

European Journal of Education Studies

ISSN: 2501 - 1111 ISSN-L: 2501 - 1111

Available on-line at: www.oapub.org/edu

doi: 10.5281/zenodo.1483663

Volume 5 | Issue 6 | 2018

SELF-EFFICACY IN LEARNING TO SOLVE SOCIAL PROBLEMS IN INCLUSIVE MIDDLE SCHOOL

Wiwik Widajati¹¹,
Punaji Setyosari²,
I Nyoman S. Degeng²,
Sumarmi²
Graduate School, Malang State University,
Indonesia
²Malang State University,
Indonesia

Abstract:

Self-efficacy plays an important role in facing and solving various problems in the era of modernization, especially social problems in real life every day. This study aims to determine the relationship between self-efficacy and the learning outcomes of solving social problems of middle school students. This research was conducted on Inclusive Middle School students in Surabaya Indonesia. The data collection instrument used was inventory self-efficacy consisting of 27 items with reliability values of 0.896, test and inventory social problem solving consisting of 45 items with reliability values of 0.926. Data analysis is using Pearson Product Moment. Based on the results of research data analysis with a significance level of 0.01, the correlation coefficient was 0.533, p = 0.000 < 0.01 and at the 0.05 level of significance the correlation coefficient was 0.294, p = 0.016 < 0.05. This means that there is a significant relationship between self-efficacy and learning outcomes in solving social problems in Inclusive Middle School students.

Keywords: self-efficacy, social problem solving

1. Introduction

Learning in the era of modernization and globalization is now very important to give students the opportunity to learn independently, use divergent thinking, self-efficacy, construct knowledge for solving social problems and linking the material to the real context in everyday life. Socio-cultural changes often have an impact on everyday social life, both positive and negative impacts. Negative impacts, including social problems (corruption, crime, poverty, unemployment, juvenile delinquency, lifestyles that do not

¹ Correspondence: email wiwikwidajati@aol.com

fit the national personality (free association, etc.), environmental pollution (garbage, slum environment, water and air pollution, etc.) need to be resolved. Therefore, students as members of society from an early age need to be taught about solving social problems, including regular students and special needs students in accordance of its potential. Based on the fact today the acquisition of the learning outcomes related to social problem-solving junior high school students is still low.

Learning covers all aspects of students comprehensively including the ability to solve social problems is not implemented optimally because most teachers are still pursuing the achievement of curriculum targets, more concerned with the target of achieving learning material that is more toward rote learning, while other aspects include the ability to solve social problems less optimal. Learning and training to improve problem solving skills is useful, so students can learn and solve problems systematically, face various challenges in an organized way, formulate innovative questions, design original solutions, distinguish truth and lies, appearance and reality, facts and opinions, knowledge and belief (Johnson, 2002).

Training the ability to solve social problems can be done by the teacher when learning takes place. The success of a learning goal is to train students' abilities to use their abilities and intellectual skills to solve problems in life, including social problems. Some indicators of problem solving are formulating problems, identifying information relating to problems, systematically evaluating problems, analyzing and formulating various solutions to solve problems, determining the most appropriate solutions to problem solving, and making conclusions (Johnson, 2002). Learning about social problem solving provides provisions to be able to solve problems including social problems and adjust to social life. Problem solving is an attempt to overcome obstacles that hinder a solution. Problem solving is the reasoning ability to develop thinking about how to solve problems systematically, to deduce the best steps that must be followed to solve problems.

Research related to problem solving, including social problems, including research conducted by Lindsay (2018), concluded that problem solving is an important component to improve individual capabilities independently, the development of problem solving skills must be fostered in the early years through the use of activities directly according to the age of the child. Effective learning about problem solving is important at the basic level, especially problem solving learning interventions in the third grade because at this time the problem solving requirements were first introduced in the curriculum (Kingsdorf, Krawec, Gritter, 2016). Research conducted by Bishara and Hui (2016), shows that students' ability to overcome problem solving can increase motivation to learn, improve student achievement and social relations. Boonen, Koning, <u>Jolles, Schoot</u> (2016), concluded that problem solving is related to mental representation skills and understanding and improving student performance. Caprioara (2015), states that problem solving is a basic component of learning in schools with strong formative effects on students, most effective for contextualization, for operational and knowledge transfer, involving cognitive factors and student experience. Intaros, Inprasitha, Srisawadi (2014), revealed that problem solving in classrooms encourages students to

work together to create problem solving strategies and improve students' ability to solve problems.

