

**THE CORRELATION AMONG CRITICAL THINKING SKILLS,
MORPHOLOGICAL AWARENESS, AND ENGLISH READING
SKILL OF THE SIXTH SEMESTER TBI STUDENTS
AT IAIN CURUP**

THESIS

**This thesis is submitted to fulfill the requirement
for 'Sarjana' degree in English Language Education**



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Demikian permohonan ini kami ajukan, agar dapat diterima terlebih dahulu diucapkan terima kasih

Wasaalam mu`alaikum, wr.wb

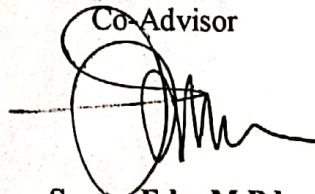
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PREFACE

All praises to Allah SWT that finally the researcher had completed writing the thesis entitled The correlation among critical thinking skills, morphological awareness, and english reading skill of the sixth semester TBI students at IAIN curup.

This thesis is submitted as a part of the completion for undergraduated degree of Strata 1 in English Study Program of Institute for Islamic Studies (IAIN) Curup. The researcher realize that this thesis is actually far from being perfect. Therefore the researcher really appreciates every suggestions and critics for the better of this thesis in the future.

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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This thesis entitled **“The Correlation Among Critical Thinking Skills, Morphological Awareness, and English Reading Skill of The Sixth Semester TBI Students at IAIN Curup”** is presented in partial fulfillment of the requirement for degree of Strata 1 in English Study Program of IAIN Curup. In concluding this thesis, the researcher received valuable contribution, guidance, support, and motivation from others, inthis chance, the researcher would like to express her deepest gratitude to:

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3. Mr. Sarwo Edy, M.Pd as my Co-Advisor who always give support, advice, guidance, and suggestion in whole process of this research. Thanks for the attention all the strong motivation which has been given to me in order to finish this research soon.
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Curup, September 2021

Writer



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MOTTO

*“Do not go where the path may lead,
go instead where there is no path
and leave a trail”.*

DEDICATION

This thesis is dedicated to:

- ❖ My beloved parents, they are my father Mr. Darul Katni and my mother Ms. Sri Winarni, who always accepts me unconditionally no matter who I am. Then, Thanks for your love, support, pray and everything I need.
- ❖ My beloved brother, Widdy Puja Kusuma who always giving me passion, motivation, love, support and prayers.
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It is with pleasure that to them all I dedicate this thesis.

ABSTRACT

Randi Turangga, 2021 : “The Correlation Among Critical Thinking Skills, Morphological Awareness, and English Reading Skill of The Sixth Semester TBI Students at IAIN Curup“

Advisor : Jumatul Hidayah, M.Pd

Co-Advisor : Sarwo Edy, M.Pd

This study was derived from theoretical foundations and the contextual phenomenon encountered among the sixth semester TBI students at IAIN Curup that indicated the possible relationships among critical thinking skills, morphological awareness, and English reading skill. To attain the study objectives, this quantitative study applied a correlation method. The population of this study was 53 sixth semester TBI students at IAIN Curup. The instruments were critical thinking skill questionnaire adopted from Honey, morphological awareness test adopted from Lisa Kay Maag, and the test of English reading skills adopted from the reading section of TOEFL ITP. The results of this study indicated that, first; there was a positive correlation between critical thinking skills and English reading skill of the sixth semester TBI students at IAIN Curup. Such a correlation was indicated by the statistical data of r_{xy} (0.36660829) which was higher than r^{table} (0.2746). Second, there was a positive correlation between morphological awareness and English reading skill of the sixth semester TBI students at IAIN Curup. Such a correlation was indicated by the statistical data of r_{xy} (0.305629) which was higher than r^{table} (0.2746). Third, there was a positive and moderate correlation between both critical thinking skills and morphological awareness and English reading skill. According to the data of statistical calculation, the obtained value of R was 0.437961742 which was categorized as moderate based on the scoring range. Because the value of R (0.437961742) was a positive value, or it went forward to (+1). All H_0 hypotheses were accepted.

Key words : **Correlation, Critical Thinking, Morphological Awereness, English Reading Skill.**

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CHAPTER I

INTRODUCTION

A. Background of the Study

Language is a means of communication which is very importance for us to adapt to society. Language is used by human beings to interact with others to express feelings and thoughts. They are your tools to carry ou your affairs, work and live together. Learning a language requires four skills, namely reading, writing, speaking, and listening. Reading belongs to receptive skill which needs high focus and cocentration. Reading, like listening, necessitates a high level of attention and emphasis. Reading is an essential aspect of language learning, but it is not an easy task. As a result, many people believe that reading is a difficult task. The fact that students commonly find reading skill difficult does not mean that such a problem has no solutions. The application of a variety of reading techniques can be of good solutions. Reading techniques, according to Namaziandost, Gilakjani, and Hidayatullah, play an important role in reading ability by assisting readers with the collection, storage, and retrieval of information during the reading process¹. Many factors, according to Habók and Magyar, can influence reading strategies, including self-efficacy, motivation, gender, learning style, and critical thinking².

¹ Ehsan Namaziandost, Abbas Pourhosein Gilakjani, and Hidayatullah, 'Enhancing Pre-Intermediate EFL Learners' Reading Comprehension through the Use of Jigsaw Technique', *Cogent Arts and Humanities*, 7.1 (2020) <<https://doi.org/10.1080/23311983.2020.1738833>>.

² Anita Habók, Andrea Magyar, and Sammy King Fai Hui, 'The Effects of EFL Reading Comprehension and Certain Learning-Related Factors on EFL Learners' Reading Strategy Use', *Cogent Education*, 6.1 (2019) <<https://doi.org/10.1080/2331186X.2019.1616522>>.

Critical thinking has been one of the hottest issues in the field of education. Higher order thinking is difficult to define but easy to recognize when it occurs. Higher order thinking skill is the complex and effortful intellectual thinking skills where people have to activate their minds in order to understand the hidden meaning from the information introduced to them. Critical thinking is a cognitive process that is linked to our ability to think rationally³. Critical thinking, according to van der Zanden and colleagues, is a complex process involving a wide range of skills and attitudes, including recognizing other points of view, evaluating evidence for alternative points of view, recognizing underlying assumptions and implicit arguments, recognizing techniques, reflecting on issues in a structured way through applying logic and insight, and presenting a point of view⁴. Bankole-Minaflinou describes critical thinking as "the active, continuous, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends to"⁵. Students can positively contribute to their expertise by making use of critical thinking skills. In their daily lives, it is extremely beneficial to make decisions, evaluate facts, generate ideas, and defend opinions. Critical thinking, according to Ghaith and El-Malak, is a higher order thinking that involves the application of a variety of advanced thinking skills in a variety of complicated situations. It is a higher-order thinking ability that involves assessing arguments and is a deliberate,

³ Maryam Danaye Tous, Abdorreza Tahriri, and Sara Haghighi, 'The Effect of Instructing Critical Thinking through Debate on Male and Female EFL Learners' Reading Comprehension', *Journal of the Scholarship of Teaching and Learning*, 15.4 (2015), 21–40 <<https://doi.org/10.14434/josotl.v15i4.13191>>.

⁴ Petrie J.A.C. van der Zanden and others, 'Fostering Critical Thinking Skills in Secondary Education to Prepare Students for University: Teacher Perceptions and Practices', *Research in Post-Compulsory Education*, 25.4 (2020), 394–419 <<https://doi.org/10.1080/13596748.2020.1846313>>.

⁵ Estelle Bankole-Minaflinou, 'Promoting Critical Thinking Skills in EFL University Students in Benin', *International Journal of English Language and Literature Studies*, 8.1 (2019), 1–13 <<https://doi.org/10.18488/journal.23.2019.81.1.13>>.

self-regulatory decision that culminates in perception, study, assessment, and inference⁶.

In the field of education, critical thinking has become a big concern. Many studies have examined the relationship between critical thinking skills and a variety of fields. Critical thought has a close relationship with grammar and lexical expertise in the linguistic field⁷. According to Kamali and Fahim, EFL learners' critical thinking levels have an important impact on their vocabulary mastery⁸. Furthermore, several recent studies have looked into the relationship between critical thought and reading, which tends to be reciprocal. For example, see the studies conducted by Nevin Akkaya⁹, Abdulmohsen¹⁰, Nour Mohammadi¹¹, Farley¹², and Kamgar¹³.

Critical thinking in reading, according to Aloqaili, has a number of advantages, including increased reading emphasis, improved ability to respond to

⁶ Ghazi Ghaith and Mirna Abd El-Malak, 'Effect of Jigsaw Ii on Literal and Higher Order Efl Reading Comprehension', *International Journal of Phytoremediation*, 21.1 (2004), 105–15 <<https://doi.org/10.1076/edre.10.2.105.27906>>.

⁷ Abbas Ali Zarei and Elham Haghgoo, 'The Relationship between Critical Thinking and L2 Grammatical and Lexical Knowledge', *English Linguistics Research*, 1.1 (2012), 104 <<https://doi.org/10.5430/elr.v1n1p104>>.

⁸ Zahra Kamali and Mansoor Fahim, 'The Relationship between Critical Thinking Ability of Iranian EFL Learners and Their Resilience Level Facing Unfamiliar Vocabulary Items in Reading', *Journal of Language Teaching and Research*, 2.1 (2011) <<https://doi.org/10.4304/jltr.2.1.104-111>>.

⁹ Nevin Akkaya, 'The Relationship Between Teachers Candidates' Critical Thinking Skills and Their Use of Reading Strategies', *Procedia - Social and Behavioral Sciences*, 47 (2012), 797–801 <<https://doi.org/10.1016/j.sbspro.2012.06.737>>.

¹⁰ Abdulmohsen S. Aloqaili, 'The Relationship between Reading Comprehension and Critical Thinking: A Theoretical Study', *Journal of King Saud University - Languages and Translation*, 24.1 (2012), 35–41 <<https://doi.org/10.1016/j.jksult.2011.01.001>>.

¹¹ Esmael Nour Mohammadi, Farrokhlagha Heidari, and Nasrin Dehghan Niry, 'The Relationship between Critical Thinking Ability and Reading Strategies Used by Iranian EFL Learners', *English Language Teaching*, 5.10 (2012) <<https://doi.org/10.5539/elt.v5n10p192>>.

¹² Mary Jane Farley and Patricia B. Elmore, 'The Relationship of Reading Comprehension to Critical Thinking Skills, Cognitive Ability, and Vocabulary for a Sample of Underachieving College Freshmen', *Educational and Psychological Measurement*, 52.4 (1992), 921–31 <<https://doi.org/10.1177/0013164492052004014>>.

¹³ Narges Kamgar and Esmail Jadidi, 'Exploring the Relationship of Iranian EFL Learners' Critical Thinking and Self-Regulation with Their Reading Comprehension Ability', *Procedia - Social and Behavioral Sciences*, 232 (2016), 776–83 <<https://doi.org/10.1016/j.sbspro.2016.10.105>>.

relevant points in a message, improved ability to recognize key points in a document, and ease of getting the point across¹⁴. People who think objectively should not take everything they see and hear at face value. They should consciously think about what they see and hear, ask questions, interpret, categorize, and make connections between what they see and hear. Students benefit from critical thinking in academic reading because it transforms the method of reading from passive to active. Readers will encounter complex interactions with the text, context, meaning, motivation, background information, and comprehension during the reading process¹⁵. As a result, they should be critical thinkers in order to interpret the text and confront the above-mentioned dynamic interactions. Critical thinking in reading, in particular, prepares students to examine and decipher the logic of an article, essay, or chapter, as well as to assess an author's reasoning. As a result, the researcher concentrates on analytical thinking as a critical thinking skill.

In the case of reading skill, word detection, word recognition, phonemic understanding, comprehension, reading fluency, and vocabulary are the next major issues that emerge in relation to the factors that undoubtedly affect reading ability¹⁶. Reading requires both vocabulary (word knowledge) and reasoning. As a result, in order to learn the art of reading, readers have to pay close attention to the written form of the language. Decoding written forms in reading conveys not only phonological but also morphological information, such as word roots, syntactic

¹⁴ Aloqaili. Op. Cit.

¹⁵ Haleh Mojarrabi Tabrizi and others, 'The Effect of Soft vs. Hard Scaffolding on Reading Comprehension Skill of EFL Learners in Different Experimental Conditions', *Cogent Education*, 6.1 (2019) <<https://doi.org/10.1080/2331186X.2019.1631562>>.

¹⁶ Maddie Kotzer, John R. Kirby, and Lindsay Heggie, 'Morphological Awareness Predicts Reading Comprehension in Adults', *Reading Psychology*, 42.3 (2021), 302–22 <<https://doi.org/10.1080/02702711.2021.1888362>>.

inflections, and derivational relations, which make up the language's minimal semantic and grammatical units¹⁷.

As previously mentioned, morphology is thought to be one of the variables that positively correlates with reading ability. Morphological awareness refers to the awareness of and the meaning and structure of morpheme in relation to words or the ability to distinguish the structure of morphemes, and includes knowledge of inflectional and derivational morphemes. Vaknin-Nusbaum defines morphology as the way words are made up of meaningful components¹⁸. Word detecting skill provides morphological knowledge on how the reader can approach unknown words, and it is one of the sub skills that can help students develop a reading skill. Morphological awareness is the ability to recognize and comprehend words that are made up of meaningful units. It is used to accomplish the purpose of grasping the text's meaning. Morphological awareness can be beneficial in a variety of reading situations¹⁹. It might also play an important part in constructing the meaning of a text. As a result, it seems that having adequate morphological knowledge can help students do better in reading comprehension tasks.

The above explanations provide theoretical foundations which showcase the interrelationships among critical thinking skills, morphological awareness, and English reading skill. Such theoretical foundations are also supported by the phenomenon the researcher found after conducting a preliminary study by interviewing some sixth semester TBI students at IAIN Curup regarding the three variables. The interview data are synthesized as followed.

¹⁷ Kotzer, Kirby, and Heggie. Ibid.

¹⁸ Vered Vaknin-Nusbaum and Michal Raveh, 'Cultivating Morphological Awareness Improves Reading Skills in Fifth-Grade Hebrew Readers', *Journal of Educational Research*, 112.3 (2019), 357–66 <<https://doi.org/10.1080/00220671.2018.1528541>>.

¹⁹ Kotzer, Kirby, and Heggie. Op. Cit.

A few of my friends are so good at English reading skill. In the TOEFL practicum, they can reach correct answers more or equal to 34 questions, out of 50 questions. I don't know why, but the fact shows me that they, who are good at English reading skill, are also quite good at making arguments during discussions.²⁰

If I compare between my English reading skill and some of my friends who have much better reading scores in TOEFL practicum, I can see that they can read faster and more accurate than I do. I usually take about 5 minutes to read one TOEFL passage, but they seem to be able to read it only within 2 minutes or fewer.²¹

I always take time to read English texts for pleasure at home. I feel that this way helps me improve my sensitivity in decoding English words. This way also makes me easier to find contextual information from the texts.²²

The synthesized data of interviews above intrinsically indicate the interrelationships among critical thinking skills, morphological awareness, and English reading skills. As can be learned from student 1, she told that her friends who were good at the reading section of TOEFL seemed to be more active in making arguments during classroom discussions. It means that they are more critical to come up with their ideas in addressing a topic during discussion. Simply speaking, this phenomenon seems to indicate that there is a possible correlation between critical thinking skills and English reading comprehension. Viewed from student 2, he informed that his friends who were better at English reading skill could read faster than him. This point is interesting because someone who can read faster portrays a good capability of decoding English words. It means that that one has a good morphological awareness either. To sum up, such a phenomenon shows that there is a possible correlation between morphological awareness and English reading skill. As can be learned from student 3, the student who was interviewed is one who is good at English reading skill, and she admitted

²⁰ An interview with student 1

²¹ An interview with student 2

²² An interview with student 3

that she could decode English words in a fluent way. It means that there is a possible relationship between morphological awareness and English reading skill.

Despite the fact that there are numerous factors that affect reading ability, the researcher emphasizes the correlation between critical thinking ability, morphological awareness, and reading ability in this study because the theoretical foundations highlighted and the contextual phenomenon which was encountered are oriented towards such three variables. Therefore, this study is conducted on sixth semester TBI students at IAIN Curup who are required to read extensively as part of their requirements in order to be able to successfully deal with sixth-semester subjects which are quite complex. The researcher, on the other hand, believes that critical thinking skills should be checked among TBI students. As a result, the researcher decides to conduct this study on the sixth semester TBI students of IAIN Curup. This study is officially entitled “**The correlation among critical thinking skills, morphological awareness, and English reading skill of the sixth semester TBI students at IAIN Curup**”. It is expected that this study can provide ideal data which can bring the contexts of TBI students of IAIN Curup to confirm the existing theoretical relationships among critical thinking skills, morphological awareness, and reading skills.

B. Research Questions

According to the study's background, the problems of this study are formulated as follows:

1. Is there any correlation between critical thinking skills and reading skill of Sixth semester TBI students at IAIN Curup?

2. Is there any correlation between morphological awareness and reading skill of Sixth semester TBI students at IAIN Curup?
3. Is there any correlation among critical thinking skills, morphological awareness, and reading skill of Sixth semester TBI students at IAIN Curup?

C. Objectives of the Study

This study is set to work on three objectives. The first is to find out the correlation between critical thinking skills and reading skill of Sixth semester TBI students at IAIN Curup. The second is to find out the correlation between morphological awareness and reading skill of Sixth semester TBI students at IAIN Curup. Lastly, the third is to find out the correlation among critical thinking skill, morphological awareness, and reading skill of Sixth semester TBI students at IAIN Curup.

D. Delimitation of the Study

The scopes of the study are delimited to the subject and aim of the study. In terms of subject, This study is delimited to the sixth semester TBI students of IAIN Curup. In terms of aim, This study is delimited to the correlation between three variables, namely critical thinking skill, morphological awareness, and reading skill.

E. Significances of the study

This study's results are expected to be useful in the advancement of English language teaching. The results would benefit students, lecturers, teachers, institutions, and other researchers in particular. Students are expected to use the study's results to master morphological understanding and critical thought skills.

The results benefit lecturers and teachers in their professional lives because they can be used to enrich their reading instruction by incorporating critical skills into their reading instruction and providing more morphology practice. The results of the analysis may be used by other researchers to perform similar studies on various subjects.

CHAPTER II

LITERATURE REVIEW

A. Critical Thinking Skills

Critical thinking, according to one of the most generally recognized and cited concepts, is the willingness of individuals to take control over their own thinking and establish acceptable criteria and expectations for evaluating their own thinking²³. Critical thinking has three dimensions based on the theory suggested by Paul and Elder. Those dimensions range from the aspect of thinking (reasoning), intellectual standards, intellectual characteristics. In order to learn how to improve ones' thinking, Paul and Elder argue that people must master two critical aspects of thinking (elements of thought and intellectual standards). People should be able to define the 'sections' (elements) of their thinking and assess the use of certain parts of thinking using intellectual criteria, in particular. Intellectual characteristics may be established over time²⁴.

When looking for facts, critical thinking skills are crucial, but many young people today have had little opportunity to learn these skills and lack of experiences with these thinking habits. A large proportion of students lack the most basic critical thinking skills needed to balance topic significance with relevant information sources²⁵. Giving students the cognitive skills they need to make good choices should be a priority in the classroom. Students who are unable to cope with the vast array of choices open to them would further lose access to

²³ Linda Elder and Richard Paul, 'Close Reading, Substantive Writing and Critical Thinking: Foundational Skills Essential to the Educated Mind', *Gifted Education International*, 25.3 (2009), 286–95 <<https://doi.org/10.1177/026142940902500310>>.

²⁴ *Ibid.*

²⁵ van der Zanden and others. Op. Cit.

the information's structure. When it comes to assessing the quality of today's vast and varied sources of knowledge, analysis, synthesis, and assessment are all necessary skills. Since the search process is not linear, finding appropriate, reliable, and timely information can be daunting and frustrating. Thus, the foregoing calls for critical thinking skills to help students make it easier in learning.

1. Cultivating Critical Thinking Skills

Critical thinking skills should be taught to pupils, and this premise has been widely accepted. Hands-on teaching in independent classes is the most powerful way to improve the skills of critical thinking. In similar vein, Abrami and colleagues who conducted a meta-analysis of 117 participants in terms of critical thinking instruction proposed that critical thinking instructions can be a great way to cultivate students' critical thinking²⁶. Scholars in the field of English as a Foreign Language (EFL) pay special attention to the growth of critical thinking skills in language programs. Recent research in the EFL classroom has found that different exercises, models, or strategies used as instructional interventions can improve students' critical thinking. Gao, Gao, and Yang, for example, suggested a cognition-based interactive teaching approach for reading academic English and found that it was successful in developing critical thinking and reading skills²⁷. Subsequently Tous, Tahriri, and Haghighi investigated the impact of debate on students' ability to learn to read in a foreign language, and their results revealed

²⁶ Philip C. Abrami and others, 'Instructional Interventions Affecting Critical Thinking Skills and Dispositions: A Stage 1 Meta-Analysis', *Review of Educational Research*, 78.4 (2008), 1102–34 <<https://doi.org/10.3102/0034654308326084>>.

²⁷ Zhao Gao, Shan Gao, and Qi Yang, 'Cognition-Based Interactive Phases and Strategies in Teaching Academic Reading', *Journal of Electronic Science and Technology*, 15.1 (2017), 33–40 <<https://doi.org/10.11989/JEST.1674-862X.6062116>>.

that debate is an important intervention for improving students' reading comprehension and critical thinking²⁸.

2. Measuring Critical Thinking Skills

Thus far, several researchers have adopted a few critical thinking models, and the model rubrics have been used to test students' critical thinking abilities. The first is Huba and Freed's model²⁹. Briefly, the breadth of this model includes several elements such as identifying the problem, understanding general facts of the problem, gathering information, identifying values, generating possible solutions and considering the positive and negative effects of solutions, selecting the most appropriate solution, and determining the ideal action with respect to the solution. Asay and Curry suggested using this model based on a comprehensive rubric that can be used to test logical thinking skills in relation to problem-solving abilities in their research³⁰. The critical thinking paradigm of Paul and Elder is the second. Identifying goals, questioning the problem, defining the problem, recognizing the definition, making conclusions, and understanding the consequences and related effects are a few of the elements of this model³¹. This model is structured to test students' writing skills and reading comprehension, Leist, Woolwine, and Bays suggested using it to assess students' critical thinking

²⁸ Danaye Tous, Tahriri, and Haghighi. Op. Cit.

²⁹ M. E. Huba and J. E. Freed, *Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning* (Boston: Allyn & Bacon, 2000).

³⁰ Sylvia M. Asay and Beverly M. Curry, 'Implementing and Assessing a Critical Thinking Problem Solving Project', *Journal of Teaching in Marriage & Family*, 3.3 (2003), 375–98 <https://doi.org/10.1300/j226v03n03_07>.

³¹ R. Paul and L. Elder, *How to Read a Paragraph: The Art of Close Reading (2nd Ed.)* (Dillon Beach, CA: Foundation for Critical Thinking, 2008).

skills in terms of both literary receptive and productive abilities³². As the third model, Stakeholder recognition, material interpretation, proof assessment, assumption analysis, clarification of key features, and construct propositions are all facets of the Browne, Hough, and Schwab's model of critical thinking skills³³. They use a scaffolding approach to promote students' critical thinking skills, and they use this model together.

However, of the three models of critical thinking, the model developed by Paul and Elder seem to be the most comprehensive model, in addition, Paul and Elder have already developed a set of test for critical thinking skills for both reading and writing skills. This test is developed according to the constructs of their model. Based on their model, Paul and Elder based critical thinking skills on some elements such as identifying goals, questioning the problem, defining the problem, recognizing the definition, making conclusions, and understanding the consequences and related effects. Subsequently, to orient the foci of critical thinking skills in the fields of reading and writing, they developed five levels of critical thinking skills as the main indicators. They developed critical thinking skills for writing in tandem with for reading because both reading and writing skills are always interrelated with each other. It means that assessing critical thinking skills in writing will also concomitantly assess critical thinking skills for reading. As the foregoing, the levels or indicators of critical thinking skills developed by Paul and Elder consist of five indicators, namely paraphrasing,

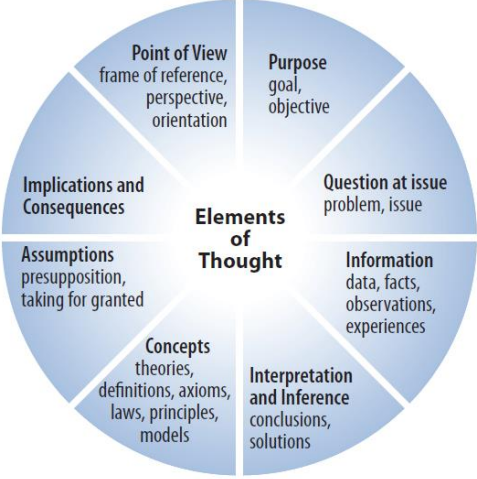
³² Cathy W. Leist, Mark A. Woolwine, and Cathy L. Bays, 'The Effects of Using a Critical Thinking Scoring Rubric to Assess Undergraduate Students' Reading Skills', *Journal of College Reading and Learning*, 43.1 (2012), 31–58 <<https://doi.org/10.1080/10790195.2012.10850361>>.

³³ Laurie Browne, Melissa Hough, and Keri Schwab, 'Scaffolding: A Promising Approach to Fostering Critical Thinking', *SCHOLE: A Journal of Leisure Studies and Recreation Education*, 24.1 (2009), 114–19 <<https://doi.org/10.1080/1937156x.2009.11949630>>.

explicating, analysis, evaluation, and role-playing. The detailed indicators can be seen in the following table.

Table 1

The Indicators of Critical Thinking Skills According to Paul and Elder

No	Indicators	Details
Level 1	Paraphrasing the Text Sentence by Sentence	Paraphrase the given sentences
Level 2	Explicating the Thesis of a Paragraph	<ol style="list-style-type: none"> 1. In one or two sentences, state the paragraph's key point. 2. After that, expand on what was paraphrased ("In other words,..."). 3. Provide concrete examples of the context by relating it to real-life circumstances. (For instance,...) 4. Link the basic thesis to other meanings that have already been understood by using metaphors, analogies, images, or diagrams.
Level 3	Analyzing the Logic of Text	<p>Show comprehensive sets of some elements of thinking included in the following circle:</p> <div style="text-align: center;">  </div> <p>The evaluation at this stage of proficiency focuses on the student's ability to recognize the following:</p> <ol style="list-style-type: none"> 1. The author's aims for writing the letter. 2. The text's most critical question, problem, or issue. 3. The text's most important details or data. 4. The text's most fundamental conclusion.

		5. The text's most fundamental principles, hypotheses, or ideas. 6. The text's most basic assumptions. 7. The text's most important consequences. 8. In the text, the author's point of view.
Level 4	Evaluation	The evaluation at this stage focuses on the student's ability to interpret or judge the text using eight simple intellectual criteria.
Level 5	Role-Playing	The evaluation at this stage of proficiency focuses on the student's ability to consciously role-play the author's thought process.
According to Paul and Elder, level 5 can be skipped dependent upon the needs of critical thinking skills tested in certain contexts.		

