

# THE INFLUENCE OF SOCIAL COGNITION AND SELF-EFFICACY ON PROBLEM SOLVING ABILITY OF SERVICE STUDENTS AT STID MOHAMMAD NATSIR

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## ABSTRACT

The purpose of this study was to determine how the influence of social cognition and self-efficacy on problem-solving ability in service students at STID Mohammad Natsir. The method used in this study is quantitative descriptive by taking a sample of students who have been doing service for two years. Primary data were collected using questionnaires, then analysis was carried out with SPSS-26. The results showed that social cognition and self-efficacy had a significant influence on problem-solving ability. It was partially found that both social cognition and self-efficacy had a significant influence. This is evidenced by a signification score of less than 0.05. Similar results can be seen from the comparison between t-count score to t-tables, calculated scores for social cognition and self-efficacy are greater than t-table values. The results of the coefficient of determination test also stated that the R-squared was 0.578. It can be concluded that social cognition and self-efficacy contribute simultaneously to problem-solving ability reaching 57.8%. The remaining 42.2% indicated a contribution from other variables that were not used in this study.

**Keywords** : influence; social cognition; self-efficacy; problem solving.

## ABSTRAK

Tujuan penelitian ini untuk mengetahui bagaimana pengaruh kognisi sosial dan self-efficacy terhadap kemampuan memecahkan masalah pada mahasiswa pengabdian di STID Mohammad Natsir. Metode yang digunakan dalam penelitian ini adalah deskriptif kuantitatif dengan mengambil sampel mahasiswa yang melakukan pengabdian selama dua tahun. Data primer dikumpulkan dengan menggunakan kuesioner, selanjutnya dilakukan analisis dengan SPSS-26. Hasil penelitian menunjukkan bahwa kognisi sosial



dan self-efficacy berpengaruh secara signifikan terhadap kemampuan memecahkan masalah. Secara parsial ditemukan bahwa kognisi sosial maupun self-efficacy berpengaruh secara signifikan. Ini dibuktikan dengan nilai signifikansi kurang dari 0,05. Hasil serupa terlihat dari perbandingan antara nilai t-hitung dengan t-tabel, skor hitung untuk kognisi sosial maupun self-efficacy lebih besar dari nilai t-tabel. Hasil uji koefisien determinasi juga menyatakan bahwa *R-squared* sebesar 0,578. Dapat disimpulkan bahwa kognisi sosial dan *self efficacy* memberikan sumbangan secara simultan terhadap kemampuan memecahkan masalah mencapai 57,8%. Sisanya sebesar 42,2% mengindikasikan adanya kontribusi dari variabel lain yang tidak digunakan pada penelitian ini.

**Kata kunci** : pengaruh; kognisi sosial; *self efficacy*; memecahkan masalah.

## INTRODUCTION

Problems and life are two elements that can not be separated because problems are the embodiment of life. With life, problems will arise in life. Especially when it is associated with people, sometimes they create, have, and can solve problems. The existence of this problem can build a person's personality to develop his potency. It is very relevant when it is related to the religious context of a person. Allah said at Al-Qur'an,

الَّذِي خَلَقَ الْمَوْتَ وَالْحَيَاةَ لِيَبْلُوَكُمْ أَيُّكُمْ أَحْسَنُ عَمَلًا وَهُوَ الْعَزِيزُ الْغَفُورُ

*"Who created death and life, to test you, which of you is better charity. And He is mighty, forgiving," (An-Naba':2)*

This verse clearly states that one of the purposes of human creation is to be tested. By a test, it will different characteristic of people in perceiving, interpreting, and solving a problem.

Problems arise usually when someone has an objective— a situation we want to achieve – and it is not clear how the goal can be achieved. This solution was revealed by Duncker in Sternberg (1). It is usually conceptualized as a search through metaphorical space. Newel in Sternberg's book (1) said that the problem space has three elements, namely the metaphor of the initial state, the state of purpose, and a number of transitional states. This series of elements functions to be able to move from one state to another towards achieving a solution. If asked how easy can a solution be found? Of course, the answer depends on how successful you are. *Problem solver* able to elaborate the dimensions of the problem.

