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## Intrapersonal and Interpersonal Range of Student Skills in Mathematics Learning

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**Abstract:** The aim of the research is to determine and create levels of intrapersonal and interpersonal skills in mathematics learning. This research includes qualitative research, the research subjects are MTsN 9 Jombang students. The main instrument is the researcher, supporting instruments: observation guide and interview guide. The research results found 3 levels of intrapersonal and interpersonal skills, namely high, medium and low. There are 3 levels, namely a high level of intrapersonal skills and a high level of interpersonal skills, 14 students, a medium level of intrapersonal skills and a moderate level of interpersonal skills, 5 students, a medium level of intrapersonal skills and low interpersonal skills, 13 students. Students who have a high level of intrapersonal skills and a high level of interpersonal skills are leaders or active social actors among their classmates. Students who are at a moderate level of intrapersonal skills and moderate levels of interpersonal skills are students who show a combination of characteristics and reflect a balanced ability to understand themselves and interact with others. Students with moderate levels of intrapersonal skills and low levels of interpersonal skills are students who have difficulty communicating effectively with others, lack self-confidence, are unsure in social interactions, have difficulty working together in groups, have difficulty understanding and adapting to social dynamics, tend to prefer to work alone or have their own time, and are less active in discussions.

**Keywords:** intrapersonal, interpersonal, mathematics learning

### ▪ INTRODUCTION

Mathematics subjects equip students with how to think, reason and reason through mental activities so as to form a continuous flow of thinking. Studying mathematics can improve students' ability to think logically, analytically, systematically, critically and creatively. In line with this, mathematics subjects aim to equip students to be able to: 1. understand mathematics learning material in the form of facts, concepts, operations, principles and mathematical relations and apply them flexibly, accurately, efficiently and precisely in solving mathematical problems (mathematical understanding and procedural skills), 2. using reasoning on patterns and properties, carrying out mathematical manipulations in making generalizations, compiling evidence, or explaining mathematical ideas and statements (mathematical reasoning and proof), 3. solving problems which includes the ability to understand problems, design mathematical models, solving models or interpreting the solutions obtained (mathematical problem solving). 4. communicate ideas with symbols, tables, diagrams, or other media to clarify situations or problems, as well as present a situation in symbols or mathematical models (mathematical communication and representation), 5. relate mathematics learning material in the form of facts, concepts, operations, mathematical principles and relationships in a field of study, across fields of study, across fields of science, and with life (mathematical connections), and 6. have an attitude of appreciating the usefulness of mathematics in life, namely having curiosity, attention and interest in studying mathematics, as well as a creative, patient, independent, persistent, open, tough, tenacious and confident attitude in solving problems (mathematical disposition (Education, 2022)). The goals of mathematics

learning included in the terms presented by Gardner include the domains of intrapersonal and interpersonal skills (Petrides, 2011). The intrapersonal skills domain appears in the sixth mathematics learning objective, namely mathematical disposition (especially confidence in solving problems). The interpersonal skills domain appears in the first mathematics learning objectives, namely mathematical understanding and procedural skills, second, mathematical reasoning and proof, third, mathematical problem solving, fourth, mathematical communication and representation, and fifth, mathematical connections. Intrapersonal skills are a person's skills related to the ability to manage themselves. Interpersonal skills are skills that relate or interact with the community group environment and the work environment as well as interactions with individual humans so that they are able to develop maximum performance (Hidayati, 2014; Goleman, 2006; Johnson & Johnson 1989).

The learning objectives for mathematics subjects as set by the Ministry of Education and Culture's Educational Assessment and Curriculum Standards Agency must be realized by teachers through mathematics learning. The two domains (intrapersonal and interpersonal skills) in mathematics learning objectives must be measured appropriately. Through the intrapersonal and interpersonal skills instrument model in mathematics learning, it will be possible for teachers to obtain levels of intrapersonal and interpersonal skills. Teachers in learning can develop verbal mathematical communication, nonverbal mathematical communication, critical thinking, mathematical problem solving, collaboration, time management, stress management, and develop creativity (Hidayati et al., 2021a, 2021b, 2022; Kilpatrick et al, 2001). This condition provides opportunities for students to develop intrapersonal and interpersonal skills in learning mathematics. The construction of a leveling model of students' intrapersonal and interpersonal skills in mathematics learning can help efforts to realize comprehensive mathematics learning goals.

