

The Effectiveness of Integrative Reading Strategies in English Comprehension Skills Among the Jordanian University EFL Students: A Moderated Mediated Model

Monther A. Alogiliy

Department of English Language and Literature, Al-Balqa Applied University, AlSalt, Jordan

Abstract—This study intends to establish the effect of integrative reading strategies (IRS) on Reading and Listening Comprehension (RLC) with regard to the mediation of Time Spent on reading (TSR) and the moderation of Level of English Proficiency (LEP) among Jordanian EFL university students. A convenience sample of 211 students was selected. The research utilized four constructs based on the Common European Framework of Reference for Languages scales (CEFR, 2021). The first construct is Reading and Listening Comprehension comprising 10 items. The second construct is the Integrative reading Strategies consisting of 5 items. The third and fourth constructs are Time Spent Reading and Level of English Proficiency consisting of 5 items each, where the study employed a 5-point Likert scale. Model 8 in Hayes' PROCESS Macro for SPSS (v4.1) is used. The results of this study indicate consistent and robust polychoric correlations for all variables. There is a significant effect of (IRS) on both (TSR) and (RLC). It is notable that (LEP) plays a critical moderating effect between IRS and RLC. In other words, RLC is positively impacted by IRS which is followed by a subsequent positive increase in TSR. However, the moderating effect of LEP on the direct relationship between IRS and RLC is significant while the effect on the indirect relationship via TSR is not significant. It is essential to underscore the fact that the stronger LEP is the higher the attenuation of the positive effect of IRS on RLC.

Index Terms—integrative reading strategies, English reading comprehension skills, reading engagement, English proficiency

I. INTRODUCTION

Reading plays a crucial role in the teaching and learning process. Therefore, it is necessary to promote reading habits from the early years of schooling, not only in the native language but also in learning English. This ensures a comprehensive education for students. Educational institutions must provide instruction in English as a foreign language to guarantee a complete and meaningful learning experience. Diverse tactics, such as educational initiatives, are promoted for this objective. In addition, researchers are studying suitable methods to enhance English reading proficiency (Fresneda & Iváñez, 2022).

Reading is a multifaceted cognitive skill that necessitates the growth of cognitive and metacognitive abilities. It is also a crucial element in the process of acquiring language. The reading proficiency of students is demonstrated through their capacity to read aloud and quietly, as well as effectively convey their comprehension of the texts. Students' reading competence is a crucial measure of their language proficiency. Nevertheless, studies have shown that college students face challenges in various aspects of reading, including comprehension, interpretation, speed, critical analysis, inference, and word recognition. These difficulties ultimately impact their overall reading proficiency (Dickens & Meisinger, 2016; Douglas et al., 2016). Furthermore, these studies have shown that pupils without proficient reading skills faced difficulties not only in attaining their academic goals, but also in executing cognitive tasks in practical situations.

A. Integrative Reading Strategies

Interactive *reading* is any form of instruction where a teacher actively involves and aids learners to establish reading fluency and comprehension skills (Merga, 2017). This is to mean that where interactive practices are taking place, the teacher understands with precision in what way each learner connects his/her thought process to the information in the text for adequacy in comprehension. To a large extent, reading involves learners' input and interpretation of information by using both their background knowledge of the topic, the information in the text, and the reading contexts to understand what the text meant. On the other hand, Maingi (2015) stated that the learners' inability to develop reading skills was presenting itself as a symptom because reading strategies were not put into use.

In a study on strategies for enhancing reading skills, Gilakjani and Sabouri (2016) emphasized that interactive practice was needed for learners to effectively interpret and understand the meanings of literary texts. According to Mraz et al. (2013), it is implied that teachers were supposed to incorporate reading strategies to enable students to

acquire the skills of reading through a transition from word decoding to fluency and comprehension. At very close range, the practice of classroom interactive reading is exciting because it borrows from the interactive model of reading. This model joins together the foundational reading skill of word decoding with the more advanced process of understanding discourse structure. A study on cognitive inquiry into reading and comprehension by Kibui (2012) observed this practice as one that comprises of progressive discourse interaction. This form of reading interaction enables the readers to access quickly and naturally word recognition and interpretations for competition in getting the word meaning derived from the knowledge of the world. With this kind of interaction, learners are seen as fluent readers and experts in the whole process of interpretation.

However, Kabita (2015) observed that the teachers lacked solid foundations for teaching reading. On the other hand, Yusuf (2015) indicated that following participation in interactive reading, there was a significant improvement in learner achievement in reading comprehension. Given that reading has vast impacts on academic achievement, there is a need for the learners to incorporate interactive reading. The process is composed of various activities, which are as follows: read aloud, repeated reading, shared reading, and guided reading. This will help the learners develop their interpretation skill and their ability to make inferences. They will also develop their ability to recognize words and decode them.

(a). Reading Aloud

The read aloud strategy is a process where the teachers use modeling of reading while they are reading during the instructional time. The process employed is purposeful and precise and the students learn to do what the teacher is doing. Henenbers and Getman (2011) noted that there is the creation of a dynamic atmosphere, which, in turn, improves the reading ability of the learners. When the teachers conduct read aloud activates in class, they are able to demonstrate the skillful reading and word identification. During the process, learners participate in the art of reading as the teachers proceed with the process of reading the given artwork (Lee & Yoon, 2017). They also participate in the discussion, which, is aimed at improving the understanding of the learners. The process of reading also provides valuable teaching points, which ideal for the improving students' abilities in word recognition and fluency. Such interactive process can aid students in refining their reading skills in the English Language (Walch, 2016).

