

Reading Attitude and Comprehension of Senior High School Learners in Cluster 1

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Abstract. The study was conducted to determine the relationship between reading attitude and comprehension of senior high school learners in cluster 1, Davao City Division. The study used a non-experimental descriptive-correlational research design, where it utilized an adapted survey instrument to gather responses from the 100 randomly selected teacher-respondents. Data gathered were treated using Mean scores with descriptive interpretation, Pearson r and Simple Linear Regression Analysis. Findings revealed that the reading attitude of Senior High School Learners in terms of enjoyment in reading, willingness to read challenging materials, frequency of reading and attitude towards reading assignments is moderately extensive; likewise, comprehension of senior high school learners in terms of making inferences, understanding vocabulary, understanding the main idea and monitoring comprehension is moderately extensive. There is a significant relationship between reading attitude and comprehension of senior high school learners. Indicators of reading attitude in terms of reading frequency, enjoyment, willingness to read challenging materials and attitude towards reading assignments significantly influenced comprehension among senior high school learners. Future research may identify barriers and challenges teachers face and investigate factors such as access to technology, teacher readiness, support systems, and institutional policies. This research may be used to develop strategies to overcome these challenges and promote the successful implementation of innovative teaching methods.

KEY WORDS

1. reading attitude. 2. comprehension. 3. challenging materials. Date Received: May 21, 2024 — Date Reviewed: May 23, 2024 — Date Published: June 1, 2024

1. Introduction

cation and learning, particularly at the senior high school level. However, students' attitudes towards reading have been a cause for concern in recent times, as many learners show disinterest and lack of motivation in reading. Attitude towards reading refers to a learner's feelings and beliefs about reading, an essential factor affecting students' motivation and engagement

Reading comprehension is crucial to edu- in reading activities. Many factors influence students' attitudes toward reading, including the teaching approach, curriculum, and reading materials used. In addition, the home environment and parental support also play a crucial role in shaping students' attitudes toward reading.

> Several studies have been conducted worldwide to explore students' attitudes towards reading and reading comprehension. Al-Nharat

(2017) found that Jordanian students' attitudes towards reading were generally negative, with learners associating reading with boredom and disinterest. A similar study in Nigeria by Adeyemo and Adeyemo (2017) revealed that secondary school students also showed a lack of interest and motivation in reading, which negatively impacted their reading comprehension skills. In contrast, a study by Wu and Huang (2017) in Taiwan showed that students who had positive attitudes towards reading had higher reading comprehension scores, indicating a correlation between attitude and performance. Furthermore, a study by Wang, Zhang, and Lin (2017) in China found that students who engaged in extensive reading had better reading comprehension skills than those who did not.

Studies have shown that the teaching approach and reading materials significantly affect students' attitudes toward reading. For instance, a study by Li (2017) in China found that learners who were taught using a student-centered approach had more positive attitudes towards reading than those taught using a teacher-centered approach. Similarly, a study by Lertola and Ala-Kokko (2017) in Finland revealed that learners who read authentic literature had more positive attitudes towards readititudes towards readititudes towards reading than those study by Lertola and Ala-Kokko (2017) in Finland revealed that learners who read authentic literature had more positive attitudes towards reading than those who read textbooks.

A study by Hattie and Donoghue (2016) in Australia revealed that many senior high school learners had poor reading comprehension skills, with many learners failing to understand and retain information from the texts they read. Similarly, a study by Dehaene, Meyniel, Wacongne, Wang, and Pallier (2015) in France found that many senior high school learners had difficulty comprehending complex texts, which affected their academic performance.

The Philippines, with its rich cultural heritage and a diverse population of approximately 110 million people, has a high literacy rate of around 96 percent. However, the country still faces significant challenges in promoting a culture of reading among its youth. A study conducted by the Department of Education in 2016 found that only 39.7 percent of senior high school students in the Philippines have satisfactory reading comprehension skills, highlighting the urgent need to address the issue. Cayaban (2018) found that Filipino students' attitudes toward reading were generally negative, with learners associating reading with boredom and disinterest. Parents play a critical role in this effort by encouraging their children to read and providing them with access to a wide range of reading materials. Schools can also improve access to books and other reading materials by investing in libraries and other resources promoting reading.

A similar study in the Philippines by Carreon and Abuan (2019) revealed that senior high school students also showed a lack of interest and motivation in reading, which negatively impacted their reading comprehension skills. Promoting a culture of reading in schools and at home is essential. One of the primary factors contributing to this issue is the lack of emphasis on reading as a core skill in the country's education system. While reading is taught in schools, it is often treated as a secondary skill rather than a primary one, with more attention being given to math and science. As a result, many students do not develop a strong foundation in reading and struggle with comprehension, particularly in their senior high school years.

The situation is particularly alarming for senior high school learners who are preparing to enter college or the workforce. These students are expected to have a higher level of proficiency in reading and comprehension, but many struggle to meet these expectations. In the researcher's locality, many schools lack adequate libraries, and students often have limited access to books and other reading materials, further limiting their exposure to diverse reading materials and reducing their motivation to read. Moreover, the proliferation of digi-

issue, with many students turning to social media, gaming, and other forms of entertainment instead of reading. This trend has led to a de- of higher education and the workforce.

tal media and the internet has exacerbated the cline in reading habits and comprehension skills among young learners, making it increasingly challenging for them to cope with the demands

Methodology 2.

