

ESL Learners' Use of Reading Strategies Across Different Text Types

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Abstract The current study sought to provide information on whether ESL learners' use of reading strategies is associated with the type of text they are reading. To address this objective, 21 ESL learners read 20 different texts of varying types and answered the Metacognitive Awareness of Reading Strategies Inventory by Mokhtari and Sheorey (*J Educ Psychol* 94(2):249–259, 2002) to measure their use of reading strategies. Using descriptive and inferential statistics, results showed that ESL learners generally applied a wide range of strategies consistently when reading different text types. These results were explained using a schema-theoretic view of reading. Findings further revealed that there was a significantly higher use of global reading strategies compared to the two other factors (i.e., problem-solving reading strategies and support reading strategies). Such a finding was attributed to the reading proficiency level of the learners. Theoretical and practical implications are discussed.

Keywords Text type · Reading strategy · ESL reading · ESL learners · Literacy

Introduction

Reading is an interactive process that involves simultaneous use of strategies for more efficient reading (Grabe 1991; Lau and Ho 2015). Hence, many scholars have explored learners' reading strategy use and how they are

influenced by various factors such as gender, proficiency level, and length of exposure to a target language. Another factor that may have an influence on reading strategy use and reading process is the type of text that learners read (Fang 2008). For example, Meyer et al. (1980) posited that learners' lack of awareness of the type of text they read prevented them from using appropriate reading plan and strategies.

Since different learners use different reading strategies when they approach a reading task, it is important to understand how reading strategies are used in an ESL context. Strategies that L1 readers use when reading texts may not necessarily be the same reading strategies used by ESL readers especially if reading strategies used by these readers are influenced by the type of text they read. For instance, Tercanlioglu (2004) found that while ESL readers frequently use reading support strategies, L1 readers reported frequent use of metacognitive reading strategies.

While many studies have explored the influence of text structure on reading comprehension and retention (e.g., Carrell 1984; Grabe 1991; Koda 2005) and the factors that influence reading strategy use (Anderson 1991; Denton et al. 2015; Young and Oxford 1997), studies on comparing the reading strategies used across different text types remain underrepresented in the literature. Furthermore, given the fact that strategy use is influenced by text difficulty and that different text types have different difficulty levels (Ellis 2009), it has been hypothesized that the use of reading strategies would vary depending on the text types read (Duke and Pearson 2008). However, there is a dearth of studies that provide empirical evidence on this claim.

As such, the current study sought to provide information on whether ESL learners' use of reading strategies is associated with the type of text they are reading. Specifically, the following questions were addressed: (1) To what

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extent do ESL learners use specific reading strategies per text type? (2) Is there a relationship between the reading strategies used by ESL learners across text types? Understanding the extent of reading strategies used by learners and their relationship with text types will help reading teachers design the reading activities that promote the use of specific reading strategies. Consequently, such knowledge will help learners adjust their reading strategies depending on the text type being read. Finally, this study will extend our understanding of the reading strategies and text types. Specifically, it may reveal that each text type may require a specific set of reading strategies for more efficient reading. It may also suggest the possible relationship between text types and reading strategy awareness and use among ESL learners.

Literature Review

Text Types

A text type refers to a mode of discourse that aims to fulfill rhetorical and communicative purposes (Trosborg 1997). Unlike genre that classifies texts based on external criteria (e.g., activities which regularly occur in the society), text types classify texts based on similarities in linguistic forms and patterns no matter what the genre is. Hence, the term *text type* is sometimes used interchangeably with *discourse structure*, *discourse pattern*, *text structure*, *rhetorical organization*, and *top-level structure* (Jiang and Grabe 2007).

According to Jacobs and Yong (2004), the features of text types can be categorized into organizational structure and language features. Organizational structure refers to the usual parts or order exhibited by the text type, while language features refer to grammatical features attached with certain text types. In some instances, texts of the same genre may manifest differences in linguistic patterns.

The common types of text include recount, persuasive texts, transactional texts, narratives, process descriptions, and expository texts (Fludernik 2000; Frønes et al. 2013; Hedge 1988). Although both narratives and recounts retell a past event, a recount begins by telling the readers who are involved, and when and where the event occurred. A narrative, on the other hand, begins by describing the characters, how they relate to one another, and their motivations and goals. Furthermore, a narrative follows an identifiable plot that includes exposition, rising action, climax, and denouement. Procedural texts, though they follow a sequence, primarily explain directions and instructions for completing a task. It can be either instructive or informative. Another widely used text type is an expository text which describes or explains concepts.