According to Young and Rasinski (2017), the development of oral reading, fluency is related to mastery of relevant phonological awareness and words. Fluency in reading a literary text in secondary schools implies a high level of automatic word recognition among learners. However, comprehension of the literature text in question involves an understanding of words. According to Yildirim et al. (2017), automaticity in word recognition impacts strongly on text comprehension as it ensures learners can read and decode the words of the text. In effect, such learners know that they are directly related to the meaning by hearing others, and they will pronounce more words. According to Steinert (2012), fluency can be developed through expression where learners make meaning. This implies that fluency in a language develops as individuals engage with words and speak them in order to make a meaning. As such, developing the recognition of words in a shared process significantly improves as people spend more time speaking and uttering words to make meaning and express their opinions on the matter.

(b). Repeated Reading

Repeated reading is a shared reading practice where learners are encouraged to read the same literary texts multiple times as a means of boost their concerned vocabulary and fluency. According to Black and Stave, less fluent learners are often more concerned about each word. This may have the impact of spending too much time on each word in order to ensure a rigorous examination and reduce mistakes. However, the same often reduce the understanding when examining each individual element as their flow of the text gets frequently disrupted by a need to carefully examine the meaning of each word in a sentence. According to Mraz et al. (2013), repeated encounters in the text are a warrant as such learners will gradually develop the ability to decode words without spent unnecessary time on their reading. Repeated reading leads automatically to better vocabulary and fluency because people learn more words. According to Chang and Millett (2013), Taiwan students experienced stronger vocabulary increased fluency and covert searching when participating in a shared repeated reading practice.

(c). Shared Reading

Shared reading refers to a practice that involves collaboration between learners who read together under the guidance of a teacher or an experienced peer. Based on the work by Vasinda and McLeod (2011), the need by learners to develop familiarization with the decoding convention to sign cues can help them transfer the decoding convention to new sentence structure from the familiar texts that used during shared reading. The approach encourages positivity when teaching English language. As per the work by Durlak et al. (2011), teachers who focus their effort on developing the oral reading fluency through the use of effective strategies enhance language fluency among the learners. Modeling combined with shared reading can be used to help learners become fluent in reading who are deficient readers of a language. In this practice of teaching, the learners read the same text after watching the teacher during shared reading. Hawkins et al. (2011) findings show that adolescents who underwent shared reading practice which included error correction and modeling scored high in sub pacific tests of reading. Kibui (2012) also acknowledges that shared reading

aids phonemic awareness as a result of the use of the same decoding rules which leads to both orthographic and phonological meaning in processing thus dotting decoding regularly.

(d). Guided Reading

Guided reading as a classroom approach is when the teachers work with small groups of students who have similar learning habits to apply reading strategies independently. Karanja (2015) stated that guided reading provided students with the ability to handle difficult texts which developed their ability to be learners. The students' personal interests were taken into consideration through the provision of small group support and explicit teaching. During guided reading, the teachers consider the complexity of the text and help the students understand the text by considering their individual needs and providing appropriate strategies. In their study, Piper et al. (2016) discovered that students had highly developed fluent reading skills, but they were unable to comprehend the text wholly. It is vital for the teachers to give the identification of challenging vocabulary, navigating complex sentence structures, and comprehending new ideas which might have never been learned in the past as top priority. Guided reading plays a big role in developing students' comprehension by ensuring that implicated their problems strategies. Block et al. (2009) found that when teachers conducted extended sessions of explicit guided reading, the reading comprehension of learners significantly improves.

The explicit instructional reading strategies are such that they require students to apply appropriate reading strategies before, during, and after reading. Salavati and Tabatabaei (2018) concluded that guided reading instruction was beneficial to students and hence the teachers.

B. Reading and Comprehension Skills in English

Reading comprehension is the process of simultaneously extracting and constructing meaning through interaction and involvement with written language (Imbaquingo & Cárdenas, 2023). Basically, the process means more than identification of the letters, words, and sentences. According to Goodman, reading is not just identification of letters and words in sequence so that the comprehension is built. Rather reading is a complex interaction in which readers depend on their prior background, or their schemata in order to make predictions and to connect the newcomers to what is familiar to them (Goodman, 2014; Rumelhart, 2017). Basic decoding processes are vital because they interact with the more complex processes of meaning generations (Grabe, 1988). Readers are in contact with texts in order to get information. This is the reading purpose that makes the English for Specific Purposes (ESP) both possible and necessary. In instruction settings, the purpose usually involves the learners' comprehension of the message, which is demonstrable as in answering comprehension questions, writing a summary, or giving an oral report (Hudson, 1991). Reading comprehension helps students understand vocabulary, sentence structure, and deeper meanings. It connects language to real-life contexts, improving fluency, accuracy, and critical thinking. It enhances cognitive skills like attention, memory, and inferencing. Reading also develops problem-solving and critical assessment abilities, supporting intellectual growth and personal development (Eragamreddy, 2025). There is more to these skills including automatic recognition, vocabulary and structure knowledge, knowledge of formal discourse structures, world knowledge and content knowledge, and synthesis and integration and rational interpretation skills (Kilag et al., 2023).