This chapter discusses the methodical process for conducting the study. This includes selecting the study design, respondents and sampling method, research instruments to be used in data gathering, procedure, ethical considerations, and lastly, data analysis. These steps are considered essential to ensuring appropriateness and correctness in the conduct of the methodical steps.

2.1. *Research Design*—This study used a non-experimental descriptive-correlational and predictive research design. This refers to studies that describe the variables and the relationships that occur naturally between and among them. Further, the study variables are classified as independent (predictor) and dependent (outcome). Moreover, any scientific process begins with a description, based on observation, of an event or events, from which theories may later be developed to explain the observations (Pallant, 2020). On the other hand, predictive research is chiefly concerned with predicting outcomes, consequences, costs, or effects. This type of research tries to extrapolate from the analysis of existing phenomena, policies, or other entities in order to predict something that has not been tried, tested, or proposed before (Gujarati, 2020). Descriptive-correlational research design is a non-experimental approach that involves observing and describing a phenomenon or behavior, and examining the relationship between variables. This design is useful when the researcher is interested in exploring the relationship between two or more variables without manipulating them. Correlational research design is useful for investigating the relationship between two or more variables. In the study of students' attitudes toward reading and reading comprehension among senior high school learners, a correlational research design can be applied to examine the association between these

two variables. Using a correlational design, the researcher could determine if there is a relationship between the two variables and the strength and direction of that relationship.

Research Respondents—Respondents 2.2. of the study were the Teachers of Cluster 1 Senior High Schools in Davao City Division. Using Raosoft sample size calculator, a total of 100 respondents were taken randomly from each respective secondary school. One randomly determined, the respondents were informed through online platforms and face-to-face considering the availability of the Wifi Connections; they likewise oriented about the purpose and importance of the study. These respondents are teaching Grade 11 and 12 learners in the respective schools as much as possible to measure competence and how they function and contribute to the learning outcomes given the new normal learning system during SY 2022-2023. The ethics of research and the process of collecting survey responses were explicitly discussed with the respondents, and observance of health protocol was strictly implemented based on Executive Order 31 S 2020 to avoid possible contamination and lower the risk of contamination.

2.3. Research Instrument—This proposed research study used a self-made survey instrument. Items were adapted from the contents of the reviewed literature. There are two parts to the survey questionnaire: the Senior High School Teachers' perception of students' atti-

sion. On the other hand, the second part of the survey is the reading comprehension among senior high school learners as perceived by the teachers. Further, the survey statements were subjected to a test-retest or validity and reliability testing using Cronbach Alpha at a .05

tudes toward reading and reading comprehen- level of confidence. They generated an alpha Cronbach of 0.867, which means that the unidimensional reliability when it comes to internal consistency is excellent. The questionnaire used a 5-point Likert scale to determine the attitude toward reading. Scale, descriptive rating and interpretation are provided below:

Scale	Descriptive Rating	Interpretation
4.20 - 5.00	Very Extensive	The attitude towards reading is always man- ifested
3.40 - 4.19	Extensive	The attitude towards reading is oftentimes manifested
2.60 - 3.39	Moderately Extensive	The attitude towards reading is sometimes manifested
1.80 – 2.59	Less Extensive	The attitude towards reading is rarely mani- fested
1.00 – 1.79	Not Extensive	The attitude towards reading is not mani- fested

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1.00 – 1.79	Not Extensive	The reading comprehension is not mani- fested

sion to conduct the study. Before collecting data, the researcher must obtain permission from the appropriate authorities, such as the research adviser and the Dean of the Rizal Memorial Colleges, and the top management of DepEd Davao City Division through the chan-

2.4. Data Gathering Procedure-Permis- nel. This permission-seeking process typically involves submitting a research proposal that includes information about the study design, procedures, and potential risks and benefits. Distribution and retrieval of the questionnaire. The researcher ensured the accuracy and completeness of the data. The distribution and retrieval

dardized and systematic manner. Collation and statistical treatment of data. The ensured that

2.5. Data Analysis—Mean scores and standard deviation were used to address statement problems posed in statement problem number one (1) regarding the extent of students' attitude towards reading and statement problem number two (2) regarding the extent of reading comprehension of senior high school learners. Pearson Product Moment Correlation Coefficient or Pearson-r was used to determine its strength-/direction significant relationship between the extent of students' attitude towards reading and

of questionnaires should be conducted in a stan- the general conditions should be followed for the collation and statistical treatment of data as part of the data-gathering procedure.

> reading comprehension of senior high school learners in Cluster 1 schools of Davao City Division. Linear Regression analysis was used to address statement problem number 4, on the indicators of students' attitude towards reading that significantly influence reading comprehension of senior high school learners in Cluster 1 schools of Davao City Division. All data processing and analysis were performed using the Jeffrey's Statistics Amazing Program (JASP) version 0.12.20. When results yielded, discussions and interpretations followed.

3. **Results and Discussion**

This chapter deals with presenting, analyzing, and interpreting data gathered. Tabular and textual presentation is presented to make more meaningful in the analysis and drawing out of implications. This further shows evidence to support the claim posed in the hypothesis.

reading attitude of Senior High School Learners. The result is focused on the highest and lowest mean ratings of indicators which are as follows: enjoyment in reading (3.39), willingness to read challenging materials (3.25), frequency of reading (3.34) and attitude towards

Table 1 shows the summary of the extent of reading assignment (2.79) are sometimes manifested, thus, moderately extensive. The overall mean rating of 3.19 denotes the extent of reading attitude of Senior High School Learners is sometimes manifested, thus, moderately extensive.