The success of learning related to social problem solving is also influenced by the characteristics of students, including self-efficacy so learning must pay attention to the characteristics of students because it affects the success of learning. Characteristics of students can be used to facilitate the acquisition, organization, and re-disclosure of new knowledge and information (Degeng, 2013). In this case information relating to social problem solving. Self-Efficacy is a belief in self-success that encourages individuals to do and achieve something. A person's belief in his sense of success is a major factor in the source of human action on what is thought, trusted and felt by individuals that influences how he acts.

To deal with and solve social problems, students must have a self-confidence (self-efficacy). In order to find a solution to a problem, including social problems, based on social cognitive theory, the role of cognitive function that is related toneeded, selfefficacy is namely a person's belief in the ability possessed to control the functioning of self and the environment (Bandura, 1999). Self-efficacy is a factor of cognitive change, namely a person's ability to display actions from the cognitive level shown (Bandura, 1994). Self-efficacy determines how people feel, think, motivate themselves and behave. Bandura (1994), states that individuals who have high confidence in their abilities when facing difficult tasks will consider it a challenge that must be mastered, maintain a commitment to achieve goals, regain efforts when facing failure, when facing situations that threaten being able to control themselves so that they can produce self-achievement and can reduce stress and not be easily depressed. While individuals who doubt their ability will consider these tasks as a threat, have low expectations, have low commitment to the goals achieved, quickly give up and lack of effort when facing a difficult task, and slow to get back up after a failure so that individuals it is easy to experience stress and depression. Self-efficacy is related to the abilities that exist in the student that involves feelings and emotions and intellectuals possessed. Confidence in students will have the ability to determine what actions will be taken in achieving a goal such as finding a way out of social problems faced so that it can achieve conformity in students and changes that occur in the surrounding environment. Selfefficacy is the individual's belief in the ability he has in organizing himself to carry out and complete a task at hand to achieve certain goals.

The findings of previous research on self-efficacy show that self-efficacy and self-regulation are fundamental to determining the quality and quantity of student participation and achievement as well as key elements to prevent school failure (Rio, Cecchini, Gimenez, Alonso & Prieto, 2017). Research Aurah (2017), shows that self-efficacy is student highly correlated with academic achievement and student performance. Sadi, O., Uyar, M (2013), concluded that students who have high self-efficacy and organizational strategies can succeed in completing tasks as well as facing difficulties, higher levels of self-efficacy are directly related to the achievement and strategy of learning settings students. Dou, Brewe, Potvin, Zwolak & Hazari (2018), found that there was a positive relationship between self-efficacy and interest and self-

efficacy with student interaction. Haase, Hoff, Hanel & Ker (2018), concluded that there is a relationship between self-efficacy and student creativity and performance. Suraya & Yunus (2017), states that self-efficacy is an important component in improving academic achievement and students' ability to a better level and increases the ability of individuals to face difficulties in life. Rooij, Jansen & Grift (2017), found that self-efficacy academic is an important predictor of the success of study and cognition, academic interest, academic activities directly related to self-efficacy. Mojtabaee, Tahriri, Danaye (2016), shows that there is a significant positive relationship between self-efficacy and social-affective strategies. Self-efficacy academic mediates a positive relationship between exploration and academic performance (Gkorezis, Kostagiolas, Niakas, 2017). Research conducted by Betoret, Rosello & Artiga (2017), found that self-efficacy academic influences student achievement and satisfaction.

The link between the research mentioned above and this research is that self-efficacy supports and relates to student performance and learning outcomes, including student performance and learning outcomes in problem solving. While the results of this study also indicate a relationship between self-efficacy with the results of learning social problem solving. Based on the background above the purpose of this study was to determine the relationship between self-efficacy and the results of learning social problem solving.

2. Research Methods

This research was a correlational study to find a relationship or correlation between a factor (variable) and another factor (variable) (Setyosari, 2015). The variables in this study are self-efficacy and social problem solving abilities. Self-efficacy is a person's self-confidence in facing various tasks and overcoming various difficulties. This variable is measured using a measure of self-efficacy based on scale for the measurement of self-efficacy for learning is a measuring tool that attempts to describe how an individual assesses his confidence in dealing with various situations. This measuring instrument consists of 27 items. The variable of social problem solving ability is the ability of students to identify and find social problems, find solutions to solve social problems and make conclusions about solving social problems, measured using learning outcomes and inventory test social problem solving, consisting of 45 items. The subjects in this study were Surabaya Inclusive Middle School students, with 67 students. Students who have a self-efficacy high of 36 students and students who have a self-efficacy low of 31 students.