These include comparison-and-contrast, cause-and-effect, definition, descriptive, and exemplification texts. Finally, there are persuasive texts that aim to convince readers (Fludernik 2000) and transactional texts that serve as a tool for communicating ideas between individuals (Frønes et al. 2013). Some examples of transactional texts are business letters, interviews, and dialogic speeches.

Understanding the structure of different text types is considered essential for effective reading (Barrot 2013, 2014b; Snyder 2010). In fact, several studies show that readers' awareness of text structure positively influences their reading process and text comprehension. For instance, Snow (2002) observed that students who analyze and understand text structure are more likely to learn more than those who lack understanding of text structure. Similarly, Kobayashi (2002) reported that students performed better when reading a clearly structured text.

Schema Theory in Reading

One view of reading process that has emerged is that schema significantly influences how readers approach a text (Graves et al. 1998). Schema refers to the learners' experience and stored knowledge in the memory. It has been used to explain various cognitive processes such as inferencing and problem solving (Nassaji 2002). From a schematic-theoretic view, how we use knowledge in comprehension has three assumptions: (1) "that schemata are preexisting knowledge structures stored in the mind, (2) that comprehension is a process of mapping the information from the text onto these preexisting knowledge structures, and (3) that knowledge-based processes are predictive and reader-driven" (Nassaji 2002, p. 444). The notion of schema has led to the view that L2 reading is an interactive process which involves both data-driven and reader-driven processes.

Schema can be distinguished into content schema (knowledge about people, culture, world, and universe) and formal/textual schema (knowledge about text structure and rhetorical organization) (Barnett 1989; Coiro and Dobler 2007). Since the present study deals with text types, the focus of this discussion will be on formal/textual schema and its influence on reading. Several studies have examined the influence of textual schema on reading. For instance, Carrell (1992) investigated the relationship between L2 learners' awareness of text structure and recall of text written in those structures. Her findings revealed that those who were aware of text structure and used it in organizing recalls showed superior recall than those who did not. The same findings were obtained by Zhang (2008) when she investigated the effects of textual schema on EFL learners' reading comprehension. After analyzing the learners' recall protocol, data showed that the learners had better recall of texts with a highly structured schema.

Reading Strategies

The term 'reading strategy' has been part of teachers' everyday vocabulary in reading classrooms. As defined, reading strategies are "deliberate, goal-directed attempts to control and modify the reader's efforts to decode text, understand words, and construct meaning of text" (Afflerbach et al. 2008, p. 368). Huang et al. (2009) and Mokhtari and Reichard (2002) proposed three categories in classifying reading strategies. These are global strategies, problem-solving strategies (PROB), and support strategies (SUP). Global strategies refer to those that are intentionally and deliberately planned to monitor reading, such as pre-viewing and predicting. Problem-solving strategies are actions that readers use to better process difficult texts. These strategies include getting word meaning through context clues and visualization of text content. Finally, there are support strategies that readers use to aid their comprehension of the text.

Several factors have been investigated in relation to reading strategy use. These include reading proficiency level (Anderson 1991; Denton et al. 2015), gender (Denton et al. 2015; Young and Oxford 1997), and mode (Huang et al. 2009). However, only a limited number of studies have explored the relationship between text type and reading strategy use. One of these studies is that of Sun (2003) who examined the influence of two expository text structures (i.e., collection and comparison/contrast) on EFL learners' reading strategy use. Eight junior high school students in Taiwan participated in the study. They were divided into two groups (i.e., proficient and less proficient) and were asked to read two different passages with different text structure. Findings revealed that students' use of reading strategies was influenced by the text they were reading. Specifically, students had more difficulties in choosing strategies when reading a collection text than when reading a comparison/contrast text.

In the same vein, Lee (2006) investigated the effects of rhetorical text structure and English reading proficiency on students' metacognitive strategies. The participants in the study were 163 Taiwanese non-English major college freshmen who were grouped into four different proficiency groups. Over a one-week period, the participants read two expository texts: one inductively structured and another one deductively structured. After reading these texts, the participants answered a 10-item comprehension test and completed the Survey of Reading Strategies. Findings revealed that reading proficiency was associated with reading strategy use (i.e., global, problem-solving, and support reading strategies). On the other hand, rhetorical text structure did not affect reading comprehension and selection of reading strategies. The study also reported that the most frequently used reading strategy is the problem-

solving type, followed by the global and the support reading strategies.

