Upper Primary Students’ Critical Reading Skills in Surakarta: Gender Based Analysis

Nur Amalia¹, Harun Joko Prayitno², Ratnasari Dyah Utami³, Dwi Yuniasih Saputri⁴

<table>
<thead>
<tr>
<th>Article History</th>
<th>Abstract</th>
</tr>
</thead>
</table>
| **Article Submission**  
18 March 2021 | This study aims to assess the critical reading skills of upper primary school students in Surakarta, Indonesia. Therefore, descriptive research design was used. The research participants consisted of sixty students (20 male and 40 female) in the fourth, fifth and sixth grade from five public primary schools and five private primary schools. They were purposively selected from five public schools and five private schools. In terms of gender composition, the number of male students was proportional to the number of female students. Thirty male students and 30 female students involved in this qualitative research. The data were collected from reading comprehension test and interview. The results were analyzed using Paul & Elder’s (2008) six aspects of critical reading skills which consist of accuracy, clarity, precision, depth, relevance and logic. The results of this study revealed that in terms of accuracy and relevance, private primary school students’ critical reading skills were higher than that of the public primary school students, while the same results were achieved for clarity and logic, depth and precision. While the students in the sixth grade developed all aspects of the skills equally to a comprehending level, the fourth graders’ clarity and the fifth graders’ clarity and logic were in the emergent level. In terms of gender, the male students in the fifth grade and the female students in the sixth grade showed a comprehending level in almost all of the aspects. |
| **Revised Submission**  
22 June 2021 | **Keywords:** critical reading, public school, private school, gender, primary students. |
| **Article Accepted**  
15 July 2021 | **Article Accepted**  
15 July 2021 |

1 Universitas Muhammadiyah Surakarta, nur.amalia@ums.ac.id
2 Universitas Muhammadiyah Surakarta, harun.prayitno@ums.ac.id
3 Universitas Muhammadiyah Surakarta, rdu150@ums.ac.id
4 Universitas Sebelas Maret, dwiyuniasihsaputri@staff.uns.ac.id
1. Introduction

Information and communication technology has progressed rapidly and impacted on the circulation of information in electronic media, social media and printed media. Information can now be easily accessed without much effort. However, the information is not always accurate and cannot always be trusted. This kind of information is called hoax. Abede (2005) states that hoax is information which is not based on the actual or real events. This kind of information has a tendency to mislead readers. Hoax spreading refers to “deceptive alerts designed to undermine the public’s confidence in an organization, product, service, or person” (Veil et al., 2012). Hoaxes are also made to have specific purposes such as providing information, influencing people, or gathering sympathy using false “fact” and misleading news that sometimes is too good to be true or too bad to be real. As a reader, people must be able to choose information selectively based on their needs and must not believe hoax easily. These skills are needed to be taught as early as students can read. Being critical in reading and able to comprehend information is one of the substantial skills for children in today’s disruptive era.

Adequate reading skills at an early age can influence student’s academic achievement throughout the course of their educational career (National Reading Panel, 2000; Slavin, Lake, Chambers, Cheung, & Davis, 2009). Children’s reading ability is a strong predictor of long-term academic and work success. A wide variety of reading skills appears at a young age and continues into adulthood.

One of the important reading skills needed today is critical reading skills. Sultan et al. (2017) state that critical reading requires active involvement of readers to think deeply by applying various skills. A critical reader has the ability to (1) summarize accurate arguments from the text, (2) identify claims, (3) discover expressed or implied assumptions, (4) analyze and evaluate the accuracy of reasons that support certain thesis statements, and (5) analyze, evaluate, and explain the purpose or consequences of using certain facts or sources of information (Barnet & Bedau, 2011). Critical thinking skills are one of the most important academic skills for students (Stewart & Stoller, 1990: 4). Critical thinking and critical reading skills are needed not only for learning in class but also for lifelong learning (Allen, 2004; Nilson, 2003; Ozdemir, 2002).

According to Lewis (1983), the purpose of teaching critical reading is to grow individuals who can make a number of judgments about what they read based on strong evidence and reasoning process rather than subjective data. Applying critical reading skills helps individuals to develop thinking strategies for critical thinking. Kurland (2000) and Ustunluoglu (2004) indicate that through critical reading, students can identify implications, assumptions, and conclusions. Since hoax is spreading uncontrollably, people need to be able to distinguish between assumptions and facts, facts and conclusions and evaluate author’s point of view.