Problem solving refer to translations have double meaning, namely the process of solving the problem itself and the result of efforts to solve the problem which in English is called solution (2). In problems solving, it need process to solve appropriately so that at a certain stage requires a thinking process. Problem solving if associated with the thought process, this is included in the category of complex thinking activities. This is because complex thinking belongs to the

category of higher-order thinking because it is actualized in unknown problem-solving activities, decision making is based on various reasons and more complex rationales, critically analyzes and synthesizes various problems, as well as thinking of steps for creative ideas (3).

Agreeing with Rubini, Kristianto concluded that problem-solving skills refer more to skills in determining solutions, solving things that can't just be solved, but with deep thinking through creativity and reasoning using existing ones with the aim of solving a problem. By solving this problem, a person's thinking ability will be maximized and can even continue to be developed (4).

Furthermore, when the individual is able to solve the problem, Watanabe (5) explain that the individual who becomes problem solver not only he show a problem of ability, but also the existence of a well-rounded mindset that can encourage a person to bring out the best in themselves, be able to view the world in a positive way and form a proactive environment.

Problems that arise certainly require to be solved. Stenberg (1) mentioned there are several stages in problems solving, including: recognizing or identifying problems, defining and representing problems mentally, developing strategies to get solutions, organizing knowledge about problems, allocating mental and physical resources to solve problems, monitoring the progress of goals to be achieved, evaluating solutions that have been taken so that the solution in the next time is better, precise and, accurate. The stages proposed by Sternberg are certainly flexible, in problems solving do not always have to go through the whole process. This flexibility underlies Kusaei (6) Simplifying that in solving and problems solving can only be with four steps, namely: understanding the problem, planning the solution, finding a solution, and evaluating.

In the process of solving this problem, people usually use options *Heuristics* – the domain of social cognition – which is appropriate based on knowledge of the problem domain. It is this knowledge that allows experts to organize the elements of problem situations into meaningful parts as well as to describe the relationship patterns of relationships between the elements of the problem that facilitate the transfer of knowledge acquired in one situation to related situations (1).

The same statement was expressed by Walgito (7) that the social attitudes of individuals in perceiving the object of a problem is strongly influenced by knowledge, experience, mindset, beliefs, learning process, and results. This perceptual process represents an individual's opinion or belief about the object of attitude, and it is related to cognition. Affection will accompany the results of cognition towards the object of attitude as an evaluative aspect, which can be positive or negative. The results of the evaluation of the affection aspect will relate to the conation aspect, which is a readiness to act, readiness to behave.

Likewise in Islam, a problem is a condition that requires individual to face and solve it(8). However, in the Islamic perspective this process of decision-making and problem solving still rests on the belief that every problem is part of

Allah's destiny and provisions. Therefore, in problems solving, individual must still involve Allah by asking for guidance to be given the best solution, performing *istikharah* prayers. This is as Muhammad prophet said,

يَقُولُ إِذَا هَمَّ أَحَدُكُمْ بِالْأَمْرِ فَلْيَرْكَعْ رَكْعَتَيْنِ مِنْ غَيْرِ الْفَرِيضَةِ ثُمَّ لِيَقُلْ

"If one of you intends to be in a business, then pray two raka'ats that are not obligatory prayers, then pray...". [HR. Al-Bukhari].

From the hadith it can be concluded that in performing *istikharah* prayers, it is expected that in the decision-making process we can avoid subjective nature and attach importance to lust. By praying *istikharah* can also avoid us from doubts and bring out steadiness in choosing the best alternative.

Related to the need for interaction with others, a person usually uses the way of mind (cognition) to be able to understand the environment around him. This is so that the person has a function in it adaptively. It was this cognition that became the basis of the emergence of social cognition, a theory developed by Albert Bandura. This theory according to Muhibin in Sudjatnika is actually embryonic to observational learning theory which views that human behavior is caused by reactions arising from interactions between the environment and the human cognitive scheme itself with the basic principle of his findings that learning is the basis of social and moral learning (9).

In social cognition, Bandura describes people as organisms that are dynamic in processing information and as social organisms. Bandura also emphasized people as human agency, people have conscious planning and execution of actions intended to affect the future. With this role, people are not passive objects governed by the environment, but people are actors of experience (10).