Interpersonal and intrapersonal skills have an important role for students to solve mathematical problems in learning (Rochim et al., 2023; Stigler, & Hiebert, 2009) . In general, intrapersonal skills and interpersonal skills are a subset of soft skills. Intrapersonal skills are a person's skills related to the ability to manage themselves. Interpersonal skills are skills that relate or interact with the community group environment and the work environment as well as interactions with individual humans so as to be able to develop maximum performance (Hidayati, 2014; Hargie, 2011).

Interpersonal skills attributes include oral and written mathematical communication, collaboration, critical thinking, creativity, and problem solving in mathematics learning, while intrapersonal skills attributes include time management, motivation, and self-confidence. Research related to intrapersonal skills, including self-confidence, has been carried out with the results that students who are in the higher self-efficacy category tend to have better problem solving abilities (Imaroh et al., 2021). Another intrapersonal related research result is related to self-confidence, students in mathematics lessons are classified as good, even though students' problem solving abilities are still low, this does not weaken their self- confidence in finding solutions to problems (Putra et al., 2018; Pajares & Schunk, 2001)

Research related to interpersonal skills with the results of students who have interpersonal intelligence, the social communication aspect is closely related to individual abilities which include communication skills (Faradina & Mukhlis, 2020). This type of

interpersonal intelligence is needed in learning mathematics, because students need to interact with students and teachers in learning (Wicaksono, 2020). Research related to intrapersonal and interpersonal has been carried out by (Rochim et al., 2023) but concentrates on problem solving. Based on several existing research, it has not focused on comprehensive mathematics learning objectives.

So far there has been no research to identify and create a level of intrapersonal and interpersonal skills in mathematics learning, therefore researchers focus on how to identify and create a level of intrapersonal and interpersonal skills in mathematics learning? In line with the research focus formulated above, the aim of this research is to identify and create a level of intrapersonal and interpersonal skills in mathematics learning. The novelty in this research is identifying and constructing levels of intrapersonal and interpersonal skills in mathematics learning and linking them to mathematics learning objectives. This leveling shows the existence of a hierarchical level of thinking awareness (Laurens, 2010). Meanwhile, according to Kurniasih (2010) ranking is a discrete hierarchical classification. This means that the ability levels are grouped in stages, into groups like 0, 1, 2, 3 or 4, or other discrete ones. Therefore, in this article, grading refers to a student's level of development or understanding. Meanwhile, the ranking of intrapersonal and interpersonal skills refers to the stages or levels of development of a person's intrapersonal and interpersonal skills. Interpersonal and intrapersonal skills refer to the abilities possessed by individuals in interacting with other people (interpersonal skills) and in managing themselves (intrapersonal skills).

The leveling of intrapersonal and interpersonal skills in mathematics learning is divided into 3 levels, namely high, medium and low. Intrapersonal skills indicators in the form of an attitude of appreciating the usefulness of mathematics in everyday life include (1) having curiosity regarding the material being studied, (2) being interested in studying mathematics, (3) being independent and diligent in studying mathematics, (4) being open, tough, tenacious, and confident in studying mathematics. High level intrapersonal ranking if at least 3 indicators are met, medium level if 2 indicators are met and low level if only 1 indicator is met. Indicators of interpersonal skills are (1) mathematical understanding and procedural skills, (2) mathematical reasoning and proof, (3) mathematical problem solving, (4) communication and mathematical representation, and (5) namely mathematical connections. Interpersonal ranking is high level if at least 4 indicators are met, medium level if only 3 indicators are met and low level if only 2 or 1 indicator is met.

Research on intrapersonal and interpersonal skills has been carried out by several researchers, including Hattie (2009) conducted a meta-analysis that highlighted the importance of factors such as social skills, including interpersonal and intrapersonal, in achieving effective learning. Weissberg et al (2015) examined the importance of social and emotional skills, including interpersonal and intrapersonal skills, in educational contexts. Hidayati (2020) discussing improving the soft skills of prospective mathematics teachers. Hidayati et al., (2021a) discussing identification of soft skills of prospective mathematics teachers. It appears that no previous research has examined the identification and leveling of intrapersonal and interpersonal skills in mathematics learning. The novelty in this research is identifying and constructing levels of intrapersonal and interpersonal skills in mathematics learning and linking them to mathematics learning objectives.