Table 1. Summary on the Extent of Reading Attri	tude of Senior High School Learners
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No	Reading Attitude of Senior High School Learners	Mean	Descriptive Equiva- lent	
1	frequency of reading		Moderately Extensive	
2	enjoyment in reading	3.39	Moderately Extensive	
3	willingness to read challenging materials	3.25	Moderately Extensive	
4	attitude towards reading assignment	2.79	Moderately Extensive	
	Overall Mean	3.19	Moderately Extensive	

Overall, these studies suggest that students' attitude towards reading can be an important indicator of their overall attitude towards reading, when students view reading assignments as

relevant, interesting, and helpful in improving their skills, they are more likely to develop a positive attitude towards reading and engage in independent reading outside of class.

Table 2 shows the summary of the extent of comprehension of senior high school learners. The result is focused on the highest and lowest mean ratings of indicators which are as follows: fested; and understanding vocabulary (3.29), thus, moderately extensive.

understanding the main idea (3.15) and monitoring comprehension (3.11) are sometimes manifested. The overall mean rating of 3.28 denotes that extent of comprehension of senior making inferences (3.59) is oftentimes mani- high school learners is sometimes manifested,

No	Comprehension of Senior High School Learners	Mean	Descriptive Equiva- lent
1	Understanding The Main Idea	3.15	Moderately Extensive
2	Making Inferences	3.59	Extensive
3	Monitoring Comprehension	3.11	Moderately Extensive
4	Understanding Vocabulary	3.29	Moderately Extensive
	Overall Mean	3.28	Moderately Extensive

Table 2. Summary of The Extent of Comprehension of Senior High School Learners

The studies emphasized the importance of developing vocabulary knowledge to enhance reading proficiency. The use of graphic organizers and the Vocabulary Self-Selection Strategy proved to be effective methods in improving students' vocabulary acquisition and reading comprehension. These findings have significant implications for the development of reading programs and instructional strategies in senior high schools.

Significant Relationship between Reading Attitude and Comprehension of Senior High School Learners

Table 3 revealed the yielded results of the significant relationship between reading attitude and comprehension of senior high school learners. It provides an information that the posed null hypothesis stating that there is no significant relationship between reading attitude and comprehension of senior high school learners. It can be depicted that Pearson's Correlation generated a significant correlation between teaching strategies on the use of manipulatives (r=0.879; p;.002) and students' understanding in mathematical concepts.

Table 3. Significant Relationship between Reading Attitude and Comprehension of Senior High School Learners

Variables Decision	Reading Attitude 0.879		1	Interpretation Reject H0
Comprehension	0.879	< 0.002	Significant	Reject II0
*significant @p< 0.05.				

One of the most prominent theoretical frameworks used to explain students' attitude towards reading and reading comprehension is the Transactional Theory of Reading, proposed by Louise Rosenblatt in 1978. According to this theory, reading is a transactional process between the reader and the text. It posits that the meaning of a text is not solely determined by the text itself, but by the interaction between the reader's prior knowledge, experiences, attitudes, and motivations, and the text itself. This theory recognizes that readers have different experiences and knowledge, which affect their understanding of the text. Hence, the meaning of a text is subjective and varies from one reader to another. Several studies have explored the relevance of the Transactional Theory of Reading to senior high school learners. For instance, a study by Martin et al. (2019) found that students' prior knowledge and motivation to read had a significant impact on their reading comprehension. Another prominent theoretical framework that explains students' attitude towards reading and reading comprehension is the Self-Regulated Learning Theory (SRL). SRL posits that learners can regulate their own learning process by setting goals, monitoring their progress, and evaluating their performance. It recognizes that students' attitudes, motivation, and cognitive strategies play a crucial role in their ability to comprehend what they read. Sev-

Social Cognitive Theory (SCT) has also been proposed as a theoretical framework to explain students' attitudes toward reading and reading comprehension. SCT posits that learning occurs through observation, modeling, and reinforcement. It recognizes the importance of social factors such as peers, family, and teachers in shaping students' attitudes and behaviors toward reading.

In the Philippine setting, several theories interpretation of the text. A study conducted by have been proposed to understand students' atti- Lazo, Emetrio, and Casimiro (2019) examined

eral studies have explored the relevance of the Self-Regulated Learning Theory to senior high school learners. For instance, a study by Ye et al. (2018) investigated the relationship between self-regulated learning and reading comprehension among 400 senior high school students in China. The results showed that students who had high levels of self-regulated learning had better reading comprehension than those with low levels of self-regulated learning.

Indicators of Reading Attitude that Significantly Influence Comprehension among Senior High School Learners

Table 4 depicts the simple regression coefficient analysis on the reading attitude that significantly influence comprehension among senior high school learners. Indicators of reading attitude in terms of frequency of reading (0.000), enjoyment in reading (0.002), willingness to read challenging materials (0.000) and attitude towards reading assignment (0.001)significantly influence comprehension among senior high school learners. Meanwhile, the R2 value of 0.866 suggests that the indicators of reading attitude, is explained by 86.6In addition, the F-value shows all the sums of squares, given regression being the model and Residual being the error. The F-value (264.597) and Fstatistic is significant p<.001, tells that the model is significantly a better predictor of students' understanding in mathematical concepts.