Regarding the role of people as human agencies, Bandura classifies them into four main characteristics. First, *intentionality* (intentionality), people have a representation of the direction of action to be carried out in the future. Second, *forethought* (forward planning) which is defined as the anticipation or estimation of the consequences of one's intentions. Third, *self-reactiveness* (self-reactivity), the part that connects thoughts and actions. In this case, the factors of skills, beliefs, and scores in social cognition theory play a role as guideline-givers. Fourth, *self-reflectiveness* (self-reflectiveness), that is, the ability of metacognition to contemplate the direction, consequences, and meaning of one's plans and actions. (10).

While according to Taylor (11), social cognition is the study of interpreting, analyzing, and forming a conclusion from social information in the environment. A similar opinion was expressed by Baron & Byrne (12) that social cognition is the way a person interprets, analyzes, remembers and uses information about the social world. Social cognition will develop along with the management of the

individual, meaning that he will be able to develop optimally, but can also stagnate or even regress. Proficiency in this case is closely related to social attitudes in the environment around where he lives.

Baron & Byrne divide this cognition into three basic aspects. First, schema. Schemas are mental structures centered on specific themes that can help us organize social information (12). Second, heuristic (mental shortcut). According to Baron & Byrne (12), heuristics It is a simple rule to make complex decisions or draw conclusions quickly and seemingly without significant effort. Taking into account efficiency and effectiveness, the process of cognition sometimes uses shortcuts by shortening or cutting the process to get out of complex social environments faster (13). Third, Deviations in social thinking. Every individual gets the gift of reason in order to think logically, but in reality Individuals are given gifts by Allah to be able to think logically in understanding their environment. But unfortunately, due to limitations as imperfect beings often have a tendency to experience mistakes and failures.

This is what Bandura revealed (10) that a person's behavior or attitude is determined by the thought process that is cognitive, if the cognitive process is not accurate in reflecting reality, maladaptive behavior will appear. Mayasari stated that there are several errors in social cognition, including: negativity bias, tendency to pay more attention to negative information; optimistic bias, the tendency to see the environment through the lens of optimism; and counterfactual thinking, thoughts that can have a strong effect on a person's state of affection and can lead to apathetic inaction, which arises when the individual fails to do something that can give him positive results, then refuses to try again at a later date in order to avoid thinking about having lost the initial opportunity (14).

Another aspect that affects problem solving are self-efficacy. Self-efficacy is a theory also introduced by Bandura. This theory became a broader part of the theory of social cognition. Bandura (15) said, "Perceived self efficacy refers to beliefs in one's capabilities to organize and execute the course of action required to produce given attainments." That is, self-efficacy refers to confidence in one's ability to organize and carry out the actions necessary to arrive at a certain achievement.

The concept of one's belief in achieving an objective is widely explained in Al-Qur'an and is always associated with faith to Allah.

إِذْ يُوحَىٰ رَبُّكَ إِلَى الْمَلَائِكَةِ آتَىٰ مَعَكُمْ فَتُنشِئُوا الَّذِينَ آمَنُوا سَالِقِي فِي قُلُوبِ الَّذِينَ كَفَرُوا  
الرُّعْبَ فَاضْرِبُوا فَوْقَ الْأَعْنَاقِ وَاضْرِبُوا مِنْهُمْ كُلَّ بَنَانٍ

*"(Remember), when your God revealed to the angels, 'Verily I am with you, then strengthen (the stand) of those who have believed. 'One day I will give fear into the hearts of the unbelievers, so strike them on their necks and beat every tip of their fingers.' (Al Anfal:12)*

The verse explains the importance of steadfastness for believers in dealing with the infidels at the Battle of Badr. The steadfast attitude of the believers is among those that are the cause of Allah's help and will not allow Muslims to fight alone against a large number of enemies (16).

In the realm of social learning, self-efficacy generated or enhanced by four triggers, there are mastery experiences, social modeling, social persuasion, and psychological response (17). These four sources explain how self-efficacy appeared or was created.

Another self-efficacy trigger that is no less important according to Taufiq is intention. Taufik further mentioned many Muslim expert who discuss how human behavior is strongly influenced by one's intentions. Intention is the belief in the heart and the tendency or direction to do a certain job and be part of the behavior or the beginning of a behavior (18).