Intrapersonal and interpersonal skills are two different but interrelated types of social skills in the context of relationships between individuals. Intrapersonal skills include an individual's ability to understand and manage themselves (Goleman, 1995). These include self-awareness, emotional regulation, self-reflection, and the ability to identify and achieve personal goals (Deci & Ryan, 2000; Mayer et al., 2008). Meanwhile, interpersonal skills involve an individual's ability to interact with other people effectively (DeVito, 2019). This includes the ability to communicate, empathize, collaborate, and build healthy relationships (Hargie, 2021; Johnson & Johnson, 2009).

Leveling of intrapersonal and interpersonal skills in mathematics learning refers to the level of an individual's ability to understand and manage themselves (intrapersonal) and to interact with other people (interpersonal) in the context of mathematics learning. This leveling of intrapersonal skills includes an individual's ability to self-reflect on their own understanding and performance of mathematics, recognize strengths and weaknesses, manage time and motivation to study, and manage emotions related to learning mathematics. The level of intrapersonal skills can vary from individual to individual, and can develop over time through practice and experience. Meanwhile, the interpersonal skills level includes the individual's ability to interact and collaborate with other people in the context of mathematics learning. This includes the ability to communicate clearly and effectively about mathematical concepts, work collaboratively in groups to solve problems, support peers in their understanding, and build supportive relationships in the classroom. The level of interpersonal skills can also vary and develop with ongoing social interactions. Grading of intrapersonal and interpersonal skills in mathematics learning as in Table 1.

**Table 1.** Grading of intrapersonal and interpersonal skills in mathematics learning

<b>Skill</b>	<b>Indicator</b>	<b>Level</b>
intrapersonal	Have curiosity regarding the material being studied	High level, if at least 4 indicators are met,
	Interested in studying mathematics	
	Independent and diligent in studying mathematics	medium level, if only 3 indicators are met
	Open, tough, tenacious, and confident in studying mathematics	low level, if only 2 or 1 indicators are met.
Interpersonal	Mathematical understanding and procedural skills	High level, if at least 4 indicators are met,
	Mathematical reasoning and proof	medium level, if only 3 indicators are met
	Mathematical problem solving	
	Communication and mathematical representation	low level, if only 2 or 1 indicators are met.
Mathematical connection		

▪ **METHOD**  
**Subject**

The research subjects were students of MTs N 9 Jombang. The reason for choosing this subject is because MTs students already have the ability for verbal mathematical

communication, non-verbal mathematical communication, critical thinking, mathematical problem solving, collaboration, time management, stress management, and developing creativity in mathematics learning.

### **Research Design and Procedure**

The research design uses qualitative descriptive. The research procedure includes, first the researcher carries out observations of the learning process to identify students' intrapersonal and interpersonal skills. Second, determine the research subjects according to the specified criteria. Third, researchers conducted interviews with selected subjects to confirm and explore the data in more depth. Fourth, researchers construct levels of intrapersonal and interpersonal skills of MTs N 9 Jombang students in learning mathematics

### **Instruments**

There are two instruments used in this research, namely the researcher as the main instrument and test questions, observation guidelines and interview guidelines as supporting instruments. Test questions are used to measure interpersonal skills in the problem solving aspect. The test questions used have been validated by expert validators to ensure the questions are valid. Observation guidelines and interview guidelines have been validated by expert validators to ensure that the content is appropriate to students' intrapersonal and interpersonal skills explored in mathematics learning.

### **Data analysis**

Data obtained through the observation and interview process were then transcribed for analysis. Researchers carried out data analysis by following the three stages of qualitative data analysis activities from Miles & Huberman (1992) and 6 stages of qualitative data analysis and interpretation Creswell (2012). The stages of data analysis carried out in this research were: (1) transcribing the data; (2) carry out data reduction; (3) data coding; (4) data validity with source triangulation; (5) review data; (6) interpreting findings; (7) validate the findings; and (8) draw conclusions

## **▪ RESULT AND DISSCUSSION**

This research involved 32 MTs N 9 Class VIII B students. The data was then classified at the level of students' intrapersonal skills and interpersonal skills in learning to construct levels. Code "1" if the indicator is met and code "0" if the indicator is not met by students in mathematics learning. The following is data on students involved in the research.