However, the critical thinking skill model proposed by Paul and Elder is quite difficult to be employed as a test because the result of measurement will be qualitative and subjective in nature. To cope with the foregoing, Honey proposes some indicators of critical thinking skills which could be deployed to assess ones' critical thinking skills in language skills including reading skill³⁴. The indicators proposed by Honey contain the skills of analysis, inference, evaluation, inductive reasoning and deductive reasoning. Honey further developed a critical thinking skills quantitative questionnaire by using these indicators. Table 2 below provides some details of the critical thinking skills indicators

Table 2. Critical thinking skills indicators according to Honey

No	Indicators of Critical Thinking Skills	Description
1	Analysis	The ability to identify, classify, compare, and contrast various sets of information.
2	Inference	The ability to absorb unstated information and the ability to draw a set of conclusions from a bundle of

³⁴ P. Honey, 'Critical Thinking Questionnaire', 2005 <<http://www.peterhoney.com>>.

		information.
3	Evaluation	The ability to consider the value or essence of information.
4	Inductive reasoning	The ability to think in detail from specific domains to generate general domains.
5	Deductive reasoning	The ability to think in detail from general domains to specific domains.

B. Morphological Awareness

1. The Definition of Morphological Awareness

Morphological knowledge is the ability to recognize how small words, letters, and letter combinations are integrated to give a phrase a new meaning. It has been discovered to play a role in reading success³⁵. Knowing more varieties of morphemic modification allows us to become aware of relationships between words that share significant parts, as well as knowledge that morphology can aid our learning of words that are correlated to others by prefixing, suffixation, or compounding. Any word that includes more than one significant unit needs morphological knowledge. As a result, morphological knowledge can play an important role in constructing a text's meaning. Other linguistic skills, such as phonological knowledge, orthographic awareness, syntactic awareness, and semantic awareness, lead to the acquisition of literacy in addition to morphological awareness.

Morphological awareness requires comprehension of inflectional and derivational morphemes, as well as awareness of and the nature and arrangement of morphemes in relation to words or the ability to discern the

³⁵ M. Diane Clark, Gizelle Gilbert, and Melissa L. Anderson, 'Morphological Knowledge and Decoding Skills of Deaf Readers', *Psychology*, 02.02 (2011), 109–16 <<https://doi.org/10.4236/psych.2011.22018>>.

structure of morphemes³⁶. Morphological knowledge is only one of a variety of linguistic abilities that must be learned in order to read and spell effectively³⁷. As a result, morphological comprehension is operationalized when a student breaks down a complicated word to make sense of it and discover the connection between it and other words. Morphological awareness also includes the ability to understand word families and their common context, such as the terms “teacher and teaching”, which share the base word “teach”, and both have to do with teaching.

2. The Elements of Morphological Awareness

There are a number of different tasks that have been used to assess morphological knowledge at various developmental stages, but there is no structured format for doing so. In English orthography, morphological word formation can be divided into two categories: inflectional and derivational³⁸. According to Anglin and others, there are five main forms of morphological words.

a. Root words

Root words are monomorphemic lexical entries that consist of single, free morphemes, e.g., *walk*, *read*, *write*, *high*.

³⁶ Forough Amirjalili and Ali Akbar Jabbari, ‘The Impact of Morphological Instruction on Morphological Awareness and Reading Comprehension of EFL Learners’, *Cogent Education*, 5.1 (2018), 1–30 <<https://doi.org/10.1080/2331186X.2018.1523975>>.

³⁷ Haomin Zhang and Jiexin Lin, ‘Morphological Knowledge in Second Language Reading Comprehension: Examining Mediation through Vocabulary Knowledge and Lexical Inference’, *Educational Psychology*, 2020 <<https://doi.org/10.1080/01443410.2020.1865519>>.

³⁸ C. McBride-Chang, R. Cho, J, and others, ‘Changing Models across Cultures: Associations of Phonological Awareness and Morphological Structure Awareness to Vocabulary and Word Recognition in Second Graders from Beijing, Hong Kong, Korea, and United States’, *Journal of Experimental Child Psychology*, 92 (2005), 140–60.

b. Inflected words

Inflected words usually consist of one free morpheme and one inflectional suffix. There are eight types of inflectional suffixes: the plural inflection (e.g., the *-s* in *cats*), the possessive inflection (e.g., the *'s* in *mother's*), the third person- singular verb inflection (e.g., the *-s* in *jumps*), the progressive inflection (e.g., the *-ing* in *walking*), the past-tense inflection (e.g., the *-ed* in *walked*), the past participle (e.g., the *-en* in *fallen*), the comparative inflection (e.g., the *-er* in *higher*), and the superlative inflection (e.g., the *-est* in *fairest*)

c. Derived words

Derived words are lexical entries that consist of one root and one or more derivational affixes. Derivational affixes in English can be prefixes or suffixes.

d. Literal compounds

Literal compounds are lexical entries that consist of two or more words. The words making up a literal compound may be root words (e.g., *sidewalk*, *payday*, *milk cow*), but one or more of them may be derived or inflected words (e.g., *tax payer*, *bare-eyed cockatoo*).

e. Idioms

Idioms are lexical entries that are like literal compounds in that they consist of two or more words but, unlike literal compounds, they are idiomatic in

the sense that it is not possible to determine their meaning from knowledge of their component morphemes³⁹.

In addition, Carstairs-McCarthy proposes three categories of morphological word formation such as.

a. Inflectional morphology

It deals with the inflected forms of words, that is the kind of variation that words exhibit on the basis of their grammatical context. There are some important inflectional morphology elements, such as:

1) Regular and irregular inflection

The plural form of countable noun will be formed by adding the suffix *-s* which is called the regularity. While, irregularity is a idiosyncrasy that dictionaries need to acknowledge by indications such as noun *tooth* becomes *plural teeth*.

2) Forms of nouns

Most countable nouns in English have two word forms: a singular and a plural. Thus, to the lexeme *cat* there corresponds a singular form *cat*, consisting of just one morpheme, and a plural form *cats*, consisting of a root *cat* and the suffix *s*. Irregular suffixes expressing plurality include *-i*, *-ae* and *-a* (as in *cacti*, *formulae*, *phenomena*).

3) Forms of pronouns and determiners

Morphology concerns with the behaviour of words classes, namely nouns, adjectives, verbs and adverbs. One does not expect in English to encounter a new pronoun (a word such as *I* or *she* or *us*) or a new

³⁹ Jeremy M. Anglin, George A. Miller, and Pamela C. Wakefield, 'Vocabulary Development: A Morphological Analysis', *Monographs of the Society for Research in Child Development*, 58.10 (1993), i <<https://doi.org/10.2307/1166112>>. P. 18

preposition (a word such as *in* or *at* or *without*). However, determiners deserve a mention here because some of them, like nouns, display a singular plural contrast, and pronouns combine a singular plural contrast with contrast unique to them, between subject and non-subject forms.

4) Forms of verb

In English, a verb lexeme has at most five distinct forms, as illustrated here with the word *give*. Basic form (used everywhere else): *give*. Third person singular present tense: *gives*, past tense: *gave*, progressive participle: *giving*, perfect or passive participle: *given*..

5) Forms of adjective

The English adjectives exhibit three dimensions of comparison, they are the positive, comparative and superlative⁴⁰.

b. Derivational morphology

It is used for all aspects of word-structure involving affixation that is not inflectional. Here is some components of derivational morphology:

1) Adverbs derived from adjectives

Some introductory treatments of English grammar talk as many adverbs end in *ly*, such as *nicely* which is derived from the word *nice* as adjective. Also, there are common adverbs that are formed by conversion: *fast* derived from the adjective *fast*.

2) Nouns derived from nouns

Not all derivational processes change word class. English has derivational processes that yield nouns with meanings.

⁴⁰ Andrew Carstairs-Mccarthy, *An Introduction to English Morphology: Words and Their Structure* (UK: Edinburgh University Press, 2002). P. 28-68

3) Nouns derived from members of other word classes

Nouns derived from adjectives and from verbs are extremely numerous. Here are some suffixes used to derive nouns from adjectives: *-ity*, e.g. *purity, equality*, *-ness*, e.g. *goodness, tallness*, *-ism*, e.g. *radicalism, conservatism*. Besides, suffixes for deriving nouns from verbs, here are some examples: *-ance, -ence*, in the word *performance, ignorance, reference*.

4) Adjectives derived from adjectives

In this category, prefixes predominate. The only suffix of note is *-ish*, *greenish, smallish, remotish*. By contrast, the prefix *un-* *unhappy, unreliable, unsure*, etc. Another negative prefix is *in-*, with allomorphs indicated by the variant spellings *il-, ir-* and *im-*, as in *intangible, illegal, irresponsible*, and *impossible*.

5) Adjectives derived from members of other

Here are some suffixes that commonly form adjectives from verbs, with their basic meanings, such as : the meaning of “able to be X” with *-able* in the word “breakable”.

6) Verbs derived from members of other word classes

Verbs derived from nouns and from adjectives are numerous. Some affixes for deriving verbs from nouns are: *de-* in the word *debug, deforest, delouse*, *-ise* in the word *organise, patronise, terrorise*, *-(i)fy* in the word *beautify, gentrify, petrify*. Some common verbs that are derived by replacing the final voiceless consonant of a noun with a voiced one,

perhaps with some vowel change too. For example : *bath* becomes *bathe*,
breath becomes *breathe*⁴¹.

3. The Assessment of Morphological Awareness

Morphological awareness testing may be done orally, in writing, or in a combination of the two. Moreover, morphological awareness tasks may be used to evaluate judgment, development, or decomposition abilities. The following are two complementary methods for measuring morphological knowledge⁴².

a. Analytic

The analytic approach is concerned with morpheme recognition, or the breakdown of terms into their constituent parts.

b. Synthetic

It is concerned with morphological structure productivity, or putting the smallest parts (morphemes) together to form words.

Chang and colleagues describe two elements of morphological knowledge evaluation that are essentially useful:

a. Morpheme recognition

It is an aspect of morphological knowledge that allows you to differentiate between various meanings across homophones.

b. Understanding of morphological structure

It's the ability to use common morphemes to construct new meaning⁴³.

⁴¹ Carstairs-Mccarthy. Ibid.

⁴² Mark Aronoff and Kirsten Fundeman, *What Is Morphology*, 2nd edn (USA: Wiley-Blackwell, 2005). P. 12-13

⁴³ C. McBride-Chang, H. Shu, and others, 'Morphological Awareness Uniquely Predicts Young Children's Chinese Character Recognition', *Journal of Educational Psychology*, 93 (2003), 743-751.

Within the morphological measurement, a comparison of oral and written tests is important. Children often use oral form tasks because they are easier to complete than written form tasks. The morphological awareness of college students was measured using the written form which included root word form, inflectional word form, derivational word form with non word and real word form, and compound word form.

C. Reading Skill

1. Definition of reading skill

Reading is a verbal activity that is intertwined with thought and all other communication skills such as listening, speaking, and writing⁴⁴. Reading is what happens when students look at a text and attach meaning to the written symbols in that text⁴⁵. Students should be taught reading skill from the start and the skill of using what they already know to grasp unfamiliar elements, whether they are concepts or simple words. Reading becomes a more involved phase that is linked to thought and has an effect on other abilities⁴⁶. Students may have difficulty reading at times, so they must have strong skills to assist them in achieving their reading goals. Reading skills are the ability to complete a task or master a reading practice such as comprehending, translating, and reviewing the printed page. It is used to help students achieve successful reading achievement and job performance by having them practice it on a daily

⁴⁴ Kate Cain, Jane Oakhill, and Peter Bryant, 'Children ' s Reading Comprehension Ability : Concurrent Prediction by Working Memory , Verbal Ability , and Component Skills', 96.1 (2004), 31–42 <<https://doi.org/10.1037/0022-0663.96.1.31>>.

⁴⁵ H. D. Brown, *Principle of Language Learning and Teaching* (New York: Longman, 2000).

⁴⁶ Ehsan Namaziandost, Fariba Rahimi Esfahani, and Sheida Ahmadi, 'Varying Levels of Difficulty in L2 Reading Materials in the Efl Classroom: Impact on Comprehension and Motivation', *Cogent Education*, 6.1 (2019) <<https://doi.org/10.1080/2331186X.2019.1615740>>.

basis. Furthermore, Brown claims that reading is an ability that teachers simply require students to master as part of their language studies⁴⁷.

Based on all of the above definitions of reading, it can be concluded that reading is a fundamental life skill that involves correctly and effectively comprehending, interpreting, evaluating, and extending meaning by identifying letters and phonic elements in written or printed text. Learners who are studying a language develop reading skills in order to improve their understanding and retention of the knowledge contained in the text.

2. The skills of reading

Reading necessitates the reader's mastery of certain abilities in order to comprehend and comprehend the text. Skills are classified by Dallman et al. based on the structure or duration of reading units, such as:

a. Definition of a phrase

Many learners need skill in phrase comprehension in order to concentrate emphasis on the recognition and perception of the meaning of the phrase rather than the meaning of each expression.

b. The context of a sentence

When it comes to sentence comprehension, the reader should practice reading sentences as entire units.

c. The context of a paragraph

Reading a paragraph will predict the result, and careful attention should be paid as a means of comprehending the paragraph⁴⁸.

⁴⁷ H. D. Brown, *Teaching by Principles An Interactive Approach to Language Pedagogy*, Second Edi (White Plains: Longman, 2001).

⁴⁸ Martha Dallman, *The Teaching Reading Sixth Edition* (New York,: College Publishing, 1982). P. 163-164

Aside from those skills, Brown lists fourteen reading skills (micro-skills and macro-skills) that students must master in order to become proficient readers:

a. Micro-skills

- 1) Recognizes the different graphemes and orthographic patterns in English.
- 2) Retain language bits of various lengths in short-term memory.
- 3) Process writing at a fast enough pace to accomplish the goal.
- 4) Recognize a core of words and interpret their meaning based on their word order pattern.
- 5) Recognize grammatical word classes (nouns, verbs, etc.), systems (for example, tenses, agreement, and pruralization), patterns, laws, and elliptical forms
- 6) Recognize that the same meaning can be conveyed in a variety of grammatical forms.
- 7) Recognize the function of cohesive devices in written discourse in signaling the relationship between and among clauses.

b. Macro-skills

- 1) Recognize the rhetorical mode of written discourse and its significance in terms of interpretation.
- 2) Recognize the communicative role of written text in terms of its structure and meaning.
- 3) Using background information, infer meaning that isn't clear.
- 4) Infer correlation and connection between events, deduce causes and effects, and detect main idea, supporting idea, new information, provided

information, generalization, and exemplification from describe events and ideas, etc.

- 5) Recognize the difference between literal and implied meaning.
- 6) Recognize and perceive culturally relevant references in the sense of cultural morphological knowledge.
- 7) Develop and employ a battery of reading techniques for text comprehension, such as scanning and skimming, detecting discourse markers, guessing the meaning of words based on context, and enabling morphological knowledge⁴⁹.

3. Reading Aspects

Some essential aspects of reading, according to Dallman et al., are:

a. Recognition of words

Readers decode the printed page by identifying the written symbol's oral counterpart. They should learn the sounds or sounds of each letter in the alphabet, or a combination of some, during the early stages of learning to read.

b. Understanding

Reading becomes more about word understanding and comprehension. It is a must in reading since the code used in written communication allows them to convert written symbols into sound or meaningful language series.

c. Introspection

Concurrence of mind, contrast of thought, disagreement of the notion, relation, and so on are examples of reflection. Reflection enables the development of ideas in addition to their use⁵⁰.

⁴⁹ Brown, *Teaching by Principles An Interactive Approach to Language Pedagogy*.

⁵⁰ Dallman. Op. Cit. P. 45

4. Reading Techniques

Brown proposes several basic reading techniques, including:

- a. Decide the reading intent
- b. Use spelling rules and conventions for bottom-up decoding
- c. Determine meaning using lexical analysis (prefixes, roots, suffixes, etc.)
- d. Guess at the meaning (of a text)
- e. Skim the text for the key points and gist.
- f. Look for relevant details in the document (names, dates, key words)
- g. For rapid processing, use silent reading techniques. h. For understanding and maintaining information, use marginal notes, outlines, charts, or a semantic map.
- h. Recognize the difference between literal and implied meanings
- i. Use discourse markers to help you process relationships⁵¹.

Teachers and scholars have attempted to describe the mental activities that readers use to construct meaning from a text in the same way. These exercises are often referred to as reading techniques, but they can also be referred to as reading skills. The following are some examples of reading ability:

- a. Recognize words quickly
- b. Use text features (subheadings, transitions, etc.)
- c. Use title(s) to infer what information might follow
- d. Apply world knowledge
- e. Analyze unfamiliar words

⁵¹ Brown, *Teaching by Principles An Interactive Approach to Language Pedagogy*. P. 189

- f. Identify grammatical functions of words
- g. Read for meaning, concentrating on constructing meaning
- h. Make educated guesses about the meaning of the text
- i. Evaluate guesses
- j. try new ones if necessary
- k. Keep the goal of reading in mind
- l. Tailor techniques to the goal of reading
- m. Recognize or infer key ideas
- n. Recognize the relationships between the text's sections
- o. Separate key ideas from minor ideas
- p. Allow for ambiguity in a document (at least temporarily)
- q. Use sense to help you understand what you're doing.
- r. Read even if you don't succeed, at least for a bit⁵².

D. Previous Related Findings

There have been a number of previous studies that have looked into the same topic. The first study is entitled “Morphological awareness: only more phonological?”. The importance of morphologic and phonological comprehension in the growth of reading skills.” Deacon and Kirby collaborated on this research⁵³. The participants in this study were 143 Grade 2 students from a variety of schools in Kingston, Ontario, Canada. The sentence analogy challenge was used to assess morphological understanding. After intelligence and phonological awareness,

⁵² Brown, *Teaching by Principles An Interactive Approach to Language Pedagogy*.

⁵³ S. H. Deacon and John R. Kirby, ‘Morphological Awareness: Just “More Phonological”? The Roles of Morphological and Phonological Awareness in Reading Development’, *Applied Psycholinguistics*, 2004, 223–38 <<https://doi.org/10.1017/S0142716404001110>>.

morphological awareness contributes 8, 10, and 7% (each p.001) of the variance in Grades 3, 4, and 5, respectively, in analyses without the autoregressor. After knowledge and morphological understanding, phonological awareness contributes 7 percent (p.001), 4 percent (p.01), and 4 percent (p.01), respectively. Beyond phonological awareness, morphological awareness made a small but important contribution to reading progress.

The second study is entitled “Using Several Measures of Morphological Awareness to Assess its Relationship to Reading”. Kenn Apel, Emily Diehm, and Lynda Apel planned this study in 2013⁵⁴. This research enlists the participation of 156 kindergarten students. Task review, spelling multimorphemic terms, affix id, relatives task, and rehit task were all used. In both oral and written language, the tasks tested a wide variety of morphological knowledge skills. As a result, themorphological understanding adds an additional 17 percent to reading comprehension variation.

The third study is entitled “Morphological Understanding and Its Relationship to Vocabulary Knowledge and Morphological Complexity among Omani EFL University Students”. This study was conducted by Al Farsi⁵⁵. The research included 86 Iranian university students, both male and female, who were randomly selected from undergraduate students at the University of Zanjan majoring in English Translation. This study found that the correlation index was statistically significant ($r = .601$, $p.05$), indicating that morphological

⁵⁴ Kenn Apel and others, ‘Morphological Awareness Intervention with Kindergartners and First- and Second-Grade Students from Low Socioeconomic Status Homes: A Feasibility Study’, *Language, Speech, and Hearing Services in Schools*, 44.2 (2013), 161–73 <[https://doi.org/10.1044/0161-1461\(2012/12-0042\)](https://doi.org/10.1044/0161-1461(2012/12-0042))>.

⁵⁵ Badriya Al Farsi, ‘Morphological Awareness and Its Relationship to Vocabulary Knowledge and Morphological Complexity among Omani EFL University Students.’, *Unpublished Master’s Thesis, University of Queensland*, June 2008, 2008, 94 <<https://doi.org/10.13140/RG.2.2.35217.12645>>.

understanding generated a strong moderate and positive correlation with vocabulary knowledge.

The fourth study is entitled “Morphological Awareness And Its Relationship To Vocabulary Size And Morphological Complexity Among Iranian Efl University Students”. This study was conducted by Latifi and colleagues⁵⁶. The participants were 60 senior university students majoring in English Language Teaching from Azad University of Qaemshahr. The findings of this study revealed that students' morphological memory was moderate (62 percent), and their vocabulary comprehension only covered 42 percent of a text's vocabulary. According to the findings of this report, there is a significant relationship between morphological knowledge and vocabulary size among students.

Based on the findings of the previous studies, it can be concluded that both critical thinking skills and morphological awareness have a significant impact on the academic field, especially reading ability as a language literacy skill. These skills must be taught and developed in order for students to succeed in learning English. The findings of this study are intended to look into the relationship between critical thought skills, morphological understanding, and reading ability.

E. Hypotheses of the Study

The theories reviewed in this chapter lead the researcher to formulating the following hypotheses.

1. H_a: There is a positive correlation between critical thinking skills and reading skill of the sixth semester TBI students at IAIN Curup.

⁵⁶ Latifi and others, ‘Morphological Awareness and Its Relationship to Vocabulary Size and Morphological Complexity Among Iranian EFL University Students’ (Iran: Mazandaran University, 2012).

H₀: There is no significant positive correlation between critical thinking skills and reading skill of the sixth semester TBI students at IAIN Curup.

2. H_a: There is a positive correlation between morphological awareness and reading skill of the sixth semester TBI students at IAIN Curup.

H₀: There is no significant positive correlation between morphological awareness and reading skill of the sixth semester TBI students at IAIN Curup.

3. H_a: There are positive correlations among critical thinking skill, morphological awareness simultaneously, and reading skill of the sixth semester TBI students at IAIN Curup.

H₀: There are no significant positive correlations among critical thinking skill, morphological awareness simultaneously, and reading skill of the sixth semester TBI students at IAIN Curup.

CHAPTER III

RESEARCH METHOD

A. Kind of the Research

This research used a correlational method. The correlational method, according to Fraenkel and others, is a method for explaining the intensity of the relationship between two or more events or characteristics⁵⁷. It is a step up from the descriptive form of description. Unlike the experimental approach, which looks at whether or not a given control condition has a predicted effect, this method focuses on the relationship that can be seen by the coefficient of correlation. To put it another way, a correlational analysis is a research method that aims to predict the degree or relationship between two or more variables without attempting to influence the variables. Furthermore, according to Ary, the correlational approach is beneficial since the stronger two events are linked (related, or associated), the better we can predict one from the other⁵⁸.

A correlational analysis can produce three different outcomes, according to Gall and others: a positive correlation, a negative correlation, or no correlation⁵⁹. To begin with, positive correlation means that when one variable increases or decreases, the others will also increase or decrease. A good positive correlation is shown by a correlation coefficient close to +1.00. Negative correlation is when one variable increases while the others decreases, it is said that the variables have

⁵⁷ Jack R Fraenkel, Norman E Wallen, and Helen H Hyun, *How to Design and Evaluate Research in Education* (1221 Avenue of the Americas, New York, NY 10020: McGraw-Hill Companies, Inc, 2012) <<https://doi.org/10.1017/CBO9781107415324.004>>.

⁵⁸ Donald Ary and others, *Introduction to Research in Education, Measurement*, 8th edn (USA: Wadsworth, Cengage Learning, 2010), iv <<https://doi.org/10.1017/CBO9781107415324.004>>.

⁵⁹ Meredith D Gall, Joyce P Gall, and Walter R Borg, *Educational Research: An Introduction*, 7th edn (USA: Allyn and Bacon, 2003).

a negative correlation. A strong negative correlation is shown by a correlation coefficient close to -1.00 . Subsequently, it is no connection. No correlation happens when the variables are uncorrelated, and there is no linear relationship between them, it is said that there is no correlation. There is no correlation when the correlation coefficient is 0.

As previously mentioned, a correlational approach is one that is used to predict the relationship between two or more variables. There were two correlational variables in this research. They were independent variables (X) and a dependent variable (Y). The independent variable is the one used to predict and influence the outcome. The dependent variable, on the other hand, is the variable that would be expected or influenced by the independent variable. The following are the variables that were used in this research:

1. Independent variable

- a. The first independent variable of this research was critical thinking skills of the sixth semester TBI students at IAIN Curup.
- b. The second independent variable of this research was morphological awareness of the sixth semester TBI students at IAIN Curup.

2. Dependent variable

- a. The dependent variable of this research was English reading skill of the sixth semester TBI students at IAIN Curup.

B. Population and Samples

1. Population

Population is defined by Fraenkel as the entire group of organisms (animal or human) that will be represented by the research participants⁶⁰. The population for this research was all sixth-semester English students in the English *Tadris* department at State Islamic Institute of Curup in the academic year 2020/2021. They were 53 English students from classes A, B, and C, who had completed several levels of English reading classes.

2. Samples

According to Ary, sample refers to the portion of the population that is being studied⁶¹. In this research, the researcher deployed a convenient sampling technique to solicit the samples. In this way, the researcher distributed the three instruments already designed as the techniques of collecting data, namely critical thinking questionnaire, English morphological test, and TOEFL reading test to the population (53 sixth semester students). Subsequently, of the 53 students, those who responded and returned the answers of the three instruments were officially regarded as the samples. After conducting the foregoing, there were 35 students who provided the answers of the three instruments. Thus, there were 35 sixth semester TBI students who became the samples of this research.

⁶⁰ Fraenkel, Wallen, and Hyun. Op. Cit.

⁶¹ Ary and others, IV. Op. Cit.

C. Techniques of Collecting Data

The data in this research were collected using one set of questionnaire and two sets of tests. The first was critical thinking questionnaire whose instrument borrowed the Critical thinking questionnaire developed by Honey⁶². This questionnaire was derived from a model of critical thinking skills whose components or indicators consisted of analysis, inference, evaluation, inductive reasoning, and deductive reasoning. The second was morphological awareness test. This test had been validated and developed by Lisa Kay Maag in 2007. The test contained 150 items which were based on three indicators namely recognizing English morphemes, modifications of English morphemes, and understanding the definitions of English morphemes. The third was English reading test. English reading test was adopted from a set of TOEFL test for reading section. The test contained 50 items.

D. Instruments

In conjunction with the elaborations contained in the previous section, techniques of collecting data, there were three sets of instruments used in this research. They were critical thinking questionnaire, English morphological awareness test, and English reading test.

1. Critical thinking skill questionnaire

The critical thinking questionnaire was developed by Honey⁶³. This questionnaire assessed the ability of students to apply critical thinking in terms

⁶² Honey. Op. Cit.

⁶³ Honey. Ibid.

of some skills such as analysis, inference, evaluation, inductive reasoning, and deductive reasoning. This questionnaire consisted of five levels of critical thinking skills which became the indicators as presented in the following table 3.

Table 3. The Blueprint of Critical Thinking Skills Questionnaire Developed by Honey⁶⁴

No	Indicators of Critical Thinking Skills	Descriptions	Items
1	Analysis	The ability to identify, classify, compare, and contrast various sets of information.	<ol style="list-style-type: none"> 1. I make notes on the important elements of people's arguments or propositions (e.g. the topic, issues, thesis and main points). 2. I distinguish between facts and opinions. 3. I search for parallels and similarities between different issues. 4. I solicit input from other people to broaden my understanding of a subject. 5. I analyze propositions to see if the logic is sound. 6. I distinguish major points from minor points.
2	Inference	The ability to absorb unstated information and the ability to draw a set of conclusions from a bundle of information.	<ol style="list-style-type: none"> 7. I put material I have read or seen into my own words to help me understand it. 8. I summarize what I have heard or read to ensure I have understood properly. 9. I draw conclusions from data I have analyzed in order to decide whether to accept or reject a proposition or argument.

