solving strategies, which are, according to Mokhtari, et al. (2018), "used when problems arise in understanding textual information (e.g.,checking understanding upon encountering conflicting information, re-reading for better understanding" (p. 225). That is to say, they are used during reading. Table 2 outlines the mean values and standatad deviation of this set of strategies. Noticeably, six sub-strategies (S14, S15, S16, S17, S20, S21) were used at a higher rate than the other two (S18, S19). The mean values are (4>Mean<5 and 3>Mean<5 respectively. The overall mean score of this category is 4.1682, which is considerably high. It is even higher than the total means of the first category (global strategies) as well as the third category (support strategies).

Table 1. Descriptive Statistics (Means & St.) of PU Students' Uses of Global Strategies

(Global Subscale) (n=8)	**Mean**	**Std.**
S1. I have a purpose in mind when I read.	4.2830	1.0629
S2. I think about what I know to help me understand what I read.	4.0189	1.16834
S3. I preview the text to see what it's about before reading it.	4.0755	1.32794
S4. I think about whether the content of the text fits my reading purpose.	4.0577	1.34912
S5. I skim the text first by noting characteristics like length and organization.	4.1509	1.11625
S6. I decide what to read closely and what to ignore.	3.7170	1.32109
S7. I use tables, figures, and pictures in a text to increase my understanding.	3.5660	1.32301
S8. I use context clues to help me better understand what I'm reading.	3.8868	1.28093
S9. I use typographical aids like boldface and italics to identify key information.	3.7170	1.56128
S10. I critically analyze and evaluate the information presented in the text.	3.3019	1.33855
S11. I check my understanding when I come across conflicting information.	3.6226	1.27440
S12. I try to guess what the material is about when I read.	4.0755	1.19049
S13. I check to see if my guesses about the text are right or wrong.	3.7358	1.28827
Total	3.8622	.27869

Table 2. Descriptive Statistics (Means & St.) of PU Students' Uses of Problem-Solving Strategies

(PROB Subscale) (n=8)	**Mean**	**Std.**
S14. I read slowly but carefully to be sure I understand what I'm reading.	4.2642	1.11201
S15.I try to get back on track when I lose concentration.	4.1698	1.28206
S16.I adjust my reading speed according to what I'm reading.	4.3396	.99891
S17. When text becomes difficult, I pay closer attention to what I'm reading.	4.6415	.76194
S18.I stop from time to time and think about what I'm reading.	3.6226	1.19657
S19. I try to picture or visualize information to help me remember what I read.	3.7358	1.33230
S20. When text becomes difficult, I re-read to increase my understanding.	4.3269	1.14996

S21. I try to guess the meaning of unknown words or phrases.	4.2453	1.12499
Total	4.1682	.33346

As for the support strategies, Mokhtari et al. argued, provide support to sustain sensitivity to reading, as in the case of using a dictionary when confronted with unfamiliar words in the text they read. In the dataset outlined in Table 3, it is obvious that out of nine strategies only two strategies (S26, S29) were used at a higher rate (4<Mean>5) than the remaining seven strategies (S22, S23, S24, S25, S27, S28, S30) that had mean values less than 4. and garreteer than 3. The overall mean score of this category is 3.7547, which is relatively moderate.

Table 3. Descriptive Statistics (Means & St.) of PU Students' Uses of Support Strategies

(Support Subscale) (n=9)	**Mean**	**Std.**
S22. I take notes while reading to help me understand what I read.	3.6226	1.2894
S23. When text becomes difficult, I read aloud to help me understand what I read.	3.6981	1.5882
S24. I summarize what I read to reflect on important information in the text.	3.2830	1.3640
S25. I discuss what I read with others to check my understanding.	3.3774	1.3898
S26. I underline or circle information in the text to help me remember it.	4.5660	.90955
S27. I use reference materials such as dictionaries to help me understand what I read	3.6792	1.2522
S28. I paraphrase (restate ideas in my own words) to better understand what I read.	3.7736	1.4093
S29. I go back and forth in the text to find relationships among ideas in it.	4.0000	1.1602
S30. I ask myself questions I like to have answered in the text.	3.7925	1.3061
Total	3.7547	.37272