**Table 2.** Students' intrapersonal and interpersonal skill levels in mathematics learning

No	Student's name	Intrapersonal Skills Level			Level of Interpersonal Skills		
		High	Medium	Low	High	Medium	Low
1	ZNR	H			H		
2	MZ		M				L
3	NAM		M				L
4	DR		M				L
5	DNL		M				L
6	DCN		M				L

7	BC	H		H			
8	A.M	H		H			
9	F IM		M			L	
10	RW	H		H			
11	KC	H		H			
12	NZC	H		H			
13	NBS	H		H			
14	ASM	H		H			
15	NK		M		M		
16	RAP		M			L	
17	HM		M		M		
18	MRA		M			L	
19	E.F	H		H			
20	RNZ	H		H			
21	DSD	H		H			
22	SAZ	H		H			
23	NSA		M		M		
24	MH		M			L	
25	D.L		M		M		
26	APCK	H		H			
27	JMA	H		H			
28	AZR		M			L	
29	KN		M			L	
30	APS		M			L	
31	NANH		M		M		
32	I		M			L	
<b>Total</b>		<b>14</b>	<b>18</b>	<b>0</b>	<b>14</b>	<b>5</b>	<b>13</b>

Mathematically there are 27 combined levels students' intrapersonal skills and interpersonal skills. However, in this study the researchers found 3 levels, namely;

1. There were 14 students at a high level of intrapersonal skills and a high level of interpersonal skills (students at this level were coded as A students).
2. Medium intrapersonal skills level and medium interpersonal skills level were 5 students (students at this level were coded as B students).
3. Medium intrapersonal skills level and low interpersonal skills level were 13 students (students at this level were coded as C students). The codes for Student A, Student B and Student C are used in the image showing the group discussion. Below is a description of each level

***High level of intrapersonal skills and high level of interpersonal skills***

Students who are at a high level of intrapersonal skills and a high level of interpersonal skills are individuals who have strong abilities in understanding and managing themselves, as well as having good skills in interacting with other people. A person with a high level of intrapersonal skills has the ability to understand themselves well, including awareness of emotions, personal motivations, and values. They can manage stress, make better decisions and achieve personal goals effectively. On the other hand, a high level of interpersonal skills indicates the ability to interact, communicate and

collaborate. Students with good interpersonal skills can form healthy relationships, understand other people's perspectives, and work well in teams.

When someone has a high level of intrapersonal skills and interpersonal skills, it means they are not only able to understand and manage themselves well, but can also relate to other people effectively. The ability to carry oneself well in social relationships, work collaboratively in teams, and understand interpersonal dynamics can help individuals to succeed in various aspects of personal and professional life. High interpersonal skills are used by students to improve relationships with other people (Rose & Nicholl, 1997). These students become leaders or active social actors among their classmates. This can be seen in Figure 1 below which shows students contributing to group projects and facilitating collaboration.



**Figure 1.** Student discussion solving mathematical problems

Students at this level show growing self-confidence to become complete human beings who have emotional and intellectual stability, who know themselves, who control themselves consistently (Muhmin, 2018). Students who have a high level of intrapersonal skills and a high level of interpersonal skills, they can share their curiosity with classmates, inspire each other, and encourage the exchange of ideas. Students are also open and resilient in providing support to classmates who face difficulties understanding mathematical concepts. Collaboration that builds self-confidence can improve learning performance. Lwin (2005) revealed that individuals with high levels of intrapersonal skills tend to be introspective and constantly carry out self-evaluation. They reflectively consider their actions and monitor their internal feelings and thoughts. High interpersonal skills are used by students to improve relationships with other people (Rose & Nicholl, 1997).

#### ***Medium level of intrapersonal skills and medium level of interpersonal skills***

Students who are at a moderate level of intrapersonal skills and a medium level of interpersonal skills show a combination of characteristics that reflect a balanced ability to understand themselves and interact with others as in Figure 1. A moderate level of



intrapersonal skills includes an individual's ability to understand and manage themselves effectively. Students at this level are able to recognize their own emotions, have good self-awareness, and can regulate their emotions to achieve goals. They have a fairly good understanding of their personal strengths and weaknesses and how to develop themselves personally.