tudes towards reading and reading comprehension among senior high school learners. One of these theories is the Transactional Theory of Reading proposed by Rosenblatt (1995), which posits that reading is an interactive process between the reader and the text. According to this theory, readers' attitudes towards reading are influenced by their prior experiences, expectations, and personal goals, which affect their interpretation of the text. A study conducted by Lazo, Emetrio, and Casimiro (2019) examined

Model	В	Beta	Standard Error	p-value	Decisions
H (Intercept)	4.145		0.079	0.001	
H (Intercept)	0.313		0.175	0.270	0.204
FR (Frequency of Reading)	0.807	0.107	0.102	0.000	*Reject H0
ER (Enjoyment in Reading)	0.441	0.108	0.136	0.002	*Reject H0
WRCM (Willingness to Read	0.202	0.097	0.210	0.000	*Reject H0
Challenging Materials)					
ATR (Attitude Towards Reading	0.683	0.086	0.499	0.001	*Reject H0
Assignment)					
$R^2 = 0.866$ F-val-					
ue = 264.597 p-					

Table 4. Regression Coefficient Analysis on Indicators of Reading Attitude that Significantly Influence Comprehension among Senior High School Learners

 $\frac{\text{value} = < 0.001}{\text{*Significant @ p < 0.05}}$

the relationship between senior high school students' attitudes towards reading and their reading comprehension skills in the Philippines. The study used a survey questionnaire and a reading comprehension test to collect data

nior high school students. The results showed a positive correlation between students' attitudes towards reading and their reading comprehension skills.

4. Conclusions and Recommendations

This chapter presents the findings, conclusion and recommendation based on the results of the data analyzed, discussed, and drawn implications. Findings are based on the posed statement of the problem; conclusions are based on the findings generated and recommendations are based on the implications of the discussions.

4.1. Findings—The following are findings of the study given the results in the presentation, analysis and discussions. The extent of reading attitude of Senior High School Learners in terms of enjoyment in reading, willingness to read challenging materials, frequency of reading and attitude towards reading assignment are sometimes manifested, thus, moderately extensive. The overall mean rating denotes the extent of reading attitude of Senior High School Learners is sometimes manifested, thus, moderately extensive. The extent of comprehension of senior high school learners in terms of making inferences is oftentimes manifested; and understanding vocabulary, understanding the main idea and monitoring comprehension are sometimes manifested. The overall mean rating denotes that extent of comprehension of senior high school learners is sometimes manifested, thus, moderately extensive. Pearson's Correlation generated a significant correlation between teaching strategies on the use of manipulatives and students' understanding in mathematical concepts. Indicators of reading attitude in terms of frequency of reading, enjoyment in reading, willingness to read challenging materials and attitude towards reading assignment significantly influence comprehension among senior high school learners.

4.2. *Conclusions*—Given the findings of the study presented, the following are conclu-

High School Learners in terms of enjoyment in reading, willingness to read challenging materials frequency of reading and attitude towards reading assignment is moderately extensive. sented conclusions of the study, the following The comprehension of senior high school learners in terms of making inferences, understanding vocabulary, understanding the main idea and monitoring comprehension is moderately extensive. There is a significant relationship between teaching strategies on the use of manipulatives and students' understanding in mathematical concepts. Indicators of reading attitude in terms of frequency of reading, enjoyment in reading, willingness to read challenging materials and attitude towards reading assignment significantly influenced comprehension among senior high school learners. The study also found that the Transactional Theory of Reading was a suitable framework for understanding the relationship between students' attitudes towards reading and their reading comprehension skills. The researchers argued that students' attitudes towards reading affect their motivation to read and their engagement with the text, which in turn impacts their reading comprehension skills. Another theory that can be applied to understand students' attitudes towards reading and reading comprehension is the Social Cognitive Theory proposed by Bandura (1986). This theory emphasizes the role of social factors and cognitive processes in shaping human behavior. According to this theory, students' attitudes towards reading can be influenced by their social environment, including their peers, parents, and teachers. Furthermore, students' cognitive processes, such as their self-efficacy beliefs, also play a crucial role in their reading behavior and performance. The study also highlighted the relevance of the Social Cognitive Theory in understanding the relationship between students' attitudes towards reading and their reading comprehension skills. The researcher argued that students' self-efficacy beliefs influence their mo-

sions, to wit; The reading attitude of Senior tivation to read and their engagement with the text, which ultimately impact their reading comprehension skills.

> 4.3. Recommendations-With the preare recommendations, to wit; Public School District Supervisor: May provide adequate resources and support through allocating sufficient resources, including funding, technology infrastructure, and professional development opportunities, to support the reading and comprehension competence. This will enable teachers to effectively implement new strategies and stay updated with the latest advancements in their respective fields. Facilitate the sharing of best practices, lesson plans, and resources to promote a culture of continuous improvement.

> School Principal. May foster a supportive and inclusive environment where teachers feel encouraged to experiment with innovative teaching methods. Recognize and reward teachers who demonstrate excellence in integrating technology and implementing innovative instructional practices. Arrange regular professional development sessions focusing on innovative teaching methods and the integration of technology. This will motivate teachers to further enhance their professional development and improve student outcomes.

> The Teachers. May engage in continuous professional development an take active role in professional development opportunities offered by the school district, educational institutions, and online platforms. Engage in selfreflection and seek feedback from peers and mentors to continuously improve instructional practices. Embrace a growth mindset and be open to adopting innovative teaching methods. Emphasize the importance of lifelong learning and continuously strive to enhance professional skills and knowledge.