C. Engagement in Reading Activities

Trowler (2010) defines student engagement as the active involvement of students, encompassing their time, effort, and utilization of resources, with the goal of maximizing their learning experiences and improving outcomes and growth. Guthrie et al. (1996) define engaged readers as individuals who possess a deep understanding of cognitive and motivational processes and actively participate in social interactions. Engaged students demonstrate intrinsic motivations, read to accomplish personal objectives, derive pleasure and knowledge from reading, achieve fluency, approach reading tasks eagerly, rely on their reading skills, employ different strategies, actively apply their prior knowledge to understand new texts, and share their attitudes towards reading in a social context (Guthrie et al., 2004).

Four main factors ensure reading engagement: motivation, strategy use, conceptual knowledge, and social interactions. Motivation involves possessing intrinsic and extrinsic motivations to achieve reading, with intrinsic motivation being particularly crucial for high levels of engagement and comprehension. Strategy use refers to the application of cognitive strategies during reading, which increases engagement when implemented before, during, and after reading. Conceptual knowledge involves using both reading and background knowledge to gain new information. Social interaction highlights the importance of engaging with peers and teachers in reading and writing activities, which enhances the retention of knowledge and experiences gained through reading (Guthrie, 2004). Collectively, these factors facilitate better interpretation of texts and strengthen the interaction between the writer and reader.

In the Reading Engagement Model, it is crucial to use reading strategies such as Cooperative Discussion and Questioning (Coop-Dis-Q). Developed by Gauthier (2001), Coop-Dis-Q is applied in five steps: creating heterogeneous and homogeneous groups, preparing a set of questions aligned with lesson objectives, facilitating group discussions and distributing questions, having triads discuss and answer questions while adding new ones, and presenting and discussing answers in larger groups (Top, 2014). Other strategies within the model include note-taking, which involves organizing and summarizing information while integrating background knowledge and personal interpretations (Çetingöz & Açıkgöz, 2009), and the Cloze Technique, where students fill in blanks in a text using contextual clues, thereby enhancing reading comprehension and self-esteem (James, 2004; Şahindokuyucu, 2006).

Based on the theoretical bases and practical implications of integrated reading strategies as well as reported effects, it is necessary that studies be conducted to examine previous empirical studies on the integrated strategies. Although the previous discussion has pointed out the complicated nature of reading, the cognitive and metacognitive requirements, and the teaching methods supporting EFL students' reading comprehension, determining the effectiveness of these methods would need to put the existing research in the context of the current academic discussion. Li et al. (2024) performed the meta-analysis to investigate the effects of four instructional strategies—scaffolding, graphic organizers, interactive read-alouds, and leveled questions—on English learners' reading comprehension. With 2284 participants from 23 studies, it was found that comprehension was increased by each strategy apart as well as their combination on it further. The analysis has showed that the longer intervention lasted the better the outcomes were, which implies that instructional measures should be continuous to be effective. Milliner and Dimoski (2024) conducted a quasi-experiment where a metacognitive intervention to develop listening comprehension of lower-proficient Japanese EFL learners was tested. While the feedback on the intervention was positive and listening self-efficacy of the participants was slightly raised, listening performance was not enhanced, which means that a certain level of proficiency should be achieved to apply such interventions. Irfun (2023) compared the Cooperative Integrated Reading and Composition method with typical teaching strategies on 8th graders in Indonesia. The former was found to be significantly effective on all accounts of increased reading comprehension. There are several other studies which have considered different measures to improve learners' reading and other English skills. Budiman et al. (2023) conducted the review of various effective strategies of culturally and linguistically diverse students concluding that there were at least six of them that worked: apart from cultivating the relationships, they included implementing total physical response. Alghonaim (2020) found that pre-related reading activities significantly raised the level of Saudi EFL learners' reading comprehension. Kim (2020) has suggested the Direct and Indirect Effects Model of Reading, which embeds a number of different concepts of reading and proved its use by testing it for the first graders in Korea with the help of the structure equation model. Mete (2020) showed that the Reading Engagement Model significantly increased reading comprehension as well as the engagement of the sixth graders in Turkey. Finally, Kulo et al. (2019) have proved that the use of the interactive reading strategies in Kenya significantly improved reading skills of the secondary school students with their further consistent use being recommended.

II. METHOD

The study focuses on English language students specializing in English Language and Literature or English Language and Linguistics across five Jordanian universities. Specifically, it includes 651 students at Al al-Bayt University and 402 students at Yarmouk University, both specializing in English Language and Literature, and 496 students at Jordan University of Science and Technology specializing in English Language and Linguistics, totaling 1,549 EFL students. Using convenience sampling, a sample of 211 students was selected for the study in the academic year 2022-2023. The research tool comprised four constructs developed based on the CEFR (Common European Framework of Reference for Languages) scales: Reading and Listening Comprehension (10 items), Integrative Reading Strategies (5 items), Time Spent Reading (10 items), and Level of English Proficiency at the Start of the Study (5 items), see Appendix. The study utilized a 5-point Likert scale for the questions. The analysis was conducted using Model 8 in Hayes' PROCESS Macro for SPSS (v4.1).