Chomphuchart (2006) explored the reading strategies used by students when reading different English texts. The participants consisted of 253 Thai graduate students enrolled in graduate programs in various universities in the United States. Results showed that Thai students used reading strategies moderately. Chomphuchart (2006) further reported that there was a significant difference in the frequency of using reading strategies between academic and literary texts. Conversely, findings revealed that there was no significant difference between the types of reading strategies (i.e., metacognitive, cognitive, and support) used in these two sets of texts.

More recently, Çakir (2008) examined whether L2 learners would employ different processing strategies when reading different types of text. The participants in the study were 11 sixth-grade students in Turkey. Each of the participants was asked to perform think-aloud protocol and free recall when reading expository and narrative texts. Using qualitative analysis, the findings revealed that the strategies used by students changed according to the text they read. The participants claimed that they could monitor their comprehension process more efficiently when they read texts with overt linguistic clues.

In the same way, Lei (2009) investigated the effects of discourse types on Taiwanese college students' reading strategy use during their L2 English reading. Using an English reading proficiency test, the 280 intermediate Taiwanese L2 English readers were selected as participants of the study. One group of learners read a passage using a "collection" structure, and the other group read a problem/solution passage. After reading the texts, the participants answered a reading strategy survey. The findings revealed significant differences between the two discourse types in the learners' use of global reading strategies. Data further revealed that participants use global, problem-solving, and support reading strategies more frequently when reading collection texts than when reading problem/solution texts. Lei (2009) concluded that there was a link between reading strategies and discourse types.

Given all the reviewed literature, it is safe to posit that there is a paucity of studies that explored the extent of and the relationship between reading strategies used by L2 learners across different text types (i.e., recount, narrative, procedure, expository, persuasive, and transactional).

Methodology

Context and Participants

Twenty-one ESL learners with intermediate reading proficiency took part in this study. They were first-year civil

engineering students (16–17 years old) enrolled in English Communication Arts 1 at a private university in the Philippines. These 15 male and 6 female participants had at least 10 years of prior formal instruction in English and had intermediate-level (or inter-medium level) reading proficiency based on the administered institutional diagnostic test for reading. Moreover, these participants had been instructed a plethora of reading strategies (e.g., recognizing discourse structure, contextual guessing, brainstorming, concept mapping, activating background knowledge, predicting and previewing, note-taking, skimming, and recognizing fallacies) during their basic education. Prior to their college education, they were also significantly exposed to different text types which include narrative, descriptive, process, expository, comparison–contrast, cause–effect, problem-solving, and argumentative/persuasive texts. They came from various socioeconomic classes and linguistic backgrounds which are typical of a university-level English class. These pieces of information were taken from the personal profile document that participants submitted at the start of the semester.

Instrument

The current study adopted the Metacognitive Awareness of Reading Strategies Inventory developed by Mokhtari and Sheorey (2002) (see Appendix). However, only the reading strategies included in the national English curriculum for secondary education were included in the instrument. These 16 items were categorized into three factors: global, problem-solving, and support reading strategies (Mokhtari and Reichard 2002; Mokhtari and Sheorey 2002). The first factor (global reading strategies) covers items 1–7; the second factor (problem-solving reading strategies) covers items 8–13; and the third factor (support reading strategies) covers items 14–16. These indicators were written in English and in positive form to facilitate students' completion of the questionnaire and mitigate response bias (Barrot 2014a; Heilenman 1990). In this Likert-type questionnaire, students were expected to respond using values from 1 to 5 (i.e., 5—to a very great extent, 4—to a great extent, 3—to a moderate extent, 2—to a small extent, and 1—not at all). The reliability of the instrument as used in the new context was calculated using Cronbach's alpha. Cronbach's alpha was .90 for the global reading strategies, .92 for the problem-solving reading strategies, and .95 for the support reading strategies, indicating that the internal reliability of these three factors was acceptable (Field 2009).

