



PROFILE OF STUDENTS' METACOGNITIVE THINKING SKILLS VIEWED FROM PARENTING STYLE OF THE PARENTS

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Abstract: The purpose of this study is to describe the profile of students' metacognitive thinking skills viewed from the parenting style of the parents. The present study involved 210 randomly recruited undergraduate students of Siliwangi Institute of Education from seven study programs. Tuncer and Kaysi's Metacognitive Thinking Skills Scale was employed to measure students' metacognitive thinking skills, covering three dimensions, namely reflective thinking ability for problem-solving, decision-making ability, and alternative Strategy ability. In measuring parenting style, Parenting Style Questionnaire (PSQ) developed by Robinson, C., Mandleco, B., Olsen, S. F., & Hart, C. H. (1995) was utilized. This study found differences in metacognitive thinking skills among students with authoritative, authoritarian, and permissive parenting style, both on metacognitive thinking skills as a whole and in its aspects. This result could be used as a need assessment for developing metacognition-based academic counseling and guidance programs.

Keywords: metacognitive thinking style, parenting style

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INTRODUCTION

College Students, as human resources prepared to compete in the globalization era, are required to have high-order thinking skills manifested in the form of critical, logical, reflective, metacognitive, and creative thinking (Marshall & Horton, 2011). Higher-order thinking skills are important for students as they are required to solve problems related to academics and other broader problems. These skills are manifested through the ability of students to distinguish facts from opinions, identify relevant information, solve problems, and infer the analyzed information (Woolfok, 2008). King, Goodson, and

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Rohani (2011) assert that in order to have employability skills, it is necessary to develop decision-making ability, interpersonal competences, and problem—solving and reasoning ability.

In the Indonesian context, developing these skills is not only critical for work but also is inevitably necessary to deal with the complexities of the family, community, and society (Lopez & Whittington, 2001). However, several recent studies revealed that Indonesian students' higher-order thinking skills in both secondary and higher education are still insufficient to deal with the complexities of society. These findings were supported by the data of PISA (Program for International Student Assessment) result, which showed that Indonesian participants were only able to reach the second of the six levels of thinking on the competed questions. These results indicated that the logical and rational thinking skills of Indonesian students are in a low category. The PISA ranking is an indicator of the low level of education in Indonesia (Munawwarah & Tohir, 2020).

Considering existing results described earlier, it is necessary to develop students' metacognitive thinking skills as one of the manifestations of high order thinking skills in their learning process. This skill refers to a set of interrelated competencies for thinking and learning as well as the skills needed for active learning, critical thinking, reflective assessment, problem-solving, and decision making.

The concept of metacognition, initially introduced by John Flavel (1979), refers to individual's knowledge of their cognitive processes. Broadly speaking, Flavel states that metacognition denotes individual's ability to control their thinking processes through various strategies, such as adapting, monitoring, and organizing. Metacognition involves complex mental processes such as making plans, using the right strategy to solve a problem, and making alternative evaluations (Dunslosky & Thiede, 1998).

Some researchers divide metacognition into two aspects, regulation of cognition and knowledge of cognition (Flavel, 1987). The former refers to a set of activities that help students control their learning while the latter describe what individuals know about their cognition. (Schraw, 1998).

In the context of higher education, metacognitive thinking skills are necessary for the students to improve their academic performance. These skills allow students to utilize existing strategies and having a greater awareness of comprehension breakdown as well as using better attentional resources, , (Schraw, 1998).

In contrast to Schraw and Dennison (1994) who divide metacognitive thinking skills into two components, Tuncer and Kaysi (2013) in their research divide metacognitive thinking skills into three aspects, namely alternative evaluation ability, decision-making ability, and reflective thinking ability for problem-solving.

Reflective thinking ability for problem-solving refers to the process of analyzing and making judgments about what has happened. Reflection is flexible across social areas, with the introduction of dynamic relationships between individuals and their groups, allowing students to construct their knowledge and guide their actions (Rychen, in Hipkins, 2006).

Decision-making ability refers to a thought in which individuals evaluate various options and make choices from the many choices, (Santrock ,2008: 362). In the same vein, Campbell et al.,(2007: 5) define decision as a choice from a variety of available options, with each choice having advantages and risks.

Alternative evaluation ability refers to an individual's skill in eliminating impossible solutions, considering the solution to be taken, selecting one or more potential solutions to be implemented and considered in detail, making a detailed plan for the solution to be implemented, and managing time effectively for the implementation of various selected solutions.