In social life, self-efficacy has a strong relationship with a person's ability to adapt to the local environment. Fajar & Afiani reported in their research that the overall results of the research that have been in-reviews shows a positive relationship between self-efficacy with self-adjustment (19). This is certainly very reasonable because Bandura stated there are three dimension on self-efficacy, namely magnitude, strength, and generality. Magnitude relates to the level of confidence of the individual to be able to face the task based on the level of difficulty. Strength emphasizes the belief in the potential of the individual. While generality concerns the breadth of the scope of abilities that individuals have, while

A review of the literature also shows that self-efficacy has an impact on a person's behavior. The impact was revealed by Lianto (20), by revealing several indicators for individuals who have high self-efficacy and low self-efficacy. Indicators of high self-efficacy include viewing challenging problems as tasks that must be mastered, being intensively involved in tasks and responsibilities, cultivating commitment at work, and quickly rising from adversity and disappointment. While low self-efficacy is the antithesis of high self-efficacy. People with low self-efficacy low tends to avoid challenging tasks, feels difficult situations and tasks are beyond his capabilities, focuses on failures and negative outcomes.

To predict that a person is able to solve problems well or not, among them is measured from self-efficacy-his. This level of self-efficacy will lead a person to be able to complete tasks well and reduce defensive when getting negative feed back. This conclusion is finding Kristanto & Sudibjo's research, that self-efficacy has positive influence on problem solving ability in daily work (4).

Such is the case at servant students' STID Mohammad Natsir who is placed in various regions. One of things that differentiates STID Mohammad Natsir from other campuses in service is its target, model, and place. The duty to subserve for two years with places of service spread throughout Indonesia,

including the target is the 3T (Front, Remote, and Outermost) regions. There are about 122 regions in Indonesia that fall into the 3T category, these areas are generally geographically located in the outermost region of Indonesia (21). A study says that among the many problems faced by students it turns out to be social problems (22). Therefore, students need to be involved in social activities.

Of course, it is not an easy thing, when individuals are in a new place especially if the location is included in the 3T category. This requires physical, mental, social, cognitive, and strong creed readiness (sincere intention). The most demanded thing is also the ability to survive in the midst of circumstances that may be very emergency. These conditions force students to be able to solve problems in the field. The ability to solve this problem is certainly very influential on the existence of students in their place of service. Bettencourt in Kristianto said that if students are able to solve and solve problems that occur both in themselves and in society, this will be a benchmark for success in their duties. In addition, this will give birth to better interaction and a high level of trust from those who benefit from student service (4).

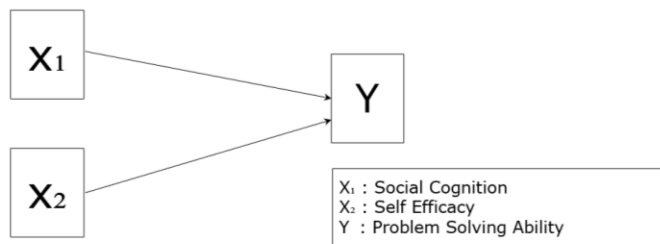
To clarify the above understanding, researchers propose several research questions: **First**, how does social cognition affect problem-solving skills of service students at STID Mohammad Natsir? **Second**, how does self-efficacy affect problem-solving skills of service students at STID Mohammad Natsir? **Third**, how does social cognition and self-efficacy affect problem-solving of service students at STID Mohammad Natsir.

Based on the research questions above, the research formulate hypothesis are:

- H1: Social cognition has a significant influence on problem-solving abilities of service students at STID Mohammad Natsir;
- H2: Self-efficacy has a significant influence on problem-solving abilities of service students at STID Mohammad Natsir;
- H3: Social cognition and self-efficacy simultaneously have a significant influence on problem-solving abilities of service students at STID Mohammad Natsir.

Based on these hypotheses above, the relationship model between these variables can be described as follows:

### **Picture 1. The Relationship Model of Variables**



To prove those assumptions, the research design used in this study is a quantitative approach using survey methods. The purpose of this study was to determine the influence between variables with multiple regression analysis. The population of this study was STID Mohammad Natsir service students batch XI and XII totaling 184 and a research sample of 65 people. The technique used in determining the sample is purposive sampling, while to determine the number of samples from the population using the Slovin formula with a margin of error of 10%.

$$n = \frac{N}{1+Ne^2} = \frac{184}{1+184 \cdot 0,10^2} = \frac{184}{1+1,84} = \frac{184}{2,84} = 64.7 = 65$$

Data collection is carried out by distributing questionnaires through google form links because the population is spread throughout Indonesia. The questionnaire used is a set of questions and statements that are distributed online for respondents to answer. The scale used in this study is Likert scale with 5 scales, namely: 1 (Never), 2 (Rare), 3 (Sometimes), 4 (Often), 5 (Always).