⁶⁴ Honey. Ibid.

			<p>10. I look for what isn't there rather than concentrate solely on what is there.</p> <p>11. I reach my own conclusions rather than let myself be swayed by the opinions of others.</p>
3	Evaluation	The ability to consider the value or essence of information.	<p>12. I test the assumptions underpinning an argument or proposition.</p> <p>13. I double-check facts for accuracy.</p> <p>14. I use a set of criteria against which to evaluate the strength of the argument or proposition.</p> <p>15. I assess the credibility of the person presenting the material I am evaluating.</p> <p>16. I play devil's advocate in order to improve my grasp of an argument or proposition.</p> <p>17. I evaluate the evidence for an argument or proposition to see if it is strong enough to warrant belief.</p> <p>18. I consider new information to see whether I need to re-evaluate a previous conclusion.</p>
4	Inductive reasoning	The ability to think in detail from specific domains to generate general domains.	<p>19. I check other people's understanding of issues.</p> <p>20. I break down material so that I can see how ideas are ordered and raised.</p> <p>21. I explore statements for ambiguity to ensure I do not misconstrue their meaning.</p> <p>22. I challenge proposals and arguments that appear to lack rigor.</p> <p>23. I ask questions to reinforce my understanding of the issue.</p> <p>24. I research a subject to enhance my understanding.</p>
5	Deductive	The ability to think in	25. I state my reasons for

	reasoning	detail from general domains to specific domains.	accepting or rejecting arguments and propositions. 26. I set aside emotive language to avoid being swayed by bias or opinionated statements. 27. I weigh up the reliability of people's opinions. 28. I establish the assumptions that an argument rests upon. 29. I set aside my prejudices to evaluate arguments in a dispassionate, objective way. 30. I establish the underlying purpose of an argument or proposition.
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The following table 4 is the form of critical thinking questionnaire based on the above blueprint.

Table 4. Honey's Critical Thinking Skills Questionnaire

Direction: Here are 30 statements exploring things you might or might not do when critically thinking about a subject. Simply read each description and click on the box to indicate how often you do it.							
No	English Items	Indonesian Items	Never	Rarely	Sometimes	Often	Always
1	I make notes on the important elements of people's arguments or propositions (e.g. the topic, issues, thesis and main points).	Saya mencatata elemen-elemen penting dari argumen atau ajuan orang lain (Misal: topik, isu, tesis, dan poin utama).					
2	I distinguish between facts and opinions.	Saya memperbedakan fakta dengan pendapat.					
3	I search for parallels and	Saya mencari aspek paralel dan					

	similarities between different issues.	kesamaan antara isu-isu yang berbeda.					
4	I solicit input from other people to broaden my understanding of a subject.	Saya mencari masukan dari orang lain untuk memperluas pemahaman saya terhadap sebuah subjek.					
5	I analyze propositions to see if the logic is sound.	Saya menganalisa pendapat-pendapat yang diajukan untuk melihat keakuratan logikanya.					
6	I distinguish major points from minor points.	Saya membedakan ide-ide besar dari ide-ide kecil.					
7	I put material I have read or seen into my own words to help me understand it.	Saya memproses informasi yang saya baca atau lihat menggunakan bahasa saya sendiri untuk membantu saya memahaminya.					
8	I summarize what I have heard or read to ensure I have understood properly.	Saya merangkum apa yang saya dengar atau baca untuk memastikan bahwa saya memahaminya dengan baik.					
9	I draw conclusions from data I have analyzed in order to decide whether to accept or reject a proposition or argument.	Saya menyimpulkan data yang saya sudah analisa agar bisa menentukan apakah saya harus terima atau tolak pendapat atau argumen terkait data itu.					
10	I look for	Saya mencari hal					

	what isn't there rather than concentrate solely on what is there.	yang tak terungkap dari pada hanya mengikuti saja apa yang tertera.					
11	I reach my own conclusions rather than let myself be swayed by the opinions of others.	Saya membuat simpulan sendiri dari pada membiarkan saya terbawa opini orang lain.					
12	I test the assumptions underpinning an argument or proposition.	Saya menguji asumsi-asumsi yang mendasari sebuah argumen atau pendapat.					
13	I double-check facts for accuracy.	Saya mengecek dua kali fakta demi keakuratan.					
14	I use a set of criteria against which to evaluate the strength of the argument or proposition.	Saya menggunakan berbagai kriteria yang berlawanan untuk mengevaluasi kekuatan dari suatu argumen atau pendapat.					
15	I assess the credibility of the person presenting the material I am evaluating.	Saya mengukur kredibilitas seseorang yang menyampaikan suatu materi yang saya evaluasi.					
16	I play devil's advocate in order to improve my grasp of an argument or proposition.	Saya mempertimbangkan ide yang berlawanan dari suatu argumen atau pendapat agar saya bisa meningkatkan pemahaman saya terkait argumen atau pendapat itu.					
17	I evaluate the evidence for	Saya mengevaluasi bukti dari suatu					

	an argument or proposition to see if it is strong enough to warrant belief.	argumen atau pendapat untuk melihat seberapa kuat argumen atau pendapat itu untuk bisa diterima.					
18	I consider new information to see whether I need to re-evaluate a previous conclusion.	Saya mempertimbangkan informasi baru untuk melihat apakah saya butuh mengevaluasi kembali simpulan yang sudah saya buat sebelumnya.					
19	I check other people's understanding of issues.	Saya memeriksa pemahaman orang lain tentang berbagai isu.					
20	I break down material so that I can see how ideas are ordered and raised.	Saya merincikan suatu materi sehingga saya mampu melihat bagaimana ide-ide bisa disusun dan diajukan.					
21	I explore statements for ambiguity to ensure I do not misconstrue their meaning.	Saya mengeksplorasi ujaran-ujaran ambigu untuk memastikan bahwa saya tidak salah paham tentang maknanya.					
22	I challenge proposals and arguments that appear to lack rigour.	Saya mempertanyakan pendapat yang diajukan atau argumen yang diangkat untuk memperlemah pendapat atau argumen tersebut.					
23	I ask questions to reinforce my understanding of the issue.	Saya membuat berbagai pertanyaan untuk memperkuat pemahaman saya tentang berbagai					

		isu.					
24	I research a subject to enhance my understanding.	Saya teliti suatu subjek untuk meningkatkan pemahaman saya tentang subjek tersebut.					
25	I state my reasons for accepting or rejecting arguments and propositions.	Saya utarakan pemikiran saya untuk menerima atau menolak berbagai argumen dan pendapat.					
26	I set aside emotive language to avoid being swayed by bias or opinionated statements.	Saya tidak menggunakan bahasa emosional untuk menghindari agar saya tidak terbawa oleh bias atau pendapat-pendapat orang lain.					
27	I weigh up the reliability of people's opinions.	Saya menimbang reliabilitas atau konsistensi pendapat-pendapat orang lain.					
28	I establish the assumptions that an argument rests upon.	Saya membangun asumsi dari suatu argumen yang didasarkan.					
29	I set aside my prejudices to evaluate arguments in a dispassionate, objective way.	Saya kesampingkan prasangka-prasangka demi mengevaluasi argumen secara objektif.					
30	I establish the underlying purpose of an argument or proposition.	Saya memperkuat tujuan dasar dari suatu argumen atau pendapat yang saya ajukan.					

2. Morphological Awareness Test

The second instrument of this research was morphological awareness test. This test was already validated and developed by Lisa Kay Maag in 2007⁶⁵. The following table 5 presents blueprint of the test, and Table 6 presents the form of morphological awareness test.

Table 5

Blueprint of Morphological Awareness Test

No	Indicators	Number of items
1	Recognizing English Morphemes	50 items
2	Modification of English morphemes	50 items
3	Understanding the definitions of English morphemes	50 items

⁶⁵ Lisa Kay Maag, 'Measuring Morphological Awareness in Adult Readers: Implications for Vocabulary Development' (UNIVERSITY OF FLORIDA, 2007).

Table 6

English Morphological Test

Part 1: Look at each word in the list below. Check *yes* if you know the word. Check *no* if you do not know the word. (If you are unsure, check *yes* if you could use the word in a sentence.)

		Do you know the word?			
Example	teacher	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
Example	thorfeize	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
1. noncombatant	<input type="checkbox"/> Yes <input type="checkbox"/> No				
2. mistreating	<input type="checkbox"/> Yes <input type="checkbox"/> No				
3. allegorical	<input type="checkbox"/> Yes <input type="checkbox"/> No				
4. believable	<input type="checkbox"/> Yes <input type="checkbox"/> No				
5. discredited	<input type="checkbox"/> Yes <input type="checkbox"/> No				
6. unmitigated	<input type="checkbox"/> Yes <input type="checkbox"/> No				
7. correspondence	<input type="checkbox"/> Yes <input type="checkbox"/> No				
8. decadence	<input type="checkbox"/> Yes <input type="checkbox"/> No				
9. hypothetically	<input type="checkbox"/> Yes <input type="checkbox"/> No				
10. explanatory	<input type="checkbox"/> Yes <input type="checkbox"/> No				
11. impiety	<input type="checkbox"/> Yes <input type="checkbox"/> No				
12. presumptuous	<input type="checkbox"/> Yes <input type="checkbox"/> No				
13. readmission	<input type="checkbox"/> Yes <input type="checkbox"/> No				
14. indefatigable	<input type="checkbox"/> Yes <input type="checkbox"/> No				
15. bedevilment	<input type="checkbox"/> Yes <input type="checkbox"/> No				
16. diversification	<input type="checkbox"/> Yes <input type="checkbox"/> No				
17. enduring	<input type="checkbox"/> Yes <input type="checkbox"/> No				
18. detestable	<input type="checkbox"/> Yes <input type="checkbox"/> No				
19. reciprocity	<input type="checkbox"/> Yes <input type="checkbox"/> No				
20. commendable	<input type="checkbox"/> Yes <input type="checkbox"/> No				
21. irreverent	<input type="checkbox"/> Yes <input type="checkbox"/> No				
22. provocation	<input type="checkbox"/> Yes <input type="checkbox"/> No				
23. despicable	<input type="checkbox"/> Yes <input type="checkbox"/> No				
24. expensive	<input type="checkbox"/> Yes <input type="checkbox"/> No				
25. protestation	<input type="checkbox"/> Yes <input type="checkbox"/> No				
26. licensure	<input type="checkbox"/> Yes <input type="checkbox"/> No				
27. despotism	<input type="checkbox"/> Yes <input type="checkbox"/> No				
28. incomparable	<input type="checkbox"/> Yes <input type="checkbox"/> No				
29. apparently	<input type="checkbox"/> Yes <input type="checkbox"/> No				
30. fundamental	<input type="checkbox"/> Yes <input type="checkbox"/> No				
31. liberation	<input type="checkbox"/> Yes <input type="checkbox"/> No				
32. demolition	<input type="checkbox"/> Yes <input type="checkbox"/> No				
33. improvisational	<input type="checkbox"/> Yes <input type="checkbox"/> No				
34. contender	<input type="checkbox"/> Yes <input type="checkbox"/> No				
35. redacting	<input type="checkbox"/> Yes <input type="checkbox"/> No				
36. operationalize	<input type="checkbox"/> Yes <input type="checkbox"/> No				
37. presentiment	<input type="checkbox"/> Yes <input type="checkbox"/> No				
38. bravery	<input type="checkbox"/> Yes <input type="checkbox"/> No				
39. indecision	<input type="checkbox"/> Yes <input type="checkbox"/> No				
40. opacity	<input type="checkbox"/> Yes <input type="checkbox"/> No				
41. incessant	<input type="checkbox"/> Yes <input type="checkbox"/> No				
42. demotion	<input type="checkbox"/> Yes <input type="checkbox"/> No				
43. indivisible	<input type="checkbox"/> Yes <input type="checkbox"/> No				
44. dependable	<input type="checkbox"/> Yes <input type="checkbox"/> No				
45. obliterating	<input type="checkbox"/> Yes <input type="checkbox"/> No				
46. addressing	<input type="checkbox"/> Yes <input type="checkbox"/> No				
47. coordination	<input type="checkbox"/> Yes <input type="checkbox"/> No				
48. discovery	<input type="checkbox"/> Yes <input type="checkbox"/> No				
49. placidity	<input type="checkbox"/> Yes <input type="checkbox"/> No				
50. defamation	<input type="checkbox"/> Yes <input type="checkbox"/> No				

Part 2: In each line, the word in **bold font** was formed from one of the words on the right. Select the letter of the word on the right which is the basis for the **bold** word.

Examples:

<u> c </u> teacher	a. tea	b. each	c. teach
<u> a </u> undamaged	a. damage	b. dam	c. aged

_____ 1. noncombatant	a. comb	b. bat	c. combat
_____ 2. mistreating	a. mist	b. treat	c. eating
_____ 3. allegorical	a. all	b. leg	c. allegory
_____ 4. believable	a. belief	b. belie	c. lie
_____ 5. discredited	a. disc	b. credit	c. edited
_____ 6. unmitigated	a. mit	b. gate	c. mitigate
_____ 7. correspondence	a. respond	b. dense	c. pond
_____ 8. decadence	a. decay	b. decade	c. cadence
_____ 9. hypothetically	a. hypothecary	b. thesis	c. the
_____ 10. explanatory	a. plane	b. planetary	c. explain
_____ 11. impiety	a. imp	b. pious	c. pie
_____ 12. presumptuous	a. presume	b. sump	c. sumptuous
_____ 13. readmission	a. read	b. admit	c. mission
_____ 14. indefatigable	a. fat	b. gable	c. fatigue
_____ 15. bedevilment	a. evil	b. bed	c. devil
_____ 16. diversification	a. diverse	b. versify	c. diver
_____ 17. enduring	a. ring	b. during	c. endure
_____ 18. detestable	a. stable	b. detest	c. testable
_____ 19. reciprocity	a. recipe	b. reciprocal	c. receipt
_____ 20. commendable	a. commend	b. mend	c. mendable
_____ 21. irreverent	a. reverse	b. revere	c. rent
_____ 22. provocation	a. prove	b. provoke	c. vocation
_____ 23. despicable	a. spice	b. cable	c. despise
_____ 24. expensive	a. expend	b. pensive	c. pens

___ 25. protestation	a. station	b. testate	c. protest
___ 26. licensure	a. censure	b. license	c. ensure
___ 27. despotism	a. despot	b. spot	c. pot
___ 28. incomparable	a. income	b. parable	c. compare
___ 29. apparently	a. parent	b. rent	c. appear
___ 30. fundamental	a. fun	b. mental	c. fundament
___ 31. liberation	a. beration	b. liberate	c. ration
___ 32. demolition	a. demo	b. mole	c. demolish
___ 33. improvisational	a. improve	b. provide	c. improvise
___ 34. contender	a. ender	b. contend	c. tend
___ 35. redacting	a. red	b. redact	c. acting
___ 36. operationalize	a. rationalize	b. opera	c. operate
___ 37. presentiment	a. present	b. resentment	c. sentiment
___ 38. bravery	a. raver	b. very	c. brave
___ 39. indecision	a. incision	b. decide	c. indecent
___ 40. opacity	a. opaque	b. pace	c. city
___ 41. incessant	a. cess	b. ant	c. cease
___ 42. demotion	a. demo	b. motion	c. demote
___ 43. reforestation	a. station	b. forest	c. fore
___ 44. dependable	a. depend	b. deepen	c. endable
___ 45. obliterating	a. literate	b. rating	c. obliterate
___ 46. addressing	a. dress	b. address	c. dressing
___ 47. coordination	a. ordination	b. ordinal	c. coordinate
___ 48. discovery	a. disco	b. cover	c. discover
___ 49. placidity	a. acidity	b. placid	c. place
___ 50. defamation	a. fame	b. famish	c. family

Part 3: Select the best definition for each word.

- ___ 1. noncombatant
a. someone in disguise
b. someone not fighting
c. someone with messy hair
- ___ 2. mistreating
a. behaving badly toward
b. clearing of foggy weather
c. unrecognizable food
- ___ 3. allegorical
a. happy
b. symbolic
c. knitted leg covering
- ___ 4. believable
a. in the realm of possibility
b. an unlikely story
c. able to survive a tragedy
- ___ 5. discredited
a. forced to pay with cash
b. a charge that is removed
c. proven false or worthless
- ___ 6. unmitigated
a. without a lawsuit
b. with one's bare hands
c. not toned down
- ___ 7. correspondence
a. exchange of letters; matching
b. organisms in a small pond
c. a legal document
- ___ 8. decadence
a. a 10-year period
b. declining, or self-indulgence
c. varying in pace
- ___ 9. hypothetically
a. with a needle
b. using supposition
c. written in ink
- ___ 10. explanatory
a. uneven; not flat
b. outside the solar system
c. giving reasons or causes
- ___ 11. impiety
a. elf-like, fairy tale character
b. lack of respect
c. baked in a round pan
- ___ 12. presumptuous
a. overly bold or confident
b. overly ornate
c. asking over and over
- ___ 13. readmission
a. place of refuge
b. tutoring in reading
c. entering again
- ___ 14. indefatigable
a. in civilian clothes
b. without tiring
c. never losing
- ___ 15. bedevilment
a. a lumpy mattress
b. causing trouble or distress
c. intense fear
- ___ 16. diversification
a. branching out
b. making into song
c. turning prose into poetry
- ___ 17. enduring
a. lasting
b. going on at the same time
c. changing rapidly
- ___ 18. detestable
a. causing hatred or dislike
b. cannot be measured
c. a horse out of the barn
- ___ 19. reciprocity
a. sharing cooking instructions
b. exchanging or sharing privileges
c. the part left over in division
- ___ 20. commendable
a. something that can be fixed
b. worthy of praise
c. something that can be sold
- ___ 21. irreverent
a. cannot be undone
b. going forward
c. lacking respect
- ___ 22. provocation
a. a first job
b. causing a response
c. a mathematical proof

- _____ 23. despicable
 a. carefully chosen
 b. food without seasoning
 c. viewed with contempt
- _____ 24. expensive
 a. talking too much
 b. thoughtful
 c. costly
- _____ 25. protestation
 a. objecting to something
 b. taking a practice test
 c. an outdated train or bus depot
- _____ 26. licensure
 a. formal granting of permission
 b. making sure of something
 c. blaming or criticizing
- _____ 27. despotism
 a. ruling with absolute control
 b. removing a stain
 c. giving up or surrendering
- _____ 28. incomparable
 a. receiving little pay
 b. able to afford
 c. without equal
- _____ 29. apparently
 a. easily
 b. caring for one's children
 c. seemingly
- _____ 30. fundamental
 a. at the base of
 b. an enjoyable puzzle
 c. interruption of a pattern
- _____ 31. liberation
 a. setting free
 b. sharing books
 c. drinking too much
- _____ 32. demolition
 a. digging underground
 b. destroying or razing
 c. lowering in rank
- _____ 33. improvisational
 a. making stronger
 b. gaining better eyesight
 c. on the spur of the moment
- _____ 34. contender
 a. shopper or customer
 b. someone who takes charge
 c. competitor
- _____ 35. redacting
 a. bad stage performance
 b. loud behavior
 c. editing; preparing for publication
- _____ 36. operationalize
 a. to sing in Latin
 b. to put into action
 c. to perform surgery
- _____ 37. presentiment
 a. giving a gift
 b. sensing what is about to happen
 c. right now; without delay
- _____ 38. bravery
 a. acting with courage
 b. cheering loudly
 c. shameful behavior
- _____ 39. indecision
 a. unable to choose
 b. inappropriate
 c. inaccurate
- _____ 40. opacity
 a. ancient village
 b. moving very slowly
 c. not letting light through
- _____ 41. incessant
 a. not stopping
 b. unscented
 c. without warning
- _____ 42. demotion
 a. lowering of rank
 b. fluttering
 c. without moving
- _____ 43. indivisible
 a. unable to be split
 b. barely visible
 c. in the future

- ___ 44. dependable
 - a. reliable
 - b. servant
 - c. unbothered

- ___ 45. obliterating
 - a. making smaller
 - b. wiping out
 - c. reprimanding

- ___ 46. addressing
 - a. putting clothes on
 - b. speaking or writing to
 - c. outer ornamental layer

- ___ 47. coordination
 - a. shaping raw materials
 - b. smoothing rough edges
 - c. harmonious interaction

- ___ 48. discovery
 - a. finding something new
 - b. planetary alignment
 - c. keeping hidden

- ___ 49. placidity
 - a. calmness
 - b. a fixed location
 - c. a chemical state

- ___ 50. defamation
 - a. making well-known
 - b. speaking badly of
 - c. hiding from one's fans

3. English Reading Test

English reading test was adopted from a set of TOEFL test for reading section. The test contained 50 items. The form of test can be seen in table 7 below.

Table 7
English Reading Skill Test

Questions 1-11

- The French word *renaissance* means rebirth. It was first used in 1855 by the historian Jules Michelet in his *History of France*, then adopted by historians of culture, by art historians, and eventually by music historians, all of whom applied it to European culture during the 150 years spanning 1450-1600. The concept of rebirth was appropriate to this period of European history because of the renewed interest in ancient Greek and Roman culture that began in Italy and then spread throughout Europe. Scholars and artists of the fifteenth and sixteenth centuries wanted to restore the learning and ideals of the classical civilizations of Greece and Rome. To these scholars this meant a return to human — as opposed to spiritual — values. Fulfillment in life, as opposed to concern about an afterlife, became a desirable goal, and expressing the entire range of human emotions and enjoying the pleasures of the senses were no longer frowned on. Artists and writers now turned to secular as well as religious subject matter and sought to make their works understandable and appealing.
- These changes in outlook deeply affected the musical culture of the Renaissance period — how people thought about music as well as the way music was composed, experienced, discussed, and disseminated. They could see the architectural monuments, sculptures, plays, and poems that were being rediscovered, but they could not actually hear ancient music—although they could read the writings of classical philosophers, poets, essayists, and music theorists that were becoming available in translation. They learned about the power of ancient music to move the listener and wondered why modern music did not have the same effect. For example, the influential religious leader Bernardino Cirillo expressed disappointment with the learned music of his time. He urged musicians to follow the example of the sculptors, painters, architects, and scholars who had rediscovered ancient art and literature.
- The musical Renaissance in Europe was more a general cultural movement and state of mind than a specific set of musical techniques. Furthermore, music changed so rapidly during this century and a half—though at different rates in different countries—that we cannot define a single Renaissance style.

1. What is the passage mainly about?
 - (A) The musical compositions that best illustrate the developments during the European Renaissance
 - (B) The musical techniques that were in use during the European Renaissance
 - (C) The European Renaissance as a cultural development that included changes in musical style
 - (D) The ancient Greek and Roman musical practices used during the European Renaissance
2. What does the author mean by using the word “eventually” in line 3?
 - (A) That music historians used the term “Renaissance” after the other historians did
 - (B) That most music historians used the term “Renaissance”
 - (C) The term “Renaissance” became widely used by art historians but not by music historians
 - (D) That music historians used the term “Renaissance” very differently than it had been used by Jules Michelet
3. The phrase “frowned on” in line 11 is closest in meaning to
 - (A) given up
 - (B) forgotten about
 - (C) argued about
 - (D) disapproved of
4. The word “now” in line 11 refers to
 - (A) the time of the classical civilizations of Greece and Rome
 - (B) the period of the Renaissance
 - (C) 1855
 - (D) the time at which the author wrote the passage
5. Where in the passage does the author mention where the Renaissance interest in classical ideas first appeared?
 - (A) Lines 1-4
 - (B) Lines 4-6

- (C) Lines 8-9
(D) Lines 11-13
6. It can be inferred from the passage that thinkers of the Renaissance were seeking a rebirth of
(A) communication among artists across Europe
(B) spirituality in everyday life
(C) a cultural emphasis on human values
(D) religious themes in art that would accompany the traditional secular themes
7. According to the passage, Renaissance artists and writers had all of the following intentions EXCEPT
(A) to use religious themes
(B) to portray only the pleasant parts of human experience
(C) to produce art that people would find attractive
(D) to create works that were easily understood
8. The word “disseminated” in line 16 is closest in meaning to
(A) played
(B) documented
(C) spread
(D) analyzed
9. What can be inferred about the music of ancient Greece and Rome?
(A) It expressed different ideals than classical sculpture, painting and poetry
(B) It was played on instruments that are familiar to modern audiences
(C) It had the same effect on Renaissance audiences as it had when originally performed
(D) Its effect on listeners was described in a number of classical texts
10. According to the passage, why was Bernardino Cirillo disappointed with the music of his time?
(A) it was not complex enough to appeal to musicians
(B) It had little emotional impact on audiences
(C) It was too dependent on the art and literature of his time.
(D) It did not contain enough religious themes
11. Which of the following is mentioned in the passage as a reason for the absence of a single Renaissance musical style?
(A) The musical Renaissance was defined by technique rather than style
(B) The musical Renaissance was too short to give rise to a new musical style
(C) Renaissance musicians adopted the styles of both Greek and Roman musicians
(D) During the Renaissance, music never remained the same for very long

Questions 12-20

- The thick, woolly fleece of the domestic sheep is its distinguishing feature and the source of much of its economic importance. Yet only a moment, in evolutionary terms, has passed since the domestic sheep had a coat resembling that of many other wild Line animals. As recently as 8,000 years ago, it was covered not in a white, continuously growing mass of wool but in a brown coat consisting of an outer array of kemps, or coarse hairs, that was shed annually and a fine woolly undercoat that also molted.
- (5) Such an animal could not have supported the technology that has grown up around the domestic sheep — the shearing, dyeing, spinning, and weaving of wool — any better than could a wild sheep such as the bighorn of North America.
- (10) Much of the selective breeding that led to the fleece types known today took place in prehistory, and even the later developments went largely unchronicled. Yet other kinds of records survive, in three forms. Specimens of wool from as long ago as 1500 B.C. have been found, mostly as ancient textiles, but also in the form of sheepskins. Antique depictions of sheep in sculpture, relief, and painting give even earlier clues to the character
- (15) of ancient fleeces. The longest line of evidence takes the form of certain primitive breeds that are still tended in remote areas or that escaped from captivity long ago and now live in the wild. They retain the characteristics of ancient sheep, providing living snapshots of the process that gave rise to modern fleeces.
12. What topic does the passage mainly discuss?
(A) The economic importance of sheep through the ages
(B) The development of textile crafts and technologies
(C) The evolution of the fleece of domestic sheep
(D) The influence of technology on wool

manufacturing

13. The word "source" in line 2 is closest in meaning to
 (A) quantity
 (B) result
 (C) basis
 (D) cost
14. According to the passage, the outer coat of sheep 8,000 years ago was
 (A) white
 (B) coarse
 (C) warmer than that of bighorn sheep
 (D) similar to that of the modern sheep
15. Which of the following can be concluded about wild sheep, as compared with domestic sheep?
 (A) They are evolving more rapidly
 (B) They have thicker coats
 (C) They are of less economic importance
 (D) They are less similar to bighorn sheep
16. The word "unchronicled" in line 11 is closest in meaning to
 (A) unquestioned
 (B) unexplained
 (C) unnoticed
 (D) unrecorded
17. What does the author mention as evidence of the characteristics of ancient sheep?
 (A) Representations of sheep in art
 (B) Ancient tales about sheep
 (C) Documents describing sheep
 (D) Skeletons of sheep
18. The word "clues" in line 14 is closest in meaning to
 (A) proofs
 (B) indications
 (C) colors
 (D) variations
19. In line 17, the author uses the term "living snapshots" to refer to
 (A) photographs of early types of sheep
 (B) early guns used for hunting sheep
 (C) ancient paintings of sheep
 (D) early breeds of sheep that still exist
20. The phrase "gave rise to" in line 18 is closest in meaning to
 (A) replaced by
 (B) favored over
 (C) brought about
 (D) found out

Questions 21-31

- Architecture has been characterized by W. R. Dalzell as the "indispensable art," and rightly so. Inevitably, the practical functions that shelters are designed to fulfill play a strong role in determining their appearance and thus, in part, their artistic character. So do the line methods of construction available and practicable at any given moment. The strikingly new forms of architecture that appeared in the late nineteenth and twentieth centuries were built to meet the needs of industry and of commerce based on industry, in a society whose essential character and internal relationships had been sharply transformed by the Industrial Revolution.