In addition to internal factor, social environmental factors, including parenting style, are known to affect one' metacognitive thinking skills. Parenting is a way of communication and interaction between parents and their children, serving as the basis for the development of the child's personality (Ginot in Savitri, 2004). In this regard, Harlock (1999) proposed three types of parenting, authoritative, authoritarian, and permissive.

Authoritative parenting style is characterized by high responsiveness and high demands. Authoritative parents are likely to be responsive to the child's emotional while having high standards at the same time. Two-way communication is usually implemented by authoritative parents to facilitate their children to freely speak up and express their opinions and thoughts. Children raised in authoritative families are reported to have high self-confidence, independence, and more positive thoughts (Shapiro, 1999: 28). Some experts also believe this parenting style generally produces the best outcomes in children.

Authoritarian parenting style is characterized by high demands to the children and parents' low responsiveness. Authoritarian parents tend to have

very high expectations of their children, but provide a very little in the way of nurturing or giving feedback to the children. Children tend to be asked to obey all orders and rules made by parents without any freedom to ask questions or express their own opinions (Baumrind in Santrock (2002: 257-258). This is in line with Shapiro (1992:27) who states that authoritarian parents seek to run a household based on structure and rules without explaining the reasoning behind their rules. They tend to force their children to obey their orders without explanation (Baumrind, 1960). Furthermore, authoritarian parents tend to provide little compassion for their children, even though compassion is the basic need of every human being, beside some others basic human basic such as physiological needs, security needs, needs for affection, needs for self-esteem, and self-actualization needs (Maslow, 1970 in Chairunnisa, 2021).

Permissive parenting is parenting style characterized by parents' high responsiveness and low demands. Permissive parents provide few rules and so their children tend to be immature . Permissive parenting tends to be indulgent so children raised in permissive families tend to have low self-regulation and self-control abilities.

METHOD

Research Design and Subject

A quantitative descriptive method was applied in the current research to analyze the profile of students' metacognitive thinking skills in terms of parenting style. This study involved 210 students from seven department at IKIP Siliwangi-Cimahi, consisting of 70 male students and 140 female students.

Research Instruments

Data on student parenting backgrounds were collected through the Parenting Style Questionnaire (PSQ) instrument which was adapted from Robinson, C., Mandlco, B., Olsen, S. F., & Hart, C. H. (1995). The PSQ instrument was used to categorize the participants whether their parenting background was authoritative, authoritarian, or permissive. Data on metacognitive thinking skills were collected through the Metacognitive Skills Scale instrument adapted from Tuncer and Kaysi (2013). This instrument is used to collect data related to the level of metacognitive skills, which consists of three aspects, namely the ability of reflective thinking for problem-solving, decision-making, and alternative evaluation ability. Responses from

participants were scored as follows; '5= strongly agree', '4= agree', '3= undecided', '2= disagree', '1= strongly disagree'.

Data analysis

The data gained through the Metacognitive Skills Scale and Parenting Style Questionnaire (PSQ) rubrics were analyzed using descriptive statistics to describe metacognitive thinking skills based on parenting background. The aspects analyzed include; 1) Overall metacognitive thinking skills of students with authoritative, authoritarian, and permissive parenting backgrounds, 2) Metacognitive thinking skills for the aspect of reflective thinking ability for problem-solving of the students with authoritative, authoritarian, and permissive parenting backgrounds, 3) Metacognitive thinking skills for the aspect of decision-making ability of students with authoritative, authoritarian, and permissive parenting backgrounds, 4) Metacognitive thinking skills for the aspect of alternative evaluation ability of students with authoritative, authoritarian, and permissive parenting backgrounds, 5) Metacognitive thinking skills of male students with authoritative, authoritarian, and permissive parenting backgrounds, and 6) Metacognitive thinking skills of female students with authoritative, authoritarian, and permissive parenting backgrounds.

FINDINGS AND DISCUSSIONS

A. Findings

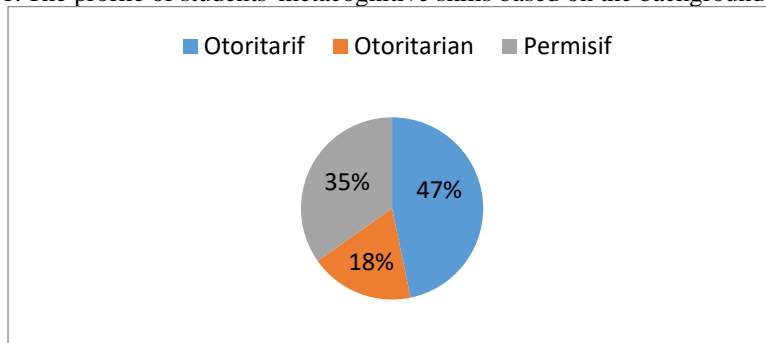
1. Profile of students metacognitive thinking skills as a whole in terms of parenting style

The profile of metacognitive thinking skills was gained through the Metacognitive Skills Scale instrument which was adapted from Tuncer and Kaysi (2013). The Metacognitive Skills Scale consists of three dimensions, namely the ability of reflective thinking for problem-solving, decision-making, and alternative evaluation ability. The total score of metacognitive thinking skills was a combined score of the three dimensions.