A number of studies have investigated the relation between gender and reading skills. Previous study suggests that teachers tend to overestimate girls ‘reading abilities and underestimate that of boys (Hinnant, O’Brien, and Ghazarian, 2009). Sorhagen (2013) found that reading ability was not related to student gender. Altunsöz (2016) also reported that there was no significant difference in critical reading skills between fourth grade male students and female students. Some studies reported that female students have critical reading skills greater than male students (Sadioğlu & Bilgin, 2008). Facione, Giancarlo, Facione and Gainen (1995) examined the influence of gender on critical thinking dispositions and reported that female students were more likely to be open to thinking than male.

However, many teachers in primary schools have not paid attention to the importance of critical reading skills for students. This is in line with the opinion expressed by Wallace (2003) that the importance of critical reading in various fields is not treated seriously as it should, including in education. Therefore, this research aims to measure critical reading skills of upper primary students based on gender. This objectives of this study is to analyze the fourth, fifth and sixth primary students critical reading skills in both public and private primary schools based on gender. Analyzing gender influence on language learning is quite important in the current environment of shared education, especially when expressions such as “male underachievement” or “female verbal superiority” have become very good considerations and are a major concern both by instructors or researchers (Oda & Abdul Kadhim, 2017).
2. Research method

This study used a qualitative descriptive approach. Qualitative descriptive research is intended to analyze and describe the existing natural and manipulated phenomena, particularly the characteristics, quality, relation between activities (Sukmadinata, 2011). Purposive sampling technique was used to select the research participants which consisted of sixty students (20 male and 40 female) in the fourth, fifth and sixth grade from five public primary schools and five private primary schools. The primary schools are located in Surakarta, Indonesia and the data were collected from February to July 2019.

The main data collection technique in this study was interview and students’ critical reading test. The instrument used in this study is a critical reading test instrument that was developed based on the opinions of Paul & Elder (2008) which consists of six aspects namely important reading skills: accuracy, clarity, precision, depth, relevance, and logic. The instrument was developed by arranging two text and there were six questions representing each of these aspects. The validity of the data is confirmed through triangulation process, and examination of peers through discussion. The data obtained were analyzed using interactive analysis techniques (Miles and Huberman, 2009: 14), namely: data collection, data condensation, data display, and conclusion.

3. Result

To assess upper primary students’ critical reading, the students’ critical response about two articles, Culture in Japan and Culture of Reading in Indonesia, were recorded and analyzed. As a follow up, students were interviewed based on 6 aspects of critical reading skills: accuracy, clarity, precision, depth, relevance, and logic (Paul & Elder, 2008). Accuracy is the ability to identify the main goals and/or concepts in reading. Clarity is the ability to understand facts, data, or examples used to support. Precision is the ability to identify and use specific vocabulary content from reading or lecturing. Depth is the ability to show the complexity of understanding. Relevance is the ability to identify or produce conclusions and personal significance based on content. Logic is the ability to apply concepts and content to other broad contexts. These aspects are expressed in several questions to assess students’ ability in finding, comprehending and or thinking about: (1) the purpose of the article, (2) the contents of the article based on facts and data in the article, (3) the application of the concept in the articles in students’ life, (4) the correlation between articles and their role as students, (5) evaluating the contents of the article and stating their opinion, and (6) asking questions that arise after reading the articles.

The diagram shows that the average students’ critical reading ability between public and private primary schools is similar in clarity, logic, depth and precision. The students from public primary school have accuracy, clarity, logic and relevance that are at emergent levels. Besides, their depth and precision are at comprehending level. Meanwhile, those from private primary school have clarity and logic at emergent level, and accuracy, relevance, depth and precision at comprehending level. It is pointed that upper primary students from private school are excel in terms of accuracy and relevance.
The diagram above shows a comparison of upper primary students’ critical reading skills based on their grades: grade four, five, and six. Fourth grade students, for accuracy, logic, relevance, depth and precision aspects are at comprehending level, whereas their clarity are at emergent level. Fifth grade students, for accuracy, relevance, depth, and precision aspects are at comprehending levels, while their clarity and logic are at emergent level. Sixth grade students are at comprehending level in 6 aspects of critical reading skills.