> The Future Researchers. May investigate the impact of innovative teaching methods through conduct research to explore the im-

learning on reading and comprehension. Identify barriers and challenges faced by teachers and investigate factors such as access to technology, teacher readiness, support systems, and

pact of innovative teaching methods to improve institutional policies. This research will help develop strategies to overcome these challenges and promote successful implementation of innovative teaching methods.

5. References

- Adeyemo, A. O., & Adeyemo, S. A. (2018). Influence of attitude and motivation on students' reading comprehension in secondary schools in ibadan metropolis, nigeria. International Journal of Education and Research, 5(5), 37–48.
- Adrales, J. R., & Tuguinayo, E. C. (2020). Enhancing reading comprehension through metacognitive strategies: A mixed-methods study. International Journal of Instruction, 13(2), 111-126. https://doi.org/10.29333/iji.2020.1328a
- Akbari, R., Yaqubi, B., & Mahdavirad, M. (2018). The impact of explicit instruction on reading strategies: Focusing on making inferences among iranian senior high school students. International Journal of Language Learning and Applied Linguistics World, 15(2), 79–90. https://doi.org/10.11648/j.ijllal.20180302.13
- Aksu, G., & Keskin, N. (2020). The relationship between reading frequency and academic achievement: Mediation role of reading attitudes. Journal of Education and Learning, 9(4), 116-124.
- Alharbi, R. A., & Taher, M. A. (2019). Saudi high school students' attitudes towards reading assignments. International Journal of English Linguistics, 9(6), 103-116. https://doi.org/ 10.5539/ijel.v9n6p103
- Alkhalifa, K. (2018). Factors influencing senior high school students' attitudes towards reading assignments in bahrain. International Journal of Humanities and Social Science Research, 8(2), 27-34.
- Al-Nharat, I. M. (2018). Secondary students' attitudes towards reading in jordan. International *Journal of Humanities and Social Science Research*, 6(1), 1–8.
- Alqahtani, M. (2019). The relationship between the type of text and reading comprehension levels among eff students in saudi arabia. English Language Teaching, 12(8), 10-19.
- Aragon, M. L., & Aquino, G. (2020). Reading attitude and academic performance of senior high school students in the philippines. Journal of Language Teaching and Research, 11(3), 231-237. https://doi.org/10.17507/jltr.1103.01
- Asuncion, J. B., & Bautista, A. R. (2018). Reading motivation and reading comprehension among senior high school students in the philippines. International Journal of Educational *Research Review*, 3(2), 48–58.
- Avila, J. R. C., & Aguila, R. A. (2018). Metacognitive reading strategy instruction and reading comprehension of grade 11 students. Asia Pacific Journal of Multidisciplinary Research, 6(3), 1-7. https://doi.org/10.5467/apjmr.v6i3.799
- Bakar, R. A., Sharifah, M. N., & Hamid, M. F. A. (2019). Factors influencing reading attitudes among malaysian secondary school students. Journal of Language and Communication, 6(2), 50–58.

- Baker, L., & Wigfield, A. (2019). Dimensions of reading motivation and their relation to reading behavior and competence. *Reading Research Quarterly*, 54(2), 133–152. https://doi.org/ 10.1002/rrq.250
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.
- Bautista, R. M., & Lizardo, R. O. (2019). Reading habits and attitudes of senior high school students towards assigned readings in english classes. *Journal of Language Teaching and Research*, 10(6), 1236–1242.
- Baybayan, L. A., & Lomboy, M. F. (2019). Towards an understanding of senior high school students' attitudes towards reading. *International Journal of Emerging Technologies in Learning (iJET)*, 14(19), 68–81. https://doi.org/10.3991/ijet.v14i19.10737
- Belen, C. P., & Ratunil, N. A. (2018). The effectiveness of explicit teaching of comprehension strategies to improve reading comprehension among filipino senior high school students. *International Journal of Social Sciences and Humanities Research*, 6(2), 84–94. https: //doi.org/10.11648/j.ss.20180202.15
- Cadavedo, J. C., Millendez, L. D., & Portillo, G. L. (2020). The impact of vocabulary self-selection strategy on the reading comprehension of senior high school students. *The Journal of Educational Research*, *113*(3), 229–240. https://doi.org/10.1080/00220671.2018.1555208
- Cain, K., & Oakhill, J. (2018). The relationship between reading comprehension and the willingness to read challenging materials: Evidence from the united kingdom. *Journal of Educational Psychology*, *110*(1), 1–12. https://doi.org/10.1037/edu0000191
- Chen, H. L., & Darhower, M. (2019). Reading motivation, engagement, and willingness to read challenging materials among high school students. *Reading Psychology*, 40(3), 211–236. https://doi.org/10.1080/02702711.2017.1400139
- Chen, Y. (2018). The effectiveness of reading strategies on reading comprehension among senior high school learners. *English Language Teaching*, *11*(3), 1–7.
- Choi, S. K., & Kang, S. (2019). The relationship between enjoyment of reading and reading performance of korean senior high school students. *Reading Research Quarterly*, 54(4), 531–543.
- Creswell, J. W. (2014). *Qualitative inquiry and research design: Choosing among five approaches* (4th). Sage.
- Dancel, A. C., & Frias, A. M. (2018). Metacognitive reading strategies and reading comprehension of senior high school students. *European Journal of Education Studies*, 5(2), 101–112. https://doi.org/10.5281/zenodo.1201048
- De Guzman, J. T., & Asilo, E. R. (2018). Senior high school students' perceptions towards reading assignments in english. *International Journal of English Language Teaching*, 6(3), 1–10.
- De Leon, J. P. J., & Gomez, G. G. (2018). Relationship of reading comprehension and attitudes towards reading among senior high school students. *Journal of Applied Research in Education*, 22(1), 16–26. https://doi.org/10.15700/saje.v38n1a1455
- De Luna, C. J. T., & Yanga, A. G. (2018). Reading comprehension and critical thinking skills of filipino senior high school students. *International Journal of English Linguistics*, 8(5), 33–41. https://doi.org/10.5539/ijel.v8n5p33