- About the middle of the nineteenth century, mechanized industrial production began to demand large, well-lighted interiors in which manufacturing could be carried on. The administration of giant industrial and commercial concerns required office buildings of unprecedented size, containing suites of offices easily accessible to employees and customers. The marketing of industrial products necessitated large-scale storage spaces, and enormous shops selling under one roof a wide variety of items. Industrial and commercial pressures drew increasing populations to urban centers, and traditional housing was no longer adequate to contain them. Mechanized transportation of industrial products and industrial and business personnel was essential. Leisure-time entertainment and cultural activities for the vast new urban populations required still a different kind of structure. Hence, the characteristic new architectural forms of the late nineteenth and twentieth centuries have been the factory, the multistory office building, the warehouse, the department store, the apartment house, the railway station, the large theater, and the gigantic sports stadium. None of these could have been built on the desired scale by traditional construction methods.

21. What is the main idea of the passage?
- (A) Various types of traditional building materials strongly influenced modern architectural design
 - (B) Changing architectural styles affected the character of cities
 - (C) New architectural forms evolved in response to the changing needs of society
 - (D) Technological advances affected conventional methods of building construction
22. The author uses the expression “rightly so” in line 2 in order to
- (A) introduce an opinion that differs from that of W. R. Dalzell
 - (B) provide examples of architecture that are indispensable
 - (C) show agreement with the way W. R. Dalzell has described architecture
 - (D) indicate that architectural design must reflect artistic qualities
23. The word “strikingly” in line 4 is closest in meaning to
- (A) aggressively
 - (B) specifically
 - (C) noticeably
 - (D) occasionally
24. According to the passage, which of the following motivated the “new forms of architecture” mentioned in line 5?
- (A) The increased wealth of citizens
 - (B) The Industrial Revolution
 - (C) Competitive international trade
 - (D) Changing ideas about artistic merit
25. It can be inferred that the demand for “large, well-lighted interiors” mentioned in line 10 resulted in the construction of
- (A) offices
 - (B) factories
 - (C) warehouses
 - (D) department stores
26. The phrase “carried on” in line 10 is closest in meaning to
- (A) conducted
 - (B) supervised
 - (C) moved about
 - (D) improved
27. The word “necessitated” in line 13 is closest in meaning to
- (A) identified
 - (B) replaced
 - (C) required
 - (D) supplied
28. It can be inferred from the passage that all of the following occurred as a result of the Industrial Revolution EXCEPT
- (A) considerable societal changes
 - (B) office buildings larger than any ever built before
 - (C) storage and marketing of industrial products
 - (D) a decrease in leisure activities
29. The word “them” in line 16 refers to
- (A) items
 - (B) pressures
 - (C) populations
 - (D) centers
30. According to the passage, which of the following is true about the effect of the Industrial Revolution on transportation systems?
- (A) Traditional methods of transportation were adequate for workers to get to their jobs.
 - (B) Faster, more efficient methods of transportation were required for the production and distribution of goods.
 - (C) Manufacturers could not produce sufficiently large quantities of goods to support the costs of railroad transportation.
 - (D) Only the most essential products required new, mechanized methods of transportation.
31. The word “Hence” in line 19 is closest in meaning to
- (A) moreover
 - (B) nevertheless
 - (C) in contrast
 - (D) for these reasons

Questions 32-40

- Famed for their high-elevation forests, the Appalachian Mountains sweep south from Quebec to Alabama. Highest in New England and North Carolina, this broad system covers more than 1,200 miles to form the rocky backbone of the eastern United States. Line The Blue Ridge Mountains form a substantial part, 615 miles, of the far-reaching Appalachians. They begin as a narrow, low ridge in Pennsylvania, then slowly spread
- (5)

- and rise until they reach the height of 5,938 feet at majestic Grandfather Mountain in North Carolina. The Blue Ridge technically includes among its major spurs the Great Smoky Mountains and the Black Mountains; Mount Mitchell, in the latter range, is at 6,684 feet the highest peak east of the Mississippi River. Like the rest of the Appalachians, these mountains were once substantially higher and bolder. Their uplift was completed some 289 million years ago, and they have been drastically eroded ever since.
- (10) At one time, immense continental glaciers covered the land as far south as Pennsylvania. Although they did not spread over the Blue Ridge, plants and animals far beyond their reach became adapted to the cold. When the climate warmed and the ice melted, the cold-adapted species retreated northward, surviving in the south only at higher, cooler elevations.
- (15) Red Spruces and Fraser firs are remnants of the Ice Age, thriving in the higher elevations of the Blue Ridge; and local belches, birches, and red oaks are typical of forests farther to the north.
- (20) Sharing the high peaks is another distinctive plant community. This is the “bald” — a treeless area covered with grass, or more commonly, with broad-leaved shrubs. Often large and vigorous, the latter include huckleberries, mountain laurel, and most especially, rhododendron, an evergreen shrub that blossoms in June and creates some of the most spectacular wild gardens on Earth.

32. The word “sweep” in line 1 could best be replaced by which of the following?
- (A) brush
(B) extend
(C) clear
(D) hurry
33. The southernmost point of the Appalachian Mountains is in
- (A) Quebec
(B) New England
(C) Alabama
(D) North Carolina
34. According to the passage, a 615-mile expanse of the Appalachians is known as
- (A) the Blue Ridge Mountains
(B) Grandfather Mountain
(C) the Black Mountains
(D) the Great Smoky Mountains
35. The word “technically” in line 7 is closest in meaning to
- (A) partially
(B) similarly
(C) likely
(D) officially
36. The expression “the latter range” in line 8 refers to
- (A) Appalachians
(B) the Black Mountains
(C) the Great Smoky Mountains
(D) Grandfather Mountain
37. The word “they” in line 13 refers to
- (A) Pennsylvania and the southern states
(B) plants and animals
(C) mountains
(D) glaciers
38. According to the passage, the melting of glaciers caused some plant species to
- (A) adapt to the heat
(B) die out
(C) grow bigger and stronger
(D) move northward
39. The author mentions all of the following as plants that can be found in a “bald” EXCEPT
- (A) mountain laurel
(B) huckleberries
(C) red oaks
(D) rhododendron
40. Where in the passage does the author mention what has happened to the development of the mountains since they reached their highest point?
- (A) Lines 5-7
(B) Lines 10-11
(C) Lines 14-15
(D) Lines 19-20

Questions 41-50

A rapidly advancing contemporary science that is highly dependent on new tools is Earth system science. Earth system science involves observation and measurements on

- (5) the Earth at all scales from the largest to the smallest. The huge amounts of data that are Line gathered come from many different locations and require special techniques for handling data. Important new tools that facilitate Earth system science include satellite remote sensing, small deep-sea submarines, and geographic information systems.

- (10) More than any other way of gathering evidence, satellite observations continually remind us that each part of the Earth interacts with and is dependent on all other parts. Earth system science was born from the realization of that interdependence. Satellite remote sensing makes possible observations at large scales, and in many cases, measurements of factors that could not otherwise be measured. For example, the ozone hole over Antarctica--the decrease in the concentration of ozone high in the atmosphere--is measured by remote sensing, as are changes in deserts, forests, and farmlands around the world. Such measurements can be used in many areas of
- (15) specialization besides Earth system science. Archaeology, for example, has benefited from satellite observations that reveal the traces of ancient trade routes across the Arabian Desert.

- (20) New tools for exploring previously inaccessible areas of the Earth have also added greatly to our knowledge of the Earth system. Small deep-sea submarines allow scientists to travel to the depths of the ocean. There they have discovered new species and ecosystems thriving near deep-sea vents that emit heat, gasses, and mineral-rich water. Just as important as new methods of measurement and exploration are new ways to store and analyze data about the Earth system. Computer-based software programs known as geographic information systems, or GIS, allow a large number of data points to be
- (25) stored along with their locations. These can be used to produce maps and to compare different sets of information gathered at different times. For example, satellite remote sensing images of a forest can be converted to represent stages in the forest's growth. Two such images, made at different times can be overlaid and compared, and the changes that have taken place can be represented in a new image.

41. What is the main idea of the passage?
 (A) Special techniques are needed to classify the huge amounts of data about Earth
 (B) New tools provide information about Earth that was once impossible to obtain
 (C) Advances in Earth system science have resolved many environmental problems
 (D) Satellite remote sensing can show changes between two images taken years apart.
42. The word "contemporary" in line 1 is closest in meaning to
 (A) little-known
 (B) informative
 (C) current
 (D) exciting
43. The word "facilitate" in line 5 is closest in meaning to
 (A) enable
 (B) require
 (C) organize
 (D) examine
44. The author of the passage mentions that satellite observations are especially effective in
 (A) conducting scientific studies of life on the ocean floor
 (B) predicting future climate changes
 (C) providing data to determine Earth's age
 (D) demonstrating interactions among all of Earth's parts
45. The word "realization" in line 9 is closest in meaning to
 (A) observation
 (B) assumption
 (C) explanation
 (D) recognition
46. According to the passage, satellite observations of the Arabian Desert allow archaeologists to discern
 (A) indications of ancient routes
 (B) evidence of former lakes
 (C) traces of early farms
 (D) remains of ancient forests
47. The word "inaccessible" in line 18 is closest in meaning to
 (A) unreachable
 (B) undiscovered
 (C) unexplored
 (D) unpredictable
48. The word "they" in line 20 refers to
 (A) new tools
 (B) small deep-sea submarines

<p>(C) scientists (D) the depths of the ocean</p> <p>49. The word “thriving” in line 21 is closest in meaning to</p> <p>(A) surviving (B) flourishing (C) feeding (D) competing</p> <p>50. The organization of the passage can best be described as</p>	<p>(A) an extended statement of the basic principles of a particular scientific theory (B) an introductory statement followed by a discussion of particular examples (C) a comparison of the effectiveness of different types of scientific tools (D) an argument for the claim that new techniques can be useful in many specialized fields</p>
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E. Validity and Reliability of the Instruments

1. Validity of the Instruments

Because the instruments used in this research were ones adopted from previous studies, the instruments were already valid. Concerning the first instrument, the critical thinking questionnaire, this instrument was already validated by Naeni with the score of validity calculation of each item higher than 0.7 as the minimum score of item validity⁶⁶. Concerning the morphological awareness test, the test was also already validated by Maag with the score of 0.72 for each question⁶⁷. The last test was English reading comprehension test adopted from a set of TOEFL ITP reading section test. The validity of this test was guaranteed by ETS.

2. Reliability of the Instruments

According to Sugiyono, reliability refers to the consistency of scores obtained by the same people when they are retested with the same test or with

⁶⁶ J. Naeni, ‘The Effect of Collaborative Learning on Critical Thinking of Iranian EFL Learners’ (Islamic Azad University, Central Tehran branch, Tehran, Iran, 2005).

⁶⁷ Maag. *Op. Cit.*

different sets of equivalent items on different occasions⁶⁸. In a similar vein, Fraenkel define reliability as the consistency of scores obtained for each individual from one administration of an instrument to the next, as well as from one set of items to the next⁶⁹. All instruments of this research have been well reliable based on the previous studies that examined their reliability. According to Naeni, the cronbach alpha calculation of critical thinking questionnaire reached the score of $\alpha = .86$. it meant that the questionnaire was valid. According to Maag, the cronbach alpha calculation of English morphological awareness test reached the score of $\alpha = 0.89$. This data also indicated a good reliability of the morphological awareness test. Lastly, because the used English reading comprehension test was adopted from ETS product of TOEFL ITP, the reading test was also well-reliable.

F. Technique of Data Analysis

After collected, the data were then analyzed to prove whether there were positive correlations among TBI students' critical thinking skills, English morphological awareness, and English reading skill. To prove the correlations among critical thinking skills, English morphological awareness, and English reading skill, the following procedures were undertaken.

1. Pre-Requirement Test

In this research, before analyzing the hypotheses, the researcher had to find the normality data of the sample first.

⁶⁸ Ibid.

⁶⁹ Fraenkel, Wallen, and Hyun. Op. Cit.

a. Normality Test

Normality test is one of the pre-requirement tests before entering linear regression analysis. To check the normality of the dependent variable, it can be done by using Microsoft Office Excel. The normality can be seen from p (significance) on Lilliefors test. If p (significance) value is greater than 0.05 ($p > 0.05$), it shows that the distribution of the data is normal. Besides, we can conduct the normality test manually using this formula in which If the highest score of $L_o < L_{table}$, it means that the data is in normal distribution.

G. Hypothesis Testing

The researcher used Pearson's Product Moment Correlation Coefficient formula, which was computerized using Microsoft Office Excel, to test the hypothesis if there were positive correlations among sixth semester TBI students' critical thinking skills, English morphological awareness, and English reading skill. The following table shows how the calculation was interpreted.

Pearson's product moment correlation coefficient Formula.

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Correlation coefficient formulas are used to find how strong a relationship is between data. The formulas return a value between -1 and 1, where:

1. 1 indicates a strong positive relationship.
2. -1 indicates a strong negative relationship.
3. A result of zero indicates no relationship at all.

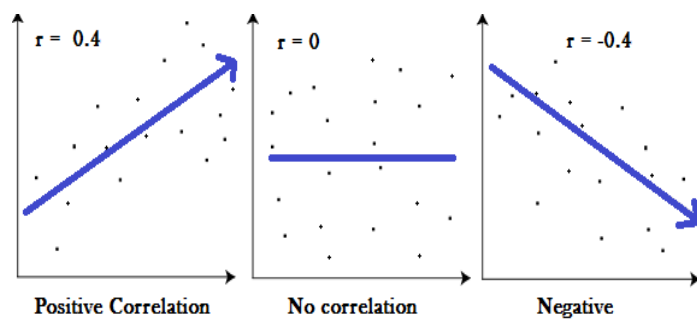


Table 8

The Interpretation of r Value

r value	Interpretation
0.800 – 1.00	very strong
0.600 – 0.79	Strong
0.400 – 0.599	Medium
0.200 – 0.399	Low
0.000 – 0.199	very low (no correlation)

CHAPTER IV

RESULTS AND DISCUSSION

A. RESULTS

1. Descriptive Data

a. The Descriptive Data of Critical Thinking Skills

The data of critical thinking skill were collected by using 30 items of critical thinking skill questionnaire. The score if all answers were correct was 30, the highest score got from students' data was 28, and the lowest score was 10. The critical thinking skill data can be seen in Table 9. The frequency distribution can be seen in Table 10.

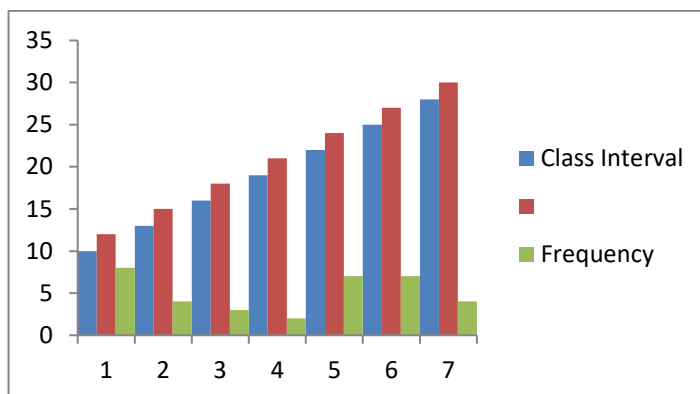
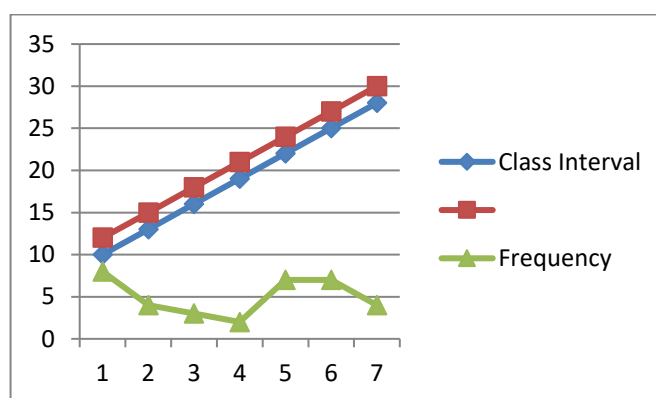
Table 9. Critical Thinking Skills Data

No	Criteria of data	Results
1	Mean	19.68571
2	Standard Deviation	6.420974
3	Max	28
4	Min	10
5	Range	18
6	Median	22
7	Mode	28
8	N	35
9	The number of Classes	$1+(3.322) \log n=$ $1+(3.322) \log 35$ 6.129394 $= 7$
10	Interval	$2.936669 = 3$
11	The Percentage of all students' critical thinking skills	$19.68571/30 \times 100 =$ 65.62 (students' critical thinking skill is at the middle level)

Table 10. The Frequency Distribution of Critical Thinking Skill

Class Interval		Frequency	Class Boundaries	Midpoint	Percentage
10	12	8	9.5-12.5	11	23%
13	15	4	12.5-15.5	14	11%
16	18	3	15.5-18.5	17	9%
19	21	2	18.5-21.5	20	6%
22	24	7	21.5-24.5	23	20%
25	27	7	24.5-27.5	26	20%
28	30	4	27.5-30.5	29	11%
Σ		35			100%

The big picture of data as displayed by the table of distribution can also be viewed in the following histogram in figure 1 and the polygon in figure 2.

**Figure 1. The Histogram of Critical Thinking Skills****Figure 2. The Polygon of Critical Thinking Skills**

Among the sample of 35 students, it can be seen that 4 students got very good, 7 students got good, 12 students got moderate, 4 students got poor and 8 students got very poor in terms of their critical thinking skills. The average of the total score was 19.68. The median was 22, and the mode was 28. The standard deviation was 6.42. The statistical computation of the data can be seen in Appendix.

Based on the calculation of students' overall critical thinking skills, it can be concluded that the critical thinking skill of the sixth semester TBI students at IAIN Curup can be classified into the middle level (65.62).

b. The Descriptive Data of Morphological Awareness

The data of morphological awareness were collected by using 150 items of morphological awareness test. The score if all answers were correct was 150, the highest score got from students' data was 95, and the lowest score was 40. The morphological awareness data can be seen in Table 11. The frequency distribution can be seen in Table 12.

Table 11. Morphological Awareness Data

No	Criteria of data	Results
1	Mean	70.8
2	Standard Deviation	16.27665
3	Max	95
4	Min	40
5	Range	55
6	Median	70
7	Mode	50
8	N	35
9	The number of Classes	$1+(3.322) \log n=$ $1+(3.322) \log 35 =$

		6.129394 = 7
10	Interval	8.973155 = 9
11	The Percentage of all students' critical thinking skills	$70.8/150 \times 100 = 47.2$ (students' morphological awareness is at a low level)

Table 12. The Frequency Distribution of Morphological Awareness

Class Interval	Frequency	Class Boundaries	Midpoint	Percentage	
40	48	3	39.5-48.5	44	9%
49	57	5	48.5-57.5	53	14%
58	66	6	57.5-66.5	62	17%
67	75	5	66.5-75.5	71	14%
76	84	5	75.5-84.5	80	14%
85	93	9	84.5-93.5	89	26%
94	102	2	94.5-102.5	98	6%
Σ		35			100%

The big picture of data as displayed by the table of distribution can also be viewed in the following histogram in figure 3 and the polygon in figure 4.

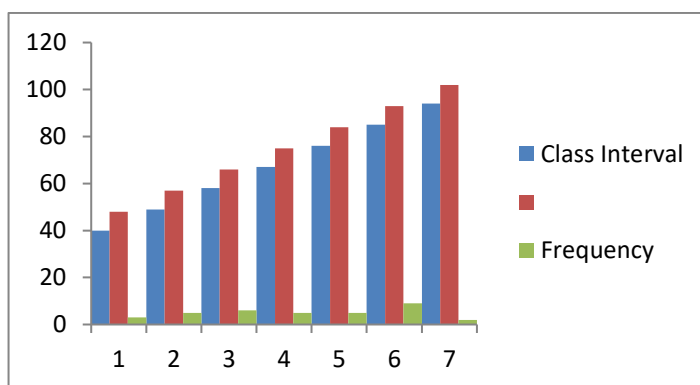


Figure 3. The Histogram of Morphological Awareness

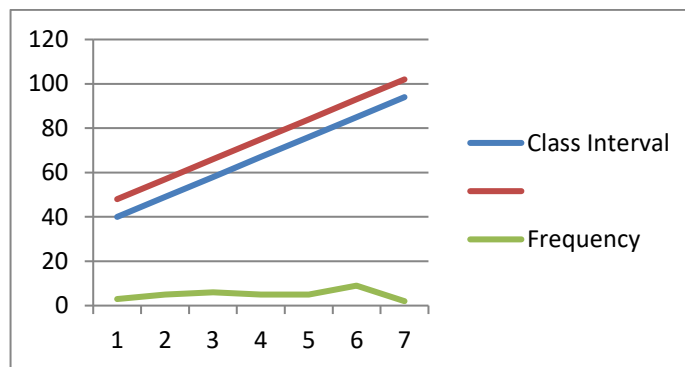


Figure 4. The Polygon of Morphological Awareness

Among the sample of 35 students, it can be seen that 2 students got very good, 9 students got good, 11 students got moderate, 5 students got poor, and 3 students got very poor in terms of their morphological awareness. The average of the total score was 70.8. The median was 70, and the mode was 50. The standard deviation was 16.28. The statistical computation of the data can be seen in Appendix.

Based on the calculation of students' overall morphological awareness, it can be concluded that the morphological awareness of the sixth semester TBI students at IAIN Curup can be classified into a low level (47.2).

c. Descriptive Data of English Reading Skill

The data of English reading skill were collected from deploying 50 items of TOEFL ITP reading section test. The score if all answers were correct was 50, the highest score got from students' data was 37, and the lowest score was 20. The English reading skill data can be seen in Table 13. The frequency distribution can be seen in Table 14.

Table 13. English Reading Skill Data

No	Criteria of data	Results
1	Mean	28.7429
2	Standard Deviation	5.5378
3	Max	37
4	Min	20
5	Range	17
6	Median	30
7	Mode	21
8	N	35
9	The number of Classes	$1+(3.322) \log n=$ $1+(3.322) \log 35 =$ 6.129394 $= 7$
10	Interval	$2,773520495$ $= 3$
11	The Percentage of all students' critical thinking skills	$28.7429/50 \times 100 =$ 57.48 (students' English reading skill is at a low level)

Table 14. The Frequency Distribution of English Reading Skill

Class Interval	Frequency	Class Boundaries	Midpoint	Percentage
20	22	19.5-22.5	21	20%
23	25	22.5-25.5	24	14%
26	28	25.5-28.5	27	11%
29	31	28.5-31.5	30	17%
32	34	31.5-34.5	33	17%
35	37	34.5-37.5	36	20%
38	40	37.5-40.5	39	0%
Σ	35			100%

The big picture of data as displayed by the table of distribution can also be viewed in the following histogram in figure 5 and the polygon in figure 6.

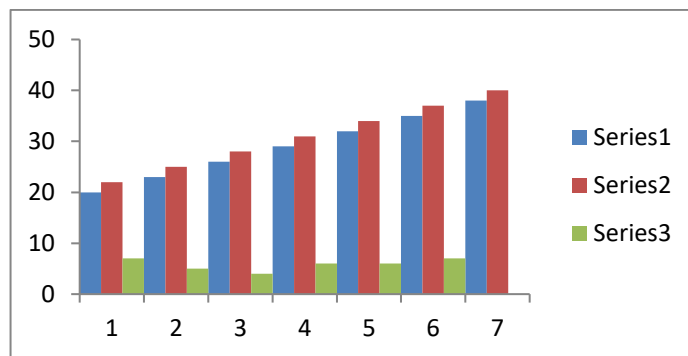


Figure 5. The Histogram of English Reading Skill

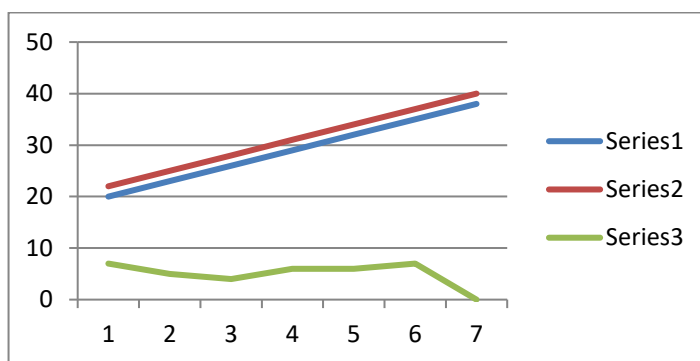


Figure 6. The Polygon of English Reading Skill

Among the sample of 35 students, it can be seen that no students got very good, 7 students got good, 16 students got moderate, 5 students got poor, and 7 students got very poor in terms of their English reading skill. The average of the total score was 28.7429. The median was 30, and the mode was 21. The standard deviation was 5.5378. The statistical computation of the data can be seen in Appendix.

Based on the calculation of students' overall English reading skill, it can be concluded that the English reading skill of the sixth semester TBI students at IAIN Curup can be classified into a low level (57.48).

2. Hypothesis Testing

It is necessary to do the prerequisite test before testing the hypotheses.