The diagram above portrays the fourth grade male students’ critical reading skill on aspects of accuracy, relevance and precision are at comprehending levels, whereas the aspects of clarity, logic and depth are at emergent levels. Fourth grade female students on aspects of logic, relevance, depth, and precision are at comprehending levels, while aspects of accuracy and clarity are at emergent levels.

Fifth grade male students’ critical reading skill on aspects of clarity, is at emergent levels, while the other five are at comprehending level. The fifth grade female students in the aspect of precision are at comprehending level, while the other five are at the emergent level.

Sixth grade male students on aspects of logic, and precision are at comprehending levels, while aspects of relevance, accuracy, clarity, and depth are at emergent levels. Sixth grade female students on aspects accuracy, clarity, relevance, depth, and precision are at comprehending levels, while the logic aspect is at emergent levels.

Based on interview, when the students were asked to explain whether or not Japanese culture is applicable for Indonesian, girls tend to answer longer but apply incorrect answer. For instance, Girl 6 answered “it is applicable because Indonesia has a strong determination to undergo this all technology, employment, education, selling and farming.”, and Girl 13 answered “In my opinion, because in Indonesia there is the same as cleaning duty after school, but only the teacher does not participate in cleaning.”
Whilst the boys answered the question by using generic ideas and applying concepts in their answer. For instance, Boy 3 and 15 answered:

“Discipline and maintaining cleanliness can be tried to be applied in Indonesian primary schools (Boy 3); and “Yups, because it has already been like that so applying the concept must be gradual, so children maintain cleanliness naturally and more sincere (Boy 15).”

When the students were asked to state their opinion whether or not the article is relevant to their role as a student, six grade boys are at emergent level as they answered briefly, such as: “Yes, because at school I like to read and do discipline”, and “yes, to motivate”. Their answers show a low relevance, with basic conclusion stated.

Contrast to the girls, they could answer the question and relate it to themselves. Girl 12 answered “because as a student, I like reading. Reading is the brain of the world. I don’t like to read very much but I have the determination to read.” Girl 15 answered “I think it is relevant, because as a student, I should respect cleanliness, discipline and punctuality, reading interests that are taught to every student.”

4. Discussion

Students’ critical reading ability when viewed from different types of school shows that students’ critical reading skills in private schools are more excel than those in public schools. Students in private schools excel in four aspects, namely accuracy, depth, and relevance. Whereas for the aspects of clarity, logic and precision between public and private primary schools are similar. Students who attend private schools are more likely to have positive socio-economic characteristics associated with academic success. Frenette & Chan (2015) in a secondary level of education conclude that reading score of private schools is higher than that of public schools. Other studies also resulted that students in private schools show higher overall performance (Ferer et al., 2004).

Even though the finding shows different students’ performance from both types of school, contextual factors such as location, school environment, school neighbourhood conditions, and also the composition of students in school have an impact on children’s learning (Carlson & Cowen, 2015; Fischer, 2013; Parcel & Dufur, 2001). The school environment in private and public primary schools is different in terms of the learning resources available, such as libraries, student services, and extracurricular activities, and models from adults as examples of educated and successful adults for students (Carlson & Cowen, 2015; Katz, 2014; Sastry & Pebley, 2010).

Wolf, Casneder, and Casneder (1967) found that students in grade 1 to 6 were able to be taught critical reading. Critical reading skills allow a student to make intelligent decisions about a product, entertainment, or even a case by asking children to respond at a very early age (Burns, Roe, and Ross, 1984). The findings suggest that there is a slight difference in terms of students’ critical reading skills of grade four, five and six. As students’ experience increases in practicing critical reading skills, the ability of students in critical reading will also escalate. Sixth grade students have more critical reading experience compared to fifth or fourth grade students. Therefore, sixth grade’s critical reading skills are relatively higher than fifth and fourth grade students, and fifth grade critical reading ability is higher than fourth grade students.

In relation to the development of students’ thinking and critical reading skills, Stauffer (1977), supported by various studies in the field (McMillan & Gentile, 1988; Nickerson, 1989; Wilson, 1988), argues that critical thinking must be taught to students from an early age. The development of critical thinking and critical reading skills of students does not automatically develop by themselves when they grow up, but must be trained with critical thinking experience both at school and outside of school. Some researchers have also emphasized that the development of students’ critical thinking must begin in the early class (Hickey, 1988; McMillan & Gentile, 1988). Thistlethwaite (1990), for example, strongly emphasizes that critical reading does not have to wait until lower level reading skills have been mastered.