- De Naeghel, J., Van Keer, H., Vansteenkiste, M., Rosseel, Y., & Slot, E. (2020). The effects of different text types on willingness to read challenging texts and reading comprehension. *Journal of Research in Reading*, *43*(1), 1–21. https://doi.org/10.1111/1467-9817.12319
- Dehaene, S., Meyniel, F., Wacongne, C., Wang, L., & Pallier, C. (2015). The neural representation of sequences: From transition probabilities to algebraic patterns and linguistic trees. *Neuron*, 88(1), 2–19.
- Duke, N. K., & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction* (pp. 205–242). International Reading Association.
- Ebarvia, M. R., & Tenedero, R. E. (2020). Reading strategy use and reading comprehension of grade 12 students. *Journal of Language and Linguistic Studies*, *16*(2), 586–599. https://doi.org/10.17263/jlls.737685
- Edem, M. B., & Nkanu, E. E. (2018). Reading attitude of university students in nigeria: The influence of motivation and interest. *Journal of Language and Literary Studies*, *10*(3), 110–115.
- Erdogan, M., & Arikan, A. (2020). The relationship between high school students' attitudes towards reading and reading comprehension levels. *Journal of Education and Practice*, *11*(16), 61–69. https://doi.org/10.7176/JEP/11-16-06
- Escobido, R. A. M., & Magno, C. (2018). Vocabulary knowledge and reading comprehension of filipino senior high school students. *Philippine Journal of Linguistics*, 49(1), 21–36.
- Fadrigon, M. V., & Gonzales, S. G. (2019). An analysis of the reading comprehension skills of grade 12 students. *Journal of Reading Education and Research*, 4(1), 21–33. https://doi.org/10.11648/j.rer.20190401.13
- Fauziati, A., & Cahyono, B. Y. (2018). Exploring the relationship between reading attitude and reading comprehension: A study of indonesian eff university students. *International Journal of Language Education and Culture Review*, 4(2), 21–34.
- Gadian, N. G., & Cajilla, J. R. (2020). Effectiveness of the think-pair-share strategy in improving senior high school students' reading comprehension skills. *Journal of Education and e-Learning Research*, 7(1), 54–59. https://doi.org/10.20448/journal.509.2020.71.54.59
- Gambrell, L. B., & Morrow, L. M. (2018). Creating classroom cultures that foster reading motivation. *The Reading Teacher*, 67(4), 285–294. https://doi.org/10.1002/trtr.1215
- Graham, S., & Hebert, M. A. (2010). Writing to read: Evidence for how writing can improve reading. *A Carnegie Corporation Time to Act Report*.
- Guthrie, J. T., & Wigfield, A. (2019). Engagement and motivation in reading. *Annual Review of Psychology*, 70, 403–422. https://doi.org/10.1146/annurev-psych-010418-102537
- Hattie, J., & Donoghue, G. (2016). Learning strategies: A synthesis and conceptual model. *npj Science of Learning*, *1*, 16013.
- Herman, P. A., & Anderson, R. C. (2010). Using direct vocabulary instruction in the context of reading comprehension research. In S. J. Samuels & A. E. Farstrup (Eds.), *What research has to say about reading instruction* (pp. 87–105). International Reading Association.
- Hidi, S., & Renninger, K. A. (2018). The four-phase model of interest development. *Educational Psychologist*, 53(2), 75–92. https://doi.org/10.1080/00461520.2018.1432750