Meanwhile, the moderate level of interpersonal skills shows an individual's ability to interact and communicate with other people effectively. Students at this level are able to build good relationships, listen well, and understand other people's perspectives. They can also resolve conflicts well and work collaboratively in teams.

These students show the intrapersonal characteristics of a person, namely understanding their own abilities and being independent (Safaria, 2005). Research by Sumadi et al., (2020) concluded that students use intrapersonal skills in identifying the problem of a problem, namely understanding the problem correctly. In this level, students have a solid foundation in intrapersonal and interpersonal skills, but still have room for further growth and development. They can improve their abilities with constant practice, constructive feedback, and ongoing self-awareness.

***Medium level of intrapersonal skills and low level of interpersonal skills***

Students who are at a moderate level of intrapersonal skills, students can identify their personal strengths and weaknesses quite well, manage their own time and emotions quite effectively, but students have difficulty communicating effectively with other people. They lack self-confidence or uncertainty in social interactions, have difficulty working together in groups or teams, because they have difficulty understanding and adapting to social dynamics. They tend to prefer to work alone or have their own time, and are less active in social activities. This can be seen in Figure 3, the student's body posture shows inactivity, where they sit in an attitude that shows a lack of involvement, facial expressions show helplessness or discomfort and do not show a strong emotional reaction to the topic being discussed.



**Figure 2.** Students discussing while learning mathematics



Growing self-confidence makes a complete human being who has emotional and intellectual stability, knows himself, and controls himself consistently (Muhmin, 2018; Bandura, 1977). Rokhima & Fitriyani (2017) that the subject uses intrapersonal by using information from the experience and knowledge they already have in solving the given problem. Interpersonal skills, such as the ability to communicate clearly and conflict resolution skills, enable students to enrich the learning process through discussion and exchange of ideas

It is important to remember that these skills can develop over time and with experience. A person can improve their intrapersonal and interpersonal skills through reflection, learning, and interaction with others. Meanwhile, the results of discussions in mathematics learning when solving problems showed that students' answers from all three levels were the same. This is possible due to interaction during discussions.