The prerequisite test includes normality test.

a. Prerequisite Test

1) Normality Test

Normality test is used to figure out whether the sample of the study is in normal distribution or not.

a) The Normality Test of Critical Thinking Skills

The computation of normality test for critical thinking skills can be seen in table 15 below:

Mean	19.6857
Standard Deviation	6.4210
Max	28
Min	10
Range	18
Median	22
Mode	27

Table 15. Normality Data of Critical Thinking Skills

N	X	Z	F(z)	S(z)	F(z)-S(z)
1	10	-1.5084	0.0657	0.0286	0.0371
2	10	-1.5084	0.0657	0.0571	0.0086
3	11	-1.3527	0.0881	0.0857	0.0024
4	11.2	-1.3216	0.0932	0.1143	0.0211
5	11.2	-1.3216	0.0932	0.1429	0.0497
6	11.2	-1.3216	0.0932	0.1714	0.0783
7	11.8	-1.2281	0.1097	0.2	0.0903
8	12	-1.1970	0.1157	0.2286	0.1129
9	13	-1.0412	0.1489	0.2571	0.1083
10	13.6	-0.9478	0.1716	0.2857	0.1141

11	14.6	-0.7920	0.2142	0.3143	0.1001
12	15	-0.7298	0.2328	0.3429	0.1101
13	16	-0.5740	0.2830	0.3714	0.0884
14	17.2	-0.3871	0.3493	0.4	0.0507
15	18	-0.2625	0.3965	0.4286	0.0321
16	19	-0.1068	0.4575	0.4571	0.0003
17	21	0.2047	0.5811	0.4857	0.0954
18	22	0.3604	0.6407	0.5143	0.1264
19	22.2	0.3916	0.6523	0.5429	0.1095
20	22.2	0.3916	0.6523	0.5714	0.0809
21	22.4	0.4227	0.6638	0.6	0.0638
22	22.4	0.4227	0.6638	0.6286	0.0352
23	22.4	0.4227	0.6638	0.6571	0.0066
24	22.6	0.4539	0.6750	0.6857	0.0107
25	25	0.8276	0.7961	0.7143	0.0818
26	26	0.9834	0.8373	0.7429	0.0944
27	26	0.9834	0.8373	0.7714	0.0659
28	27	1.1391	0.8727	0.8	0.0727
29	27	1.1391	0.8727	0.8286	0.0441
30	27	1.1391	0.8727	0.8571	0.0155
31	27	1.1391	0.8727	0.8857	0.0130
32	28	1.2949	0.9023	0.9143	0.0120
33	28	1.2949	0.9023	0.9429	0.0405
34	28	1.2949	0.9023	0.9714	0.0691
35	28	1.2949	0.9023	1	0.0977
L Count =					0.1264
L Table at 0,05 confidential level =					0.1478
Conclusion: Because L Count is lower than L table (0.1264<0.1478), the data are normally distributed					

The calculation shows that the L count got was 0.1264, and the L table acquired from the confidence level of 0.05 was 0.1478. Because L Count was lower than L table (0.1264<0.1478), the data were normally distributed.

b) The Normality Test of Morphological Awareness

The computation of normality test for morphological awareness can be seen in table 16 below:

Mean	70.8000
Standard Deviation	16.2767
Max	95
Min	40
Range	55
Median	70
Mode	50

Table 16. Normality Data of Morphological Awareness

N	X	Z	F(z)	S(z)	F(z)-S(z)
1	40	-1.8923	0.0292	0.0286	0.0007
2	42	-1.7694	0.0384	0.0571	0.0187
3	48	-1.4008	0.0806	0.0857	0.0051
4	49	-1.3393	0.0902	0.1143	0.0241
5	50	-1.2779	0.1006	0.1429	0.0422
6	50	-1.2779	0.1006	0.1714	0.0708
7	54	-1.0322	0.1510	0.2	0.0490
8	54	-1.0322	0.1510	0.2286	0.0776
9	58	-0.7864	0.2158	0.2571	0.0413
10	58	-0.7864	0.2158	0.2857	0.0699
11	60	-0.6635	0.2535	0.3143	0.0608
12	62	-0.5407	0.2944	0.3429	0.0485
13	63	-0.4792	0.3159	0.3714	0.0555
14	66	-0.2949	0.3840	0.4	0.0160
15	68	-0.1720	0.4317	0.4286	0.0031
16	68	-0.1720	0.4317	0.4571	0.0254
17	70	-0.0492	0.4804	0.4857	0.0053
18	70	-0.0492	0.4804	0.5143	0.0339
19	75	0.2580	0.6018	0.5429	0.0590
20	76	0.3195	0.6253	0.5714	0.0539
21	76	0.3195	0.6253	0.6	0.0253
22	77	0.3809	0.6484	0.6286	0.0198
23	80	0.5652	0.7140	0.6571	0.0569
24	84	0.8110	0.7913	0.6857	0.1056

25	85	0.8724	0.8085	0.7143	0.0942
26	86	0.9339	0.8248	0.7429	0.0820
27	86	0.9339	0.8248	0.7714	0.0534
28	87	0.9953	0.8402	0.8	0.0402
29	87	0.9953	0.8402	0.8286	0.0116
30	88	1.0567	0.8547	0.8571	0.0025
31	88	1.0567	0.8547	0.8857	0.0310
32	90	1.1796	0.8809	0.9143	0.0334
33	93	1.3639	0.9137	0.9429	0.0292
34	95	1.4868	0.9315	0.9714	0.0400
35	95	1.4868	0.9315	1	0.0685
L Count =					0.1056
L Table at 0,05 confidential level =					0.1478
Conclusion: Because L Count is lower than L table (0.1056<0.1478), the data are normally distributed					

The calculation shows that the L count got was 0.1056, and the L table acquired from the confidence level of 0.05 was 0.1478. Because L Count was lower than L table (0.1056<0.1478), the data were normally distributed.

c) The Normality Test of English Reading Skill

The computation of normality test for English reading skill can be seen in table 17 below:

Mean	28.7429
Standard Deviation	5.5378
Max	37
Min	20
Range	17
Median	30
Mode	21

Table 17. Normality Data of English Reading Skill

N	X	Z	F(z)	S(z)	F(z)-S(z)
1	20	-1.5788	0.0572	0.0286	0.0286
2	20	-1.5788	0.0572	0.0571	0.0001
3	21	-1.3982	0.0810	0.0857	0.0047
4	21	-1.3982	0.0810	0.1143	0.0333
5	21	-1.3982	0.0810	0.1429	0.0618
6	22	-1.2176	0.1117	0.1714	0.0597
7	22	-1.2176	0.1117	0.2	0.0883
8	23	-1.0370	0.1499	0.2286	0.0787
9	23	-1.0370	0.1499	0.2571	0.1073
10	24	-0.8565	0.1959	0.2857	0.0898
11	25	-0.6759	0.2496	0.3143	0.0647
12	25	-0.6759	0.2496	0.3429	0.0933
13	26	-0.4953	0.3102	0.3714	0.0612
14	27	-0.3147	0.3765	0.4	0.0235
15	27	-0.3147	0.3765	0.4286	0.0521
16	28	-0.1341	0.4466	0.4571	0.0105
17	29	0.0464	0.5185	0.4857	0.0328
18	30	0.2270	0.5898	0.5143	0.0755
19	30	0.2270	0.5898	0.5429	0.0469
20	30	0.2270	0.5898	0.5714	0.0184
21	31	0.4076	0.6582	0.6	0.0582
22	31	0.4076	0.6582	0.6286	0.0296
23	32	0.5882	0.7218	0.6571	0.0646
24	33	0.7687	0.7790	0.6857	0.0933
25	33	0.7687	0.7790	0.7143	0.0647
26	34	0.9493	0.8288	0.7429	0.0859
27	34	0.9493	0.8288	0.7714	0.0573
28	34	0.9493	0.8288	0.8	0.0288
29	35	1.1299	0.8707	0.8286	0.0422
30	35	1.1299	0.8707	0.8571	0.0136
31	35	1.1299	0.8707	0.8857	0.0150
32	36	1.3105	0.9050	0.9143	0.0093
33	36	1.3105	0.9050	0.9429	0.0379
34	36	1.3105	0.9050	0.9714	0.0664
35	37	1.4911	0.9320	1	0.0680
L Count =					0.1073
L Table at 0,05 confidential level =					0.1478

Conclusion: Because L Count is lower than L table (0.1073<0.1478), the data are normally distributed

The calculation shows that the L count got was 0.1073, and the L table acquired from the confidence level of 0.05 was 0.1478. Because L Count is lower than L table ($0.1073 < 0.1478$), the data are normally distributed.

b. Hypothesis Testing

The normality test computation result revealed that the data is normally distributed. The researcher then moved on to the next step, testing the study's three hypotheses, which were stated in the previous chapter. The computation's results are described in each hypothesis testing presentation as follows:

1) The First Hypothesis

The first hypothesis of this research stated that: there is a positive correlation between critical thinking skills (X1) and English reading skill (Y) of the sixth semester TBI students at IAIN Curup. The correlation was tested by employing the formula of Pearson Product Moment. The researcher utilized Microsoft Office Excel Program as a tool for doing calculation in an accurate way. The computation results can be seen in the following presentation.

Table 18. The Correlation between Critical Thinking skills and English Reading**Skills**

No	X1	Y	X1 After Scoring	Y After Scoring	No	X	Y	XY	X ²	Y ²
1	28	36	93	72	1	93	72	6696	8649	5184
2	26	30	87	60	2	87	60	5220	7569	3600
3	26	29	87	58	3	87	58	5046	7569	3364
4	19	30	63	60	4	63	60	3780	3969	3600
5	22.4	36	67	72	5	67	72	4824	4489	5184
6	22.6	28	68	56	6	68	56	3808	4624	3136
7	16	27	48	54	7	48	54	2592	2304	2916
8	21	36	70	72	8	70	72	5040	4900	5184
9	13.6	26	45	52	9	45	52	2340	2025	2704
10	11.2	32	37	64	10	37	64	2368	1369	4096
11	18	20	54	30	11	54	30	1620	2916	900
12	15	27	45	41	12	45	41	1822.5	2025	1640.25
13	13	37	39	56	13	39	56	2164.5	1521	3080.25
14	22.4	21	67	32	14	67	32	2110.5	4489	992.25
15	17.2	20	52	30	15	52	30	1560	2704	900
16	11	30	33	45	16	33	45	1485	1089	2025
17	22	21	66	32	17	66	32	2079	4356	992.25
18	22.2	34	67	51	18	67	51	3417	4489	2601
19	22.4	34	67	51	19	67	51	3417	4489	2601
20	10	23	30	35	20	30	35	1035	900	1190.25
21	28	31	93	62	21	93	62	5766	8649	3844
22	11.2	25	37	50	22	37	50	1850	1369	2500
23	27	22	90	44	23	90	44	3960	8100	1936
24	25	33	83	66	24	83	66	5478	6889	4356
25	22.2	35	81	70	25	81	70	5670	6561	4900
26	12	23	44	46	26	44	46	2024	1936	2116
27	11.2	34	41	68	27	41	68	2788	1681	4624
28	27	31	90	62	28	90	62	5580	8100	3844
29	10	24	33	48	29	33	48	1584	1089	2304
30	27	35	99	70	30	90	70	6300	8100	4900
31	28	21	93	42	31	93	42	3906	8649	1764
32	27	25	90	50	32	90	50	4500	8100	2500

33	14.6	33	49	66	33	49	66	3234	2401	4356
34	11.8	22	39	44	34	39	44	1716	1521	1936
35	28	35	93	70	35	93	70	6510	8649	4900
					Σ	2231	1878.5			
The Interpretation of r Value										
N	35									
ΣX^2	158239									
$(\Sigma X)^2$	4977361									
ΣY^2	106670.3									
$(\Sigma Y)^2$	3528762									
$\Sigma X\Sigma Y$	4190934									
ΣXY	123290.5									
r_{xy}	0.366608									
r_{table}	0.2746									

Based on the above calculation, it can be construed that because r_{xy} (0.36660829) is higher than r_{table} (0.2746), there is a positive correlation between critical thinking skills and English reading skill. The correlation is positive because r_{xy} (0.36660829) is categorized as positive number or it goes forward to (+1). Compared with the table of interpretation of r value, the result indicates that the correlation is low because r_{xy} (0.36660829) is in the range of (0.200 – 0.399). To sum up, although the correlation is low, there is a positive correlation between critical thinking skills and English reading skill of the sixth semester TBI students at IAIN Curup. The H_a is accepted and the H_0 is rejected.

2) The Second Hypothesis

The Second hypothesis of this research stated that: There is a positive correlation between morphological awareness (X2) and reading skill (Y) of the sixth semester TBI students at IAIN Curup. The correlation was tested

by employing the formula of Pearson Product Moment. The researcher utilized Microsoft Office Excel Program as a tool for doing calculation in an accurate way. The computation results can be seen in the following presentation.

Table 19. The Correlation between Morphological Awareness and English Reading Skill

No	X2	Y	X1 after scoring	Y after scoring	No	X	Y	XY	X ²	Y ²
1	40	36	27	72	1	27	72	1944	729	5184
2	42	30	28	60	2	28	60	1680	784	3600
3	48	29	40	58	3	40	58	2320	1600	3364
4	49	30	44	60	4	44	60	2640	1936	3600
5	50	36	45	72	5	45	72	3240	2025	5184
6	50	28	45	56	6	45	56	2520	2025	3136
7	54	27	49	54	7	49	54	2646	2401	2916
8	54	36	36	72	8	36	72	2592	1296	5184
9	58	26	39	52	9	39	52	2028	1521	2704
10	58	32	39	64	10	39	64	2496	1521	4096
11	60	20	30	30	11	30	30	900	900	900
12	62	27	31	41	12	31	41	1255.5	961	1640.25
13	63	37	32	56	13	32	56	1776	1024	3080.25
14	66	21	33	32	14	33	32	1039.5	1089	992.25
15	68	20	34	30	15	34	30	1020	1156	900
16	68	30	34	45	16	34	45	1530	1156	2025
17	70	21	35	32	17	35	32	1102.5	1225	992.25
18	70	34	35	51	18	35	51	1785	1225	2601
19	75	34	38	51	19	38	51	1938	1444	2601
20	76	23	38	35	20	38	35	1311	1444	1190.25
21	76	31	51	62	21	51	62	3162	2601	3844
22	77	25	51	50	22	51	50	2550	2601	2500
23	80	22	53	44	23	53	44	2332	2809	1936
24	84	33	56	66	24	56	66	3696	3136	4356
25	85	35	57	70	25	57	70	3990	3249	4900

26	86	23	57	46	26	57	46	2622	3249	2116
27	86	34	57	68	27	57	68	3876	3249	4624
28	87	31	58	62	28	58	62	3596	3364	3844
29	87	24	58	48	29	58	48	2784	3364	2304
30	88	35	59	70	30	59	70	4130	3481	4900
31	88	21	59	42	31	59	42	2478	3481	1764
32	90	25	60	50	32	60	50	3000	3600	2500
33	93	33	62	66	33	62	66	4092	3844	4356
34	95	22	63	44	34	63	44	2772	3969	1936
35	95	35	63	70	35	63	70	4410	3969	4900
					Σ	1596	1878.5			
The Interpretation of r Value										
N	35	0.800 – 1.00		very strong						
ΣX^2	77428	0.600 – 0.79		Strong						
$(\Sigma X)^2$	2547216	0.400 – 0.599		Medium						
ΣY^2	106670.3	0.200 – 0.399		Low						
$(\Sigma Y)^2$	3528762	0.000 – 0.199		very low (no correlation)						
$\Sigma \Sigma Y$	2998086									
ΣXY	87253.5									
r_{xy}	0.305629									
r_{table}	0.2746									

Based on the above calculation, it can be construed that because r_{xy} (0.305629) is higher than r_{table} (0.2746), there is a positive correlation between morphological awareness and English reading skill. The correlation is positive because r_{xy} (0.305629) is categorized as positive number or it goes forward to (+1). Compared with the table of interpretation of r value, the result indicates that the correlation is low because r_{xy} (0.305629) is in the range of (0.200 – 0.399). To sum up, although the correlation is low, there is a positive correlation between morphological awareness and English reading skill of the sixth semester TBI students at IAIN Curup. The H_a is accepted and the H_0 is rejected.

3) The Third Hypothesis

The third hypothesis of this research stated that: There is a positive correlation between both critical thinking skills (X1) and morphological awareness (X2) and reading skill (Y) of the sixth semester TBI students at IAIN Curup. The correlation was tested by employing the formula of Pearson Product Moment. The researcher utilized Microsoft Office Excel Program as a tool for doing calculation in an accurate way. The computation results can be seen in the following presentation.

Table 20. The Correlation between Both Critical Thinking Skills and Morphological Awareness and English Reading Skill

No	X1	X2	Y	X ₁ ²	X ₂ ²	Y ²	X ₁ Y	X ₂ Y	X ₁ X ₂
1	93	27	72	8649	729	5184	6696	1944	2511
2	87	28	60	7569	784	3600	5220	1680	2436
3	87	40	58	7569	1600	3364	5046	2320	3480
4	63	44	60	3969	1936	3600	3780	2640	2772
5	67	45	72	4489	2025	5184	4824	3240	3015
6	68	45	56	4624	2025	3136	3808	2520	3060
7	48	49	54	2304	2401	2916	2592	2646	2352
8	70	36	72	4900	1296	5184	5040	2592	2520
9	45	39	52	2025	1521	2704	2340	2028	1755
10	37	39	64	1369	1521	4096	2368	2496	1443
11	54	30	30	2916	900	900	1620	900	1620
12	45	31	41	2025	961	1681	1845	1271	1395
13	39	32	56	1521	1024	3136	2184	1792	1248
14	67	33	32	4489	1089	1024	2144	1056	2211
15	52	34	30	2704	1156	900	1560	1020	1768
16	33	34	45	1089	1156	2025	1485	1530	1122
17	66	35	32	4356	1225	1024	2112	1120	2310
18	67	35	51	4489	1225	2601	3417	1785	2345
19	67	38	51	4489	1444	2601	3417	1938	2546
20	30	38	35	900	1444	1225	1050	1330	1140
21	93	51	62	8649	2601	3844	5766	3162	4743
22	37	51	50	1369	2601	2500	1850	2550	1887

23	90	53	44	8100	2809	1936	3960	2332	4770
24	83	56	66	6889	3136	4356	5478	3696	4648
25	81	57	70	6561	3249	4900	5670	3990	4617
26	44	57	46	1936	3249	2116	2024	2622	2508
27	41	57	68	1681	3249	4624	2788	3876	2337
28	90	58	62	8100	3364	3844	5580	3596	5220
29	33	58	48	1089	3364	2304	1584	2784	1914
30	90	59	70	8100	3481	4900	6300	4130	5310
31	93	59	42	8649	3481	1764	3906	2478	5487
32	90	60	50	8100	3600	2500	4500	3000	5400
33	49	62	66	2401	3844	4356	3234	4092	3038
34	39	63	44	1521	3969	1936	1716	2772	2457
35	93	63	70	8649	3969	4900	6510	4410	5859
Σ	2231	1596	1881	158239	77428	106865	123414	87338	103244

N	35	
Σx_1^2	16028.69	
Σx_2^2	4650.4	
Σy^2	5774.686	
$\Sigma x_1 y$	3513.686	
$\Sigma x_2 y$	1564.4	
$\Sigma x_1 x_2$	1510.4	
b1	0.193433	
b2	0.273576	
A	28.93781	
KPB	0.19181	19.18105
R	0.437962	43.79617

Note:

KPB is the coefficient of determination

R is the coefficient correlation

According to the above table, it can be interpreted that the ability of critical thinking skills and morphological awareness to affect English reading skill is only 19.18%. In the meantime, the rest, namely 80.81%, is affected by other factors. Subsequently, the obtained value of R is 0.437961742 which is categorized as moderate based on the scoring range. Because the value of R (0.437961742) is positive value, or it goes forward

to (+1), so it means that there is a positive correlation. To sum up, the calculation results indicate that there is a positive and moderate correlation between both critical thinking skills and morphological awareness and English reading skill. This condition proves that H_0 is rejected and H_a is accepted.

B. DISCUSSION

The results of this research highlight an understanding of the correlations among critical thinking skills, morphological awareness, and English reading skill. The following details will discuss those correlations by providing some short summaries of this research's data, some theoretical argumentations, and some related interpretations.

1. The correlation between critical thinking skills and English reading skill

According to the findings of this study, critical thinking skill has a positive correlation with English reading skill. Reading requires critical thinking because critical thinking improves reading focus, the ability to respond to the appropriate points in a message, the ability to identify key points in a text, and the ease with which the point is conveyed. Those explanations are consistent with prior studies conducted by Mohammadi et al⁷⁰ and Azin et al⁷¹ showing that reading requires critical thinking skills. The correlation of critical thinking skill and English reading skill can be identified by students' ability to easily identify key points in

⁷⁰ Nour Mohammadi, Heidari, and Dehghan Nirya.

⁷¹ Nooshin Azin and Hossein Heidari Tabrizi, 'The Relationship between Critical Thinking Ability of Iranian English Translation Students and Their Translation Ability', *Theory and Practice in Language Studies*, 6.3 (2016), 541–48 <<https://doi.org/10.17507/tpls.0603.12>>.

the text, students' ability to understand the message within the text, and students' ability to deeply understand information stated or implied in the text. Based on the results, it is clear that the majority of students who have high percentages of correct answers on the reading test in the parts of finding main idea, identifying implicit information, and defining meaning of word based on context also have critical thinking skill scores. Meanwhile, students who only understand the explicit information are classified as lacking critical thinking skills.

Reading skill is one of many factors that can help improve ones' reading skills. Students with good English reading skill will be good readers, and some factors influencing their use of strategies include self-efficacy, motivation, gender, learning style, and critical thinking skill. As supported by Mohammadi, Heidari, and Niry, critical thinking skill as a factor in English reading skill plays an important role⁷² because students' improvements in critical thinking skills are proportional to their improvements in reading practices⁷³. Critical thinking skills enable students to form their own opinions and make decisions, improve their ability to analyze and generate ideas, evaluate texts, and create better synthesis from them. Students with low critical thinking skills also have low reading skills. Meanwhile, students with a high level of critical thinking skill also have a high level of reading skill. It shows that the critical thinking skills of IAIN Curup's sixth semester TBI students have a positive correlation with their English reading skill.

⁷² Nour Mohammadi, Heidari, and Dehghan Niry.

⁷³ Kamali and Fahim.

2. The Correlation between Morphological Awareness and English Reading Skill

According to the data, students' morphological awareness correlates positively with their English reading ability. Morphological awareness is required for reading because it deals with understanding the smallest part of a word (morphemes) and is used to tackle the unknown word in the text. It is consistent with Simanjuntak⁷⁴. To read unfamiliar words, students use morphological awareness. Students who understand how words are formed using morphemes and the meaning of prefixes and suffixes can improve their comprehension of written text. It can be demonstrated by the study's findings, which show that students with high morphological awareness score highly in English reading ability. Meanwhile, students who lack morphological awareness perform poorly in English reading. So, morphological awareness and reading skill tend to rise and fall together, which is consistent with many recent studies, such as those conducted by Deacon and Kirby⁷⁵, Jarmulowicz et al.⁷⁶, Nielsen et al.⁷⁷; which found morphological awareness to be moderately to strongly correlated with reading.

Some aspects of English reading skill are supported, such as word knowledge, phonemic awareness, comprehension, decoding, reading fluency, and so on. According to the explanation, vocabulary or word knowledge is one of the components that comprise the overall reading skill. When a new word has a

⁷⁴ E.G. Simanjuntak, *Developing Reading Skills for EFL Students* (Jakarta: Dirjen DIKTI - Departemen Pendidikan dan Kebudayaan, 1988).

⁷⁵ Deacon and Kirby.

⁷⁶ L. Jarmulowicz and others, 'Fitting Derivational Morphophonology into a Developmental Model of Reading', *Reading and Writing: An Interdisciplinary Journal*, 21.3 (2008) <<https://doi.org/275-297>. doi:10.1007/s11145-007-9073-y>.

⁷⁷ Diane Corcoran Nielsen, Barbara Luetke, and Deborah S Stryker, 'The Importance of Morphemic Awareness to Reading Achievement and the Potential of Signing Morphemes to Supporting Reading Development', *Journal of Deaf Studies and Deaf Education*, 5, 2011 <<https://doi.org/10.1093/deafed/enq063>>.

morphological structure that students recognize, they use their morphological knowledge to remember it. As a result, the greater their morphological awareness, the greater their ability to remember new words and, as a result, directly improve their English reading skill. The current study investigated the possibility that morphology is important in developing word knowledge and contributing to reading success. Students can have good English reading skills if they understand English morphology. Thus, English reading ability and morphological awareness are related to each other. The foregoing has been proven by Apel, et al.⁷⁸, Casalis, et al.⁷⁹, and Deacon and Kirby⁸⁰.

All of the explanations above indicate that the sixth semester TBI students at IAIN Curup's morphological awareness have a positive correlation with their English reading skill.

3. The Correlations between Both Critical Thinking Skills and Morphological Awareness and English Reading Skill

According to the results, there is a positive correlation between both critical thinking skills and morphological awareness and English reading skill. It can be seen that students with high critical thinking skills and morphological awareness can answer the reading questions better. They perform better on English reading skill test than students with lower scores of critical thinking skills and morphological awareness. It is obvious that critical thinking skills assist students in capturing more information within the text; they can capture both explicit and

⁷⁸ Apel and others. Op.Cit.

⁷⁹ Séverine Casalis, Pascale Colé, and Delphine Sopo, 'Morphological Awareness in Developmental Dyslexia', *Annals of Dyslexia*, 54.August 2014 (2004), 114–38 <<https://doi.org/10.1007/s11881-004-0006-z>>.

⁸⁰ Deacon and Kirby. Op. Cit.

implicit information. They can not only read a whole text but also understand the message contained within it. However, simply having the ability to think critically is insufficient for developing English reading skill. Students can understand the message if they understand the meaning of each word in the text because each word has its own meaning and may have one or more word formations. As a result, students should have morphological awareness in order to comprehend the meaning of English words in the text. As a result, they understand the meaning of every word in the text, as well as the message stated or implied in the text. As a result, it is possible to conclude that critical thinking skills and morphological awareness can both improve English reading skill.

Many aspects of English reading skill are involved, including morphological awareness and critical thinking skills. Students who think critically and are aware of even the smallest part of an English word will understand the meaning and message contained within the text. In such a way, they will automatically comprehend the text. That is, they will improve their English reading skill through morphological awareness and critical thinking skills. It is demonstrated by their critical thinking skills, morphological awareness, and English reading skills. Some students who perform well in one variable also perform well in others. Meanwhile, some students who perform poorly in one variable also perform poorly in others. As a result, all variables in this research are related to one another. According to those explanations, the critical thinking skills of the sixth semester TBI students at IAIN Curup and morphological awareness have a positive correlation with their English reading skill.

CHAPTER V

CONCLUSION AND SUGGESTIONS

A. CONCLUSION

Based on the results of this research, there are some conclusions which can be drawn as follows:

1. There is a positive but low correlation between critical thinking skills and English reading skill of the sixth semester TBI students at IAIN Curup. Such a correlation is indicated by the statistical data of r_{xy} (0.36660829) which is higher than r_{table} (0.2746). The correlation is positive because r_{xy} (0.36660829) is categorized as positive number or it goes forward to (+1). Compared with the table of interpretation of r value, the result indicates that the correlation is low because r_{xy} (0.36660829) is in the range of (0.200 – 0.399). Based on the above statement, it reveals critical thinking and reading ability in English, which are the important ability to analyze the text more easily because critical thinking will check that students think critically and logically based on their knowledge. So critical thinking is relevant to reading comprehension skills to improve reading skills.
2. There is a positive but low correlation between morphological awareness and English reading skill of the sixth semester TBI students at IAIN Curup. Such a correlation is indicated by the statistical data of r_{xy} (0.305629) is higher than r_{table} (0.2746). The correlation is positive because r_{xy} (0.305629) is categorized as positive number or it goes forward to (+1). Compared with the table of interpretation of r value, the result indicates that the correlation is low because

r_{xy} (0.305629) is in the range of (0.200 – 0.399). Besides the relationship with reading, morphological awareness is also linked to various language skills. It means that morphological awareness can be applied at reading classes to improve their ability to read.