- Hsu, Y., & Wu, W. (2019). The effect of explicit inference instruction on senior high school students' reading comprehension. *International Journal of Research Studies in Education*, 8(2), 43–60. https://doi.org/10.5861/ijrse.2019.2919
- Ilagan, J. G., & Llante, C. A. (2019). Senior high school students' reading comprehension and metacognitive awareness. *Journal of Language and Literacy Education*, 15(1), 14–33. https://doi.org/10.25148/jolle.15.1.005569
- Iswati, S., & Fahmi, I. (2019). The effectiveness of online vocabulary learning program on reading comprehension of senior high school students. *English Language Teaching and Technology Journal*, *3*(1), 1–14. https://doi.org/10.17509/elt-tech.v3i1.18794
- Jacaban, M. T. (2019). Effect of graphic organizers on vocabulary acquisition and reading comprehension of senior high school students. *European Journal of English Language Teaching*, 4(3), 1–20. https://doi.org/10.5281/zenodo.3353789
- JASP. (n.d.). A fresh way to do statistics.
- Jian, X., Li, J., & Zhang, S. (2019). The effects of metacognitive reading strategies on english reading comprehension of chinese senior high school students. *International Journal of Emerging Technologies in Learning*, 14(7), 63–74. https://doi.org/10.3991/ijet.v14i07. 10023
- Jung, J., & Moon, S. (2019). The effects of repeated reading and summarization on reading comprehension in english as a foreign language for korean high school students. *Reading* & Writing, 32(5), 1225–1249. https://doi.org/10.1007/s11145-018-9913-4
- Kendeou, P., van den Broek, P., White, M. J., & Lynch, J. S. (2019). Developing successful readers: Building comprehension from the bottom-up and top-down. In R. F. Flippo & D. C. Caverly (Eds.), *Handbook of college reading and study strategy*.
- Keong, B. M., Li, X., & Li, Y. (2019). The impact of a digital reading program on primary school students' attitudes towards reading in china. *Computers & Education*, *139*, 1–13.
- Khajavi, Y., Arizi, H. R., & Pashmforoosh, R. (2018). The relationship between vocabulary knowledge and reading comprehension among senior high school learners. *English Language Teaching*, 11(12), 26–32.
- Khan, S. A., Tariq, M. M., & Shafiq, M. (2018). Reading frequency and attitude towards reading among secondary school students in pakistan. *Pakistan Journal of Education and Languages*, 2(1), 39–56.
- Koenig, T., & MacMillan, K. (2004). Preconceptions and expectations for data analysis software in qualitative research. *The Wow Factor Social Science Computer Review*.
- Laya, M. B. (2020). The relationship between reading frequency and reading comprehension of senior high school students. *Reading Horizons*, 60(1), 1–17.
- Lazo, M. A. M., Emetrio, G. E. G., & Casimiro, E. P. (2019). Attitude toward reading as a predictor of reading comprehension among senior high school students. *The Asia-Pacific Education Researcher*, 28(2), 83–91. https://doi.org/10.1007/s40299-018-00421-6
- Lee, H. J., & Cho, Y. (2017). Effects of reading motivation and reading comprehension on middle school students' academic achievement. *Journal of Educational Research*, 110(3), 268– 277.
- Lee, H. J., & Song, M. K. (2020). Examining the relationship between enjoyment of reading and reading motivation among senior high school students. *Journal of Adolescent & Adult Literacy*, 64(3), 336–346.

- Lertola, J., & Ala-Kokko, T. (2017). The role of literature in developing a positive attitude towards reading. *Scandinavian Journal of Educational Research*, *61*(3), 339–353.
- Li, J. (2018). The effectiveness of extensive reading on vocabulary learning and reading comprehension among chinese senior high school students. *English Language Teaching*, 11(3), 49–57. https://doi.org/10.5539/elt.v11n3p49
- Li, X. (2017). Exploring the effect of teacher-centered and student-centered instruction on efl learners' reading attitudes. *Sino-US English Teaching*, *14*(4), 264–273.
- Li, Y., & Li, Y. (2019). The effect of pre-reading activities on senior high school students' reading comprehension. *English Language Teaching*, *12*(9), 83–94. https://doi.org/10.5539/elt. v12n9p83
- Liao, Y.-H., Lin, Y.-C., & Liang, J.-C. (2019). The relationship between senior high school students' reading attitudes and reading comprehension abilities in eff contexts. *Journal of Language Teaching and Research*, 10(3), 617–623. https://doi.org/10.17507/jltr.1003.24
- Lim, Y. M., Chen, D. T., & Zhang, Y. (2019). A study on the effectiveness of reading comprehension strategies on senior high school students in singapore. *International Journal of Learning, Teaching and Educational Research*, 18(3), 63–76. https://doi.org/10.26803/ ijlter.18.3.5
- Lin, Y. T., Huang, H. Y., & Huang, H. T. (2020). The effects of multimodal vocabulary learning on vocabulary knowledge and reading comprehension for senior high school students. *Journal of Educational Technology Development and Exchange*, 13(2), 49–66. https: //doi.org/10.18785/jetde.1302.04
- Lumasac, N. A. B., & Lumbre, J. M. P. (2020). Reading comprehension strategies used by grade 11 students in a public school in the philippines. *Journal of Language Teaching and Research*, *11*(2), 155–162. https://doi.org/10.17507/jltr.1102.01
- Mabolo, M. C. M., & Alcalde, L. E. (2018). The influence of teacher-led questioning on the reading comprehension skills of senior high school students. *European Journal of Education Studies*, 5(7), 210–221. https://doi.org/10.5281/zenodo.1314411
- Mendoza, A. M., & Claveria, R. J. (2020). Enhancing reading comprehension through cooperative learning strategy: A quasi-experimental study. *Journal of Language and Linguistic Studies*, 16(2), 429–446. https://doi.org/10.17263/jlls.739981
- Miranda, M. R. (2020). Factors affecting the reading comprehension of senior high school students in the philippines. *Journal of Education and Human Development*, 9(1), 38–49. https://doi.org/10.15640/jehd.v9n1a4
- Mullis, I. V. S., Martin, M. O., Foy, P., & Hooper, M. (2016). *Pirls 2016 international results in reading*. International Association for the Evaluation of Educational Achievement.
- Panadero, E., & Alonso-Tapia, J. (2020). The effect of metacognitive strategies instruction on reading comprehension: A comparative study. *Frontiers in Psychology*, 11, 509. https: //doi.org/10.3389/fpsyg.2020.00509
- Park, H., & Lee, K. (2018). The effects of digital reading on reading comprehension among senior high school learners. *English Language Teaching*, 11(4), 14–23.
- Pascual, A. G., & Aguila, R. B. (2020). Effects of a reading intervention program on the reading comprehension skills of grade 11 students. *International Journal of Social Science and Humanities Research*, 8(2), 107–115. https://doi.org/10.11648/j.ss.20200802.14