III. RESULT AND DISCUSSIONS

The analysis using Model 8 in Hayes' PROCESS Macro for SPSS (v4.1) examines the relationships between Integrative Reading Strategies (IRS), Time Spent on Reading (TSR), Reading and Listening Comprehension (RLC), and the Level of English Proficiency at the start of the study (LEP) with a sample size of 211 participants. This discussion covers the direct and indirect effects of IRS on RLC, with a focus on the moderating role of LEP.

A. Time Spent on Reading (TSR)

The model summary (Table 1) for TSR indicates a strong relationship between the predictors and the outcome variable, with an R-squared value of 0.5512. This means that 55.12% of the variance in TSR is explained by the model, which is statistically significant ($F = 84.7600, p < 0.0001$).

TABLE 1
MODEL SUMMARY FOR TSR

R	R-sq	MSE	F	df1	df2	p
.7425	.5512	.4330	84.7600	3	207	.0000

TABLE 2
MODEL COEFFICIENTS FOR TSR

Coefficient	Value	SE	t-value	p-value	LLCI	ULCI
Constant	1.0158	.5147	1.9736	.0498	.0011	2.0305
IRS	.7475	.1484	5.0357	.0000	.4549	1.0402
LEP	.0966	.1424	.6786	.4981	-.1840	.3772
Int_1 (IRS x LEP)	-.0370	.0405	-.9136	.3620	-.1167	.0428

Looking at the coefficients (Table 2), it can be seen that IRS significantly positively affect TSR, with a coefficient = 0.7475 and $p < 0.0001$. In other words, integrative reading strategies are associated with more time spent on studying. LEP has no significant effect on TSR. At the same time, the LR test for the highest order unconditional interaction for TSR shows both R-squared change and additional p-value of 0.0018 and 0.3620, respectively (Table 3). This indicates that the interaction between IRS and LEP does not significantly contribute to the model.

TABLE 3
INTERACTION EFFECT FOR TSR

R2-change	F	df1	df2	p
.0018	.8347	1	207	.3620

B. Reading and Listening Comprehension (RLC)

From the model summary (Table 4) for the outcome variable RLC, it is seen that the relationship between the predictors and the outcome variable is robust. The R-squared value for the model is 0.6052, which means that 60.52% of the variance in the RLC variable is accounted for by the model, and this is very highly significant – the value of F is 78.9505, and p is less than 0.0001.

TABLE 4
MODEL SUMMARY FOR RLC

R	R-sq	MSE	F	df1	df2	p
.7780	.6052	.4364	78.9505	4	206	.0000

From the coefficients in Table 5, it can be seen that IRS significantly positively affects RLC (coeff = 0.7731, $p < 0.0001$), implying that integrative reading strategies improve reading and listening comprehension. TSR also has a significant and positive effect on RLC (coeff = 0.3036, $p < 0.0001$), meaning that more time spent on reading contributes to a better level of reading and listening comprehension. LEP has a non-significant positive effect on RLC (coeff = 0.1894, $p = 0.1870$). However, the interaction is significant (coeff = -0.0832, $p = 0.0423$), meaning that the effect of IRS on RLC is different depending on the levels of LEP.

TABLE 5
MODEL COEFFICIENTS FOR RLC

Coefficient	Value	SE	t-value	p-value	LLCI	ULCI
Constant	.0180	.5215	.0345	.9725	-1.0102	1.0462
IRS	.7731	.1579	4.8967	.0000	.4618	1.0844
TSR	.3036	.0698	4.3512	.0000	.1660	.4412
LEP	.1894	.1431	1.3238	.1870	-.0927	.4714
Int_1 (IRS x LEP)	-.0832	.0407	-2.0432	.0423	-.1634	-.0029

The test of the highest order unconditional interaction for RLC shows an R-squared change of 0.0080, with an F-value of 4.1746, and a P-value of 0.0423 (Table 6). This means that the interaction is significant and contributes to the model. As such, it can be concluded that LEP level moderates the effect of IRS on RLC.

TABLE 6
INTERACTION EFFECT FOR RLC

R2-change	F	df1	df2	p
.0080	4.1746	1	206	.0423

Looking into the conditional effects in Table 7, it is possible to see that the effect of IRA on RLC tends to decrease with the growth in the value of LEP. Surfacing and excavating the data in depth, it becomes evident that, at the level of LEP = 2.5000, the effect of IRA on RLC proved to be the most impressive since its size amounted to Coeff = 0.5652 and $p < 0.0001$. In its turn, at the level of LEP = 3.7500, the effect appeared to be less potent, with the size reduced to 0.4612. Finally, at the highest point, LEP = 4.5200, the effect of IRA on RLC was the weakest, as its value was 0.3972, all the same, remaining statistically significant at $p < 0.0001$. It means that the use of integrative reading strategies does have an effect on the process of reading and listening comprehension. However, at the same time, the effect tends to grow weaker with the increase in the level of a person's proficiency in English.