Data on the parenting background of students was collected through the Parenting Style Questionnaire (PSQ) instrument which was adapted from Robinson, C., Mandleco, B., Olsen, S. F., & Hart, C. H. (1995). Based on the data from this PSQ, respondents are classified into three groups, namely participants with authoritative, authoritarian, or permissive parenting

backgrounds. The profile of students' metacognitive skills is based on the background of parenting patterns summarized in table 1.

Table 1. The profile of students' metacognitive skills based on the background of parenting



The table above shows differences in metacognitive thinking skills between students with authoritative, authoritarian, and permissive parenting backgrounds. With the value of sig. F change of 0.016 (<0.05) and the value of the degree of correlation 0.475, the parenting background of students appears to be moderately correlated with students' metacognitive thinking skills.

2. Profile of students' thinking skills on aspects of metacognitive thinking in terms of parenting style

a. The aspect of reflective thinking ability for problem-solving

Reflective thinking skills for problem-solving are the first aspect of reflective thinking skills. These skills include understanding when someone fails to solve a problem, finding the best problem-solving solution, looking for various alternative solutions to problems, linking previous problem-solving solutions to new problems, and evaluating problem-solving solutions. The results of students' reflective thinking skills for problem-solving based on parenting style are shown in table 2.

Tabel 2. Students' reflective thinking skills for problem-solving based on parenting style

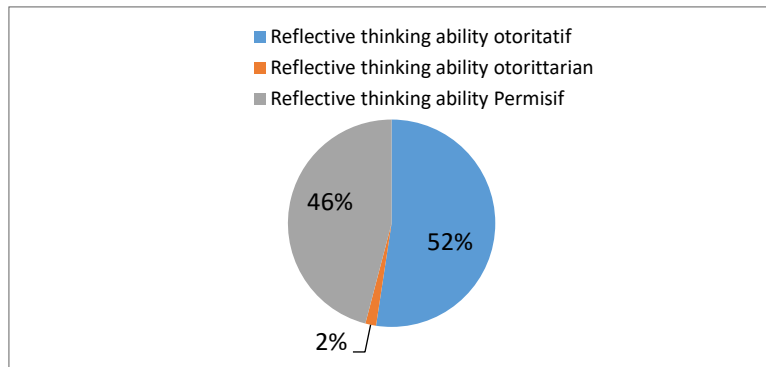


Table 2 indicated differences in reflective thinking skills for problem-solving between students with authoritative, authoritarian, and permissive parenting backgrounds, with a value of sig. F change (0.000) < 0.05, and the value of the degree of correlation between reflective thinking skills for problem-solving and parenting was 0.828, meaning there was a significant correlation.

b. The aspect of decision-making ability

Decision-making ability is the second aspect of metacognitive thinking skills. This ability is characterized by the ability to think about options before solving problems, consequences of decisions made on others, and how and for whom decisions are made. Students' decision-making ability based on parenting style background is shown in table 3.

Tabel 3. Students' decision-making ability based on parenting style background

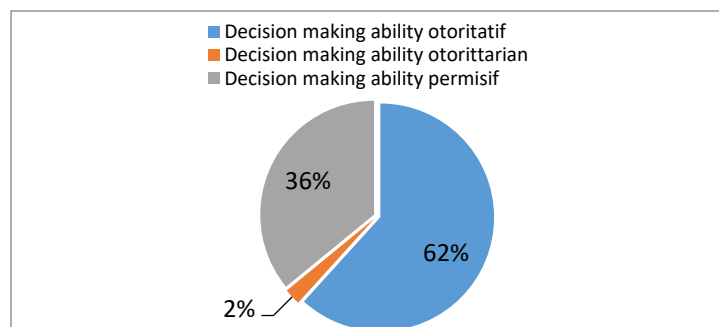


Table 3 shows differences in students' metacognitive thinking skills in the aspect of the ability to make decisions between students with authoritative, authoritarian, and permissive parenting backgrounds. With the value of sig. F change of 0.000 (< 0.05), the students' metacognitive thinking skills in the aspect of decision-making ability have a significant correlation with the authoritative, authoritarian, and permissive parenting background with a degree of correlation (1.00).

c. The aspect of alternative evaluation ability

The skill of looking for evaluation alternatives is the third aspect of metacognitive thinking skills. The ability to make alternative student evaluations based on the background of parenting style is shown in table 4.