Inclusive Junior High School is one manifestation of inclusive education, namely education for children with special needs in general education (regular) together with their peers (Choate, 2004). Inclusive education is the core of education for all (education for all). In inclusive diversity, education is not an obstacle to achieving good learning outcomes for all students and can even encourage exceptional and high-achieving learning outcomes. Inclusive education is closely linked to international efforts to achieve education for all (Ainscow & Miles, 2008). Inclusive education is a system of

implementing education that provides an opportunity for all students from various conditions and backgrounds to take part in education or learning in a common educational environment together, with educational services that are tailored to the needs and abilities of students. The data analysis technique used in this study is the correlation technique Pearson Product Moment. To find out the relationship between the two variables using the Pearson correlation coefficient with the help of the SPSS program.

3. Research Results

Hypothesis testing is done to test or prove the relationship between the variables of self-efficacy and learning outcomes of social problem solving. The data in this study were analyzed using correlation techniques. The results of research data analysis with correlation techniques are Pearson Product Moment presented in table 1.

Table 1: Data Analysis Results with Correlation Technique Pearson Product Moment Correlation Self Efficacy with Learning Results Problem Solving Social (Social Problem Solving)

		Social Problem	Social Problem Solving	Efficacy
		Solving Pre-Test	Post-Test Results	
		Results		
Social Problem	Pearson	1	.294*	.533**
Solving Pre-Test	Correlation		.016	.000
Results	Sig. (2-tailed)	67	67	67
	N			
Social Problem	Pearson	.294*	1	.212
Solving Post-Test	Correlation	.016		.085
Results	Sig. (2-tailed)	67	67	67
	N			
Efficacy Score	Pearson	.553*	.212	1
	Correlation	.000	.085	
	Sig. (2-tailed)	67	67	67
	N			

Based on the correlation test with significance level of 0.01 was obtained the correlation coefficient of 0.533, p = 0.000 < 0.01 and at 0.05 the significance level of the correlation coefficient 0.05, p = 0.016 < 0.05. Based on the results of the data analysis, it can be concluded that there is a significant relationship between self-efficacy and the ability to solve social problems in Inclusive Middle School students. The correlation coefficient shows how strong the relationship between the two variables tested. The correlation coefficient in this study is 0.553 so it can be stated that the variables in this study at the significance level of 0.01 have the strength of the relationship in the medium category. While at the 0.05 level of significance has less relationship strength. In this study, the correlation coefficient has a positive relationship which means that if self-efficacy is

high, then the ability to solve social problems is also high and conversely if self-efficacy is low then the ability to solve social problems is also low.

4. Discussion

Based on the results of data analysis it can be concluded that there is a relationship between the variables of self-efficacy and the variable ability to solve social problems. This is indicated by the correlation coefficient at the 0.01 significance level of 0.533, p = 0.000 < 0.01 and at the 0.05 significance level of the correlation coefficient 0.294, p = 0.016 < 0.05. The correlation coefficient in this study is positive which indicates that there is a positive relationship between the two research variables. This supports the proof of the working hypothesis (Ha), namely that there is a relationship between self-efficacy and the ability to solve social problems in Surabya Inclusive 36 Middle School students. The positive value on the correlation coefficient score between the two variables means that the higher the self-efficacy, the higher the ability to solve social problems. In this study the results showed that self-efficacy has a relationship with the ability to solve social problems. The manual calculation to find out the percentage variance between two variables is by squaring the correlation coefficient then multiplying by 100%. After manual counting based on the correlation coefficient of this study, a percentage of 28.4% was obtained. This result means that in this study, self-efficacy has a role of 28.4% in influencing the ability to solve social problems.

The results of the above research are in accordance with the research conducted by Hemmings & Kay (2016), finding that self-efficacy proved to be the most important predictor of output and contributed to knowledge about the factors underlying research skills. Glu (2015), found that there was a relationship between self-efficacy and learning outcomes which was partly mediated by regulatory efforts, students with self-efficacy were able to analyze and control their impulses and develop in the face of challenges, they excelled academically. Self-efficacy is related to students' academic performance and resilience and is very important when individuals face difficulties (Cassidy, 2015).research Goulao's (2014) found that there was a significant relationship between self-efficacy and academic performance and achievement. Afandi, Degeng, Setyosari, Kamdi (2015), concluded that there are differences in learning outcomes between groups of students with high self-efficacy and groups of students with low self-efficacy; this means that self-efficacy is influential and related to learning outcomes. Erozkan (2014, shows that there is a positive relationship between self-efficacy and constructive problem solving. Bedel & Onsekiz (2016), shows that self-efficacy is significantly related to academic motivation, this affects learning outcomes. Research conducted by Schunk & Gunn (2015), shows that self-efficacy is related to the success of problem solving, selfefficacy and the use of task strategies to improve students' skills and performance in learning