TABLE 7
CONDITIONAL EFFECTS OF IRS AT VALUES OF LEP

LEP Value	Effect	SE	t-value	p-value	LLCI	ULCI
2.5000	.5652	.0735	7.6934	.0000	.4204	.7100
3.7500	.4612	.0583	7.9119	.0000	.3463	.5762
4.5200	.3972	.0689	5.7666	.0000	.2614	.5330

C. Conditional Direct Effects of IRS on RLC

The direct effects of IRS on RLC at various levels of LEP are significant and presented in Table 8. Results show that the effect of IRS is profound on RLC when the level of the LEP is low, i.e. its effect size is 0.5652, and it is highly significant, as its p-value is less than 0.0001. However, when LEP is more moderate, i.e. at the level of 3.7500, the effect size is lower, amounting to 0.4612, but the effect is still highly significant, as its p-value is also less than 0.0001. Moreover, when this variable is high, i.e. amounts to 4.5200, the effect size is lower, equal to 0.3972, but the impact is still highly significant, as with the previous cases, its p-value is less than 0.0001. In other words, the level of English proficiency moderates the impact of the IRS on the RLC positively, meaning that the higher the LEP, the lower is the direct effect of the IRS on the RLC.

TABLE 8
CONDITIONAL DIRECT EFFECTS OF IRS ON RLC

LEP Value	Effect	SE	t-value	p-value	LLCI	ULCI
2.5000	.5652	.0735	7.6934	.0000	.4204	.7100
3.7500	.4612	.0583	7.9119	.0000	.3463	.5762
4.5200	.3972	.0689	5.7666	.0000	.2614	.5330

D. Conditional Indirect Effects of IRS on RLC

The indirect effects of IRS on RLC through TSR at different levels of LEP are summarized in Table 9. It is possible to see that the indirect effect of IRS on RLC through TSR is always significant given various levels of LEP. In this respect, at the lower medium of LEP 2.5000, a slightly higher indirect effect is observed: 0.1989, with a 95% confidence interval from 0.0841 to 0.3291. When a more medium range of LEP is employed, it is seen that the indirect effect slightly decreases to 0.1849. Finally, with the highest LEP 4.5200 level, such a parameter is even more reduced: 0.1762. However, all sets of indirect effect are significant as no confidence interval contains zero.

TABLE 9
CONDITIONAL INDIRECT EFFECTS OF IRS ON RLC VIA TSR

LEP Value	Effect	BootSE	BootLLCI	BootULCI
2.5000	.1989	.0624	.0841	.3291
3.7500	.1849	.0563	.0805	.3017
4.5200	.1762	.0546	.0748	.2901

E. Index of Moderated Mediation

The index of moderated mediation in Table 10 provides insight into whether the mediation effect of TSR on the relationship between IRS and RLC is moderated by LEP. The index of moderated mediation for LEP is -0.0112 with a 95% confidence interval from -0.0385 to 0.0145. Since the confidence interval includes zero, this indicates that there is no significant moderated mediation effect. In other words, the mediation effect of TSR in the relationship between IRS and RLC is not significantly influenced by the level of LEP.

TABLE 10
INDEX OF MODERATED MEDIATION

Index	BootSE	BootLLCI	BootULCI
LEP	-.0112	.0131	-.0385

F. Key Findings

The findings illustrated that there is a strong relationship between IRS and both TSR and RLC, and the level of English proficiency plays a significant moderating effect on the connection between IRS and RLC. However, the outcome that holds even greater importance is that there are significant relationships between IRS and RLC, both direct and indirect, via TSR with the level of English proficiency on the direct relationship. Specifically, while IRS has a robust positive influence on TSR, and TSR impacts RLC the moderating effect of LEP on the connection between these two factors is not significant. Conversely, the direct impact of IRS on RLC is not significant. The significant direct relationship between the IRS and RLC with stronger moderation indicates that beneficiaries with a higher initial level of English proficiency are receiving the IRS would not receive the same benefits in their RLC as weaker English speakers.

In other words, the more proficient an English speaker, the lesser the level of their listening comprehension improvements from the IRS intervention.

These results provide interesting implications on the influence of Integrative Reading Strategies (IRS) on reading and listening comprehension and the time spent on reading. While IRS has a strong positive effect on the TSR and RLC, the level of English proficiency has a significant effect on the IRS impact on RLC. Particularly, it was observed that IRS significantly affects the RLC indirectly through the TSR and effects having low levels of English proficiency moderate the effect of IRS on RLC. Further, the direct effect of IRS on RLC is not significant, specifically for participants with a high level of English proficiency.

G. Comparison With Related Studies

(a). What Is New?

This study introduces a nuanced understanding of the interaction between IRS, TSR, RLC, and LEP, emphasizing the moderating role of English proficiency. The finding that higher proficiency students benefit less from IRS in terms of RLC improvement contrasts with the typical assumption that proficiency invariably enhances comprehension gains. This insight contributes to a growing body of literature emphasizing the need for tailored instructional strategies based on proficiency levels. The study aligns with the findings of Alghonaim (2020), who suggested that pre-related reading activities significantly enhance EFL learners' comprehension but adds complexity by incorporating the moderation effect of proficiency levels.

(b). What Is Already Known?

The literature review indicated that the effects of IRS on reading comprehension and engagement are well documented in the literature. The relation is mentioned by Merga (2017) and Gilakjani and Sabouri (2016), who stated that such interactive reading strategies facilitate comprehension and engagement. Additionally, Guthrie et al. (2004) found a significant connection between time spent on reading and comprehension, as well as a need for cognitive and motivational predictors. The results of the present study support these findings and provide additional evidence for the beneficial influence of IRS, revealed indirectly through the growth of TSR, on RLC.

(c). What Is Conflicting?

