Unveiling Critical Thinking Skills of Students in Top Junior High Schools in Makassar: An Empirical Study

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Article Information	ABSTRACT
	This study aims to describe the critical thinking skills of eighth-grade students attending public junior high schools with an A accreditation rating in Makassar City. The population of the study consisted of 4,167 students, and a sample of 365 students was selected using a cluster random sampling technique. The sample was drawn from 13 public junior high schools in Makassar City. The research instrument used was a critical thinking skills test in the form of 24 multiple-choice questions. Based on the results of the descriptive statistical analysis, the critical thinking skills of eighth-grade students in A-accredited public junior high schools in Makassar City were found to be in the moderate category, with an average percentage of 65.35%. Specifically, critical thinking skills on the elementary clarification indicator were in the high category (70.50%), basic support was in the low category (53.63%), inference was in the moderate category (60.32%), advanced clarification was in the high category (68.56%), and strategy and tactics was also in the high category (73.77%).

INTRODUCTION

Facing the era of global competition in the 21st century, science and technology is one part of education that must be prepared so that it can produce quality and competent humans (Martinez, 2022; Aura et al., 2023; Tangney et al., 2023). One of the competencies that must be mastered to face global competition in the 21st century workforce is an individual who thinks critically (Geisinger, 2016; Rios et al., 2020; Tight, 2021). The use of individual analysis, reasoning, and cooperation skills in understanding and resolving circumstances related to their interests is referred to as 21st century skills in general. Critical thinking is needed to solve complex problems and generate innovations that can create market advantage (Nicholus et al., 2024). Underlying this concept is the belief that individuals leaving school to enter today's workforce need a specific set of skills to succeed and contribute to the advancement of the economy and society in an environment that is both challenging and complex (Kocak et al., 2021; Li et al., 2021; Li, 2023).

Critical thinking skills are one of the 21st century skills formulated by the US Based Partnership for 21st Century Skills (Khotimah et al., 2023). Critical thinking skills have become one of the objectives to be achieved in subjects in various educational contexts around the world. Some authors and philosophers consider critical thinking as a set of skills, while others as a worldview and personal disposition (Etemadfar et al., 2020; Fajaryati & Akhyar, 2020; Namaziandost et al., 2020). Critical thinking, problem-solving, and academic success are all essential to human existence from the beginning of time to the present (Huang & Sang, 2023). Interpersonal skills, learning motivation and engagement, as well as critical thinking and problem-solving talents, have always been valued by humans (Almulla, 2023). These skills are very important for learners to master considering that the work that learners will do in the future is based on the production, analysis, distribution and consumption of information. In addition, critical thinking skills are also a necessity that must be possessed by learners in the era of independent learning. Learning activities should challenge intellectual growth, as these activities are essential for mastering critical thinking skills (Mohammadi et al., 2022; Parra-Pérez et al., 2024). Critical thinking skills are not innate so they can be applied, practiced and developed through the learning process and learning assessment (Myrzatayeva et al., 2023).

Critical thinking skills and other skills can be trained and developed through the learning process, especially science learning (Romero, Quesada, & Estepa, 2021). Science learning has an important role in providing an understanding of science and technology. through the process of learning science can train and develop thinking skills, arouse students' curiosity and interest in science and technology (Pellegrino & Hilton 2012; Ma, Zhang, & Luo, 2021). Therefore, students are obliged to study science, because by studying science, students will have mastery of the universe in the form of facts, concepts, principles, procedures and theories that can be related to daily routines (Hidayati, Fadly & Ekapti, 2021; Shofiyah et al., 2024).