- Pili, F. R. P., & Baroy, J. C. (2019). Reading habits and attitudes of senior high school students in bicol region, philippines. *Journal of Education and Human Development*, 8(3), 83–90.
- Pineda, M. R. M., & Comia, E. V. (2020). Exploring the relationship between vocabulary size and reading comprehension of senior high school students in a private school in the philippines. *English Language Teaching*, 13(11), 130–138. https://doi.org/10.5539/elt.v13n11p130
- Reyes, J. A. (2018). The relationship between self-efficacy and reading comprehension of senior high school students. *European Journal of Education Studies*, 5(7), 237–248. https: //doi.org/10.5281/zenodo.1312611
- Roxas, R. M., & Sugay, R. A. (2020). The relationship between reading strategies and reading comprehension of senior high school students in the philippines. *Philippine ESL Journal*, 22, 118–135. https://doi.org/10.35873/phil.esl2020.22.118-135
- Samonte, J. A. L., & Barcarse, M. L. (2020). The use of authentic materials to enhance reading motivation among senior high school students. *The Asia-Pacific Education Researcher*, 29(2), 133–141. https://doi.org/10.1007/s40299-019-00492-2
- Santos, I. F., & del Castillo, E. S. (2018). Reading comprehension and vocabulary acquisition through shared reading: A study among filipino senior high school students. *Journal of Language Teaching and Research*, 9(3), 503–509. https://doi.org/10.17507/jltr.0903.19
- Sarudin, N., Alias, N., & Salleh, S. M. (2018). The relationship between metacognitive awareness, reading comprehension strategies, and reading comprehension. *International Journal of Academic Research in Business and Social Sciences*, 8(6), 596–609. https://doi.org/10. 6007/ijarbss/v8-i6/4375
- Schaffner, E., Schiefele, U., Ulferts, H., & Kuchler, A. (2020). The role of enjoyment in reading achievement: Empirical evidence from three countries. *Journal of Research in Reading*, 41(3), 511–527.
- Schraw, G., & Dennison, R. S. (2019). Measuring metacognition in educational settings. In D. J. Hacker, J. Dunlosky, & A. C. Graesser (Eds.), *Handbook of metacognition in education* (pp. 27–44). Routledge. https://doi.org/10.4324/9780429436958-2
- Shabani, K., & Tavakoli, M. (2020). The role of reading attitude and self-efficacy beliefs in reading comprehension of iranian eff learners. *Journal of Research in Applied Linguistics*, 11(1), 88–107.
- Sung, Y., Chang, H., & Lee, Y. (2019). Reading frequency and reading motivation in a digital era: A case study of south korean middle school students. *Journal of Adolescent Adult Literacy*, 63(1), 89–100.
- Tahir, A., Azam, S., & Imran, R. (2018). Relationship between reading comprehension and identifying the main idea among university students. *Bulletin of Education and Research*, 40(2), 117–129. https://doi.org/10.5281/zenodo.1312674
- Tapia, L. M. V., & Zapanta, E. R. (2018). Reading frequency and attitude toward reading of senior high school students. *Journal of Education and Practice*, 9(16), 59–65.
- Tolentino, E. C., & Mandin, E. (2020). Factors influencing senior high school students' engagement in reading assignments in english. *The Philippine E-Journal for Applied Research and Development*, *11*, 60–75.
- Torres, R. P., & Escalona, D. D. (2019). Factors affecting the reading comprehension of senior high school students. *International Journal of Humanities, Social Sciences and Education*, 6(10), 107–115. https://doi.org/10.11648/j.hssr.2019.0610.18

- Tsaliki, E., & Touloumakos, A. K. (2020). Designing effective reading assignments to enhance students' motivation and engagement: The case of greece. *International Journal of Research Studies in Education*, 9(2), 1–15. https://doi.org/10.5861/ijrse.2020.4547
- Villaluz, R. J. M., & Madrid, L. A. S. (2019). A mixed-method study on reading comprehension and strategy use of filipino senior high school students. *Reading Psychology*, 40(6), 601– 624. https://doi.org/10.1080/02702711.2018.1520508
- Wang, L., & Zhang, X. (2020). A study on the relationship between reading motivation, reading strategies, and reading comprehension of senior high school students. *Journal of Language* and Linguistics, 19(2), 47–54. https://doi.org/10.11648/j.linguistics.20200202.11
- Wang, Y., Zhang, W., & Lin, Y. (2017). Extensive reading and reading comprehension in eff contexts: A meta-analysis. *The Modern Language Journal*, 101(4), 772–785.
- Wigfield, A., Tonks, S. M., & Klauda, S. L. (2018). Expectancy-value theory. In D. E. Alvermann, N. J. Unrau, & R. B. Ruddell (Eds.), *Theoretical models and processes of reading* (7th, pp. 279–301). International Reading Association. https://doi.org/10.1002/9781119159800. ch13
- Wu, Y. T., & Huang, S. Y. (2017). Effects of attitude towards reading, reading strategy, and reading frequency on reading comprehension: An empirical study of eff learners in taiwan. *International Journal of Learning and Teaching*, 3(2), 197–204.
- Yamashita, J., & Jiang, L. (2018). The effects of visual aids on eff learners' reading comprehension of authentic materials. *Reading in a Foreign Language*, *30*(1), 109–125.