5. Conclusions and Suggestions

The conclusion of this study is that there is a relationship between self-efficacy and social problem solving abilities in junior high school students Inclusive Surabaya The relationship found in this study is a positive relationship and has a strong relationship in the medium category which means that the higher the self-efficacy, the higher the students' social problem solving abilities. The results of the study show that there is a relationship between self-efficacy and learning outcomes. For solving social problems, related to these findings, further research related to self-efficacy needs to be done in the form of experimental research, development research and classroom action research to be more convincing about the findings in this study.

About the Authors

Wiwik Widajati is a student of Instructional Technology Doctoral Program, State University of Malang, Indonesia who has the topic of instructional strategies and lecturers of the Faculty of Education, Surabaya State University, Indonesia. Punaji Setyosari and I Nyoman S. Degeng are senior professors and lecturers of the Postgraduate Instructional Technology Study Program, State University of Malang, Indonesia. Sumarmi is a senior professor and lecturer in the Postgraduate Geography Study Program, State University of Malang, Indonesia.

References

- Afandi, Z., Degeng, I.N.S., Setyosari, P., Kamdi, W. 2015. Effect of Contextual Learning Strategies and Self-Efficacy on High School Students Learning Outcomes in History. Dissertation. Unpublished. Postgraduate, Malang State University.
- Ainscow, M., Miles, S. 2008. Making Education for All inclusive: Where Next? *Prospects*, vol. 145, no. 1.
- Aurah, Catherine. 2017. Investigating the Relationship between Science Self-Efficacy Beliefs, Gender, and Academic Achievement, among High School Students in Kenya. *Journal of Education and Practice*, v8 n8 p146-153 2017, Pages: 8.
- Bandura, A. 1994. Self-Efficacy. Encyclopedia of human behavior (Vol. 4, pp. 71-81).
- Bandura, A. 1999. Social Cognitive Theory: An Agentic Perspective. *Asian Journal of Social Psychology* (1999) 2: 21-41.
- Bedel, E.F. 2014. Exploring Academic Motivation, Academic Self-efficacy and Attitudes toward Pre-service Early Teaching in Childhood Education Teachers. *Journal of Education and Training Studies*, Vol. 4, No. 1, 142-149.
- Betoret, F.D., Rosello, L.A. & Artiga, A.G. 2017. Self-Efficacy, Satisfaction, and Academic Achievement: The Mediator Role of Students' Expectancy-Value Beliefs. Front. Psychol, Multidisciplinary Psychology Journal, https://doi.org/10.3389/fpsyg.2017.01193.