In fact, efforts to develop students' thinking skills through science learning have not been well implemented. The lack of empowerment of students' critical thinking skills in science learning is thought to still occur and is experienced by students at the junior high school level (Wang et al., 2017). One example is the form of exercise questions and test questions given by teachers to students to be used in evaluations is generally still memorized (C1, C2, and C3). This is in line with the results of the TIMSS four-year study in 2015 that Indonesia ranked 44th out of 47 countries with an average score of 397 below the average TIMSS score of 500. The low international science achievement of students in Indonesia is caused by several factors, one of which is because students

are less trained in solving contextual questions, requiring reasoning, argumentation, and creativity in solving them, where such types of questions are the types of TIMSS questions (Mamu, 2014; Martin et al., 2016).

In addition to the learning process and learning assessment, the feasibility of education units also needs to be considered in the application of critical thinking skills, one of which is accreditation. Accreditation is an activity of assessing the feasibility of an education unit based on predetermined criteria. The accreditation rating of the education unit that has been determined consists of A (superior), B (good), and C (sufficient) (Asy'ari et al., 2021; Awaludin, 2017).

Based on observations and interviews with several science teachers at A-accredited public junior high schools in Makassar City recognized as top schools due to their superior accreditation status it was revealed that while a variety of learning models were implemented, many did not align with the foundational principles of the intended models. Generally, these models have not effectively facilitated the development of students' critical thinking skills. Although these schools routinely conduct evaluations of students' learning outcomes at the end of each semester, the test items are not aligned with critical thinking skill indicators. Furthermore, many science teachers in these top-performing schools have never formally assessed the level of their students' critical thinking skills. This gap is particularly concerning given that such schools are expected to model best educational practices. Therefore, it is essential to conduct research that measures the critical thinking skills of eighth-grade students in these A-accredited public junior high schools. The findings from this study can serve as a reference for teachers in Makassar City to design learning strategies that align with students' needs and characteristics. In this way, efforts to foster students' critical thinking potential can be more effectively implemented and appropriately addressed.

RESEARCH METHODS

This research uses descriptive research with quantitative descriptive research design. Quantitative descriptive research aims to provide a systematic, factual, and accurate description of the facts and characteristics of a particular population or area. The data collected is analyzed using statistical procedures to produce objective and measurable conclusions (Creswell, 2014). This research was conducted in 13 A-accredited public junior high schools in Makassar City, with a research population of all eighth grade students of public junior high schools in Makassar City, totaling 4167 students.

The sampling technique used is Cluster Random Sampling. The population of the cluster is a sub-population of the total population. The use of this sampling technique is due to the very

large sample size, which is then selected the smallest sub-population and then reselected individual samples in the sub-population (Gay, Mills, & Airasian, 2012). The sample size was determined using the Yamane formula (1967) with a sampling error of 5%, resulting in a total sample of 365 students. Respondents filled out the instrument voluntarily and prior to the research, permission was obtained from the relevant parties. The identity of the respondents is kept confidential. The number of samples in each school is shown in Table 1.

Tabel 1. Sample Size of Students in Class VIII

Subdistrict (*Cluster*)	School Name	Sub Population	Sub Sample
Mamajang	SMPN 1	265	23
Tallo	SMPN 4	331	29
Wajo	SMPN 5	254	23
Ujung Pandang	SMPN 6	348	30
Ujung Tanah	SMPN 7	290	25
Bontoala	SMPN 10	325	28
Tamalanrea	SMPN 12	282	25
Manggala	SMPN 17	439	38
Panakkukang	SMPN 23	394	35
Tamalate	SMPN 27	306	27
Mariso	SMPN 29	341	30
Rappocini	SMPN 33	262	23
Biringkanaya	SMPN 35	330	29
Total		**4167**	**365**

The data collection technique employed in this study entailed the administration of a critical thinking skills test in the form of multiple-choice questions on the subject matter of the human respiratory system and the human excretory system in the eighth-grade even semester. The test consisted of 24 items, each describing one indicator, and included four alternative answers. The research instrument utilized is a critical thinking skills test according to Ennis, which contains five indicators. These five critical thinking indicators are further elaborated into 12 sub indicators, as illustrated in Table 2.