3. There is a positive and moderate correlation between both critical thinking skills and morphological awareness and English reading skill. According to the data of statistical calculation, the obtained value of R is 0.437961742 which is categorized as moderate based on the scoring range. Because the value of R (0.437961742) is a positive value, or it goes forward to (+1).

B. SUGGESTIONS

Based on the findings of this study, the following suggestions or recommendations are made to English lecturers, students, and other researchers:

1. For Lecturers

- a. Lecturers should supplement their reading instruction by including exercises that develop students' critical thinking skills.
- b. Lecturers explain and teach critical thinking skills such as analysis, inference, evaluation, inductive reasoning, and deductive reasoning.
- c. Lecturers must be more serious about incorporating more morphology-related practices into their teaching because morphological awareness is one way to improve students' English reading skills.

2. For students

- a. Students should be aware of their critical thinking skills and morphological awareness, as both are important factors that can support their English reading ability.
- b. Students are expected to understand the meaning and message of English texts deeply by using their critical thinking skills.
- c. Students should be aware of every word in English texts and develop an understanding of base words, inflectional words, derivational words, and compound words because these can all help them increase their morphological awareness while improving their English reading skills.

3. For other researchers

The results of this research could be used as a reference for future research on critical thinking skills, English morphological awareness, and English reading skill.

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KEPUTUSAN DEKAN FAKULTAS TARBIIYAH

Nomor : ~~392~~ Tahun 2021

Tentang

**PENUNJUKAN PEMBIMBING 1 DAN 2 DALAM PENULISAN SKRIPSI
INSTITUT AGAMA ISLAM NEGERI CURUP**

- Menimbang** : a. Bahwa untuk kelancaran penulisan skripsi mahasiswa, perlu ditunjuk dosen Pembimbing I dan II yang bertanggung jawab dalam penyelesaian penulisan yang dimaksud ;
b. Bahwa saudara yang namanya tercantum dalam Surat Keputusan ini dipandang cakap dan mampu serta memenuhi syarat untuk diserahi tugas sebagai pembimbing I dan II ;
- Mengingat** : 1. Undang-Undang Nomor 20 tahun 2003 tentang Sistem Pendidikan Nasional ;
2. Peraturan Presiden RI Nomor 24 Tahun 2018 tentang Institut Negeri Islam Curup;
3. Peraturan Menteri Agama RI Nomor : 30 Tahun 2018 tentang Organisasi dan Tata Kerja Institut Agama Islam Negeri Curup;
4. Keputusan Menteri Pendidikan Nasional RI Nomor 184/U/2001 tentang Pedoman Pengawasan Pengendalian dan Pembinaan Program Diploma, Sarjana dan Pascasarjana di Perguruan Tinggi;
5. Keputusan Menteri Agama RI Nomor B.II/3/15447, tanggal 18 April 2018 tentang Pengangkatan Rektor IAIN Curup Periode 2018-2022.
6. Keputusan Direktur Jenderal Pendidikan Islam Nomor : 3514 Tahun 2016 Tanggal 21 oktober 2016 tentang Izin Penyelenggaraan Program Studi pada Program Sarjana STAIN Curup
7. Keputusan Rektor IAIN Curup Nomor : 0047 tanggal 21 Januari 2019 tentang Pengangkatan Dekan Fakultas Tarbiyah Institut Agama Islam Negeri Curup;
- Memperhatikan** : 1. Surat Rekomendasi dari Ketua Prodi TBI nomor : B-050/FT.2/PP.00.9/03/2021
2. Berita Acara Seminar Proposal pada Hari Rabu, 24 April 2019.

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Menetapkan

Pertama

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Dosen Institut Agama Islam Negeri (IAIN) Curup masing-masing sebagai Pembimbing I dan II dalam penulisan skripsi mahasiswa :

N A M A : **Randi Turangga**

N I M : **15551033**

JUDUL SKRIPSI : **The Correlation Among critical Thinking Skills, Morphological Awareness, and Reading Skill of the Sixth Semester TBI Students at IAIN Curup**

- Kedua** : Proses bimbingan dilakukan sebanyak 8 kali pembimbing I dan 8 kali pembimbing II dibuktikan dengan kartu bimbingan skripsi ;
- Ketiga** : Pembimbing I bertugas membimbing dan mengarahkan hal-hal yang berkaitan dengan substansi dan konten skripsi. Untuk pembimbing II bertugas dan mengarahkan dalam penggunaan bahasa dan metodologi penulisan ;
- Keempat** : Kepada masing-masing pembimbing diberi honorarium sesuai dengan peraturan yang berlaku ;
- Kelima** : Surat Keputusan ini disampaikan kepada yang bersangkutan untuk diketahui dan dilaksanakan sebagaimana mestinya ;
- Keenam** : Keputusan ini berlaku sejak ditetapkan dan berakhir setelah skripsi tersebut dinyatakan sah oleh IAIN Curup atau masa bimbingan telah mencapai 1 tahun sejak SK ini ditetapkan ;
- Ketujuh** : Apabila terdapat kekeliruan dalam surat keputusan ini, akan diperbaiki sebagaimana mestinya sesuai peraturan yang berlaku ;

Ditetapkan di Curup,

pada tanggal 30 April 2021



Tembusan :

1. Rektor
2. Bendahara IAIN Curup;
3. Kabag Akademik kemahasiswaan dan kerja sama;
4. Mahasiswa yang bersangkutan;



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Lampiran : Proposal dan Instrumen
Hal : Permohonan Izin Penelitian

05 Mei 2021

Kepada Yth. Rektor IAIN Curup

Assalamualaikum Wr, Wb

Dalam rangka penyusunan skripsi S.1 pada Institut Agama Islam Negeri Curup :

Nama : Randi Turangga
NIM : 1551033
Fakultas/Prodi : Tarbiyah / TBI
Judul Skripsi : The Correlation among Critical Thinking Skills, Morphological Awereness, and Reading Skill the Sixth Semester TBI Students at IAIN Curup
Waktu Penelitian : 05 Mei s.d 05 Agustus 2021
Tempat Penelitian : IAIN Curup

Mohon kiranya Bapak berkenan memberi izin penelitian kepada Mahasiswa yang bersangkutan.

Demikian atas kerjasama dan izinnya diucapkan terimakasih

a.n Dekan



Tembusan : disampaikan Yth ;

1. Rektor
2. Warek 1
3. Ka. Biro AUAK



KARTU KONSULTASI PEMBIMBING SKRIPSI

NAMA : RANDI TURANGGA.
 NIM : 1555 16 33
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 PEMBIMBING I : Jumatul Hidayah, M.Pd.
 PEMBIMBING II : Sarwo Edy, S.Pd.I., M.Pd.
 JUDUL SKRIPSI : THE CORRELATION AMONG CRITICAL THINKING SKILLS, MORPHOLOGICAL AWARENESS, AND READING SKILL THE SIXTH SEMESTER TBI STUDENTS AT IAIN CURUP.

- * Kartu konsultasi ini harap dibawa pada setiap konsultasi dengan pembimbing 1 atau pembimbing 2;
- * Dianjurkan kepada mahasiswa yang menulis skripsi untuk berkonsultasi sebanyak mungkin dengan pembimbing 1 minimal 2 (dua) kali, dan konsultasi pembimbing 2 minimal 5 (lima) kali dibuktikan dengan kolom yang di sediakan;
- * Agar ada waktu cukup untuk perbaikan skripsi sebelum diujikan diharapkan agar konsultasi terakhir dengan pembimbing dilakukan paling lambat sebelum ujian skripsi.



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Kami berpendapat bahwa skripsi ini sudah dapat diajukan untuk ujian skripsi IAIN Curup.

Pembimbing I,

 JUMATUL HIDAYAH, M.Pd.
 NIP. 19700224 200212 2 002

Pembimbing II,

 SARWO EDY, S.Pd.I., M.Pd.
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IAIN CURUP

NO	TANGGAL	Hal-hal yang Dibicarakan	Paraf Pembimbing I	Paraf Mahasiswa
1	20/04/2021	Mursi Chapt I		
2	22/04/2021	— " — "		
3	27/04/2021	— " — "		
4	03/mei/2021	Acc Instrumen Pen.		
5	11/mei/2021	Revisi Chapter IV		
6	9/juni/2021	Acc CHAPTER IV		
7	24/juni/2021	Revisi CHAPTER V		
8	14/juli/2021	Acc UJIAN Skripsi.		



IAIN CURUP

NO	TANGGAL	Hal-hal yang Dibicarakan	Paraf Pembimbing II	Paraf Mahasiswa
1	19/04/2021	Revisi Proposal Penelitian / Skripsi.		
2	22/04/2021	Revisi Chapter I Lanjut II, III.		
3	26/04/2021	PERUBAHAN TEORI / format Bab IV.		
4	04/mei/2021	Acc Chapter I, II, III, Instrumen P.		
5	12/mei/2021	PERUBAHAN TEORI, DAN REFERENSI		
6	10/juni/2021	PERUBAHAN BAB IV		
7	23/juni/2021	Acc CHAPTER IV LENGKAP CHAPTER V		
8	14/juli/2021	Acc KESIMPULAN, ACC UJIAN.		

APPENDIXES

A. Blueprint and Instrument of Critical Thinking Skills

The Blueprint of Critical Thinking Skills Questionnaire Developed by Honey

No	Indicators of Critical Thinking Skills	Descriptions	Items
1	Analysis	The ability to identify, classify, compare, and contrast various sets of information.	<ol style="list-style-type: none"> 1. I make notes on the important elements of people's arguments or propositions (e.g. the topic, issues, thesis and main points). 2. I distinguish between facts and opinions. 3. I search for parallels and similarities between different issues. 4. I solicit input from other people to broaden my understanding of a subject. 5. I analyze propositions to see if the logic is sound. 6. I distinguish major points from minor points.
2	Inference	The ability to absorb unstated information and the ability to draw a set of conclusions from a bundle of information.	<ol style="list-style-type: none"> 7. I put material I have read or seen into my own words to help me understand it. 8. I summarize what I have heard or read to ensure I have understood properly. 9. I draw conclusions from data I have analyzed in order to decide whether to accept or reject a proposition or argument. 10. I look for what isn't there rather than concentrate solely on what is there. 11. I reach my own conclusions rather than let myself be swayed by the opinions of others.

3	Evaluation	The ability to consider the value or essence of information.	<p>12. I test the assumptions underpinning an argument or proposition.</p> <p>13. I double-check facts for accuracy.</p> <p>14. I use a set of criteria against which to evaluate the strength of the argument or proposition.</p> <p>15. I assess the credibility of the person presenting the material I am evaluating.</p> <p>16. I play devil's advocate in order to improve my grasp of an argument or proposition.</p> <p>17. I evaluate the evidence for an argument or proposition to see if it is strong enough to warrant belief.</p> <p>18. I consider new information to see whether I need to re-evaluate a previous conclusion.</p>
4	Inductive reasoning	The ability to think in detail from specific domains to generate general domains.	<p>19. I check other people's understanding of issues.</p> <p>20. I break down material so that I can see how ideas are ordered and raised.</p> <p>21. I explore statements for ambiguity to ensure I do not misconstrue their meaning.</p> <p>22. I challenge proposals and arguments that appear to lack rigor.</p> <p>23. I ask questions to reinforce my understanding of the issue.</p> <p>24. I research a subject to enhance my understanding.</p>
5	Deductive reasoning	The ability to think in detail from general domains to specific domains.	<p>25. I state my reasons for accepting or rejecting arguments and propositions.</p> <p>26. I set aside emotive language to avoid being swayed by bias or opinionated statements.</p> <p>27. I weigh up the reliability of</p>

			<p>people's opinions.</p> <p>28. I establish the assumptions that an argument rests upon.</p> <p>29. I set aside my prejudices to evaluate arguments in a dispassionate, objective way.</p> <p>30. I establish the underlying purpose of an argument or proposition.</p>
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Honey's Critical Thinking Skills Questionnaire

Direction: Here are 30 statements exploring things you might or might not do when critically thinking about a subject. Simply read each description and click on the box to indicate how often you do it.

No	English Items	Indonesian Items	Never	Rarely	Sometimes	Often	Always
1	I make notes on the important elements of people's arguments or propositions (e.g. the topic, issues, thesis and main points).	Saya mencatata elemen-elemen penting dari argumen atau ajuan orang lain (Misal: topik, isu, tesis, dan poin utama).					
2	I distinguish between facts and opinions.	Saya memperbedakan fakta dengan pendapat.					
3	I search for parallels and similarities between different issues.	Saya mencari aspek paralel dan kesamaan antara isu-isu yang berbeda.					
4	I solicit input from other people to broaden my understanding of a subject.	Saya mencari masukan dari orang lain untuk memperluas pemahaman saya terhadap sebuah subjek.					
5	I analyze propositions	Saya menganalisa pendapat-pendapat					

	to see if the logic is sound.	yang diajukan untuk melihat keakuratan logikanya.					
6	I distinguish major points from minor points.	Saya membedakan ide-ide besar dari ide-ide kecil.					
7	I put material I have read or seen into my own words to help me understand it.	Saya memproses informasi yang saya baca atau lihat menggunakan bahasa saya sendiri untuk membantu saya memahaminya.					
8	I summarize what I have heard or read to ensure I have understood properly.	Saya merangkum apa yang saya dengar atau baca untuk memastikan bahwa saya memahaminya dengan baik.					
9	I draw conclusions from data I have analyzed in order to decide whether to accept or reject a proposition or argument.	Saya menyimpulkan data yang saya sudah analisa agar bisa menentukan apakah saya harus terima atau tolak pendapat atau argumen terkait data itu.					
10	I look for what isn't there rather than concentrate solely on what is there.	Saya mencari hal yang tak terungkap dari pada hanya mengikuti saja apa yang tertera.					
11	I reach my own conclusions rather than let myself be swayed by the opinions of	Saya membuat simpulan sendiri dari pada membiarkan saya terbawa opini orang lain.					

	others.						
12	I test the assumptions underpinning an argument or proposition.	Saya menguji asumsi-asumsi yang mendasari sebuah argumen atau pendapat.					
13	I double-check facts for accuracy.	Saya mengecek dua kali fakta demi keakuratan.					
14	I use a set of criteria against which to evaluate the strength of the argument or proposition.	Saya menggunakan berbagai kriteria yang berlawanan untuk mengevaluasi kekuatan dari suatu argumen atau pendapat.					
15	I assess the credibility of the person presenting the material I am evaluating.	Saya mengukur kredibilitas seseorang yang menyampaikan suatu materi yang saya evaluasi.					
16	I play devil's advocate in order to improve my grasp of an argument or proposition.	Saya mempertimbangkan ide yang berlawanan dari suatu argumen atau pendapat agar saya bisa meningkatkan pemahaman saya terkait argumen atau pendapat itu.					
17	I evaluate the evidence for an argument or proposition to see if it is strong enough to warrant belief.	Saya mengevaluasi bukti dari suatu argumen atau pendapat untuk melihat seberapa kuat argumen atau pendapat itu untuk bisa diterima.					
18	I consider new information to see whether I need to re-evaluate a previous conclusion.	Saya mempertimbangkan informasi baru untuk melihat apakah saya butuh mengevaluasi kembali simpulan					

		yang sudah saya buat sebelumnya.					
19	I check other people's understanding of issues.	Saya memeriksa pemahaman orang lain tentang berbagai isu.					
20	I break down material so that I can see how ideas are ordered and raised.	Saya merincikan suatu materi sehingga saya mampu melihat bagaimana ide-ide bisa disusun dan diajukan.					
21	I explore statements for ambiguity to ensure I do not misconstrue their meaning.	Saya mengeksplorasi ujaran-ujaran ambigu untuk memastikan bahwa saya tidak salah paham tentang maknanya.					
22	I challenge proposals and arguments that appear to lack rigour.	Saya mempertanyakan pendapat yang diajukan atau argumen yang diangkat untuk memperlemah pendapat atau argumen tersebut.					
23	I ask questions to reinforce my understanding of the issue.	Saya membuat berbagai pertanyaan untuk memperkuat pemahaman saya tentang berbagai isu.					
24	I research a subject to enhance my understanding.	Saya teliti suatu subjek untuk meningkatkan pemahaman saya tentang subjek tersebut.					
25	I state my reasons for accepting or rejecting arguments and propositions.	Saya utarakan pemikiran saya untuk menerima atau menolak berbagai argumen dan pendapat.					

26	I set aside emotive language to avoid being swayed by bias or opinionated statements.	Saya tidak menggunakan bahasa emosional untuk menghindari agar saya tidak terbawa oleh bias atau pendapat-pendapat orang lain.					
27	I weigh up the reliability of people's opinions.	Saya menimbang reliabilitas atau konsistensi pendapat-pendapat orang lain.					
28	I establish the assumptions that an argument rests upon.	Saya membangun asumsi dari suatu argumen yang didasarkan.					
29	I set aside my prejudices to evaluate arguments in a dispassionate, objective way.	Saya kesampingkan prasangka-prasangka demi mengevaluasi argumen secara objektif.					
30	I establish the underlying purpose of an argument or proposition.	Saya memperkuat tujuan dasar dari suatu argumen atau pendapat yang saya ajukan.					

B. Blueprint and Instrument of Morphological Awareness

Blueprint of Morphological Awareness Test

No	Indicators	Number of items
1	Recognizing English Morphemes	50 items
2	Modification of English morphemes	50 items
3	Understanding the definitions of English morphemes	50 items

English Morphological Test

Part 1: Look at each word in the list below. Check *yes* if you know the word. Check *no* if you do not know the word. (If you are unsure, check *yes* if you could use the word in a sentence.)

Do you know the word?

Example	teacher	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Example	thorfeize	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

- | | | | | | | | |
|-----|-----------------|------------------------------|-----------------------------|-----|-----------------|------------------------------|-----------------------------|
| 1. | noncombatant | <input type="checkbox"/> Yes | <input type="checkbox"/> No | | | | |
| 2. | mistreating | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 26. | licensure | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. | allegorical | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 27. | despotism | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. | believable | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 28. | incomparable | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. | discredited | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 29. | apparently | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 6. | unmitigated | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 30. | fundamental | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 7. | correspondence | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 31. | liberation | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 8. | decadence | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 32. | demolition | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 9. | hypothetically | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 33. | improvisational | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 10. | explanatory | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 34. | contender | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11. | impiety | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 35. | redacting | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 12. | presumptuous | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 36. | operationalize | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 13. | readmission | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 37. | presentiment | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 14. | indefatigable | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 38. | bravery | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 15. | bedevilment | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 39. | indecision | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 16. | diversification | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 40. | opacity | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 17. | enduring | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 41. | incessant | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 18. | detestable | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 42. | demotion | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 19. | reciprocity | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 43. | indivisible | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 20. | commendable | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 44. | dependable | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 21. | irreverent | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 45. | obliterating | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 22. | provocation | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 46. | addressing | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 23. | despicable | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 47. | coordination | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 24. | expensive | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 48. | discovery | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 25. | protestation | <input type="checkbox"/> Yes | <input type="checkbox"/> No | 49. | placidity | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | | | | 50. | defamation | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Part 2: In each line, the word in **bold font** was formed from one of the words on the right. Select the letter of the word on the right which is the basis for the **bold** word.

Examples:

 c teacher

a. tea

b. each

c. teach

 a undamaged

a. damage

b. dam

c. aged

-
- | | | | | |
|-------|----------------------------|----------------|---------------|--------------|
| _____ | 1. noncombatant | a. comb | b. bat | c. combat |
| _____ | 2. mistreating | a. mist | b. treat | c. eating |
| _____ | 3. allegorical | a. all | b. leg | c. allegory |
| _____ | 4. believable | a. belief | b. belie | c. lie |
| _____ | 5. discredited | a. disc | b. credit | c. edited |
| _____ | 6. unmitigated | a. mit | b. gate | c. mitigate |
| _____ | 7. correspondence | a. respond | b. dense | c. pond |
| _____ | 8. decadence | a. decay | b. decade | c. cadence |
| _____ | 9. hypothetically | a. hypothecary | b. thesis | c. the |
| _____ | 10. explanatory | a. plane | b. planetary | c. explain |
| _____ | 11. impiety | a. imp | b. pious | c. pie |
| _____ | 12. presumptuous | a. presume | b. sump | c. sumptuous |
| _____ | 13. readmission | a. read | b. admit | c. mission |
| _____ | 14. indefatigable | a. fat | b. gable | c. fatigue |
| _____ | 15. bedevilment | a. evil | b. bed | c. devil |
| _____ | 16. diversification | a. diverse | b. versify | c. diver |
| _____ | 17. enduring | a. ring | b. during | c. endure |
| _____ | 18. detestable | a. stable | b. detest | c. testable |
| _____ | 19. reciprocity | a. recipe | b. reciprocal | c. receipt |
| _____ | 20. commendable | a. commend | b. mend | c. mendable |
| _____ | 21. irreverent | a. reverse | b. revere | c. rent |
| _____ | 22. provocation | a. prove | b. provoke | c. vocation |
| _____ | 23. despicable | a. spice | b. cable | c. despise |
| _____ | 24. expensive | a. expend | b. pensive | c. pens |

___ 25. protestation	a. station	b. testate	c. protest
___ 26. licensure	a. censure	b. license	c. ensure
___ 27. despotism	a. despot	b. spot	c. pot
___ 28. incomparable	a. income	b. parable	c. compare
___ 29. apparently	a. parent	b. rent	c. appear
___ 30. fundamental	a. fun	b. mental	c. fundament
___ 31. liberation	a. beration	b. liberate	c. ration
___ 32. demolition	a. demo	b. mole	c. demolish
___ 33. improvisational	a. improve	b. provide	c. improvise
___ 34. contender	a. ender	b. contend	c. tend
___ 35. redacting	a. red	b. redact	c. acting
___ 36. operationalize	a. rationalize	b. opera	c. operate
___ 37. presentiment	a. present	b. resentment	c. sentiment
___ 38. bravery	a. raver	b. very	c. brave
___ 39. indecision	a. incision	b. decide	c. indecent
___ 40. opacity	a. opaque	b. pace	c. city
___ 41. incessant	a. cess	b. ant	c. cease
___ 42. demotion	a. demo	b. motion	c. demote
___ 43. reforestation	a. station	b. forest	c. fore
___ 44. dependable	a. depend	b. deepen	c. endable
___ 45. obliterating	a. literate	b. rating	c. obliterate
___ 46. addressing	a. dress	b. address	c. dressing
___ 47. coordination	a. ordination	b. ordinal	c. coordinate
___ 48. discovery	a. disco	b. cover	c. discover
___ 49. placidity	a. acidity	b. placid	c. place
___ 50. defamation	a. fame	b. famish	c. family

Part 3: Select the best definition for each word.

- ___ 1. noncombatant
a. someone in disguise
b. someone not fighting
c. someone with messy hair
- ___ 2. mistreating
a. behaving badly toward
b. clearing of foggy weather
c. unrecognizable food
- ___ 3. allegorical
a. happy
b. symbolic
c. knitted leg covering
- ___ 4. believable
a. in the realm of possibility
b. an unlikely story
c. able to survive a tragedy
- ___ 5. discredited
a. forced to pay with cash
b. a charge that is removed
c. proven false or worthless
- ___ 6. unmitigated
a. without a lawsuit
b. with one's bare hands
c. not toned down
- ___ 7. correspondence
a. exchange of letters; matching
b. organisms in a small pond
c. a legal document
- ___ 8. decadence
a. a 10-year period
b. declining, or self-indulgence
c. varying in pace
- ___ 9. hypothetically
a. with a needle
b. using supposition
c. written in ink
- ___ 10. explanatory
a. uneven; not flat
b. outside the solar system
c. giving reasons or causes
- ___ 11. impiety
a. elf-like, fairy tale character
b. lack of respect
c. baked in a round pan
- ___ 12. presumptuous
a. overly bold or confident
b. overly ornate
c. asking over and over
- ___ 13. readmission
a. place of refuge
b. tutoring in reading
c. entering again
- ___ 14. indefatigable
a. in civilian clothes
b. without tiring
c. never losing
- ___ 15. bedevilment
a. a lumpy mattress
b. causing trouble or distress
c. intense fear
- ___ 16. diversification
a. branching out
b. making into song
c. turning prose into poetry
- ___ 17. enduring
a. lasting
b. going on at the same time
c. changing rapidly
- ___ 18. detestable
a. causing hatred or dislike
b. cannot be measured
c. a horse out of the barn
- ___ 19. reciprocity
a. sharing cooking instructions
b. exchanging or sharing privileges
c. the part left over in division
- ___ 20. commendable
a. something that can be fixed
b. worthy of praise
c. something that can be sold
- ___ 21. irreverent
a. cannot be undone
b. going forward
c. lacking respect
- ___ 22. provocation
a. a first job
b. causing a response
c. a mathematical proof

- _____ 23. despicable
a. carefully chosen
b. food without seasoning
c. viewed with contempt
- _____ 24. expensive
a. talking too much
b. thoughtful
c. costly
- _____ 25. protestation
a. objecting to something
b. taking a practice test
c. an outdated train or bus depot
- _____ 26. licensure
a. formal granting of permission
b. making sure of something
c. blaming or criticizing
- _____ 27. despotism
a. ruling with absolute control
b. removing a stain
c. giving up or surrendering
- _____ 28. incomparable
a. receiving little pay
b. able to afford
c. without equal
- _____ 29. apparently
a. easily
b. caring for one's children
c. seemingly
- _____ 30. fundamental
a. at the base of
b. an enjoyable puzzle
c. interruption of a pattern
- _____ 31. liberation
a. setting free
b. sharing books
c. drinking too much
- _____ 32. demolition
a. digging underground
b. destroying or razing
c. lowering in rank
- _____ 33. improvisational
a. making stronger
b. gaining better eyesight
c. on the spur of the moment
- _____ 34. contender
a. shopper or customer
b. someone who takes charge
c. competitor
- _____ 35. redacting
a. bad stage performance
b. loud behavior
c. editing; preparing for publication
- _____ 36. operationalize
a. to sing in Latin
b. to put into action
c. to perform surgery
- _____ 37. presentiment
a. giving a gift
b. sensing what is about to happen
c. right now; without delay
- _____ 38. bravery
a. acting with courage
b. cheering loudly
c. shameful behavior
- _____ 39. indecision
a. unable to choose
b. inappropriate
c. inaccurate
- _____ 40. opacity
a. ancient village
b. moving very slowly
c. not letting light through
- _____ 41. incessant
a. not stopping
b. unscented
c. without warning
- _____ 42. demotion
a. lowering of rank
b. fluttering
c. without moving
- _____ 43. indivisible
a. unable to be split
b. barely visible
c. in the future

- ___ 44. dependable
a. reliable
b. servant
c. unbothered
- ___ 45. obliterating
a. making smaller
b. wiping out
c. reprimanding
- ___ 46. addressing
a. putting clothes on
b. speaking or writing to
c. outer ornamental layer
- ___ 47. coordination
a. shaping raw materials
b. smoothing rough edges
c. harmonious interaction
- ___ 48. discovery
a. finding something new
b. planetary alignment
c. keeping hidden
- ___ 49. placidity
a. calmness
b. a fixed location
c. a chemical state
- ___ 50. defamation
a. making well-known
b. speaking badly of
c. hiding from one's fans

B. Instrument of English Reading Skill Test (TOEFL ITP Format) and Key

Answers

Questions 1-11

- The French word *renaissance* means rebirth. It was first used in 1855 by the historian Jules Michelet in his *History of France*, then adopted by historians of culture, by art historians, and eventually by music historians, all of whom applied it to European culture during the 150 years spanning 1450-1600. The concept of rebirth was appropriate to this period of European history because of the renewed interest in ancient Greek and Roman culture that began in Italy and then spread throughout Europe. Scholars and artists of the fifteenth and sixteenth centuries wanted to restore the learning and ideals of the classical civilizations of Greece and Rome. To these scholars this meant a return to human — as opposed to spiritual — values. Fulfillment in life, as opposed to concern about an afterlife, became a desirable goal, and expressing the entire range of human emotions and enjoying the pleasures of the senses were no longer frowned on. Artists and writers now turned to secular as well as religious subject matter and sought to make their works understandable and appealing.
- These changes in outlook deeply affected the musical culture of the Renaissance period — how people thought about music as well as the way music was composed, experienced, discussed, and disseminated. They could see the architectural monuments, sculptures, plays, and poems that were being rediscovered, but they could not actually hear ancient music—although they could read the writings of classical philosophers, poets, essayists, and music theorists that were becoming available in translation. They learned about the power of ancient music to move the listener and wondered why modern music did not have the same effect. For example, the influential religious leader Bernardino Cirillo expressed disappointment with the learned music of his time. He urged musicians to follow the example of the sculptors, painters, architects, and scholars who had rediscovered ancient art and literature.
- The musical Renaissance in Europe was more a general cultural movement and state of mind than a specific set of musical techniques. Furthermore, music changed so rapidly during this century and a half—though at different rates in different countries—that we cannot define a single Renaissance style.