The study's findings regarding the non-significant direct impact of IRS on RLC for high-proficiency students conflict with some previous findings. In particular, Kim (2020) suggested that there is a linear relationship between the available proficiency and gains in comprehension when reading is applied. Thus, I believe that a study can provide a background for discovering more about these thresholds when proficiency affects the implementation of certain strategies to realize whether such findings are valid. I should note that Milliner and Dimoski (2024) ascertained that IRS can offer low-proficiency students reading comprehension without significant change. In the present case, one can see that even high-proficiency students may sometimes fail to demonstrate improved comprehension through IRS. As soon as different factors can be played out, this issue can be better understood due to these findings.

H. Importance and Impact

I believe that the study's findings are important for educators and curriculum developers who are willing to use the opportunities of reading strategies to assist their students. If these tools are not capable of helping all students equally, it is inevitable to design the approach based on the specifics of the students and their proficiency levels. It can also become a premise for the further creation of strategies that can be impactful for all proficiency levels. In addition, these findings can influence EFL education in the contexts such as those provided by the author when multicultural, and thus, multilingual learners are involved. It will be possible to offer different students various activities rather than impose a one-size-fits-all approach.

IV. CONCLUSION

The paper adds to our understanding of how integrative reading strategies interact with proficiency levels to impact reading and listening comprehension. It plays an important role as it points out the moderating role of proficiency, thereby offering applicable implications for educators to focus on comprehending diverse learners. There is a need for further examination of the underlying mechanisms of the interaction between both variables, as well as how a variety of instructed strategies can be best optimized for each level of proficiency. Eventually, this study illuminates how English proficiency moderates the association between Integrative Reading Strategies (IRS) and Reading and Listening Comprehension (RLC), but it has significant drawbacks. The study covered a specific demography, which may not reflect the diversity of students in different schools. Self-reported measures may also influence participants' views of competence and comprehension increases. To increase generalizability, future study should examine these correlations in more diverse populations, such as learners from different languages and cultures. IRS's long-term effects on proficiency levels may be better understood through longitudinal investigations. Additionally, studying motivation, cognitive engagement, and socio-cultural variables may provide a more complete picture of IRS, TSR, and RLC

dynamics. Adaptive instructional tactics based on competency levels could improve educational results and more equitably spread IRS advantages across learner profiles.

APPENDIX. QUESTIONNAIRE STATEMENTS

Developed from CEFR (2021). Council of Europe, Council for Cultural Co-operation, Education Committee, & Modern Languages Division. (2021). *Common European framework of reference for languages: Learning, teaching, assessment*. Cambridge University Press.

Reading and Listening Comprehension

- I can understand the main idea of a text on a familiar topic.
- I am able to identify specific details in an academic article.
- I can follow the argument in a text on a complex subject.
- I am able to infer the meaning of unknown words from the context.
- I can summarize the main points of a written text.
- I can understand the main points of a lecture in my field of study.
- I am able to follow conversations between native speakers in English.
- I can understand instructions and announcements in English.
- I am able to catch specific details when listening to audio recordings.
- I can comprehend the gist of TV news and current affairs programs.

Integrative Reading Strategies

- I regularly use skimming and scanning techniques to locate information in texts.
- I often summarize what I have read to enhance understanding.
- I make predictions about the content before reading a text.
- I frequently ask questions about the text while reading to improve comprehension.
- I use graphic organizers (e.g., mind maps, charts) to organize information from readings.

Time Spent Reading

- I spend many hours per week reading academic materials in English.
- I set aside specific times for reading activities each day.
- I read for pleasure in English often.
- I track the amount of time I spend reading different types of texts.
- I am consistent in my reading habits over a semester.
- I frequently engage in group discussions about readings in English.
- I participate in online forums or discussion boards related to my readings.
- I seek feedback from peers or instructors about my understanding of readings.
- I am involved in study groups where reading materials are discussed.
- I find discussing readings with others helps improve my comprehension.

Level of English Proficiency at the Start of the Study

- I can understand instructions given in English without needing translation.
- I am able to express my opinions clearly in English during conversations.
- I am confident in writing essays or reports in English.
- I find it easy to read and understand academic texts in English.
- I can follow and participate in discussions conducted entirely in English.

REFERENCES

- [1] Alghonaim, A. S. (2020). Impact of related activities on reading comprehension of EFL students. *English Language Teaching*, 13(4), 15–27.
- [2] Block, C. C., Whiteley, C. S., Parris, S. R., Reed, K. L., & Cleveland, M. D. (2009). Instructional approaches that significantly increase reading comprehension. *Journal of Educational Psychology*, 101(2), 262–281.
- [3] Budiman, B., Ishak, J. I. P., Rohani, R., Lalu, L. M. H., Jaelani, S. R., & Jaelani, M. P. (2023). Enhancing English language proficiency: Strategies for improving student skills. *Journal of Scientific Research, Education, and Technology*, 2(3), 1118–1123.
- [4] CEFR. (2021). Council of Europe, Council for Cultural Co-operation, Education Committee, & Modern Languages Division. (2021). *Common European framework of reference for languages: Learning, teaching, assessment*. Cambridge University Press.
- [5] Çetingöz, D., & Açıkgöz, K. (2009). Not alma stratejisinin öğretiminin tarih başarısı ve hatırd tutma üzerindeki etkileri [The Effects of Note-taking Strategy on History Achievement and Retention]. *Kuram ve Uygulamada Eğitim Yönetimi*, 15(60), 577–600.
- [6] Chang, C.-S., & Millett, S. (2013). Improving reading rates and comprehension through timed repeated reading. *Reading in a Foreign Language*, 25(2), 126–148.