In analyzing data, researchers use descriptive analysis and inferential statistics. Descriptive analysis is analyzing data by illustrating data that has been collected, while inferential analysis is analyzing sample data to determine the effect of two independent variables on one variable bound by multiple regression. The inferential statistical analysis used in this study used the SPSS 26 application.

## RESULT AND DISCUSSION

From the results of the questionnaire, it was found that 47% of respondents were men and 53% were women. The number of respondents based on age was grouped into three groups, namely aged 18-22 years as much as 58%, 22-27 years as much as 28%, and age over 27 years as much as 14%. From the results of the questionnaire, data were also obtained that the position of the respondent's task place was spread across various regions in Indonesia. The responses of the study subjects to the questionnaire were analyzed with SPSS. Based on the results, there were three items that were declared invalid because the calculated was less than 0.389. The invalid items are deleted and recalculated.



To determine the reliability of the research instrument, a reliability test was carried out with the following results:

Table 1. Reliability Test Results

Variable	Cronbach's Alpha	Number of items
Social Cognition	0.934	13
Self Efficacy	0,916	14
Problem-solving skills	0,917	15

Based on the output of SPSS, the calculation results of the reliability test of Cronbach's Alpha method can be seen in the table above. The independent variable consists of two variables, namely social cognition and self-efficacy. Cronbach's Alpha score for social cognition is 0.934 with a total item count of 15; Cronbach's Alpha score for self-efficacy is 0.916 with 15 items, as for the dependent variable, Cronbach's Alpha score for problem-solving ability is 0.917.

Referring to the decision-making criteria stated by Ghozali (23) if koefisien Cronbach's Alpha  $> 0.700$ , the question or statement is declared reliable or a construct or variable is declared reliable. Conversely, if koefisien Cronbach's Alpha  $< 0.700$  then the question or statement is declared unreliable or a construct or variable is declared unreliable. So it can be said that the results Cronbach's Alpha for 42 items, the statement in this study was declared reliable because of the overall score Cronbach's Alpha on each variable higher than 0.700.

Table 2. Descriptive Statistics

	Social Cognition	Self Efficacy	Problem-solving skills
N			
Valid	65	65	65
Missing	0	0	0
Mean	57.40	60.86	54.03
Median	58.00	60.00	54.00
Mode	53a	55a	53a
Std. Deviation	8.183	7.774	9.354
Kurtosis	5.449	.959	1.321
Std. Error of Kurtosis	.586	.586	.586
Range	54	41	53
Minimum	21	34	22
Maximum	75	75	75

Table 3 Measurement Categorization

Category	Guidelines	Measurement Results		
		Social Cognition	Self Efficacy	Problem-solving skills
Low	$X < M - 1SD$	$X < 39.7$	$X < 46.6$	$X < 39.0$
Middle	$M - 1SD \leq X \leq M + 1SD$	$39.8 \leq X \leq 56.1$	$46.7 \leq X \leq 62.2$	$39.1 \leq X \leq 57.8$
High	$M + 1SD \leq X$	$56.2 \leq X$	$62.3 \leq X$	$57.9 \leq X$

Based on the table, it can be seen if the social cognition variable has an average score of 57.40 which is included in the high category with a minimum score of 21 and a maximum score of 75. The distribution of social cognition variable data was 8.183. Then, the variable self efficacy has an average score of 60.86 which is included in the medium category with a minimum of 34 and a maximum score of 75. The distribution of data for social cognition was 7,774. The problem-solving ability variable has an average score of 54.03 which is included in the medium category with a minimum score of 22 and a maximum score of 75. The distribution of social cognition variable data was 9.354. This categorization of data refers to statements from Azwar (24).