In self-report studies, learners may have the tendency to overrate or underrate themselves (Cohen 1998) and interpret the indicators in the questionnaire differently (Oxford et al. 2004). To overcome these difficulties, this study used

on-task assessment which involves responding to a questionnaire or rating scale immediately after the completion of a task (Butler and Lee 2006). This approach allowed students to assess their strategies in a more detailed and contextualized way. Furthermore, the teacher-researcher explained each descriptor in the questionnaire in detail to all the participants.

Procedure

The tasks involved the reading of six sets of reading texts ($n = 20$) of varying types. As shown in Table 1, each set was composed of at least three different texts with length ranging from 400 to 500 words. Prior to the reading tasks, all texts were subjected to TextEvaluator to ensure that text complexity was appropriate for the participants. TextEvaluator is a fully automated software that provides reliable measures of text complexity and strongly correlates with human ratings ranging from $r = 0.78$ to $r = 0.81$ (Sheehan et al. 2010). Topics were also preselected based on participants' interest and schema to control other variables that might affect the results. Their interest and background knowledge were determined by asking them to answer a survey that listed the topics that might interest them and that were within their background knowledge.

One session prior to the reading task, learners were oriented on the procedure for undertaking the reading task and completing the questionnaire. During this session, copies of the self-report questionnaire were distributed. Then, the learners read it for 10 min to familiarize themselves with its content. Afterwards, reading task procedure was explained to them by providing details on the number of texts that they would read per session and the duration for doing such a task. The procedure on how they would answer the questionnaire and interpret the specific descriptors was also discussed. During the briefing session, the participants' questions were also addressed.

After the briefing, the participants read each text from every set. Since this was an on-task assessment, they were immediately directed to answer the questionnaire after reading each text. They were further prohibited from conferring with one another while answering the questionnaire so as not to influence the results of the self-report. In completing the task, the participants were given 15–20 min to read each text and 10–15 min to complete the corresponding questionnaire. On this note, learners would be able to read three texts per session. This means that one session was allotted in reading all three texts from each text type except expository texts ($n = 5$) which were allotted two sessions. Since the class met four times in a week with 90 min per session, the participants completed the reading tasks after seven sessions. All questionnaires were collected, tallied, and analyzed.

Table 1 Reading texts and their types

Set no.	Text types	No. of texts ($n = 20$)	Specific texts
1	Recount	3	Biography and news articles
2	Procedure	3	Instructive process description and informative process description
3	Narrative	3	Legend, personal narrative, fiction
4	Expository	5	Exemplification text, descriptive text, definition text, cause-and-effect text, comparison-and-contrast text
5	Persuasive	3	Editorial and opinion column
6	Transactional	3	Interview text, business letter, friendly letter

Data Analysis

Descriptive and inferential statistics were used to analyze data. Descriptively, the mean scores and standard deviations of the extent of reading strategies used by learners were computed. These scores were interpreted using the following range (Mokhtari and Reichard 2002): 3.50–5.00 (*high*); 2.50–3.40 (*moderate*); 2.40 and lower (*low*). To determine whether there are significant differences in the use of reading strategies across text types, Analysis of Variance (ANOVA) was used. To determine the correlations between the reading strategies used by learners across text types, the mean scores were subjected to Pearson product correlations. Values greater than 0.70 are deemed acceptable (Hinkle et al. 2003).

Results

The present study sought to determine whether ESL learners' use of reading strategies is associated with the type of text they are reading. Specifically, this section presents the extent of reading strategies used by learners per text type and how these reading strategies correlate with one another.

Table 2 presents the mean scores and standard deviations on the extent of reading strategies that ESL learners employed when reading different text types. Results show that learners used global reading strategies at a high level across different text types. For problem-solving and support reading strategies, learners used them at a moderate level in almost all text types. By looking closely at each factor, the findings indicate that among all global reading strategies, only items 5 (*guessing what the material is all about*) and 7 (*recognizing tone, bias and logical fallacies*) were moderately used by learners when reading recount, expository, and transactional texts. The findings further reveal that these two indicators had the highest score variability among all global reading strategies. Despite this variability, results reveal that the learners' use of global reading strategies across text types did not differ significantly ($p = .581$).

Unlike global reading strategies, problem-solving strategies were used moderately in four (i.e., recount, procedure, narrative, and transactional texts) of the six text types. However, they remained to be used at a high level in expository and persuasive texts. Per indicator, results reveal that *taking notes while reading* (item 10) and *paraphrasing* (item 12) were the learners' least preferred problem-solving strategies when reading different texts. No significant difference ($p = .689$) was reported as regards using these strategies across text types.