1. What is the passage mainly about?
 - (A) The musical compositions that best illustrate the developments during the European Renaissance
 - (B) The musical techniques that were in use during the European Renaissance
 - (C) The European Renaissance as a cultural development that included changes in musical style
 - (D) The ancient Greek and Roman musical practices used during the European Renaissance
2. What does the author mean by using the word “eventually” in line 3?
 - (A) That music historians used the term “Renaissance” after the other historians did
 - (B) That most music historians used the term “Renaissance”
 - (C) The term “Renaissance” became widely used by art historians but not by music historians
 - (D) That music historians used the term “Renaissance” very differently than it had been used by Jules Michelet
3. The phrase “frowned on” in line 11 is closest in meaning to
 - (A) given up
 - (B) forgotten about
 - (C) argued about
 - (D) disapproved of
4. The word “now” in line 11 refers to
 - (A) the time of the classical civilizations of Greece and Rome
 - (B) the period of the Renaissance
 - (C) 1855
 - (D) the time at which the author wrote the passage
5. Where in the passage does the author mention where the Renaissance interest in classical ideas first appeared?
 - (A) Lines 1-4
 - (B) Lines 4-6

- (C) Lines 8-9
(D) Lines 11-13
6. It can be inferred from the passage that thinkers of the Renaissance were seeking a rebirth of
(A) communication among artists across Europe
(B) spirituality in everyday life
(C) a cultural emphasis on human values
(D) religious themes in art that would accompany the traditional secular themes
7. According to the passage, Renaissance artists and writers had all of the following intentions EXCEPT
(A) to use religious themes
(B) to portray only the pleasant parts of human experience
(C) to produce art that people would find attractive
(D) to create works that were easily understood
8. The word “disseminated” in line 16 is closest in meaning to
(A) played
(B) documented
(C) spread
(D) analyzed
9. What can be inferred about the music of ancient Greece and Rome?
(A) It expressed different ideals than classical sculpture, painting and poetry
(B) It was played on instruments that are familiar to modern audiences
(C) It had the same effect on Renaissance audiences as it had when originally performed
(D) Its effect on listeners was described in a number of classical texts
10. According to the passage, why was Bernardino Cirillo disappointed with the music of his time?
(A) it was not complex enough to appeal to musicians
(B) It had little emotional impact on audiences
(C) It was too dependent on the art and literature of his time.
(D) It did not contain enough religious themes
11. Which of the following is mentioned in the passage as a reason for the absence of a single Renaissance musical style?
(A) The musical Renaissance was defined by technique rather than style
(B) The musical Renaissance was too short to give rise to a new musical style
(C) Renaissance musicians adopted the styles of both Greek and Roman musicians
(D) During the Renaissance, music never remained the same for very long

Questions 12-20

- The thick, woolly fleece of the domestic sheep is its distinguishing feature and the source of much of its economic importance. Yet only a moment, in evolutionary terms, has passed since the domestic sheep had a coat resembling that of many other wild Line animals. As recently as 8,000 years ago, it was covered not in a white, continuously growing mass of wool but in a brown coat consisting of an outer array of kemps, or coarse hairs, that was shed annually and a fine woolly undercoat that also molted. Such an animal could not have supported the technology that has grown up around the domestic sheep — the shearing, dyeing, spinning, and weaving of wool — any better than could a wild sheep such as the bighorn of North America.
- Much of the selective breeding that led to the fleece types known today took place in prehistory, and even the later developments went largely unchronicled. Yet other kinds of records survive, in three forms. Specimens of wool from as long ago as 1500 B.C. have been found, mostly as ancient textiles, but also in the form of sheepskins. Antique depictions of sheep in sculpture, relief, and painting give even earlier clues to the character of ancient fleeces. The longest line of evidence takes the form of certain primitive breeds that are still tended in remote areas or that escaped from captivity long ago and now live in the wild. They retain the characteristics of ancient sheep, providing living snapshots of the process that gave rise to modern fleeces.
12. What topic does the passage mainly discuss?
(A) The economic importance of sheep through the ages
(B) The development of textile crafts and technologies
(C) The evolution of the fleece of domestic sheep
(D) The influence of technology on wool

manufacturing

13. The word "source" in line 2 is closest in meaning to
(A) quantity
(B) result
(C) basis
(D) cost
14. According to the passage, the outer coat of sheep 8,000 years ago was
(A) white
(B) coarse
(C) warmer than that of bighorn sheep
(D) similar to that of the modern sheep
15. Which of the following can be concluded about wild sheep, as compared with domestic sheep?
(A) They are evolving more rapidly
(B) They have thicker coats
(C) They are of less economic importance
(D) They are less similar to bighorn sheep
16. The word "unchronicled" in line 11 is closest in meaning to
(A) unquestioned
(B) unexplained
(C) unnoticed
(D) unrecorded
17. What does the author mention as evidence of the characteristics of ancient sheep?
(A) Representations of sheep in art
(B) Ancient tales about sheep
(C) Documents describing sheep
(D) Skeletons of sheep
18. The word "clues" in line 14 is closest in meaning to
(A) proofs
(B) indications
(C) colors
(D) variations
19. In line 17, the author uses the term "living snapshots" to refer to
(A) photographs of early types of sheep
(B) early guns used for hunting sheep
(C) ancient paintings of sheep
(D) early breeds of sheep that still exist
20. The phrase "gave rise to" in line 18 is closest in meaning to
(A) replaced by
(B) favored over
(C) brought about
(D) found out

Questions 21-31

- Architecture has been characterized by W. R. Dalzell as the "indispensable art," and rightly so. Inevitably, the practical functions that shelters are designed to fulfill play a strong role in determining their appearance and thus, in part, their artistic character. So do the line methods of construction available and practicable at any given moment. The strikingly new forms of architecture that appeared in the late nineteenth and twentieth centuries were built to meet the needs of industry and of commerce based on industry, in a society whose essential character and internal relationships had been sharply transformed by the Industrial Revolution.

- About the middle of the nineteenth century, mechanized industrial production began to demand large, well-lighted interiors in which manufacturing could be carried on. The administration of giant industrial and commercial concerns required office buildings of unprecedented size, containing suites of offices easily accessible to employees and customers. The marketing of industrial products necessitated large-scale storage spaces, and enormous shops selling under one roof a wide variety of items. Industrial and commercial pressures drew increasing populations to urban centers, and traditional housing was no longer adequate to contain them. Mechanized transportation of industrial products and industrial and business personnel was essential. Leisure-time entertainment and cultural activities for the vast new urban populations required still a different kind of structure. Hence, the characteristic new architectural forms of the late nineteenth and twentieth centuries have been the factory, the multistory office building, the warehouse, the department store, the apartment house, the railway station, the large theater, and the gigantic sports stadium. None of these could have been built on the desired scale by traditional construction methods.

21. What is the main idea of the passage?
- (A) Various types of traditional building materials strongly influenced modern architectural design
 - (B) Changing architectural styles affected the character of cities
 - (C) New architectural forms evolved in response to the changing needs of society
 - (D) Technological advances affected conventional methods of building construction
22. The author uses the expression “rightly so” in line 2 in order to
- (A) introduce an opinion that differs from that of W. R. Dalzell
 - (B) provide examples of architecture that are indispensable
 - (C) show agreement with the way W. R. Dalzell has described architecture
 - (D) indicate that architectural design must reflect artistic qualities
23. The word “strikingly” in line 4 is closest in meaning to
- (A) aggressively
 - (B) specifically
 - (C) noticeably
 - (D) occasionally
24. According to the passage, which of the following motivated the “new forms of architecture” mentioned in line 5?
- (A) The increased wealth of citizens
 - (B) The Industrial Revolution
 - (C) Competitive international trade
 - (D) Changing ideas about artistic merit
25. It can be inferred that the demand for “large, well-lighted interiors” mentioned in line 10 resulted in the construction of
- (A) offices
 - (B) factories
 - (C) warehouses
 - (D) department stores
26. The phrase “carried on” in line 10 is closest in meaning to
- (A) conducted
 - (B) supervised
 - (C) moved about
 - (D) improved
27. The word “necessitated” in line 13 is closest in meaning to
- (A) identified
 - (B) replaced
 - (C) required
 - (D) supplied
28. It can be inferred from the passage that all of the following occurred as a result of the Industrial Revolution EXCEPT
- (A) considerable societal changes
 - (B) office buildings larger than any ever built before
 - (C) storage and marketing of industrial products
 - (D) a decrease in leisure activities
29. The word “them” in line 16 refers to
- (A) items
 - (B) pressures
 - (C) populations
 - (D) centers
30. According to the passage, which of the following is true about the effect of the Industrial Revolution on transportation systems?
- (A) Traditional methods of transportation were adequate for workers to get to their jobs.
 - (B) Faster, more efficient methods of transportation were required for the production and distribution of goods.
 - (C) Manufacturers could not produce sufficiently large quantities of goods to support the costs of railroad transportation.
 - (D) Only the most essential products required new, mechanized methods of transportation.
31. The word “Hence” in line 19 is closest in meaning to
- (A) moreover
 - (B) nevertheless
 - (C) in contrast
 - (D) for these reasons

Questions 32-40

- Famed for their high-elevation forests, the Appalachian Mountains sweep south from Quebec to Alabama. Highest in New England and North Carolina, this broad system covers more than 1,200 miles to form the rocky backbone of the eastern United States. Line The Blue Ridge Mountains form a substantial part, 615 miles, of the far-reaching Appalachians. They begin as a narrow, low ridge in Pennsylvania, then slowly spread
- (5)

- and rise until they reach the height of 5,938 feet at majestic Grandfather Mountain in North Carolina. The Blue Ridge technically includes among its major spurs the Great Smoky Mountains and the Black Mountains; Mount Mitchell, in the latter range, is at 6,684 feet the highest peak east of the Mississippi River. Like the rest of the Appalachians, these mountains were once substantially higher and bolder. Their uplift was completed some 289 million years ago, and they have been drastically eroded ever since.

- (10) At one time, immense continental glaciers covered the land as far south as Pennsylvania. Although they did not spread over the Blue Ridge, plants and animals far beyond their reach became adapted to the cold. When the climate warmed and the ice melted, the cold-adapted species retreated northward, surviving in the south only at higher, cooler elevations.
- (15) Red Spruces and Fraser firs are remnants of the Ice Age, thriving in the higher elevations of the Blue Ridge; and local belches, birches, and red oaks are typical of forests farther to the north.

- (20) Sharing the high peaks is another distinctive plant community. This is the “bald” — a treeless area covered with grass, or more commonly, with broad-leaved shrubs. Often large and vigorous, the latter include huckleberries, mountain laurel, and most especially, rhododendron, an evergreen shrub that blossoms in June and creates some of the most spectacular wild gardens on Earth.

32. The word “sweep” in line 1 could best be replaced by which of the following?
(A) brush
(B) extend
(C) clear
(D) hurry
33. The southernmost point of the Appalachian Mountains is in
(A) Quebec
(B) New England
(C) Alabama
(D) North Carolina
34. According to the passage, a 615-mile expanse of the Appalachians is known as
(A) the Blue Ridge Mountains
(B) Grandfather Mountain
(C) the Black Mountains
(D) the Great Smoky Mountains
35. The word “technically” in line 7 is closest in meaning to
(A) partially
(B) similarly
(C) likely
(D) officially
36. The expression “the latter range” in line 8 refers to
(A) Appalachians
(B) the Black Mountains
(C) the Great Smoky Mountains
(D) Grandfather Mountain
37. The word “they” in line 13 refers to
(A) Pennsylvania and the southern states
(B) plants and animals
(C) mountains
(D) glaciers
38. According to the passage, the melting of glaciers caused some plant species to
(A) adapt to the heat
(B) die out
(C) grow bigger and stronger
(D) move northward
39. The author mentions all of the following as plants that can be found in a “bald” EXCEPT
(A) mountain laurel
(B) huckleberries
(C) red oaks
(D) rhododendron
40. Where in the passage does the author mention what has happened to the development of the mountains since they reached their highest point?
(A) Lines 5-7
(B) Lines 10-11
(C) Lines 14-15
(D) Lines 19-20

Questions 41-50

A rapidly advancing contemporary science that is highly dependent on new tools is Earth system science. Earth system science involves observation and measurements on

(5) the Earth at all scales from the largest to the smallest. The huge amounts of data that are Line gathered come from many different locations and require special techniques for handling data. Important new tools that facilitate Earth system science include satellite remote sensing, small deep-sea submarines, and geographic information systems.

(10) More than any other way of gathering evidence, satellite observations continually remind us that each part of the Earth interacts with and is dependent on all other parts. Earth system science was born from the realization of that interdependence. Satellite remote sensing makes possible observations at large scales, and in many cases, measurements of factors that could not otherwise be measured. For example, the ozone hole over Antarctica--the decrease in the concentration of ozone high in the atmosphere--is measured by remote sensing, as are changes in deserts, forests, and farmlands around the world. Such measurements can be used in many areas of

(15) specialization besides Earth system science. Archaeology, for example, has benefited from satellite observations that reveal the traces of ancient trade routes across the Arabian Desert.

(20) New tools for exploring previously inaccessible areas of the Earth have also added greatly to our knowledge of the Earth system. Small deep-sea submarines allow scientists to travel to the depths of the ocean. There they have discovered new species and ecosystems thriving near deep-sea vents that emit heat, gasses, and mineral-rich water. Just as important as new methods of measurement and exploration are new ways to store and analyze data about the Earth system. Computer-based software programs known as geographic information systems, or GIS, allow a large number of data points to be

(25) stored along with their locations. These can be used to produce maps and to compare different sets of information gathered at different times. For example, satellite remote sensing images of a forest can be converted to represent stages in the forest's growth. Two such images, made at different times can be overlaid and compared, and the changes that have taken place can be represented in a new image.

41. What is the main idea of the passage?
- (A) Special techniques are needed to classify the huge amounts of data about Earth
- (B) New tools provide information about Earth that was once impossible to obtain
- (C) Advances in Earth system science have resolved many environmental problems
- (D) Satellite remote sensing can show changes between two images taken years apart.
42. The word "contemporary" in line 1 is closest in meaning to
- (A) little-known
- (B) informative
- (C) current
- (D) exciting
43. The word "facilitate" in line 5 is closest in meaning to
- (A) enable
- (B) require
- (C) organize
- (D) examine
44. The author of the passage mentions that satellite observations are especially effective in
- (A) conducting scientific studies of life on the ocean floor
- (B) predicting future climate changes
- (C) providing data to determine Earth's age
- (D) demonstrating interactions among all of Earth's parts
45. The word "realization" in line 9 is closest in meaning to
- (A) observation
- (B) assumption
- (C) explanation
- (D) recognition
46. According to the passage, satellite observations of the Arabian Desert allow archaeologists to discern
- (A) indications of ancient routes
- (B) evidence of former lakes
- (C) traces of early farms
- (D) remains of ancient forests
47. The word "inaccessible" in line 18 is closest in meaning to
- (A) unreachable
- (B) undiscovered
- (C) unexplored
- (D) unpredictable
48. The word "they" in line 20 refers to
- (A) new tools
- (B) small deep-sea submarines

- (C) scientists
- (D) the depths of the ocean

49. The word “thriving” in line 21 is closest in meaning to

- (A) surviving
- (B) flourishing
- (C) feeding
- (D) competing

50. The organization of the passage can best be described as

- (A) an extended statement of the basic principles of a particular scientific theory
- (B) an introductory statement followed by a discussion of particular examples
- (C) a comparison of the effectiveness of different types of scientific tools
- (D) an argument for the claim that new techniques can be useful in many specialized fields

Answer Key

No	Answer	No	Answer	No	Answer	No	Answer	No	Answer
1	C	11	D	21	D	31	D	41	B
2	D	12	C	22	C	32	B	42	C
3	D	13	C	23	C	33	D	43	A
4	B	14	B	24	B	34	A	44	D
5	B	15	C	25	A	35	D	45	D
6	C	16	D	26	A	36	B	46	A
7	B	17	A	27	C	37	D	47	A
8	C	18	A	28	D	38	D	48	C
9	D	19	D	29	C	39	C	49	B
10	C	20	C	30	B	40	B	50	B

C. Row Descriptive Data of Critical Thinking Skills

DESCRIPTIVE DATA OF CRITICAL THINKING SKILLS

N	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10
Student 1	5	4	5	5	3	5	5	5	4	5
Student 2	5	5	5	5	5	5	5	4	3	4
Student 3	5	4	4	5	5	5	5	5	5	5
Student 4	5	3	4	3	5	3	5	2	4	2
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Student 6	4	4	3	3	4	3	2	3	3	5
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Student 30	5	5	5	4	5	5	5	5	5	5
Student 31	5	3	5	5	5	4	5	5	4	5
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Student 33	3	1	1	2	2	1	2	1	3	2
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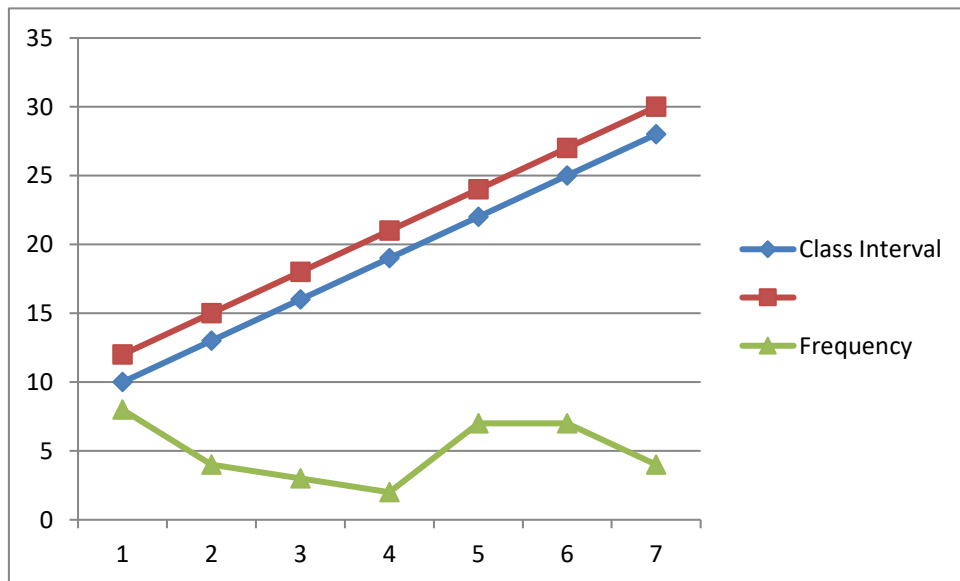
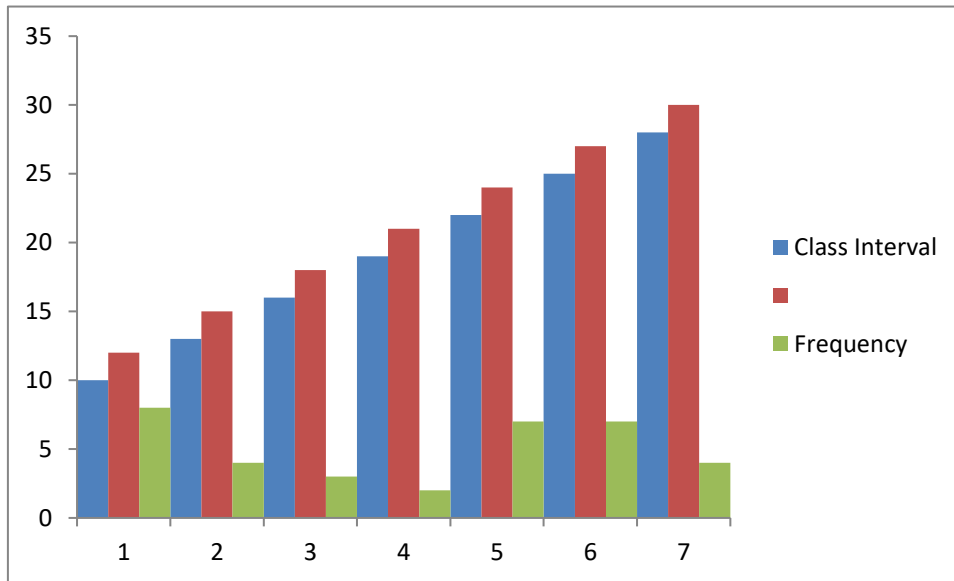
N	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16	Item 17	Item 18	Item 19	Item 20
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Student3	5	5	5	5	3	5	2	2	5	5
Student 4	5	2	4	2	3	1	3	2	3	2
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Student 6	5	4	4	5	2	3	3	3	3	4
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Student 25	2	4	4	3	5	3	3	4	3	3
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Student 34	1	2	1	1	2	2	2	3	1	4
Student 35	5	5	4	5	4	5	5	5	5	4

N	Item 21	Item 22	Item 23	Item 24	Item 25	Item 26	Item 27	Item 28	Item 29	Item 30	SUM	Score
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Student 6	4	5	3	5	4	5	4	5	5	3	113	22,6
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Student 19	3	3	5	4	5	3	5	5	4	3	112	22,4
Student 20	3	2	2	2	3	2	2	2	1	2	50	10
Student 21	5	5	4	5	4	5	5	4	5	5	140	28
Student 22	3	2	2	4	4	2	4	2	2	2	56	11,2
Student 23	5	5	5	4	4	3	5	4	4	4	135	27
Student 24	4	4	3	4	4	5	5	3	4	5	125	25

Student 25	3	3	5	4	5	3	5	5	4	3	111	22,2
Student 26	3	2	4	2	4	2	2	1	2	3	60	12
Student 27	3	2	2	4	4	2	4	2	2	2	56	11,2
Student 28	5	5	5	5	5	5	5	4	4	4	135	27
Student 29	3	2	2	2	3	2	2	2	1	2	50	10
Student 30	4	5	4	5	5	4	5	3	3	3	135	27
Student 31	5	5	4	5	4	5	5	4	5	5	140	28
Student 32	5	5	5	4	4	3	4	4	5	4	135	27
Student 33	4	3	2	1	5	1	4	2	5	5	73	14,6
Student 34	3	2	2	4	3	2	4	2	1	2	59	11,8
Student 35	5	5	4	5	4	5	5	4	5	5	140	28

Mean	19,68571	
Standard Deviation	6,420974	
Max	28	
Min	10	
Range	18	
Median	22	
Mode	28	
N	35	
Class	6,129394	7
Interval	2,936669	3

Class Interval		Frequency	Class Boundaries	Midpoint	Percentage
10	12	8	9,5-12,5	11	23%
13	15	4	12,5-15,5	14	11%
16	18	3	15,5-18,5	17	9%
19	21	2	18,5-21,5	20	6%
22	24	7	21,5-24,5	23	20%
25	27	7	24,5-27,5	26	20%
28	30	4	27,5-30,5	29	11%
Σ		35			100%



D. Normlity Data of Critical Thinking Skills

NORMALITY DATA OF CRITICAL THINKING SKILLS

N	X	Z	F(z)	S(z)	F(z)-S(z)	Mean	19,6857
1	10	- 1,5084	0,0657	0,0286	0,0371	Standard Deviation	6,4210
2	10	- 1,5084	0,0657	0,0571	0,0086	Max	28
3	11	- 1,3527	0,0881	0,0857	0,0024	Min	10
4	11,2	- 1,3216	0,0932	0,1143	0,0211	Range	18
5	11,2	- 1,3216	0,0932	0,1429	0,0497	Median	22
6	11,2	- 1,3216	0,0932	0,1714	0,0783	Mode	27
7	11,8	- 1,2281	0,1097	0,2	0,0903		
8	12	- 1,1970	0,1157	0,2286	0,1129		
9	13	- 1,0412	0,1489	0,2571	0,1083		
10	13,6	- 0,9478	0,1716	0,2857	0,1141		
11	14,6	- 0,7920	0,2142	0,3143	0,1001		
12	15	- 0,7298	0,2328	0,3429	0,1101		
13	16	- 0,5740	0,2830	0,3714	0,0884		
14	17,2	- 0,3871	0,3493	0,4	0,0507		
15	18	- 0,2625	0,3965	0,4286	0,0321		
16	19	- 0,1068	0,4575	0,4571	0,0003		
17	21	0,2047	0,5811	0,4857	0,0954		
18	22	0,3604	0,6407	0,5143	0,1264		
19	22,2	0,3916	0,6523	0,5429	0,1095		
20	22,2	0,3916	0,6523	0,5714	0,0809		
21	22,4	0,4227	0,6638	0,6	0,0638		
22	22,4	0,4227	0,6638	0,6286	0,0352		
23	22,4	0,4227	0,6638	0,6571	0,0066		
24	22,6	0,4539	0,6750	0,6857	0,0107		
25	25	0,8276	0,7961	0,7143	0,0818		
26	26	0,9834	0,8373	0,7429	0,0944		

27	26	0,9834	0,8373	0,7714	0,0659
28	27	1,1391	0,8727	0,8	0,0727
29	27	1,1391	0,8727	0,8286	0,0441
30	27	1,1391	0,8727	0,8571	0,0155
31	27	1,1391	0,8727	0,8857	0,0130
32	28	1,2949	0,9023	0,9143	0,0120
33	28	1,2949	0,9023	0,9429	0,0405
34	28	1,2949	0,9023	0,9714	0,0691
35	28	1,2949	0,9023	1	0,0977
				L Count =	0,1264
				L Table at 0,05 confidential level =	0,1478
Conclusion: Because L Count is lower than L table (0,1264<0,1478), the data are normally distributed					