The next stage of testing that needs to determine the influence between variables is regression analysis. In this study using multiple regression analysis because it consists of two variables-X, namely social cognition ( $X_1$ ), self efficacy ( $X_2$ ) and one variable-Y, problem solving skill. Theoretically, multiple regression analysis will produce valid parameter estimates if they meet classical assumptions. The classical assumptions used in multiple regression analysis are:

### Normality Test

Normality test aims to determine whether the selected sample comes from a normal or abnormal population distribution. The interpretation of the test of normality (25) can be concluded as follows if the score of Asymp. Sig. (2-tailed) is higher than the rate of 5% Alpha (Asymp. Sig. (2-tailed) > 0.05) it can be concluded that the data derived from populations that are normally distributed; if the score of Asymp. Sig. (2-tailed) is lower than the Alpha level of 5% (Asymp. Sig. (2-tailed))

**Table 2. Normality Test**

		Unstandardized Residual
N		65
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	6.07617086
Most Extreme Differences	Absolute	.083
	Positive	.043
	Negative	-.083
Test Statistics		.083
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

From the table, it is found that the significance score is 0.200. It means that the significance score  $> 0.05$ , so it can be stated that the data is normally distributed.

### Linearity Test

In this study, a linearity test was also conducted to determine whether the variables of social cognition ( $X_1$ ) and self efficacy ( $X_2$ ) have a significant linear relationship or not to the variable of problem solving skill ( $Y$ ). A good correlation should have a linear relationship between the predictor or independent variable and the criteriumdependent variable. In linearity testing can be done by comparing the significance score of 0.05. If the score of Deviation from Linearity Sig.  $> 0.05$  then there is a significantly linear relationship between the independent variable and the dependent variable. If the score of Deviation from Linearity Sig.  $< 0.05$  then there is no significantly linear relationship between the independent variable and the dependent variable.

**Table 3. Linearity Test**

			Sum of Squares	Df	Mean Square	F	Sig.
Self Efficacy * Social Cognition	Between Groups	(Combined)	2670.921	26	102.728	3.262	.000
		Linearity	1696.764	1	1696.764	53.873	.000
		Deviation from Linearity	974.157	25	38.966	1.237	.271
	Within Groups		1196.833	38	31.496		
	Total		3867.754	64			
Problem- solving skills * Social cognition	Between Groups	(Combined)	3647.755	26	140.298	2.731	.002
		Linearity	2518.326	1	2518.326	49.020	.000
		Deviation from Linearity	1129.429	25	45.177	.879	.627
	Within Groups		1952.183	38	51.373		
	Total		5599.938	64			

From the table, the results of Deviation from Linearity between Self Efficacy and Social Cognition have a significance score of 0.271, while the results of Deviation from Linearity between problem-solving ability and social cognition, a significance score of 0.627. The result can be stated that there is a linear relationship between the three variables because the score of Deviation from Linearity is higher than 0.05.

### Multicollinearity Test

Another test that was also carried out in this study was the multicollinearity test. The purpose of this test is to test whether the regression model found a correlation (strong relationship) between independent variables.

A good regression model should not have correlation among independent variables or no symptoms of multicollinearity. The results of the multicollinearity test are as follows:

**Table 4. Multicollinearity Test**

Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-4.924	7.391		-.666	.508		
Social Cognition	.611	.130	.513	4.705	.000	.645	1.551
Self Efficacy	.381	.143	.291	2.671	.010	.645	1.551

a. Dependent Variable: Problem-solving Ability

In multicollinearity testing can be done by comparing the tolerance score with 0.10. If the tolerance score  $> 0.10$ , it means that there is no multicollinearity in the regression model. If the tolerance score  $< 0.10$ , it means that multicollinearity occurs in the regression model. From the test results, a tolerance score of 0.645 was obtained. This score is higher than 0.10. Another test is by comparing the score of VIF (Variance Inflation Factor), namely if the score of  $VIF < 10.00$  means that there is no multicollinearity in the regression model. If the VIF score  $> 10.00$ , it means that multicollinearity occurs in the regression model. From the calculation results, the score for social cognition and self-efficacy was 1.551, so the VIF score  $< 10.00$ . From these two tests, it can be concluded that there is no correlation between independent variables or there is no symptom of multicollinearity in regression.

### Heteroscedasticity Test

Furthermore, this study also conducted a heteroscedasticity test which aimed to test whether in the regression model there was an inequality of variance from the residual of one observation to another (Ghozali, 2018: 120). In this observation to detect the presence of heteroscedasticity is carried out by means of the Glejser test. The basis for decision making for heteroskedastisitis test with glejser test is to compare if the significance score is higher than 0.05, heterosdasticity symptoms do not occur in the regression model. Conversely, if the significance score is lower than 0.05, it means that heterosdasticity symptoms occur in the regression model.