Students’ critical reading ability when viewed from gender differences shows that in general the ability of female students (girls) is superior to male students (boys). This is consistent with the results of previous studies that girls have critical reading skills greater than boys (Sadıoğlu & Bilgin, 2008). Facione et. al. (1995) examined the influence of gender on critical thinking dispositions and
Nur Amalia reported that girls are more likely to be open-minded than boys.

Boys have advantages in several aspects. They excel in aspects of accuracy, clarity, and logic. The ability of boys to reason is higher than that of girls. This is in accordance with the theory which suggests that men are more rational than women (Fischer, 1993). The research results of Hidayat et al. (2019) also show that male and female youth (15-24 yo) have no significant perception of accuracy (credibility), clarity, depth (amount of information), and relevance. Male youth indicated more unsatisfied with material coverage of than female youth information.

Previous research has identified gender gaps in understanding text in girls outperforming boys, especially from primary school classes (Arellano, 2013; Below et al., 2010; Driessen & Langen, 2013; Slik et al., 2015). Boys show a higher preference for rational-processing than girls (Sladek, 2010). Other research results also prove that women prefer experience-processing, and men prefer a more rational style (Epstein, 2003).

Girls excel in aspects of relevance and depth. They understand reading more easily than boys. Logan and Johnston (2009: 200) suggest that girls are better at reading comprehension than boys. Girls are estimated to have a corpus callosum greater than boys, averaging 25% greater in adolescence (Gurian & Stevens 2012: 2) which allows them to integrate auditory and visual information from two more halves. In addition there is the fact that the left hemisphere, which is responsible for auditory processing and verbal expression, develops earlier in girls than boys means that girls tend to process information faster than boys (Rowe, Rowe & Pollard, 2004: 23). Girls answers indicate that they can answer question with some relevance, conclude, and somewhat connect the concepts personally. At this stage, six grade students are at comprehending toward expert level for relevance aspect in critical reading.

From the view of maturity levels study, gender difference is one of the significance factors that affects reading skills, stating that female are comprehending faster than boys (Klinger, Shulha & Wade-Woolley, 2010: 4). Boys have lower language skills related to reading than girls (Burman, Bitan & Booth, 2008: 1349).

This study finds that female students have higher scores in terms of reasoning that is personally related. This finding is in line with the results of research that reveal that women are more sensitive to emotional expression in real interpersonal interactions so that relevance abilities are higher than men (Chen, et. Al., 2018). Women have long been believed to outperform men in recognizing emotional expression (Yuan et al., 2009; Erol et al., 2013; Lee et al., 2013; Mason et al., 2016). Other studies also provide results that women prefer experience-processing to men (Sladek, 2010).

5. Conclusion

There is a difference in critical reading skills of students in upper grade between public and private primary schools. The difference is influenced by several factors, namely the school facilities, the learning methods used, and the supportive school environment. The critical reading ability of boys in upper level, especially in six grade, excel in aspects of logic. This is because boys have higher reasoning abilities than girls. Girls are more emotional so they are excel in aspects that are personally related to them. In addition, girls also have the ability to understand reading better than boys. However, as they developing their reading skills through their study, at the end of primary school the critical reading ability of both boys and girls nearly equal, only different in aspects of logic and relevance. The limitation of this study is that research is only carried out in elementary schools so the possibility of the results is not the same as research conducted in junior high schools, high schools or colleges, so further research needs to be done at a higher level. The researcher can then measure students' critical reading skills in terms of other aspects.

6. Recommendations

This study recommends for further researchers to analyze related to critical reading skills based on several aspects such as family background, reading intensity, type of reading, and the use of technology to find information.
7. Limitations

The limitation of this study is that the research sample used only focuses on students in the primary school teacher education study program. In addition, researchers also cannot control the external variables that have an influence on the results of this study.

References


National Reading Panel. (2000). Teaching Children to Read: An Evidence-based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction. NIH Publ No 00-4769, vol. 7, p. 35, https://doi.org/10.1002/ ppub.1950070418.