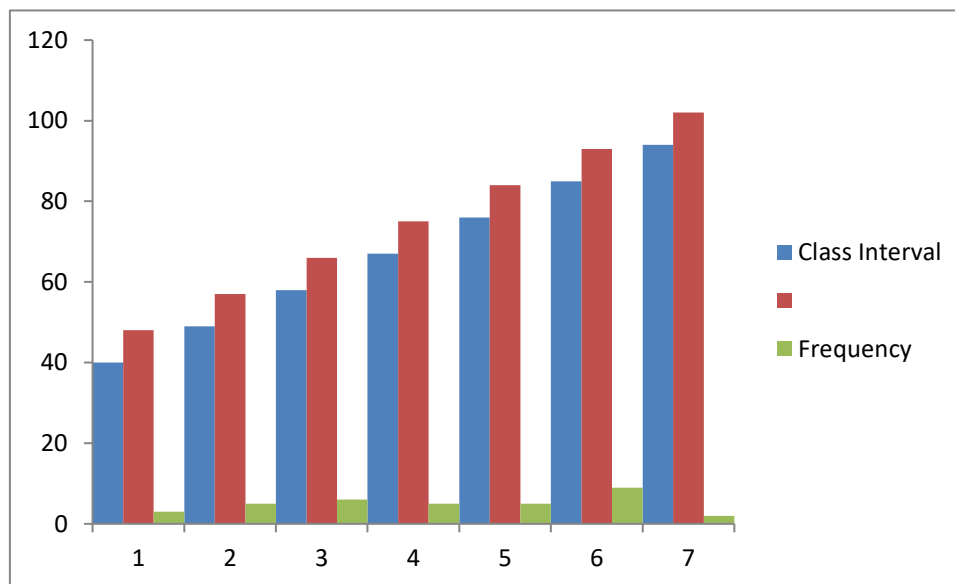
E. Raw Descriptive Data of Morphological Awareness

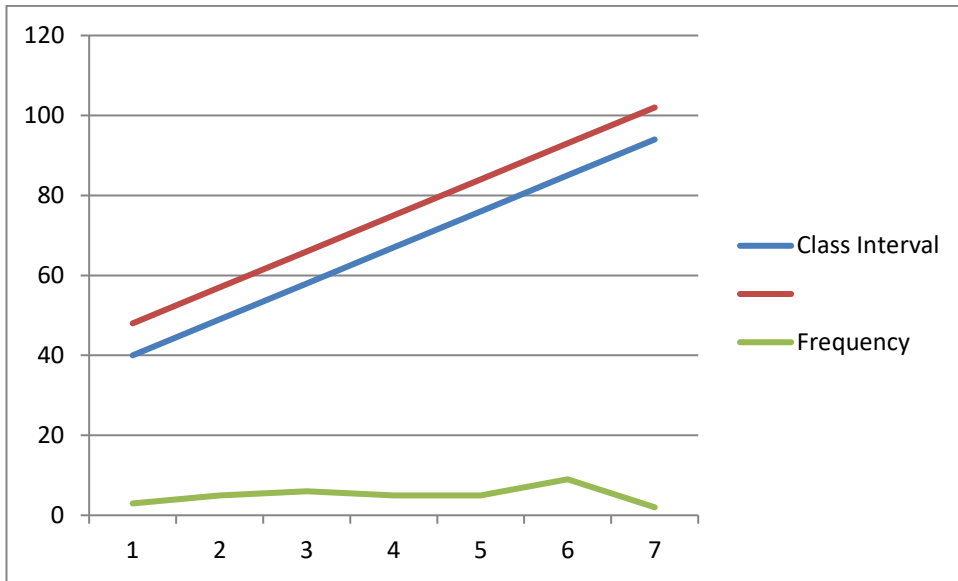
DESCRIPTIVE DATA OF MORPHOLOGICAL AWARENESS

N	The number of students' correct answers out of 150 items
Student 1	50
Student 2	40
Student 3	42
Student 4	86
Student 5	66
Student 6	58
Student 7	84
Student 8	70
Student 9	93
Student 10	68
Student 11	58
Student 12	95
Student 13	60
Student 14	95
Student 15	62
Student 16	63
Student 17	70
Student 18	68
Student 19	48
Student 20	77
Student 21	90
Student 22	85
Student 23	76
Student 24	87
Student 25	54
Student 26	54
Student 27	86
Student 28	87
Student 29	75
Student 30	49
Student 31	80
Student 32	88
Student 33	76
Student 34	50
Student 35	88

Mean	70,8
Standard Deviation	16,27665
Max	95
Min	40
Range	55
Median	70
Mode	50
N	35
Class	6,129394
Interval	8,973155

Class Interval	Frequency	Class Boundaries	Midpoint	Percentage	
40	48	3	39,5-48,5	44	9%
49	57	5	48,5-57,5	53	14%
58	66	6	57,5-66,5	62	17%
67	75	5	66,5-75,5	71	14%
76	84	5	75,5-84,5	80	14%
85	93	9	84,5-93,5	89	26%
94	102	2	94,5-102,5	98	6%
Σ		35			100%





F. Normality Data of Morphological Awareness

NORMALITY DATA OF MORPHOLOGICAL AWARENESS						Mean	70,8000
N	X	Z	F(z)	S(z)	F(z)-S(z)	Standard Deviation	16,2767
1	40	- 1,8923	0,0292	0,0286	0,0007	Max	95
2	42	- 1,7694	0,0384	0,0571	0,0187	Min	40
3	48	- 1,4008	0,0806	0,0857	0,0051	Range	55
4	49	- 1,3393	0,0902	0,1143	0,0241	Median	70
5	50	- 1,2779	0,1006	0,1429	0,0422	Mode	50
6	50	- 1,2779	0,1006	0,1714	0,0708		
7	54	- 1,0322	0,1510	0,2	0,0490		
8	54	- 1,0322	0,1510	0,2286	0,0776		
9	58	- 0,7864	0,2158	0,2571	0,0413		
10	58	- 0,7864	0,2158	0,2857	0,0699		
11	60	- 0,6635	0,2535	0,3143	0,0608		
12	62	- 0,5407	0,2944	0,3429	0,0485		
13	63	- 0,4792	0,3159	0,3714	0,0555		
14	66	- 0,2949	0,3840	0,4	0,0160		
15	68	- 0,1720	0,4317	0,4286	0,0031		
16	68	- 0,1720	0,4317	0,4571	0,0254		
17	70	- 0,0492	0,4804	0,4857	0,0053		
18	70	- 0,0492	0,4804	0,5143	0,0339		
19	75	0,2580	0,6018	0,5429	0,0590		
20	76	0,3195	0,6253	0,5714	0,0539		
21	76	0,3195	0,6253	0,6	0,0253		
22	77	0,3809	0,6484	0,6286	0,0198		
23	80	0,5652	0,7140	0,6571	0,0569		
24	84	0,8110	0,7913	0,6857	0,1056		
25	85	0,8724	0,8085	0,7143	0,0942		
26	86	0,9339	0,8248	0,7429	0,0820		

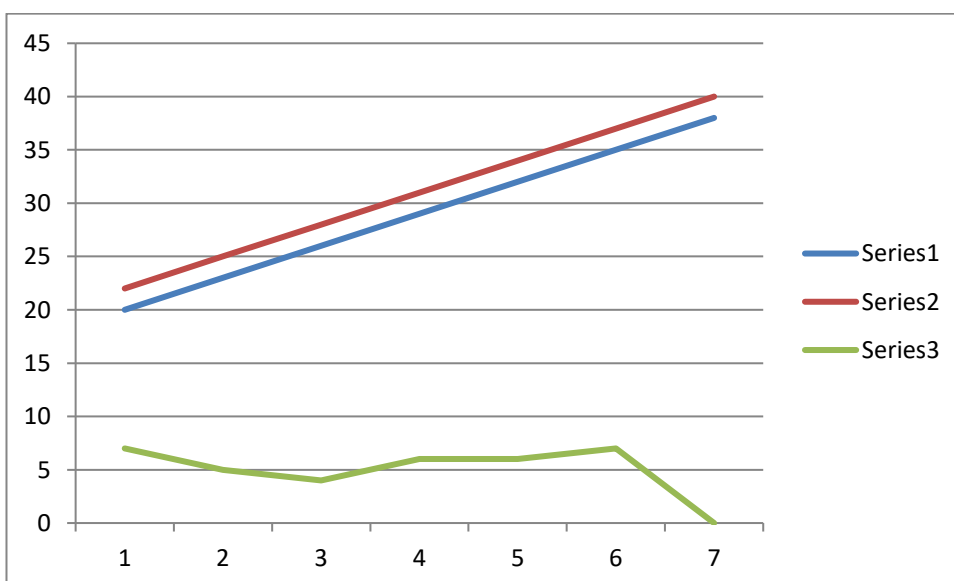
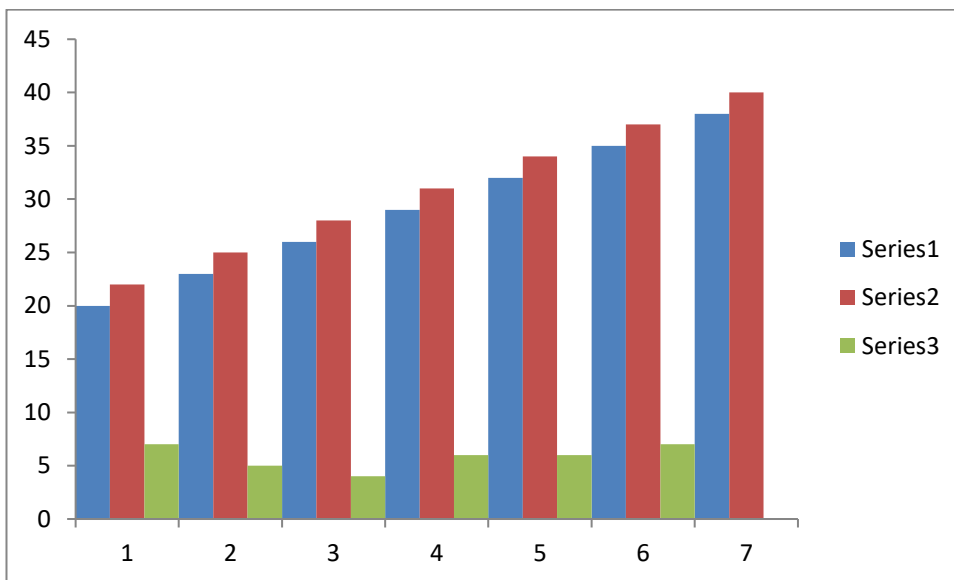
27	86	0,9339	0,8248	0,7714	0,0534
28	87	0,9953	0,8402	0,8	0,0402
29	87	0,9953	0,8402	0,8286	0,0116
30	88	1,0567	0,8547	0,8571	0,0025
31	88	1,0567	0,8547	0,8857	0,0310
32	90	1,1796	0,8809	0,9143	0,0334
33	93	1,3639	0,9137	0,9429	0,0292
34	95	1,4868	0,9315	0,9714	0,0400
35	95	1,4868	0,9315	1	0,0685
				L Count =	0,1056
			L Table at 0,05 confidential level =		0,1478
Conclusion: Because L Count is lower than L table (0,1056<0,1478), the data are normally distributed					

G. Raw Descriptive Data of English Reading Skill

DESCRIPTIVE DATA OF ENGLISH READING SKILL

N	The number of students' correct answers out of 50 items	Mean	28,74286
Student 1	36	Standard Deviation	5,5378
Student 2	30	Max	37
Student3	29	Min	20
Student 4	30	Range	17
Student 5	36	Median	30
Student 6	28	Mode	36
Student 7	27		
Student 8	36		
Student 9	26		
Student 10	32		
Student 11	20		
Student 12	27		
Student 13	37		
Student 14	21		
Student 15	20		
Student 16	30		
Student 17	21		
Student 18	34		
Student 19	34		
Student 20	23		
Student 21	31		
Student 22	25		
Student 23	22		
Student 24	33		
Student 25	35		
Student 26	23		
Student 27	34		
Student 28	31		
Student 29	24		
Student 30	35		
Student 31	21		
Student 32	25		
Student 33	33		
Student 34	22		
Student 35	35		

Class Interval		Frequency	Class Boundaries	Midpoint	Percentage
20	22	7	19,5-22,5	21	20%
23	25	5	22,5-25,5	24	14%
26	28	4	25,5-28,5	27	11%
29	31	6	28,5-31,5	30	17%
32	34	6	31,5-34,5	33	17%
35	37	7	34,5-37,5	36	20%
38	40	0	37,5-40,5	39	0%
Σ		35			100%



H. Normality Data of English Reading Skill

NORMALITY DATA OF ENGLISH READING SKILL

N	X	Z	F(z)	S(z)	F(z)-S(z)	Mean	28,7429	
1	20	- 1,5788	0,0572	0,0286	0,0286	Standard Deviation	5,5378	
2	20	- 1,5788	0,0572	0,0571	0,0001	Max	37	
3	21	- 1,3982	0,0810	0,0857	0,0047	Min	20	
4	21	- 1,3982	0,0810	0,1143	0,0333	Range	17	
5	21	- 1,3982	0,0810	0,1429	0,0618	Median	30	
6	22	- 1,2176	0,1117	0,1714	0,0597	Mode	21	
7	22	- 1,2176	0,1117	0,2	0,0883	N	35	
8	23	- 1,0370	0,1499	0,2286	0,0787	Class	6,12939404	7
9	23	- 1,0370	0,1499	0,2571	0,1073	Interval	2,77352049	3
10	24	- 0,8565	0,1959	0,2857	0,0898			
11	25	- 0,6759	0,2496	0,3143	0,0647			
12	25	- 0,6759	0,2496	0,3429	0,0933			
13	26	- 0,4953	0,3102	0,3714	0,0612			
14	27	- 0,3147	0,3765	0,4	0,0235			
15	27	- 0,3147	0,3765	0,4286	0,0521			
16	28	- 0,1341	0,4466	0,4571	0,0105			
17	29	0,0464	0,5185	0,4857	0,0328			
18	30	0,2270	0,5898	0,5143	0,0755			
19	30	0,2270	0,5898	0,5429	0,0469			
20	30	0,2270	0,5898	0,5714	0,0184			
21	31	0,4076	0,6582	0,6	0,0582			
22	31	0,4076	0,6582	0,6286	0,0296			
23	32	0,5882	0,7218	0,6571	0,0646			
24	33	0,7687	0,7790	0,6857	0,0933			
25	33	0,7687	0,7790	0,7143	0,0647			
26	34	0,9493	0,8288	0,7429	0,0859			

27	34	0,9493	0,8288	0,7714	0,0573
28	34	0,9493	0,8288	0,8	0,0288
29	35	1,1299	0,8707	0,8286	0,0422
30	35	1,1299	0,8707	0,8571	0,0136
31	35	1,1299	0,8707	0,8857	0,0150
32	36	1,3105	0,9050	0,9143	0,0093
33	36	1,3105	0,9050	0,9429	0,0379
34	36	1,3105	0,9050	0,9714	0,0664
35	37	1,4911	0,9320	1	0,0680
				L Count =	0,1073
				L Table at 0,05 confidential level =	0,1478

Conclusion: Because L Count is lower than L table (0,1073<0,1478), the data are normally distributed

I. Computation of Correlation between Critical Thinking Skills (X1) and English Reading Comprehension (Y)

No	X1	Y	X1 after scoring	Y after scoring
1	28	36	93	72
2	26	30	87	60
3	26	29	87	58
4	19	30	63	60
5	22,4	36	67	72
6	22,6	28	68	56
7	16	27	48	54
8	21	36	70	72
9	13,6	26	45	52
10	11,2	32	37	64
11	18	20	54	30
12	15	27	45	41
13	13	37	39	56
14	22,4	21	67	32
15	17,2	20	52	30
16	11	30	33	45
17	22	21	66	32
18	22,2	34	67	51
19	22,4	34	67	51
20	10	23	30	35
21	28	31	93	62
22	11,2	25	37	50
23	27	22	90	44
24	25	33	83	66
25	22,2	35	81	70
26	12	23	44	46
27	11,2	34	41	68
28	27	31	90	62
29	10	24	33	48
30	27	35	99	70
31	28	21	93	42
32	27	25	90	50
33	14,6	33	49	66
34	11,8	22	39	44
35	28	35	93	70

No	X	Y	XY	X ²	Y ²
1	93	72	6696	8649	5184
2	87	60	5220	7569	3600
3	87	58	5046	7569	3364
4	63	60	3780	3969	3600
5	67	72	4824	4489	5184
6	68	56	3808	4624	3136
7	48	54	2592	2304	2916
8	70	72	5040	4900	5184
9	45	52	2340	2025	2704
10	37	64	2368	1369	4096
11	54	30	1620	2916	900
12	45	41	1822,5	2025	1640,25
13	39	56	2164,5	1521	3080,25
14	67	32	2110,5	4489	992,25
15	52	30	1560	2704	900
16	33	45	1485	1089	2025
17	66	32	2079	4356	992,25
18	67	51	3417	4489	2601
19	67	51	3417	4489	2601
20	30	35	1035	900	1190,25
21	93	62	5766	8649	3844
22	37	50	1850	1369	2500
23	90	44	3960	8100	1936
24	83	66	5478	6889	4356
25	81	70	5670	6561	4900
26	44	46	2024	1936	2116
27	41	68	2788	1681	4624
28	90	62	5580	8100	3844
29	33	48	1584	1089	2304
30	90	70	6300	8100	4900
31	93	42	3906	8649	1764
32	90	50	4500	8100	2500
33	49	66	3234	2401	4356
34	39	44	1716	1521	1936
35	93	70	6510	8649	4900
Σ	2231	1878,5			

N	35
ΣX^2	158239
$(\Sigma X)^2$	4977361
ΣY^2	106670,3
$(\Sigma Y)^2$	3528762
$\Sigma X\Sigma Y$	4190934
ΣXY	123290,5
r_{xy}	0,366608
r_{table}	0.2746

r_{xy}	0,366608
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SUMMARY OUTPUT

Regression Statistics

Multiple R 0,3666083

R Square 0,1344016

Adjusted R

Square 0,1081714

Standard Error 12,385753

Observations 35

ANOVA

Significance

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>
Regression	1	786,044141	786,0441	5,123917	0,030298
Residual	33	5062,42729	153,4069		
Total	34	5848,47143			

<i>Coefficients</i>	<i>Standard</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower</i>	<i>Upper</i>
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	<i>Error</i>					95,0%		95,0%	
Intercept	39,555611	6,57803553	6,013286	9,28E-07	26,1725	52,93872493	26,1725	52,93872	
X Variable 1	0,2214494	0,09783032	2,263607	0,030298	0,022412	0,420486683	0,022412	0,420487	

Because r_{xy} (0,36660829) is higher than r_{table} (0.2746), there is a positive correlation between critical thinking skills and English reading comprehension.

J. The Computation of Correlation between Morphological Awareness (X2) and English Reading Skill (Y)

No	X2	Y	X1 after scoring	Y after scoring
1	40	36	27	72
2	42	30	28	60
3	48	29	40	58
4	49	30	44	60
5	50	36	45	72
6	50	28	45	56
7	54	27	49	54
8	54	36	36	72
9	58	26	39	52
10	58	32	39	64
11	60	20	30	30
12	62	27	31	41
13	63	37	32	56
14	66	21	33	32
15	68	20	34	30
16	68	30	34	45
17	70	21	35	32
18	70	34	35	51
19	75	34	38	51
20	76	23	38	35
21	76	31	51	62
22	77	25	51	50
23	80	22	53	44
24	84	33	56	66
25	85	35	57	70
26	86	23	57	46
27	86	34	57	68
28	87	31	58	62
29	87	24	58	48
30	88	35	59	70
31	88	21	59	42
32	90	25	60	50
33	93	33	62	66
34	95	22	63	44

35	95	35	63	70
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No	X	Y	XY	X ²	Y ²
1	27	72	1944	729	5184
2	28	60	1680	784	3600
3	40	58	2320	1600	3364
4	44	60	2640	1936	3600
5	45	72	3240	2025	5184
6	45	56	2520	2025	3136
7	49	54	2646	2401	2916
8	36	72	2592	1296	5184
9	39	52	2028	1521	2704
10	39	64	2496	1521	4096
11	30	30	900	900	900
12	31	41	1255,5	961	1640,25
13	32	56	1776	1024	3080,25
14	33	32	1039,5	1089	992,25
15	34	30	1020	1156	900
16	34	45	1530	1156	2025
17	35	32	1102,5	1225	992,25
18	35	51	1785	1225	2601
19	38	51	1938	1444	2601
20	38	35	1311	1444	1190,25
21	51	62	3162	2601	3844
22	51	50	2550	2601	2500
23	53	44	2332	2809	1936
24	56	66	3696	3136	4356
25	57	70	3990	3249	4900
26	57	46	2622	3249	2116
27	57	68	3876	3249	4624
28	58	62	3596	3364	3844
29	58	48	2784	3364	2304
30	59	70	4130	3481	4900
31	59	42	2478	3481	1764
32	60	50	3000	3600	2500
33	62	66	4092	3844	4356
34	63	44	2772	3969	1936
35	63	70	4410	3969	4900

Σ	1596	1878,5			
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N	35
ΣX^2	77428
$(\Sigma X)^2$	2547216
ΣY^2	106670,3
$(\Sigma Y)^2$	3528762
$\Sigma X \Sigma Y$	2998086
ΣXY	87253,5
r_{xy}	0,305629
r_{table}	0.2746

r_{xy}	0,305629
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SUMMARY OUTPUT

Regression Statistics

Multiple R	0,3056291
R Square	0,0934092
Adjusted R Square	0,0659367
Standard Error	12,67564
Observations	35

ANOVA

				<i>Significance</i>	
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>
Regression	1	546,300793	546,3008	3,400103	0,074187
Residual	33	5302,17064	160,6718		
Total	34	5848,47143			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95,0%</i>	<i>Upper 95,0%</i>
Intercept	38,04227	8,74258219	4,351377	0,000123	20,25535	55,82918699	20,25535	55,82919
X Variable 1	0,3427447	0,1858766	1,843937	0,074187	-0,03542	0,720913501	-0,03542	0,720914

Because r_{xy} (0,305629119) is higher than r_{table} (0.2746), there is a positive correlation between morphological awareness and English reading comprehension.

**K. The Computation of Correlation between Both Critical Thinking Skills (X1)
and Morphological Awareness (X2) and English Reading Skill (Y)**

No	X1	X2	Y	X ₁ ²	X ₂ ²	Y ²	X ₁ Y	X ₂ Y	X ₁ X ₂
1	93	27	72	8649	729	5184	6696	1944	2511
2	87	28	60	7569	784	3600	5220	1680	2436
3	87	40	58	7569	1600	3364	5046	2320	3480
4	63	44	60	3969	1936	3600	3780	2640	2772
5	67	45	72	4489	2025	5184	4824	3240	3015
6	68	45	56	4624	2025	3136	3808	2520	3060
7	48	49	54	2304	2401	2916	2592	2646	2352
8	70	36	72	4900	1296	5184	5040	2592	2520
9	45	39	52	2025	1521	2704	2340	2028	1755
10	37	39	64	1369	1521	4096	2368	2496	1443
11	54	30	30	2916	900	900	1620	900	1620
12	45	31	41	2025	961	1681	1845	1271	1395
13	39	32	56	1521	1024	3136	2184	1792	1248
14	67	33	32	4489	1089	1024	2144	1056	2211
15	52	34	30	2704	1156	900	1560	1020	1768
16	33	34	45	1089	1156	2025	1485	1530	1122
17	66	35	32	4356	1225	1024	2112	1120	2310
18	67	35	51	4489	1225	2601	3417	1785	2345
19	67	38	51	4489	1444	2601	3417	1938	2546
20	30	38	35	900	1444	1225	1050	1330	1140
21	93	51	62	8649	2601	3844	5766	3162	4743
22	37	51	50	1369	2601	2500	1850	2550	1887
23	90	53	44	8100	2809	1936	3960	2332	4770
24	83	56	66	6889	3136	4356	5478	3696	4648
25	81	57	70	6561	3249	4900	5670	3990	4617
26	44	57	46	1936	3249	2116	2024	2622	2508
27	41	57	68	1681	3249	4624	2788	3876	2337
28	90	58	62	8100	3364	3844	5580	3596	5220
29	33	58	48	1089	3364	2304	1584	2784	1914
30	90	59	70	8100	3481	4900	6300	4130	5310
31	93	59	42	8649	3481	1764	3906	2478	5487
32	90	60	50	8100	3600	2500	4500	3000	5400
33	49	62	66	2401	3844	4356	3234	4092	3038
34	39	63	44	1521	3969	1936	1716	2772	2457
35	93	63	70	8649	3969	4900	6510	4410	5859
Σ	2231	1596	1881	158239	77428	106865	123414	87338	103244

n	35
$\Sigma x1^2$	16028,69
$\Sigma x2^2$	4650,4
Σy^2	5774,686
$\Sigma x1y$	3513,686
$\Sigma x2y$	1564,4
$\Sigma x1x2$	1510,4

b1	0,193433
b2	0,273576
a	28,93781

KPB	0,19181	19,18105
R	0,437962	43,79617

SUMMARY OUTPUT

Regression Statistics

Multiple R	0,437961742
R Square	0,191810487
Adjusted R Square	0,141298643
Standard Error	12,07663089
Observations	35

ANOVA

	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	1107,645281	553,8226	3,797337	0,033129232
Residual	32	4667,040433	145,845		
Total	34	5774,685714			

Standard

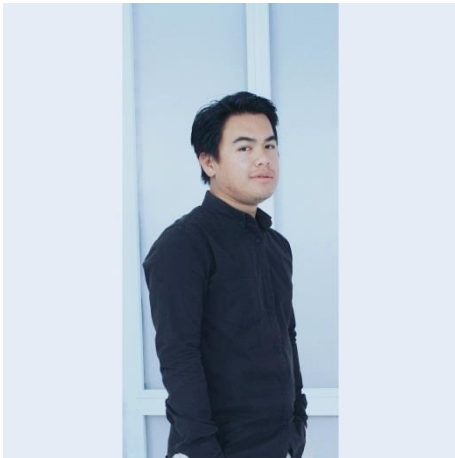
	<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95,0%</i>	<i>Upper 95,0%</i>
Intercept	28,93781172	9,584042525	3,019374	0,004944	9,41575594	48,45986751	9,41575594	48,45986751

X Variable 1	0,193432964	0,09688276	1,996567	0,054439	-0,003910759	0,390776688	-0,00391076	0,390776688
X Variable 2	0,273576219	0,179866508	1,520996	0,138082	-0,092799868	0,639952307	-0,09279987	0,639952307

The above table means that the variables of critical thinking skills and morphological awareness affect the variable of English reading skill as high as 19.18%. Meanwhile, the rest, 80.1% is affected by other factors.

The value of R 0.437961742 is included in the middle or moderate category based on the score's range. Because the value of R goes forward to +1, it means that the correlation is positive. Therefore, to sum up, the correlation between both critical thinking skills and morphological awareness and English reading skill is moderate and positive. K^2 is the coefficient of determination. R is the coefficient of correlation.

BIOGRAPHY



Randi Turangga was born in Sentral Baru, 11th of April 1997, He is a son from Darul Katni and Sri Winarni, He has one brother which name is Widdy Puja Kusuma. His hobbies are playing football, listening to music, and watching movie. He finished his Elementary School at SDN 27 Bermani Ulu, continued to Junior High School at SMPN 17 Rejang Lebong, then continued to Senior High School at SMAN 06 Rejang Lebong. Alhamdulillah all of his education was passed very well.