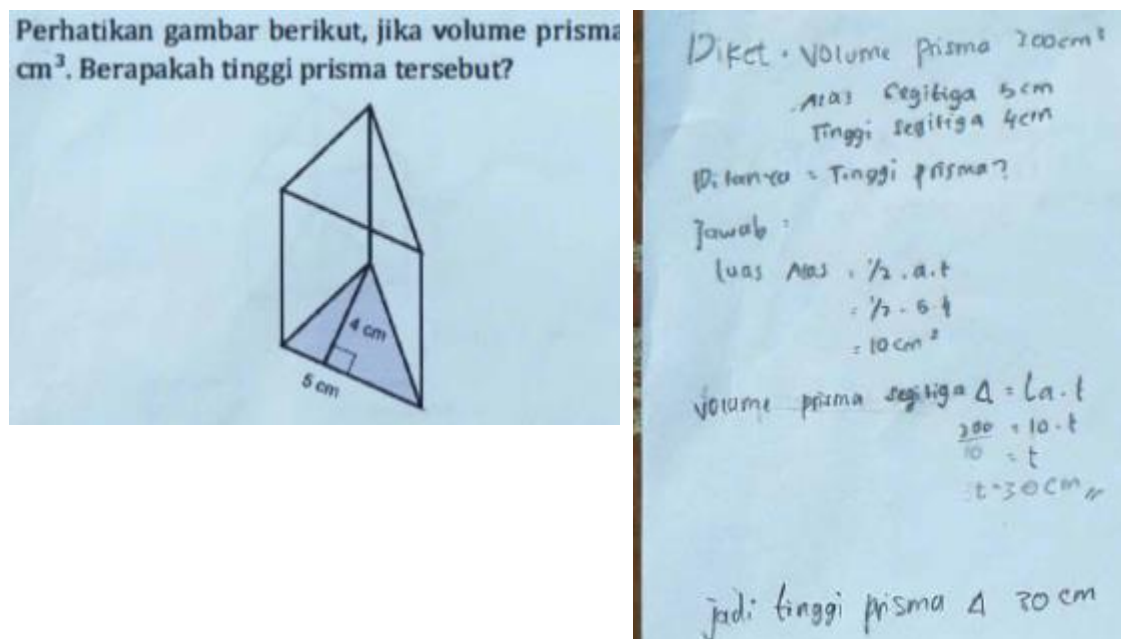


Figure 3. Results of student answers during discussion

#### CONCLUSION

The results of this research found 3 levels, namely a high intrapersonal skills level and a high interpersonal skills level of 14 students, a medium intrapersonal skills level and a medium interpersonal skills level of 5 students, a medium intrapersonal skills level and a low interpersonal skills level of 13 students. Students who are at a high level of intrapersonal skills and a high level of interpersonal skills are leaders or active social actors among their classmates. Students who are at a moderate level of intrapersonal skills and a medium level of interpersonal skills are students who show a combination of characteristics reflecting a balanced ability to understand themselves and interact with others. Students at a medium level of intrapersonal skills and a low level of interpersonal skills identify their personal strengths and weaknesses quite well, manage their own time and emotions quite effectively, but students have difficulty communicating effectively with other people. They lack self-confidence or uncertainty in social interactions, have difficulty working together in groups or teams, because they have difficulty

understanding and adapting to social dynamics. They tend to prefer to work alone or have their own time, and are less active in social activities.

#### ▪ REFERENCES

- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.
- Creswell, W. J. (2012). *Educational research planning, conducting and evaluating quantitative and qualitative research* 4th edition.
- Deci, E. L., & Ryan, R. M. (2000). The “ what” and “ why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- DeVito, J. A. (2019). The interpersonal communication book. *Instructor*, 1(18), 521–532.
- Faradina, A., & Mukhlis, M. (2020). *Analisis berpikir logis siswa dalam menyelesaikan matematika realistik ditinjau dari kecerdasan interpersonal*. *Alifmatika: Jurnal Pendidikan Dan Pembelajaran Matematika*, 2(2), 129–151.
- Goleman, D. (1995). *Emotional intelligence: why it can matter more than IQ* Bloomsbury. NY, England.
- Goleman, D. (2006). *Social intelligence: the new science of human relationships*. New York, NY: Bantam Books.
- Hargie, O. (2011). *Skilled interpersonal communication: research, theory and practice*. London: Routledge.
- Hargie, O. (2021). *Skilled interpersonal communication: Research, theory and practice*. Routledge.
- Hattie, J. (2009). *Visible learning: a synthesis of over 800 meta-analyses relating to achievement*. New York: Routledge.
- Hidayati, F. H. (2020). *Lesson study: peningkatan soft skills calon guru matematika*. *Integral: Pendidikan Matematika*, 11(1), 42–53.
- Hidayati, W. S. (2014). *Atribut soft skill untuk mahasiswa calon guru matematika*. *Seminar Nasional Dan Pendidikan Matematika*, 276–291.
- Hidayati, W. S., Iffah, J. D. ., & Rafi, M. (2021a). *Identifikasi soft skills guru dalam pembelajaran matematika*. *Webinar Nasional STKIP PGRI Jombang*, 1–11.
- Hidayati, W. S., Iffah, J. D. ., & Rafi, M. (2022). Describing soft skills attributes of senior high school teacher in mathematics learning. *AIP Conference Proceedings*.
- Hidayati, W. S., Iffah, J. D. ., & Rafi, M. F. (2021b). *Model instrumen soft skills dalam pembelajaran matematikas peserta didik SMA di Jawa Timur*. *Laporan Akhir PDUPT*.
- Hidayati, W. S., Iffah, J. D. N., & Rafi, M. F. (2021c). *Identifikasi soft skills guru dalam pembelajaran matematika*. *Prosiding Conference on Research and Community Services*. Vol. 3. No. 1.
- Imaroh, A., Umah, U., & Asriningsih, T. M. (2021). *Analisis kemampuan pemecahan masalah matematika ditinjau dari self-efficacy siswa pada materi sistem persamaan linear tiga variabel*. *JPMI (Jurnal Pembelajaran Matematika Inovatif)*, 4(4), 843–856.
- Johnson, D. W., & Johnson, R. T. (1989). *Cooperation and competition: theory and research*. Edina, MN: Interaction Book Company

- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365–379.
- Kilpatrick, J., Swafford, J., & Findell, B. (Eds.). (2001). *Adding it up: helping children learn mathematics*. Washington, DC: National Academy Press.
- Kurniasih, A. W. (2010). *Penjenjangan kemampuan berpikir kritis mahasiswa prodi pendidikan matematika fmipa unnes dalam menyelesaikan masalah matematika*. Seminar Nasional Matematika Dan Pendidikan Matematika (Vol. 486).
- Laurens, T. (2010). *Penjenjangan metakognisi siswa yang valid dan reliabilitas*. *Jurnal Pendidikan Dan Pembelajaran (JPP)*, 17(2), 201–211.
- Lwin, M. (2005). *How to multiply your child's intelligence, cara mengembangkan berbagai komponen kecerdasan; cet-ke1*. Indeks.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional intelligence: New ability or eclectic traits? *American Psychologist*, 63(6), 503–517.
- Miles, M. B., & Huberman, A. M. (1992). *Metode penelitian kualitatif*. UI Press.
- Muhmin, A. H. (2018). *Pentingnya pengembangan soft skills mahasiswa di perguruan tinggi*. *Forum Ilmiah*, 15(2).
- Pajares, F., & Schunk, D. H. (2001). Self-beliefs and school success: Self-efficacy, self-concept, and school achievement. *Perception*, 11(2), 239–266.
- Pendidikan, K. B. S. K. dan A. (2022). *Capaian pembelajaran pada pendidikan anak usia dini, jenjang pendidikan dasar, dan jenjang pendidikan menengah pada kurikulum merdeka*.
- Petrides, K. V. (2011). Emotional Intelligence. In *The Wiley-Blackwell handbook of individual differences* (pp. 656–678).
- Putra, H. D., Putri, W. A. S., Fitriana, U., & Andayani, F. (2018). *Kemampuan pemecahan masalah matematis dan self-confidence siswa SMP*. *SJME (Supremum Journal of Mathematics Education)*, 2(2), 60–70.
- Rochim, A., Hidayati, W. ., & Masruroh, F. (2023). Students' Profiles with interpersonal and intrapersonal intelligence in solving mathematical problems. *Mosharafa Jurnal Pendidik Matematika*, 12(1), 35–46.
- Rokhima, N., & Fitriyani, H. (2017). *Pemecahan masalah matematika siswa smp ditinjau dari kecerdasan intrapersonal*. *Jurnal Unimus: Prosiding Seminar Nasional*.
- Rose, C. P., & Nicholl, M. J. (1997). *Accelerated learning for the 21st century: The six-step plan to unlock your master-mind*. Dell.
- Safaria, T. (2005). *Interpersonal intelligence: Metode pengembangan kecerdasan interpersonal anak*. Amara Books.
- Satriawan, A., Sutiarto, S., & Rosidin, U. (2020). *Pengembangan media pembelajaran interaktif terintegrasi soft skills dalam meningkatkan kemampuan pemecahan masalah*. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 4(2), 950–963.
- Stigler, J. W., & Hiebert, J. (2009). *The teaching gap: Best ideas from the world's teachers for improving education in the classroom*. Simon and Schuster.
- Sumadi, S., Putra, T. Y., & Astutik, H. S. (2020). *Proses pemecahan masalah matematika siswa SMA berdasarkan kecerdasan majemuk*. *JHM, Jurnal of Honai Math*, 3(2), 123–144.

- Wahyu, M. N., Sutiarto, S., & Bharata, H. (2020). *Pembelajaran soft skill komunikasi untuk meningkatkan kemampuan komunikasi matematis siswa*. Jurnal Cendekia: Jurnal Pendidikan Matematika, 4(1), 406–413.
- Weissberg, R. P., Durlak, J. A., Domitrovich, C. E., & Gullotta, T. P. (Eds.). (2015). *Handbook of social and emotional learning: research and practice*. New York: Guilford Press.
- Wicaksono, A. (2020). *Profil pemecahan masalah matematika siswa smp dengan kecerdasan interpersonal ditinjau berdasarkan gender*. Koordinat Jurnal Pembelajaran Matematika Dan Sains, 1(1), 39–51