**Table 5. Heteroscedasticity Test**

Type	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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	B	Std. Error	Beta		
1 (Constant)	6.242	3.749		1.665	.101
Social Cognition	.000	.074	.000	-.001	.999
Self Efficacy	-.022	.078	-.049	-.287	.775

a. Dependent Variable: Abs\_RES

From the table, it is known that the significance score of social cognition variable (X1) is 0.999, while the significance score of self-efficacy variable is 0.775. Because the significance score of the two variables is higher than 0.05, in accordance with the basis of decision making in the Glejser test, it can be concluded that heteroscedasticity symptoms do not occur in the regression model.

Some of these classic assumption tests show that the regression analysis stage can be carried out because it has met several specified conditions. In conducting multiple regression analysis there are three stages of hypothesis testing needed to answer the hypothesis proposed.

### Partial Hypothesis Test (T-Test)

This t-test is performed to show how the independent variable (X) affects individually or partially on the dependent variable (Y). The testing basis of the partial hypothesis test can be seen from two things. Based on the significance score, if the significance score is less than the probability of 0.05 then there is a significant influence between the independent variable (X) and the dependent variable (Y) or the hypothesis is accepted. Conversely, if the significance score is higher than the probability of 0.05 then there is no significant influence between the independent variable (X) and the dependent variable (Y) or the hypothesis is rejected. Another test can be by contrasting the score of t-count with t-table, if the score of t-count is higher than t-table then there is a significant influence between the independent variable (X) on the dependent variable (Y) or the hypothesis is accepted. Meanwhile, if the t-count score is lower than the probability of the t-table, there is no significant influence between the independent variable (X) and the dependent variable (Y) or the hypothesis is rejected. In this study, the t-table score was 1,999. While the t-test calculation is shown in the following table:

**Table 6. Partial Hypothesis Test**

	Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.208	6.374		-.660	.512

Social Cognition	.405	.126	.354	3.214	.002
Self Efficacy	.575	.132	.478	4.343	.000

a. Dependent Variable: Problem-Solving Skill

Based on the table, the results of the partial hypothesis test, comparison score of t-count and t-table of social cognition is  $3.214 > 1.999$  with a significance score of  $0.02 < 0.05$ . It means that social cognition affects problem solving ability. Self efficacy variable, comparison score of t-count and t-table is  $4.343 > 1.999$  with a significance score of  $0.00 < 0.05$ . It means that self efficacy affects problem solving ability.

### Simultaneous Hypothesis Test (F-Test)

The F-test is used to determine whether all independent variables simultaneously have an influence on the dependent variable. If  $F\text{-count} > F\text{-table}$  and  $\alpha < 0.05$ , then there is a role of social cognition and Self Efficacy on problem-solving ability. However, if the  $F\text{-count} < F\text{-table}$  and  $\alpha > 0.05$ , then there is no role of social cognition and self-efficacy on problem-solving ability. The score of F-table is 3.15.

**Table 7. Simultaneous Hypothesis Test (F Test)**

Type		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3237.068	2	1618.534	42.469	.000b
	Residuals	2362.871	62	38.111		
	Total	5599.938	64			

a. Dependent Variable: Problem-solving Skills

b. Predictors: (Constant), Self Efficacy, Social Cognition

Based on table 7, the results of the simultaneous hypothesis test state that the calculated score of F-Test is higher than the F-table,  $42.469 > 3.15$ . Judging from the significance score, it can be seen that  $0.00 < 0.05$ . From these two statements, it is concluded that there is an influence between social cognition and self-efficacy on problem-solving skills.

### Test Coefficient of Determination

The coefficient of determination test or symbolized by  $R^2$  is a statistical test that aims to predict and see how much contribution the influence of the independent variable (X) to the dependent variable (Y). This determination is expressed by the coefficient as a percentage known as the score of R square.

**Table 8. Coefficient of Determination Test**

Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
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1	.760a	.578	.564	6.173
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a. Predictors: (Constant), Self Efficacy, Social Cognition

Based on the table, the results of the coefficient of determination test produce score of R-squared was 0.578. So, it shows that social cognition and self-efficacy contribute simultaneously to problem-solving skills reaching 57.8%. The remaining 42.2% indicated a contribution from other variables that were not used in this study.