- [7] Dickens, R. H., & Meisinger, E. B. (2016). Examining the effects of skill level and reading modality on reading comprehension. *Reading Psychology, 37*(2), 318–337. <https://doi.org/10.1080/02702711.2015.1055869>
- [8] Douglas, K., Barnett, T., Poletti, A., Seaboyer, J., & Kennedy, R. (2016). Building reading resilience: Re-thinking reading for the literary studies classroom. *Higher Education Research and Development, 35*(2), 254–266. <https://doi.org/10.1080/07294360.2015.1087475>
- [9] Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(2), 405–432.
- [10] Eragamreddy, N. (2025). Reading comprehension and semantic processing. *ISRG Journal of Arts, Humanities & Social Sciences, 3*(2), 166–177.
- [11] Fresneda, R. G., & Iváñez, M. P. (2022). Effects of the development of reading comprehension questions on learning improvement. *Revista de Lenguas para Fines Específicos, 28*(1), 61–74.
- [12] Gauthier, L. R. (2001). Coop-Dis-Q: A reading comprehension strategy. *Intervention in School and Clinic, 36*(4), 217–220.
- [13] Gilakjani, A. P., & Sabouri, N. B. (2016). How can students improve their reading comprehension skills? *Journal of Studies in Education, 6*(2), 229–240.
- [14] Goodman, K. S. (2014). Reading: A psycholinguistic guessing game. In *Making sense of learners making sense of written language* (pp. 103–112). Routledge.
- [15] Grabe, W. (1988). Reassessing the term “interactive”. *Interactive Approaches to Second Language Reading, 6*, 56–70.
- [16] Guthrie, J. T., Wigfield, A., Barbosa, P., Perencevich, K. C., Taboada, A., Davis, M. H., Scaffidi, N., & Tonks, S. (2004). Increasing reading comprehension and engagement through concept-oriented reading instruction. *Journal of Educational Psychology, 96*(3), 403–423.
- [17] Guthrie, J. T., Wigfield, A., Metsala, J. L., & Cox, K. E. (1999). Motivational and cognitive predictors of text comprehension and reading amount. *Scientific Studies of Reading, 3*(3), 231–256.
- [18] Hawkins, R. O., Hale, A. D., Sheeley, W., & Ling, S. (2011). Repeated reading and vocabulary-previewing interventions to improve fluency and comprehension for struggling high-school readers. *Psychology in the Schools, 48*(1), 59–77. <https://doi.org/10.1002/pits.20545>
- [19] Hudson, T. (1991). A content comprehension approach to reading English for science and technology. *TESOL Quarterly, 25*(1), 77–104.
- [20] Imbaquingo, A., & Cárdenas, J. (2023). Project-based learning as a methodology to improve reading and comprehension skills in the English language. *Education Sciences, 13*(6), Article 587. <https://doi.org/10.3390/educsci13060587>
- [21] Irfun, I. (2023). The implementation of cooperative integrated reading and composition (CIRC) method in improving student's reading comprehension at SMP Muhammadiyah 2 Depok Sleman. *Indonesian Journal of Education, 3*(1), 89–113.
- [22] James, W. (2004). *Special education and social development*. Anmol Publications PVT. LTD.
- [23] Kabita, D. N. (2015). *Instructional strategies used to enhance reading comprehension among primary school pupils: A study of Starehe Sub-County, Nairobi County, Kenya* [Unpublished doctoral dissertation]. Moi University.
- [24] Karanja, W. (2015). *Effects of reading difficulties on academic performance among form three students in public secondary schools, Kiambu County, Kenya* [Unpublished master's thesis]. Kenyatta University.
- [25] Kibui, A. W. (2012). *Reading and comprehension in the African context: A cognitive enquiry*. Zapf Chancery Publishers.
- [26] Kilag, O. K., Quezon, J., Pansacala, J. A., Suba-an, J., Kilag, F., & Esdrelon, K. G. (2023). Advancing reading skills: State-of-the-art remediation strategies. *Excellencia: International Multi-disciplinary Journal of Education, 1*(1), 15–29.
- [27] Kim, Y. S. G. (2020). Toward integrative reading science: The direct and indirect effects model of reading. *Journal of Learning Disabilities, 53*(6), 469–491.
- [28] Kulo, S. A., Odundo, P. A., & Kibui, A. (2019). Interactive reading strategies on learner achievement in reading skills in secondary schools in Kisumu County, Kenya. *International Journal of English Language Teaching, 7*(5), 1–13.
- [29] Lee, J., & Yoon, S. Y. (2017). The effects of repeated reading on reading fluency for students with reading disabilities: A meta-analysis. *Journal of Learning Disabilities, 50*(2), 213–224.
- [30] Li, J. T., Tong, F., Irby, B. J., Lara-Alecio, R., & Rivera, H. (2024). The effects of four instructional strategies on English learners' English reading comprehension: A meta-analysis. *Language Teaching Research, 28*(1), 231–252.
- [31] Maingi, J. M. (2015). *Language teachers' perceptions and practices in enhancing learners' strategy use for reading proficiency in selected secondary schools in Kenya* [Doctoral dissertation]. Kenyatta University, Kenya.
- [32] Merga, M. (2017). Interactive reading opportunities beyond the early years: What educators need to consider. *Australian Journal of Education, 61*(3), 328–343.
- [33] Mete, G. (2020). The impact of the reading engagement model on the 6th graders' reading comprehension achievement. *African Educational Research Journal, 8*(3), 499–510.
- [34] Milliner, B., & Dimoski, B. (2024). The effects of a metacognitive intervention on lower-proficiency EFL learners' listening comprehension and listening self-efficacy. *Language Teaching Research, 28*(2), 679–713.
- [35] Mraz, M., Nichols, W., Caldwell, S., Beisley, R., Sargent, S., & Rupley, W. (2013). Improving oral reading fluency through readers' theatre. *Reading Horizons, 52*(2), 163–180.
- [36] Piper, B., Schroeder, L., & Trudell, B. (2016). Oral reading fluency and comprehension in Kenya: Reading acquisition in a multilingual environment. *Journal of Research in Reading, 39*(2), 133–152.
- [37] Press, M., Henenbers, E., & Getman, D. (2011). Nonfiction read-alouds: The why of and how to. *The California Reader, 45*(1), 36–43.
- [38] Rumelhart, D. E. (2017). Schemata: The building blocks of cognition. In *Theoretical issues in reading comprehension* (pp. 33–58). Routledge.
- [39] Şahindokuyucu, A. (2006). *A study of cloze and multiple-choice tests for measuring reading comprehension of preparatory students* [Unpublished master's thesis]. Abant İzzet Baysal Üniversitesi, Bolu.
- [40] Salavati, A., & Tabatabaei, O. (2018). Effect of interactive post-reading tasks on reading comprehension of young Iranian young adults pre-intermediate EFL learners. *International Journal of Research Studies in Language Learning, 7*(4), 1–11.