Taken as a whole, the mean scores in Tables 1, 2, and 3 demonstrate the distribution of reading strategies across the three categories – global, problem-solving, and support strategies. Among the three categories, problem-solving strategies' out-rated the other two RS categories, global and

problem-solving strategies. This finding ties well with some findings in the literature, namely Abu-Snoubar (2017), Kocaman and Beşkardeşler (2016), and Villanueva (2022). These strategies could be developed into skills that likely last with the learners long (Abu-Snoubar, 2017). The remaining strategies are no less significant. They should be developed because all the RSs on the inventory are inseparable. They are noticeable strategies the participants tend to use prior to, during and after reading a text. For instance, they preview the text to check what it is about before reading it (S3: μ=4.0755). Additionally, they decided if the text fits their reading purpose (μ= 4.0577). In contrast, after reading the text, they sometimes discuss the content with others to check their understanding (μ= 3.3777) and summarize the text for reflection on important points in the text (μ= 3.283). While pre-and after reading strategies seem to be of less rate, they still can be considered important strategies that the learners need to elevate.

The findings ensued from the questionnaire were reinforced by observational data obtained from which a sub-sample of the participants. A closer observation of the informants' behavior while reading was noted using a rubric of 12 criteria. Each criterion was rated from 1 to 5, and the total of the scores was estimated at 60 points. The overall scores of five observed participants are summarized in the following table.

Table 4. Observed Reading Strategies through the Re-telling Technique

No.	The learner…	**Credit score**	**Obtained score**
1	accurately depicts the main ideas of the passage.	5	19
	includes most or all of the key points in the summary.		
2	accurately recounts supporting details.	5	17
3	uses the same vocabulary as in the original, or simplify or embellish it.	5	17
4	provides the beginning, middle, and end of the story, and in the correct order.	5	17
5	describes the characters/actions and setting in the text.	5	16
6	relates information in the text to personal knowledge.	5	18
7	note interrelationships among ideas.	5	16

8	Before reading, the learner reads the title and subheadings and look at pictures in the text.	5	12
9	starts reading immediately without reading the title and subheadings.	5	10
10	While reading, s/he looks at a glossary or illustrations or seem to reread portions of text.	5	13
11	The learner seems anxious or withdrawn.	5	21
12	seems confident and comfortable with the task.	5	11

As the table displays, some findings support pertinent aspects of the questionnaire. Each criterion was scored 5 and suppose each participant obtained the full score, the total on the rubric should be 25 points. Results outlined in Table 4 indicates that the informants scored relatively moderate scores on the rubric varying from 11 to 19 (out of 25 each). The scores which fall below the average were Criterion 8, 9 and 12. with this in mind, the participants seem not to care about pre-reading strategies such as examining the title and subheadings and scrutinizing pictures embodied in the text. This echoes the obtained scores for Criterion No. 8, wherein the obtained score is 12 out of 25. As well, results of Criterion 9 aligns with that of Criterion 8 wherein the total score is 10 out of 25. Noticeably, respondents started reading without poring over the title and subheadings. perhaps this is because they were less confident and uncomfortable with the task (see Criterion 12). On the other hand, the respondent seemingly care about the main idea in a text by skimming (the mean score in Table 1 is 4.1509, SD=1.11625). The first criterion in Table 4 is quite relevant, wherein the obtained score is 19 out of 25. Perhaps, this is because they were trained in reading comprehensions class how to focus on the main idea of a text, skim and scan a text – strategies that reading teachers seem to consider for during-reading tasks. Pre-reading and post-reading strategies seem to be marginalized albeit their significance for successful reading.

Putting these results in the broader context of RSs research, it is worthwhile to recall novel results of relevant studies at the local and international levels – studies used the same reading inventory that Mokhtari and his associates developed to measure ESL EFL reading strategies. To begin with, the most relevant study in the Jordanian context is Abu-Snoubar (2017) study which explored reading strategies EFL learners at Al-Balqa Applied employ. Similar to the findings reported in this investigation (μ=4.1682), Abu-Snoubar's findings found the problem-solving strategies were the most frequently used (μ=3.8081). Although this sub-category of strategies ranked highest in both universities, the mean value of the PU's students was higher in terms of the use of this set of strategies. On the other hand, global and support strategies in both contexts ranked at the mean values between 3.8 and 3.5 (global strategies) at PU (μ=3.8622) versus (μ=3.5169) at Al-Balqa, and support strategies (μ=3.7547) versus (μ=3.5393) at Al-Balqa. There is a slight difference in the mean values of both categories in both universities.