The findings in the study as illustrated in descriptive statistics showed that STID Mohammad Natsir's service students had an average ability in social cognition of 57.40 which was included in the high category, while self-efficacy of 60.86 which was included in the medium category, and problem-solving ability of 54.03 which was included in the medium category. Based on the description of the data, it can be concluded that the level of social cognition, self-efficacy, and problem-solving ability in STID Mohammad Natsir students is classified as medium.

In the results of the first hypothesis test, the findings in this study showed that social cognition had a positive effect on problem-solving skills in STID Mohammad Natsir service students. This result is indicated by the t-test result that the t-count score is higher than the t-table  $3.214 > 1.999$  with a significance score lower than 0.05 which is 0.02. The highest score on social cognition is heuristic dimension how the student asses the local environment by looking at people's habits. Score of this indicator is 0.846. The lowest score indicator on the social cognition is heuristic dimension, especially for comprehend others based on the environment, score is 0.461. This conclusion in line with the results of Mayasari's research (14) that social cognition contributes to UNNES students who participate in KKN, especially related to their social attitudes. The influence given was 53.8%.

The second hypothesis also shows the same thing that self-efficacy has a positive effect on problem-solving skills in STID service student Mohammad Natsir. This is shown by the results stating that the t-count score is higher than the t-table, which is  $4.343 > 1.999$  with a significance score of  $0.00 < 0.05$  which means that there is a role of Self Efficacy on the ability to solve problems. The highest score of self efficacy variable on strength dimension. It is related how be able to try to muster the will to overcome feelings of laziness in doing tasks with score 0.768. The lowest score indicator on generality dimension that emphasized how finish their job within the specified time, score is 0.567. The research that is being carried out is also in line with Kristianto's research which concludes that self-efficacy has a positive influence on the ability to solve problems with the path coeficien between these two variables of 0.143

The findings of the third hypothesis also show that social cognition and self-efficacy simultaneously affect the problem-solving ability of STID service student Mohammad Natsir. The results of the simultaneous hypothesis test stated

that the calculated F score was higher than the table F score,  $42.469 > 3.15$ . Judging from the significance score, it is also lower, namely 0.005, so  $0.00 < 0.05$ . From these two statements, it was concluded that there was a significant influence between social cognition and self-efficacy on problem-solving skills and contributed a very large amount, namely 57.8%. The remaining 42.2% of problem-solving skills were influenced by other variables not contained in this study.

## CONCLUSION

Referring to the processing and analysis of data on two independent variables, namely social cognition ( $X_1$ ) and Self Efficacy ( $X_2$ ) and one dependent variable ( $Y$ ), it can be concluded: **First**, Social cognition has significant influence on the problem-solving skill of STID Mohammad Natsir service students with partial hypothesis test results, the comparative score of t-variable social cognition is  $3.214 > 1.999$ , while the significance score is  $0.02 < 0.05$  which means there is an influence of social cognition on problem solving ability. **Second**, Self efficacy has significant influence on the problem-solving skill of STID Mohammad Natsir service students the comparative score t variable Self Efficacy is  $4.343 > 1.999$  with a significance score of  $0.00 < 0.05$  which means that there is a role of Self Efficacy in the ability to solve problems where contribution is effective. **Third**, Simultaneously, social cognition and self-efficacy have an influence on problem-solving skill. It is indicated by a calculated F score higher than the table F score, with a ratio of  $42.469 > 3.15$ . Judging from the significance score, it can be seen that  $0.00 < 0.05$ . Social cognition and self-efficacy contributed greatly based on the results of the coefficient of determination test with R-squared score of 0.578. So it shows that social cognition and self-efficacy contribute simultaneously to problem-solving skills reaching 57.8%. The remaining 42.2% indicated a contribution from other variables that were not used in this study.

Based on the findings above, it can be concluded that social cognition and self-efficacy have a strong influence on the problem-solving abilities of community service students. It can be implied that improving social cognition and self-efficacy can be a improving to solve the student's problem at the preaching field. This research can also be used as a basis for evaluation of STID Mohammad Natsir to improve students' social cognition and self-efficacy abilities because the service program is a routine program every year. This is done so that the readiness of students assigned to do community service can carry out their duties better than before.

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