A different picture is revealed regarding learners' use of support reading strategies. Findings show that these strategies were used consistently at a moderate level across text types. The main reason for these results is that learners barely used graphic organizers when reading texts of any type. Learners, however, used the other two support reading strategies extensively. Similar to the first two factors, no significant difference ($p = .675$) was reported as regards learners' use of these strategies across text types.

Overall findings reveal that although the level of learners' use of reading strategies differed across text types as reflected by their respective average means, such difference was not significant ($p = 0.389$). Regarding the significant differences among these three factors per text type, results show that there were significant differences across text types ($p = <.001$). This means that global reading strategies were the most favored or most extensively used strategies by learners across text types, followed by problem-solving strategies. The least used of all strategies when reading different texts were the support reading strategies. Moreover, findings suggest that *recognizing tone, bias, and logical fallacies* was used extensively in persuasive texts than in other text types ($p = .002$), while *using graphic organizers* was most used when reading procedural texts ($p = <.001$).

As shown in Table 3, correlations between mean scores of reading strategies used by ESL learners across text types were calculated. Each possible pair of text types was intercorrelated. Generally, the correlations between text types were very strong, which ranged from $r = 0.87$ to $r = 0.98$. This result suggests that ESL learners

Table 2 Extent of reading strategies used by ESL learners per text type

Reading strategies	Text types											
	Recount		Procedural		Narrative		Expository		Persuasive		Transactional	
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
Global	3.6	0.28	3.6	0.14	3.6	0.22	3.6	0.23	3.8	0.24	3.6	0.33
1. Previewing the text	3.6	0.76	3.9	0.28	3.5	0.51	3.7	0.37	3.8	0.49	3.9	0.53
2. Skimming	3.8	0.30	3.9	0.20	3.7	0.12	3.9	0.25	4.0	0.17	3.8	0.06
3. Deciding what to read and what to ignore	3.9	0.02	3.9	0.18	3.8	0.21	3.9	0.22	3.9	0.13	3.6	0.44
4. Critically analyzing and evaluating presented information	3.5	0.25	3.5	0.10	3.7	0.38	3.7	0.23	3.8	0.09	3.7	0.19
5. Guessing what the material is all about	3.3	0.24	3.5	0.17	3.7	0.10	3.4	0.22	3.9	0.25	3.4	0.29
6. Matching one's reading purpose to content of text	3.9	0.24	3.8	0.06	3.8	0.10	3.8	0.13	3.9	0.21	3.9	0.32
7. Recognizing tone, bias, and logical fallacies	3.0	0.17	2.8	0.02	3.0	0.10	3.0	0.18	3.5	0.32	3.2	0.49
Problem-solving	3.4	0.22	3.4	0.28	3.4	0.20	3.5	0.26	3.5	0.21	3.3	0.23
8. Underlining and circling information	3.7	0.15	3.6	0.18	3.6	0.17	3.7	0.31	3.7	0.20	3.6	0.09
9. Reading back and forth to see relationship among ideas	3.8	0.21	3.9	0.35	3.6	0.05	3.7	0.19	3.7	0.19	3.5	0.15
10. Taking notes while reading	2.6	0.21	2.8	0.16	2.7	0.15	2.9	0.21	2.6	0.10	2.5	0.30
11. Asking question to oneself	3.6	0.25	3.4	0.37	3.7	0.25	3.7	0.24	3.9	0.26	3.6	0.49
12. Paraphrasing	3.2	0.31	3.3	0.44	3.3	0.45	3.3	0.35	3.3	0.25	3.2	0.21
13. Summarizing	3.6	0.18	3.5	0.16	3.6	0.10	3.5	0.24	3.6	0.23	3.6	0.11
Support	3.2	0.26	3.1	0.21	3.1	0.19	3.1	0.15	3.1	0.25	3.0	0.18
14. Using graphic organizers	1.8	0.32	2.1	0.14	1.6	0.21	1.8	0.16	1.7	0.32	1.7	0.02
15. Using context clues	3.9	0.29	3.7	0.36	4.0	0.27	4.0	0.13	3.8	0.24	3.7	0.11
16. Adjusting reading speed	3.8	0.16	3.5	0.14	3.7	0.10	3.6	0.15	3.8	0.18	3.6	0.41
	3.4	0.25	3.4	0.21	3.4	0.20	3.5	0.22	3.6	0.23	3.4	0.26

consistently used different reading strategies across different text types. And since the absolute value of r exceeded the critical value (e.g., $0.87 > 0.632$), there was sufficient evidence to support the claim of linear correlations between text types.