Tabel 2. Grid of Critical Thinking Skills Instrument Indicators

Indicator	Sub Indicators	Number of Questions
Elementary Clarification	Focusing the question	2
	Analyzing arguments	2
	Ask and answer questions	2
Basic Support	Considering the credibility of a source	2
	Observe and consider the results of observations	2
Inference	Make inductions and consider the results of inductions	2
	Make deductions and consider the results of deductions	2

Indicator	Sub Indicators	Number of Questions
Advance Clarification	Make decisions and consider the results	2
	Define terms, consider definitions	2
	Identifying assumptions	2
Strategy and Tactics	Deciding on an action	2
	Interact with others	2
Number of Questions		**24**

(Source: Ennis, 1985)

The data from the critical thinking skills test was subsequently analyzed using the SPSS version 21.0 for windows application. The criteria for categorizing students' critical thinking skills are detailed in Table 3.

Tabel 3. Categories of Critical Thinking Skills

Percentage	Category
$80\% \leq x \leq 100\%$	Very High
$66\% \leq x \leq 79\%$	High
$56\% \leq x \leq 65\%$	Medium
$40\% \leq x \leq 55\%$	Low
$0\% \leq x \leq 39\%$	Very low

(Source: Agnafia, 2019)

RESEARCH RESULT

Descriptive Statistical Analysis of Critical Thinking Skills of Eighth Grade Students of Accredited-A State Junior High School in Makassar City.

The results of descriptive analysis of critical thinking skills of eighth grade students in A-accredited public junior high schools in Makassar City can be seen in Table 4.

Tabel 4. Descriptive Statistics of Critical Thinking Skills of Eighth Grade Students of A-Accredited Public Junior High Schools in Makassar City

Statistics	Results
Sample Quantity	365
Ideal Value	100
Highest Score	91,67
Lowest Score	29,17
Average	65,36
Standard Deviation	11,80

Based on Table 4, it is known that the ideal score of critical thinking skills of eighth grade students of accredited-A public junior high schools in Makassar City is 24. The highest score obtained by eighth grade students of A-accredited public junior high schools in Makassar City on critical thinking skills is 22, where the highest score obtained is only two differences with the ideal score. While the lowest score is 8 with a total of 365 respondents.

Percentage of Critical Thinking Skills of Eighth Grade Learners of A-Accredited Public Junior High Schools in Makassar City

The following is a description in the form of a histogram based on the average percentage of critical thinking skills of eighth grade students of A-accredited public junior high schools in Makassar City.

Picture 1. Histogram of Critical Thinking Skills of Eighth Grade Students of A-Accredited Public Junior High Schools in Makassar City

Description of the Average Percentage of Each Indicator of Critical Thinking Skills Eighth Grade Students of A-Accredited State Junior High School in Makassar City

The percentage of each indicator of critical thinking skills of eighth grade students of A-accredited public junior high schools in Makassar City is presented in Table 5.

Tabel 5. Average Percentage of Each Indicator of Critical Thinking Skills of Eighth Grade Students of A-Accredited State Junior High Schools in Makassar City

Critical Thinking Skills Indicator	Number of Questions	Percentage (%)	Category
Elementary Clarification	6	70,50	High
Basic Support	4	53,63	Low
Inference	6	60,32	Medium
Advance Clarification	4	68,56	High
Strategy and Tactics	4	73,77	High
Mean		**65,36**	**Medium**

Based on the data in Table 5, it is obtained that the average percentage of critical thinking skills of eighth grade students of A-accredited public junior high schools in Makassar City is 65.36%, including in the medium category. The indicator of strategy and tactics is the indicator with the highest average of 73.77% in the high category. Meanwhile, the indicator of basic support is the indicator with the lowest average of 53.63% in the low category.