Even though small, the results give a general vision of how Jordanian students approach reading skills. They are generally high users of problem-solving strategies compared to the other two strategy sets: Support and global strategies. Nevertheless, it is to be noted that the participants in the two studies were not homogeneous in terms of major. While all the participants in the study at hand were affiliated with English and literature, their counterparts at Al-Balqa university were recruited from 14 different majors including English Information Technology, Physics, Agriculture, Engineering, Medical Analysis and Medicine. Perhaps, the participants did not take reading in English as seriously as it was in specific departments where English is the medium of instruction – the sample of the present stud is a case in point.

Comparing the findings of this study with similar studies that implemented the same reading inventory beyond the Jordanian context is good food for though. Like the present study, Do and Phan (2021) in the Vietnamese context demonstrates that problem-solving strategies out-rated frequencies of the other two categories. On the contrary, the Vietnamese learners were moderate RSs users. The present study, alongside Abu-Snoubar's study, exhibit Jordanian learners as high RSs users. In terms of gender, Vietnamese female learners scored higher at using support strategies than males did, unlike the sample of the present study, which exhibited no significant gender-based differences. In a similar vein, Villanueva (2022), found problem-solving strategies out-rating the global and support strategies. In Kocaman and Beşkardeşler's (2016) study, those problem-solving strategies came second after the global strategies, and the support strategies were the least used strategies. The first part invalidates the findings of the present study. The similarity of findings, where exist, suggest that learners in the Jordanian context generally use common strategies that other learners in the worldwide context employ while reading texts.

In a nutshell, learners in EFL contexts use reading strategies inconsistently. The order of strategy categories differs from context to context which may reflect the teaching philosophy and approaches adopted in every context. However, it is to be noted that the three categories of strategies are interconnected (Mokhtari et al., 2018). The difference in this consistency may also result from the sample size, major, and socio-linguistic background. These variables likely play an important role in varying the results. It is fair to argue that there is no consensus on the prominence of any of the three broad categories in Mokhtari et al.'s inventory. There is no general cause of such variance. The never-stop change of learning mediums and emerging learning

modes may have a crucial role in shaping the difference in reading strategy frequencies, but it is worthwhile to explore if these variables predict better reading performance (Mokhtari & Sheorey, 2002).

Conclusion

To bring this study to a conclusion, it is evident that learners in the Jordanian context, given evidence from Philadelphia university, use common reading strategies with high frequencies of problem-solving strategies over global and support reading strategies, which echoes prior research findings. It contributes to L2 learning by developing reading strategies at the word, phrase, and sentence levels and paragraph-wise, discourse-wise and metacognitive strategies. The study has implications for learners, teachers and curriculum and syllabus designers. It lays the groundwork for helping learners efficiently and become strategic readers, promoting their awareness of strategies before, during, and after reading academic texts. They need to be trained on using diagrams, pictures and font type in a text to get the gist of the content prior to delving into reading the texts. Similarly, the study encourages teachers to monitor their students' reading more closely and help them realize pre-reading and post-reading strategies alongside their strategies while reading a text. Teachers may want to adapt teaching strategies and techniques that correspond to effective reading strategies on the reading inventory. Likewise, the study provides a basis for syllabus designers to include various reading materials encompassing texts with figures, tables, and illustrations that juxtapose linguistics and non-linguistic elements that promote meaning-making.

The results leave the authors of this paper in a position to suggest further research to correlate problem-solving strategies that topped the ranking in the study with learners' performance in reading comprehension. Other than that, the present inquiry examined RSs

within the context of academic reading. Future researchers may stimulate debate on whether these strategies are extrapolated to some other genres or undertake a similar study with digital reading strategies compared to paper-based reading strategies.

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