Tabel 4. Student evaluations based on the background of parenting style

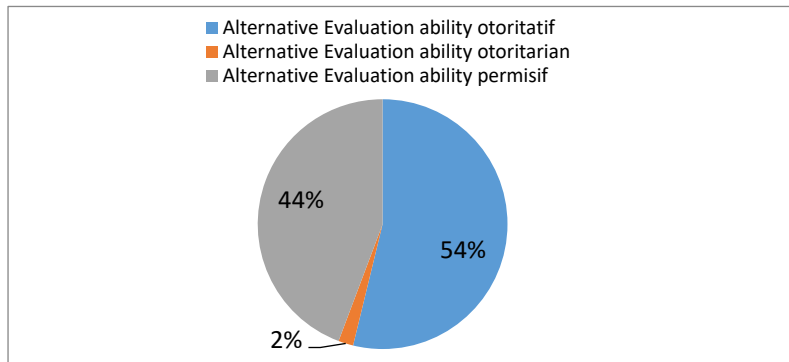


Table 4 shows differences in students' metacognitive thinking skills in the aspect of alternative evaluation abilities between students with authoritative, authoritarian, and permissive parenting backgrounds. With the value of sig. F change 0.000 (<0.05) and the value of the degree of correlation (0.873).

3. Students' metacognitive thinking skills in terms of gender and parenting background.

The gender analysis aims to notice differences in metacognitive thinking skills between male and female students with have authoritative, authoritarian, and permissive parenting styles. The difference is displayed in table 5 and table 6.

Tabel 5. Female students' metacognitive thinking skills

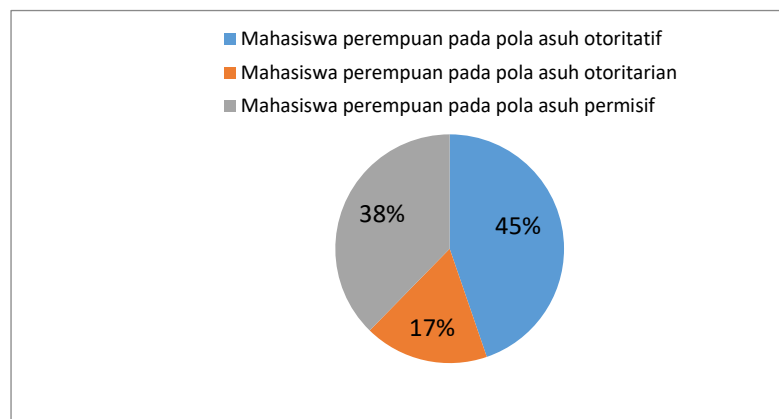


Table 5 shows differences in the metacognitive thinking skills of female students with authoritative, authoritarian, and permissive parenting styles with a sig. F change value (0.000) < 0.05, and the degree of relationship between the three backgrounds is (0.967).

Table 6. Male students' metacognitive thinking skills

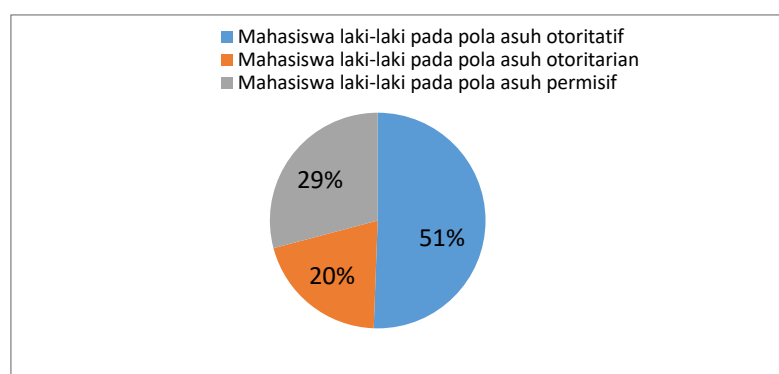


Table 6 shows differences in the metacognitive thinking skills of male students with authoritative, authoritarian, and permissive parenting backgrounds with sig. F change values (0.000) < 0.05, and the degree of relationship between the three backgrounds is (1.00).

B. Discussion

Parenting style plays a big role in the formation of individual personality. This parenting style is manifested in the form of interaction and communication in their daily lives. Authoritarian parents tend to apply a one-way form of communication, hence children lack opportunities to express opinions, argue, express disagreements or make their own decisions. Authoritarian parents tend to only demand obedience from their children without providing adequate opportunities to talk (Santrock, 2007:167). This parenting style is likely to result in feelings of pressure in children, causing them to be doubtful and cannot even make their own decisions, lack initiative, are easily nervous, rebellious, or too obedient.