DISCUSSION

The research conducted was intended to determine the description of critical thinking skills of eighth grade students of A-accredited public junior high schools in Makassar city. The data in this study were obtained through a critical thinking skills test with the subject matter of the human respiratory system and the human excretory system consisting of 24 multiple choice numbers representing 5 indicators of critical thinking skills. Based on data analysis of critical thinking skills that have been obtained, the percentage of critical thinking skills of eighth grade students of A-accredited public junior high schools in Makassar city is 65.36% with a moderate category. Of the total 365 students, 61 students (16.71%) have critical thinking skills that fall into the very high category. The schools that have the most students with very high critical thinking skills are SMPN 5, SMPN 12, and SMPN 33 with 11 students each.

The school with the highest percentage of critical thinking skills is SMPN 5 Makassar with a percentage of 74.71%, the majority of students are in the high and very high categories. Of the 29 learners involved, 11 learners (37.93%) were in the very high category, and 17 learners (58.62%) were in the high category. No learners from SMPN 5 were in the low or very low categories, with only 1 learner (3.45%) in the medium category. This shows that SMPN 5 has a high proportion of learners with critical thinking skills, which is significant compared to other schools that have more learners in the moderate or low categories.

Critical thinking skills among eighth-grade students in A-accredited public junior high schools in Makassar City vary widely. This can be influenced by internal school factors such as teaching quality and academic environment. The quality of teaching and learning methods used, such as problem-based learning and group discussions, allow learners to engage in the process of analysis and evaluation, which are important for the development of critical thinking skills (Ennis, 2011). In addition, an academic culture that supports openness and exploration of ideas also encourages learners to think critically (Facione, 2015). Effective school leadership, which is able to motivate teachers to implement innovative approaches, also plays an important role in creating a conducive learning environment (Robinson, 2011). Optimal implementation of the independent curriculum and the curriculum 2013, which emphasize the development of higher order thinking skills, as well as the availability of adequate resources and facilities, such as libraries and laboratories, also support students' ability to learn independently and develop their critical thinking skills (Kemendikbud, 2013; Paul & Elder, 2007).

From this study, information was also collected and analyzed the achievement of each indicator of critical thinking skills. The following is a more detailed description of the indicators of critical thinking skills of eighth grade students of A-accredited public junior high schools in Makassar city.

a. Elementary Clarification

The indicator of elementary clarification is spread over numbers 1, 2, 3, 13, 14, 15 with sub-indicators of focusing questions, analyzing arguments, and asking and answering questions. The sub-indicator of analyzing arguments is the sub-indicator with the highest average percentage compared to the other two sub-indicators. The following is an example of a question from the sub-indicator analyzing arguments in number 14.

Question Number	**: 14**
Indicators	**: Elementary Clarification**
Sub-Indicator	**: Analyzing Arguments**

Take a look at the arguments below!
When a person is active during the day in hot weather, sweat will be released from their skin which causes body odor. Generally, sweat is odorless, but if it stays on the skin for several hours, it can cause body odor. This is due to the activity of bacteria that live naturally on the surface of the skin, where these bacteria multiply rapidly in sweat.
Based on the above argument, which of the following is the correct way to deal with body odor caused by sweat contaminated by bacteria is...
  a. Bathe twice a day
  b. Using a deodorant that contains antiperspirant
  c. Must change clothes frequently and wash used clothes promptly.
  d. All answers are correct
Answer Key: D

The problem on the sub-indicator of analyzing arguments, learners are given an argument related to skin that secretes sweat. Learners are asked to analyze the argument to solve the problem that occurs. In this sub-indicator, students are expected to be able to analyze arguments so that they can make conclusions by analyzing the problem solving that has been made (Romero, Quesada, & Estepa, 2021).

The percentage of sub-indicators analyzing arguments of 83.13% is included in the very high category. Based on this percentage, it can be interpreted that students are able to analyze arguments or review the structure of an argument. Learners are able to produce an argument or opinion on a matter presented (Ferdyan & Arsih, 2021). skills in analyzing arguments have been identified as a key component of critical thinking, as they require reasoning and evaluation of alternative points of view according to the quality of supporting evidence (Jiménez-Aleixandre & Puig, 2012).