- [41] Steinert, P. (2012). *Interactive read-alouds: A professional development project for improving vocabulary and comprehension in preschoolers*. Retrieved April 2016, 2025, from <https://dspace.sunyconnect.suny.edu>.
- [42] Top, M. B. (2014). *İşbirlikli tartışma sorgulama (ITS) stratejisinin ilköğretim 4. sınıf öğrencilerinin okuduğunu anlama başarılarına etkisi* [The effect of the collaborative discussion inquiry (CDI) strategy on fourth-grade primary school students' reading comprehension achievement] [Unpublished master's thesis]. Mustafa Kemal Üniversitesi, Sosyal Bilimler Enstitüsü, Hatay.
- [43] Trowler, V. (2010). *Student engagement literature review*. The Higher Education Academy. Retrieved January 6th, 2017, from https://www.heacademy.ac.uk/system/files/StudentEngagementLiteratureReview_1.pdf. Accessed on January 7th, 2025.
- [44] Vasinda, S., & McLeod, J. (2011). Extending readers theatre: A powerful and purposeful match with podcasting. *The Reading Teacher*, 64(7), 486–497. <https://doi.org/10.1598/RT.64.7.2>
- [45] Walch, R. L. (2016). Read alouds and their impact on students' literacy development [Master's thesis, The College at Brockport: State University of New York]. *Education and Human Development Master's Theses*, 669. Retrieved January 7th, 2025, from https://digitalcommons.brockport.edu/ehd_theses/669.
- [46] Yildirim, K., Rasinski, T., & Kaya, D. (2017). Fluency and comprehension of expository texts in Turkish students in grades four through eight. *Educational Sciences: Theory & Practice*, 17(4), 1233–1250. <https://doi.org/10.12738/estp.2017.4.0339>
- [47] Young, C., & Rasinski, T. (2017). Readers theatre: Effects on word recognition automaticity and reading prosody. *Journal of Research in Reading*, 40(1), 5–21. <https://doi.org/10.1111/1467-9817.12074>
- [48] Yusuf, H. O. (2015). Interactive activities and its impact on students' performance in reading comprehension in senior secondary schools in Kaduna, Nigeria. *Procedia - Social and Behavioral Sciences*, 191, 523–528. <https://doi.org/10.1016/j.sbspro.2015.04.446>



Monther A. Alogiliy was born in Balila – Jordan in 1971.

Bachelor of Arts in English Literature. Poona University. Pune - India. 1992.

Master of Arts in English Literature. Jodhpur University. Jodhpur - India. 1995.

PhD, Applied English Language. Reading Strategies & Teaching English as a Foreign Language (TEFL). University Of Athens. Athens - Greece. 2014.

Currently he is an assistant professor in the English department and literature in Al-Salt College for Humanitarian Studies at Al-Balqa Applied University in city of Al-Salt – Jordan.

His current and previous research interests are: (Applied English, Teaching English as a Foreign Language, English for Specific Purposes, Reading Strategies, and Developing Conversational Skills for EFL Learners, Methods of Teaching English, Teaching and Developing Basic English Language Skills for EFL Learners

such as Listening, Speaking and Reading).

Dr. Alogiliy also is a member in (APETAU) Association of Professors of English and Translation at Arab Universities. He was awarded fully funded scholarship from the European Union through the National Foundation for Scholarships in Greece (I.K.Y) based on competitive criteria with a large group of researchers.