Discussion

The present study aimed to determine the ESL learners' use of reading strategies across different text types. Specifically, this paper sought to determine the extent of their use of specific reading strategies per text type as well as the relationship between the reading strategies they used across text types. Findings reveal that ESL learners generally applied a wide range of strategies consistently when reading different text types. However, among the three factors, global reading strategies were used more extensively than the other two factors across text types.

Unlike Sun (2003), Çakir (2008), and Lei's (2009) earlier findings, the present study supports and extends the findings of Chomphuchart (2006) and Lee (2006) that learners' use of reading strategies did not change across text types. One possible explanation for these results can be anchored from the schema-theoretic view of reading which

states that reading involves the interaction of reader and the text (Rumelhart 1977). Because ESL learners (i.e., college students) already had sufficient formal schema on all text types, this may explain why there was no significant difference anymore in the extent of reading strategies they applied. They activated this type of schema to make their reading more efficient and more effortless using various reading strategies. This contention is supported by the findings obtained by Carrell (1992) and Zhang (2008) that awareness of textual schema influenced how readers approach the reading task.

There are, however, some differences between the findings of the current study and those of Lee's (2006). For instance, Lee (2006) reported that the most frequently used strategy when reading expository texts was the problem-solving type, followed by the global and the support reading strategies. In the present study, there was a significantly higher use of global reading strategies compared to the two other factors. This result may be attributed to the proficiency level of the learners involved in the present study. As hypothesized by Mokhtari and Reichard (2002), proficient readers were more likely to use global and problem-solving reading strategies more frequently than less proficient readers. And since the participants of this study were intermediate-level readers, they were expected

Table 3 Correlations matrix for the six text types

Text Types	Recount	Procedural	Narrative	Expository	Persuasive	Transactional
Recount	–	0.93	0.96	0.98	0.94	0.94
Procedural		–	0.88	0.93	0.87	0.90
Narrative			–	0.97	0.97	0.94
Expository				–	0.95	0.95
Persuasive					–	0.97
Transactional						–

to extensively use global reading strategies and fewer support reading strategies.

It should be noted that some reading strategies were used more extensively in some text types than others as shown in the current study. These findings provide empirical support for the hypothesis of Duke and Pearson (2008) that certain reading strategies are used more extensively than others. For instance, *recognizing tone, bias, and logical fallacies* was used extensively in persuasive texts than in other text types. This result was expected because persuasive texts typically contain opinions and evaluative statements which are prone to biases and logical fallacies.

Another interesting finding is that the use of graphic organizers was most frequent when reading procedural texts. It is because procedural texts are highly structured. This kind of text structure facilitates the production of visual representation of ideas. Despite the recognized importance of graphic organizers in reading comprehension (Jiang and Grabe 2007; Sweller and Chandler 1994), findings reveal that the use of graphic organizers remained to be the least (i.e., at a low extent) applied reading strategy by the learners during actual reading. Such a finding corroborates Kletzien's (1991) findings that visualizing was seldom used as a reading strategy when reading an expository text. One possible explanation for this is the heavy extraneous cognitive load that visualizing had on students (Stull and Mayer 2007). Students might find this strategy difficult because it is a very complex process that involves the identification of topic and supporting details, linking and alignment of relationships among concepts, schema activation, and comprehension of the whole text (Liu et al. 2010). Another feasible reason for this phenomenon is that not all learners were visual learners who were more inclined to making visual representations as they read texts.

While there was no significant difference in the use of reading strategies across text types, it can be seen from the overall means that only in expository and persuasive texts learners used reading strategies at a high level. These data may support earlier contentions that increased structural complexity as well as abstract and logical relations is more

difficult to process (McNamara et al. 2011; Saenz and Fuchs 2002). This means that the more difficult the text is, the more readers are prone to breakdown. Hence, they used more reading strategies (e.g., support reading strategies) to compensate for this breakdown (Huang et al. 2009).