- Bishara, S., Hui, S.K.F. 2016. <u>Creativity in Unique Problem-Solving in Mathematics and Its Influence on Motivation for Learning</u>. *Journal of <u>Cogent Education</u>*, Volume 3, Issue 1
- Boonen, A.J.H., Koning, B.B., Jolles, J., Schoot, M. 2016. Word Problem Solving in Contemporary Math Education: A Plea for Reading Comprehension Skills Training. <u>Journal Frontiers Psychology</u> 2016; 7: 191.
- Caprioara, D. 2015. Problem Solving-Purpose and Means of Learning Mathematics in School. *Procedia-Social and Behavioral Sciences*, Volume 191, 2 June 2015, Pages 1859-1864.
- Cassidy, S. 2015. Resilience Building in Students: The Role of Academic Self-Efficiency. *Frontiers in Psychology*, Volume 6, Article 1781.
- Choate, Joyce, S. 2004. Successful Inclusive Teaching Proven Ways to Detect and Correct Special Needs. Happened. Helen Keller International, Usaid, Pearson Education, Inc.
- Degeng, I.N.S. 2013. Learning Sciences: Classification of Variables for the Development of Theory and Research. Malang: Kalam Hidup.
- Dou, R., Brewe, E., Potvin, G., Zwolak, J. P & Hazari, Z. 2018. <u>Understanding the Development of Interest and Self-efficacy in Active-learning Undergraduate Physics Courses</u>. <u>International Journal of Science Education</u>, Volume 40, <u>Issue 13</u>, Pages 1587-1605.
- Erozkan, A. 2014. Analysis of Social Problem Solving and Social Self-Efficacy in Prospective Teachers. *Educational Sciences: Theory and Practice*, v.14 n.2, p 447-455.
- Gkorezis, P., Kostagiolas, P., Niakas, D. 2017. Linking Exploration to Academic Performance: The Role of Information Seeking and Academic Self-efficacy. *Library Management*, Vol. 38 Issue: 8/9, pp.404-414.
- Goulao, M.F. 2014. The Relationship between Self-Efficacy and Academic Achievement in Adults' Learners. *Athens Journal of Education*, Vol. 1, No. 3, 237.
- Glu, Y.K. 2015. Self-Efficacy and Academic Achievement, A Case From Turkey. *Journal of Education and Practice*, Vol. 6, No. 29.
- Haase, J., Hoff, E.V., Hanel, P.H.P. & Ker, A.I. 2018. <u>A Meta-Analysis of the Relationship between Creative Self-Efficacy and Different Creativity Measurements</u>. <u>Creativity Research Journal</u>, Volume 30, <u>Issue 1</u>, Pages 1-16.
- Hemmings, B. & Kay, R. 2016. The Relationship between Research Self-efficacy, Research Disposition and Publication Output. Educational Psychology, An International Journal of Experimental, Volume 36, Issue 2, Pages 347-361.
- Intaros, P., <u>Inprasitha</u>, M., <u>Srisawadi</u>, N. 2014. Students' Problem Solving Strategies in Problem Solving-mathematics Classroom. <u>Procedia-Social and Behavioral Sciences</u>, <u>Volume 116</u>, Pages 4119-4123.
- Johnson, E.B. 2002. Contextual Teaching and Learning. California: Corwin Press Inc.
- Kingsdorf, S., <u>Krawec</u>, J., <u>Gritter</u>, K. 2016. <u>A Broad Look at the Literature on Math Word Problem-Solving Interventions for Third Graders</u>. *Journal <u>Cogent Education</u>*, Volume 3, <u>Issue 1</u>.

- Linsay, L.D. 2018. <u>Problem Solving in the Early Years</u>. *Sage Journals*, <u>Intervention in School and Clinic</u>, Vol. 53, Issue 4.
- Mojtabaee H.S.M., Tahriri, A. & Danaye T.M. 2016. The Relationship between EFL Learners' Self-efficacy and Their Social-Affective Strategy Use Across Years of Study. *International Journal of Research Studies in Psychology*, Volume 5 Number 4, 27-39.
- Rio, J.F., <u>Cecchini</u> J.A., <u>Gimenez</u> A.M., <u>Alonso</u> D.M., <u>Prieto</u>, J.A. 2017. Self-<u>Regulation</u>, <u>Cooperative Learning</u>, and <u>Academic Self-Efficacy</u>: <u>Interactions to Prevent School Failure</u>. *Frontiers Psychology, Multidisciplinary Psychology Journal*, <u>https://doi.org/10.3389/fpsyg.2017.00022</u>.
- Rooij, E.C.M., <u>Jansen</u>, E.P.W. A. & <u>Grift</u>, WJCM 2017. Factors that contribute to the Secondary School of Student Self-Efficacy in Being a Successful University Student. *Journal of Research in Post-Compulsory Education*, Volume 22, <u>Issue 4</u>, Pages 535-555.
- Sadi, O., Uyar, M. 2013. The Relationship between Self-Efficacy, Self-Regulated Learning Strategies and Achievement: A Path Model. *Journal of Baltic Science Education*, Volume 12, Issue 1, Page 21-33.
- Schunk, D. & Gunn, T.P. 2015. Self-Efficacy and Skill Development: Influence of Task Strategies and Attributions. *The Journal of Educational Research*, 79 (4): 238-244. Setyosari, P. 2015. *Educational and Development Research Methods*, first print. Jakarta: Kencana Prenada Media Group.
- Setyosari, P. 2015. Metode Penelitian Pendidikan dan Pengembangan, cetakan pertama. Jakarta: Kencana Prenada Media Group.
- Suraya, W.H. & <u>Yunus</u>, J.N. 2017. Self-Efficacy and Academic Performance of Secondary Students Schools in Perak: An Exploratory Outlook for the *International Journal of Academic Research in Progressive Education and Development*, Vol. 6, No. 3.

Wiwik Widajati, Punaji Setyosari, I Nyoman S. Degeng, Sumarmi SELF-EFFICACY IN LEARNING TO SOLVE SOCIAL PROBLEMS IN INCLUSIVE MIDDLE SCHOOL

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a Creative Commons Attribution 4.0 International License (CC BY 4.0).