The next sub-indicator is focusing the question. This sub-indicator received a percentage of 68.22% in the high category. Based on this percentage, it can be interpreted that students are able

to focus questions or it can be said that students are able to understand an event and formulate questions according to the event. Similar research results have also been conducted by Khoirunnisa & Sabekti (2020) that on this sub-indicator students are classified in the high category.

The next sub-indicator is asking and answering questions. In this sub-indicator, a percentage of 60.14% was obtained. Based on this percentage, it is included in the moderate category, which means that students are quite capable of asking and answering questions. Similar research results have also been carried out by Wahyuni, Sari & Kowiyah (2021) that on the sub-indicator asking and answering questions students are classified in the moderate category. This indicates that students can think critically in elementary clarification and students are clear enough to express answers that are in accordance with the problem.

In general, students' critical thinking skills on indicators of elementary clarification which include sub-indicators of focusing questions, analyzing arguments, and asking and answering questions are included in the high category with a percentage value of 70.50%. This is in line with research conducted by Salbiah (2017) that students' critical thinking skills on indicators of elementary clarification are included in the high category. The high level of critical thinking skills in this indicator is because students have been trained in identifying a problem in working on problems.

b. Basic Support

indicators considering the credibility of a source and observing and developing observations. The sub-indicator considering the credibility of a source is the sub-indicator with the lowest average percentage among other sub-indicators. The following is an example of a question from the sub-indicator considering the credibility of a source in number 16.

Question Number	**: 16**
Indicators	**: Basic Support**
Sub-Indicator	**: Considering the Credibility of a Source**

In a prop, the process of filtering blood in the kidneys requires certain tools and materials. Take a look at the filtering model in the kidney below!

The source of the above tool is related to the parable of the actual process of filtering blood in the kidneys. The correct statement about the analogy with the kidney organ is....

1.	Corong	Sebagai glomerulus
2.	Kertas Saring	Sebagai kapsula bowman
3.	Erlenmeyer	Sebagai glomerulus
4.	Filtrat	Sebagai urine primer

Based on the statement above, the correct one is....
a.   1 and 3
b.   1, 2, and 3
c.   1 and 4
d.   4 only
Answer Key: C

In this sub-indicator, learners are given a picture of a prop of the blood filtration process in the kidneys. Learners are asked to determine the correct statement about the parable of the kidney organ based on credible sources. The ability to consider source credibility is a person's ability to use existing procedures from trusted sources (formulas, statements, and facts) in solving the problem at hand (Fernanda et al., 2019).

The percentage on the sub-indicator considering the credibility of a source is 49.86%. Based on the percentage obtained, this sub-indicator is included in the low category, which means that students are less able to consider the credibility of a source. The results of this study are in line with research conducted by Fernanda et al (2019) that students' skills in considering the credibility of a source still have difficulty in processing information from a source that has been heard or seen and using it to solve existing problems. Similarly, Nainggolan, Suriani & Sianturi (2021) stated that this sub-indicator has the lowest percentage among the sub-indicators in the indicator of basic support.

The next sub-indicator is observing and developing observation results. According to Wahyuni, Sari & Kowiyah (2021) on this sub-indicator students are expected to be able to find and be able to determine evidence for a statement in a source to compile accurate information in theory. Based on Table 4.5, it is informed that the percentage on the sub-indicator of observing and considering the results of observations is 57.40%. Based on the percentage obtained, the skills of observing and considering the results of students' observations are included in the moderate category or it can be said that students are quite good at observing and considering the results of observations. This is in line with research conducted by Fernanda et al (2019) which states that students are able to process data based on tables or observation reports quite well.