The finding that ESL learners consistently used different reading strategies across different text types has some theoretical and practical values. From a practical perspective, these findings lend support for an integrated approach to teaching and learning reading strategies. This means no matter what the text type is, teachers may need to simultaneously teach and expose learners to various reading strategies. They can do this by explicitly incorporating strategy instruction into their instructional materials and other teaching activities. Theoretically, the findings allow us to have a deeper understanding that reading strategy use is a result of interaction between the learners and the text; that is, it is influenced by learners' schema and reading proficiency level as well as structural complexity of the text.

Conclusion

The current study sought to determine the extent of and the relationship among reading strategies employed by ESL learners when reading different text types. The findings reveal that ESL learners generally applied a wide range of strategies consistently when reading different text types. Furthermore, ESL learners tend to use global reading strategies more extensively than the other two factors across text types. The findings of this study are noteworthy because, as mentioned earlier, no previously published studies have shown the extent of and the relationship among reading strategies used by ESL learners across different text types.

While the present study provided some interesting insights, it nevertheless has several limitations. First, it remains a self-report study. For example, students may report that they did not use strategies because it has already become an automatic and unconscious process (Cohen 1998). It would be useful to use a qualitative and/or a

mixed method design in future studies to provide more generalizable results. Second, the study examined reading strategies of a limited sample of university students with intermediate reading proficiency. It is, therefore, interesting to replicate the study by increasing the number of participants of varying reading proficiency level from different universities and background to make the findings more conclusive and interpretation more meaningful. Third, since the strategies included in the study were delimited to those that are included in the syllabus, students might have used other strategies that were not included in the list. Hence, strategy categories in future studies should be expanded based on actual strategies that students used during the reading task. Finally, since this study was conducted in a private university in the Philippines, the findings may not be generalizable to other learning contexts and should be interpreted with caution. The use of reading strategies should not also be treated as the same with other college students with intermediate-level reading proficiency because it is likely that academic major may affect strategy use.

Despite the limitations of this study, its findings have several implications for reading instruction. Since students tend to use a fixed set of reading strategies regardless of text types, it would be useful if they develop their skills in orchestrating all of these reading strategies to enable them to effectively use strategies simultaneously (Harrison

2004). Also, if students know the specific strategies appropriate for a particular text type, they would be able to adjust their strategies for more efficient reading. On the part of the teacher, the current findings would help them explore ways on how they can teach reading strategies not in isolation but integratively. The reason for this is that efficient readers do not use these strategies in isolation; rather, they use multiple strategies while reading a particular text. For instance, we not only recognize fallacies while reading persuasive texts but also get its main idea and identify supporting details. Since the findings suggest that students rarely use graphic organizers to learn and comprehend texts, teachers may devote more time to helping them use this reading strategy during reading tasks. They can do this by frequently incorporating the preparation of graphic organizers after they have read a particular text. Finally, teachers may use the findings of this study to enhance their assessment practices. Through formative assessment, they can use their understanding of reading strategy use for helping learners match their strategies to their own learning style, learning needs, and demand of the reading tasks.

Appendix

See Table 4.

Table 4 Self-report questionnaire

Reading Strategies	Extent				
	VGE	GE	ME	SE	N
I preview the whole text or parts of it before I actually read it	5	4	3	2	1
I extract the main idea of the text through quick reading	5	4	3	2	1
I decide on what to read closely and what to ignore	5	4	3	2	1
I critically analyze and evaluate information presented in the text	5	4	3	2	1
I continually predict what the author might say and then confirm its accuracy	5	4	3	2	1
I match my reading purpose to the content of the text	5	4	3	2	1
I recognize tone, bias, and logical fallacies	5	4	3	2	1
I underline and circle relevant information.	5	4	3	2	1
I read back and forth to see the relationship among ideas in the text	5	4	3	2	1
I take brief notes to clarify, condense, and remember ideas	5	4	3	2	1
I ask questions to myself to better understand the text	5	4	3	2	1
I paraphrase the ideas in the text (while and after reading) for better understanding	5	4	3	2	1
I summarize the key points and ideas for better understanding	5	4	3	2	1
I use graphic organizers to learn and comprehend the text I read	5	4	3	2	1
I use the words around the term I do not know to figure out its meaning	5	4	3	2	1
I adjust my reading speed to better understand the text I read	5	4	3	2	1

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