Parents who apply permissive parenting tend to free their children to act as they please and often ignore them so that children become spoiled, dependent on others, lack empathy, or act ignorant.

Meanwhile, parents with authoritative parenting prioritize the interests of their children while controlling their behavior. Authoritative parents tend to be realistic about their children, their expectations do not exceed the child's ability

and provide the widest opportunity for children to choose and take an action while providing an understanding that every action will have consequences.

The three types of parenting have different impacts on the emotional state and thinking behavior of children. This thinking behavior is manifested in different thinking skills including metacognitive thinking skills. The processes that occur in metacognitive thinking such as recording information, information transformation, strategy selection, problem-solving, and others are influenced by emotional situations such as depression, anxiety, stress, mood, and others (Suharnan, 2005).

The above opinion is in line with the opinion of Zelazo and Gross (2007), in Utomo (2015), who states that emotion regulation is directly related to the executive function (EF). EF is an understanding of conscious control of thought and action. Research conducted by Tavakolizadeh and Qavam (2011) and Pekrun et al. (2002) show that students with self-confidence use internal locus of control in their learning, have good skills in terms of conditioning mental processes to complete complex tasks in their learning process tend to experience an increase in their academic achievement.

More specifically, the results of the above study also show differences in metacognitive thinking skills based on aspects consisting of reflective thinking abilities for problem-solving, decision-making abilities, and alternative evaluation abilities, between students with authoritative, authoritarian, and permissive parenting backgrounds.

Ability of Reflective thinking for problem-solving is the first aspect of metacognitive thinking skills, referring to mental activities to identify problems and solve problems by activating its components such as reacting, elaborating, and contemplating. This reflective thinking ability is not only influenced by emotions, but also by certain mindset habits, whether the individual is accustomed to having a rigid mental set or a flexible mental set. (Zimbardo: 2011).

The second aspect is ability of decision-making. Decision-making refers to the selection of behavioral alternatives from two or more alternatives (Terry, in Syamsi, 1989). Before making a decision, individuals are required to look systematically, collect facts and data, carefully determine the alternatives, and take the most appropriate action. The decision-making process involves the rational mind as well as the emotional mind. In this regard, Goleman (2007), states that there is a steady or stable stage in the comparison of rational-emotional control of thought patterns, the two minds generally work in close harmony and complement each other. Emotions provide input and information

to rational thinking processes and rational thoughts refine and sometimes decide on these emotional inputs.

The third aspect is alternative evaluation ability that refers to the ability to evaluate several options or alternatives and choose solutions. It involves a variety of individual emotional considerations, including preferences. Emotional conditions can lead a person to determine which alternative problem solving is best so that raw logic can be used as well as possible (Goleman, 2007).

Viewed from the gender differences, this study found no difference in overall metacognitive thinking skills and based on its aspects between male and female students with authoritative, authoritarian, and permissive parenting backgrounds.

Previous studies show that the influence of socialization, parenting, and culture contribute to differences emotion regulation in women and men (e.g., Alexander & Wood, 2000; Brody & Hall, 1993; Eagly, 1987; Eagly & Wood ,1991; and Grossman & Wood, 1993). If it is associated with metacognitive thinking skills, then this difference in emotion regulation contributes to the difference in metacognitive thinking skills between men and women.

Individuals with good metacognitive thinking skills are likely to have good emotional regulation skills regardless of their background and gender although these emotion regulation skills are also influenced by many other factors besides parenting (Gross, 1998).

CONCLUSION AND RECOMMENDATION

Based on the research findings and discussion above, it can be concluded that there are differences in metacognitive thinking skills between students with authoritative, authoritarian, and permissive parenting backgrounds.

Referring to the results of studies on cognitive theory, social cognitive learning theory, and several relevant studies, it can be concluded that these differences are related to the various emotional regulation skills of individuals. Cognitive aspects involved in metacognitive thinking processes such as perception, memory, and another cognitive process can be influenced by the emotional state that goes on in a person.

Individual emotional states that can affect cognitive processes include metacognitive thinking such as stress, depression, anxiety, and mood. From the research findings above, it appears that parenting does not directly affect metacognitive thinking skills, but it does affect emotional conditions and these emotional conditions contribute to students' metacognitive thinking skills.

The results of this study imply that further research is needed to examine the relationship between the variables of parenting, emotion regulation skills, and metacognitive thinking skills.

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