In general, the percentage of students' critical thinking skills on the indicator of basic support is 53.63%. The results of this percentage are included in the low category. This is in line with similar research conducted by Harso & Gago (2018) which states that for indicators of basic support students are in the low or less critical category.

c. Inference

The conclusion indicator is divided into three sub-indicators, namely making induction and considering the results of induction, making deduction and considering the results of deduction, and making decisions and considering the results. This indicator is found in questions number 6, 7, 8, 18, 19, and 20, where the sub-indicator of making induction and considering the results of induction is the sub-indicator with the lowest average percentage among the sub-indicators contained in the inference indicator. The following is an example of a sub-indicator question making induction and considering the results of induction found in number 18.

Question Number	: 18
Indicators	: **Inference**
Sub-Indicators	: **Make Inductions and Consider the Results of Inductions**

In testing the urine of a patient using Biuret solution, the urine turned purple in color. When the urine was also tested using Benedict's solution, the urine remained clear in color. Based on these tests, it can be concluded that the patient is suspected of having...
  a. Albuminuria
  b. Uremia
  c. Diabetes mellitus
  d. Polyuria

Answer Key: B

This question contains a narrative related to testing someone's urine using Biuret solution. Then students are asked to conclude the disease suffered from the results of urine testing using biuret solution. The skill of making induction is the skill of students to make a conclusion or generalization from the problem that has been solved (Fernanda et al., 2019).

The percentage obtained on this sub-indicator is 49.32%. So it can be interpreted that this sub-indicator is included in the low category. This is in line with research conducted by Kusumastuti, Susilowati & Eko (2019) which states that critical thinking skills on the sub-indicator of making induction and considering the results of induction are included in the less critical category.

The next sub-indicators are making deductions and considering the results of deductions. Critical thinking is closely related to deduction skills (Kusumastuti, Susilowati & Eko, 2019). The percentage obtained on this sub-indicator is 61.10%. So it can be interpreted that the critical thinking skills of students on the sub-indicator of making deductions and considering the results of deductions are included in the moderate category. This is in line with research conducted by Ferdyan & Arsih (2021) that students' critical thinking skills on the deduction sub-indicator are included in the moderate category.

The next sub-indicator is making decisions and considering the results. Decision-making skills are skills to determine the results of considerations based on existing facts (Fernanda et al., 2019). The percentage of students' critical thinking skills on this sub-indicator was 70.55%. The percentage is included in the high category. This means that eighth grade students of A-accredited public junior high schools in Makassar city have been able to make decisions and consider the results. This is in accordance with research conducted by Sugandi (2021) that students are able to make correct decisions.

In general, the critical thinking skills of eighth grade students of A-accredited state junior high schools in Makassar city on the conclusion indicator amounted to 60.32%. The percentage results are included in the moderate category. So it can be interpreted that eighth grade students of A-accredited state junior high schools in Makassar city are quite capable of inference a problem. This is in line with research conducted by Harso & Gago (2018) that students' critical thinking skills on inference indicators are included in the moderate or fairly critical category.

d. Advance clarification

The indicator of advance clarification is divided into two, namely defining terms, considering definitions and identifying assumptions. This indicator is found in questions number 9, 10, 21, and 22, where the sub-indicator identifying assumptions is the sub-indicator with a higher average percentage compared to the average percentage of sub-indicators considering terms, considering definitions. The following is an example of a problem from the sub-indicator identifying assumptions found in number 22.

Question Number   **: 22**
Indicators   **: Advance clarification**
Sub-Indicators   **: Identifying Assumptions**
When we are in cold areas, we often urinate. Why do you think we pass a large volume of urine when in cold areas...
  a. Because at that time the blood vessels expand, blood flow in the glomerulus and filtration drops
  b. Because at that time the blood vessels constrict, blood flow in the glomerulus and filtration increases
  c. Because at that time the blood vessels expand, blood flow in the glomerulus and filtration stabilize
  d. Because at that time blood vessels constrict, blood flow in the glomerulus and filtration stabilizes
Answer Key: B

The question on this sub-indicator, learners are given an assumption about someone who is in a cold area will urinate more often. Learners are asked to identify these assumptions related to humans who release large volumes of urine when in cold areas. According to Agustiana (2019) the skill of advance clarification is the skill to reason and reconstruct valid arguments. The percentage obtained on this sub-indicator was 68.56%. The percentage obtained is included in the high

category. So it can be interpreted that students have been able to identify an assumption. This is in line with research conducted by Agustiana (2019) that students' critical thinking skills on this sub-indicator are included in the excellent category.

Furthermore, the sub-indicator defines terms and considers definitions. The percentage obtained on this sub-indicator was 63.84%. The percentage obtained is included in the moderate category. So it can be interpreted that the critical thinking skills of eighth grade students of A-accredited public junior high schools in Makassar City are quite capable of defining terms and considering definitions. This is in line with research conducted by Ayun et al (2020) that the percentage of students on the sub-indicator of defining terms and considering definitions is included in the moderate category.

In general, the percentage of critical thinking skills of eighth grade students of A-accredited public junior high schools in Makassar City on the indicator of advance clarification is 68.56%. The percentage obtained is included in the high category. This is in line with research conducted by Harso & Gago (2018) that critical thinking skills on indicators of advance clarification are included in the high or critical category.

e. Strategy and Tactics

The indicator of strategy and tactics is divided into two sub-indicators, namely deciding on actions and interacting with others. This indicator is in questions number 11, 12, 23, and 24 where the sub-indicator interacting with others is the sub-indicator with the highest average percentage when compared to the sub-indicator deciding on actions. The following is an example of a question for the sub-indicator interacting with others in question number 24.

Question Number : 24
Indicators : **Strategy and Tactics**
Sub-Indicators : **Interact with Others**
Your sister has acne on her face caused by bacteria. As a good sister, what actions will you take so that the pimples on your sister's face heal...
a. Ask her to clean her face regularly and use skincare regularly
b. Ask him to avoid eating fatty foods
c. Ask him to exercise more
d. Ask him to drink water regularly
Answer Key: A

The question that illustrates this sub-indicator asks learners to help solve a problem experienced by a sister related to facial acne. The percentage obtained on this sub-indicator was 78.77%. The percentage obtained is included in the high category. So it can be interpreted that eighth grade students of A-accredited public junior high schools in Makassar city are able to

interact with others. This is in line with research conducted by Husni & Sedijani (2019) that students have been able to provide solutions to a situation from a problem.

The next sub-indicator is deciding on action. The percentage obtained on this sub-indicator is 68.77%. the percentage obtained is included in the high category. So it can be interpreted that students are able to decide on an action. This is in line with research conducted by Nuryanti, Zubaidah & Diantoro (2018) that students have been able to choose criteria to consider solutions to a given problem.

In general, the percentage of critical thinking skills of students in class VIII of A-accredited junior high schools in Makassar city on indicators of strategy and tactics is 73.77%. This percentage is included in the high category. So it can be interpreted that eighth grade students of A-accredited public junior high schools in Makassar city have been able to organize strategies and tactics. This is in line with research conducted by Fujika, Anggraini & Budiarti (2015) which states that students' critical thinking skills on indicators of regulating strategies and tactics show a high category.

CONCLUSION

Based on the results of the research that has been done, it can be concluded that the level of critical thinking skills of eighth grade students of A-accredited public junior high schools in Makassar city is in the medium category with a percentage of 65.35%. The critical thinking skills of eighth grade students of A-accredited public junior high schools in Makassar city on indicators of elementary clarification are in the high category with a percentage of 70.50%, indicators of basic support are in the low category with a percentage of 53.63%, indicators of inference are in the medium category with a percentage of 60.32%, indicators of advance clarifications are in the high category 68.56%, and the last indicator, namely strategy and tactics, is in the high category with a percentage of 73.77%.

ACKNOWLEDGMENTS

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