The Effectiveness of Psychoeducational Group of Goal-Setting Training to Improve Self-Efficacy and Learning Motivation

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Article Info

Abstract

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Self-efficacy and learning motivation are important for students because those affect the learning process, cognitive actions and increase effort through the student's ability to achieve academic goals. This study aimed to determine the effectiveness of the psychoeducational group of goal-setting training to improve self-efficacy and learning motivation of students at Mekar Arum Junior Hight Shool, Bandung Regency. This study used an experimental method with a randomized pretest-posttest control group design by involving 14 students with low to moderate self-efficacy and learning motivation levels as study subjects. The results of this study showed that the psychoeducational group of goal-setting training was effective in improving students' self-confidence in doing assignments, enthusiasm for learning and academic achievements at school. The results of the Wilcoxon Signed Rank Test and Mann-Whitney Test showed that the intervention of the goal-setting training psychoeducational group was effective in improving the self-efficacy and learning motivation of students at Mekar Arum Junior High School, Bandung Regency. The results and findings of the study, including implications and limitations are further discussed in the discussion section.

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INTRODUCTION

Self-efficacy and learning motivation are important factors because those affect the learning process, cognitive actions and increase effort through the student's ability to achieve academic goals. Self-efficacy refers to students' confidence in achieving the desired results (Bandura, 1977), including successfully carrying out certain tasks and overcoming obstacles or challenges (Pajares, 2008). The efficacy and motivation of learning also determine behavior, and the amount of effort that will be given in a certain situation, as well as perseverance in overcoming difficulties. Self-efficacy has an important role in the achievement of students in the learning process. (Ejubović & Puška, 2019; Joo, Lim, & Kim, 2013; Wang, Shannon, & Ross, 2013). Self-efficacy is also an important element in measuring students' readiness to follow learning well (Sun & Rogers, 2021).

Not only self-efficacy, learning motivation is also significant because it is one of the facilities or tendencies of a person to achieve goals with persistence and enthusiasm in carrying out his learning activities (Cherniss & Goleman: 2001). Given the advancement of technology, the learning process is now widely carried out through digital media and uses a number of applications. However, the implementation of online learning through digital media causes a lack of student's learning motivation such as what is mentioned in studies conducted by Cahyani, Listiana, & Larasati (2020), and Simamora (2020) that students with low motivation are strongly influenced by external factors such as the learning environment, learning time, and instrumental support which in turn affect achievement. On the contrary, Fitriyani, Fauzi, & Sari (2020) argue that intrinsic factors greatly motivate students in online learning. The enthusiasm and ambition to understand and add new knowledge have encouraged students to study hard even through online. In addition, resilience and psychological conditions also support them to succeed in online learning. Based on the previous explanation, the implementation of online learning through digital media has advantages and disadvantages and causes inconsistencies in student's learning motivation. Thus, an intervention is needed to improve self-efficacy and motivation of student's learning in education in this digital era.

Individuals who have a higher level of self-efficacy will decide to take the necessary actions more easily and approach the task with less anxiety; they will give more effort to achieve their goals and be more persistent when facing obstacles. People who doubt their self-efficacy will reduce their efforts and quickly give up on achieving their goals (Bandura, 1977, 1986). Confidence in the ability to complete tasks also greatly affects the emotional reaction of a person to life events. Low self-efficacy in achieving goals can lead to depression and later affect one's coping strategies (Bandura, 1986). Numerous studies have showed that students with higher general self-efficacy are less likely to procrastinate.

The services of psychoeducational groups emphasize the use of educational methods to convey information and develop skills (Henderson & Thompson, 2016). Psychoeducational groups aim to promote personal growth according to the stages of their development, the provision of relevant information, and solving problems, or conflicts (Henderson & Thompson, 2016).

Psychoeducational groups as an intervention can improve the academic field of students, evidenced by the study of Onemli (2012) that psychoeducational groups increase the motivational beliefs and academic success rates of students. Furthermore, Putra & Suetikno (2018) in their study found an academic improvement through the implementation of psychoeducational groups. Thus, the results of the previous studies provide reinforcement that the psychoeducational groups can be applied to students to develop their abilities, foster academic confidence, have good learning motivation. One way that guidance and counseling teachers can do to increase self-efficacy and learning motivation is to carry out psychoeducational groups using goal-setting

training. Group exercise techniques are techniques applied in psychoeducational groups with an orientation to make group members active, mobile, and dynamic (Jacobs et al, 2011).

The choice of methods in this study was based on several fundamental assumptions related to self-efficacy and student's learning motivation. Goal-setting training has an influence on students' self-efficacy and learning motivation. Goal-setting is described as the identification of specific achievements to be made in a specific area with measurable results, such as actions and achievement schedules (Rowe et al. 2017). Sullivan and Strode (2010) mention the importance of learning to set achievement goals. The achievement of goals provides students with a feeling of ability and improves learning outcomes. In addition, feedback on the progress of goals can foster self-efficacy and motivation in students since those prove that they are capable and make improvements with their hard work (Putwain, et al., 2018).

One study shows that there is a positive influence of goal-setting training on improving self-efficacy. The results of pratiningsih & Sahrah study (2016) state that there are differences at the level of self-efficacy due to the goal-setting training. In addition, several other studies have showed that there is a positive influence of goal-setting training on improving learning motivation. A study conducted by McMillan (2019) shows goal-setting strategies have a positive effect on achievement and motivation towards academic tasks. Furthermore, another study conducted by Ramadhani, et., al (2021) found an improvement in learning motivation after the intervention of psychoeducational services goal-setting. However, an investigation conducted by Glynn et. al (2009) shows that goal-setting has no impact on the motivation or self-efficacy of students who are involved in setting goals. No impact on the intervention happened due to discrepancies in the level or age of the sample.

Students with low levels of self-efficacy and learning motivation see the activities or tasks assigned to them as more difficult than

their abilities. This idea certainly increases the level of stress, anxiety, and narrows the perspective necessary for students to solve problems in the best way. Cleary and Zimmerman (2004) found that low self-efficacy interferes with student's motivation. Likewise, Schunk (2003) agrees that when self-efficacy is low, the level of self-confidence in doing tasks and solving problems is also low which of course has a negative impact on students' abilities, aspirations, and commitment.

The above theories are in accordance with the low self-efficacy condition by class VIII students at Mekar Arum Junior High School Bandung Regency before being given treatment. It was indicated by the characteristics of feeling less confident, lack of potential and confidence in doing the tasks given by the teacher, being awkward to ask teachers and friends if there is material that is not understood, being late in submitting assignments, not daring to express opinions or consult problems to counseling guidance teachers and inability to make academic goals because they failed to achieve expectations.

Students who show high self-efficacy perform better at academics compared to the low one (Shores & Shannon, 2007). Self-efficacy will also encourage students to enjoy learning activities and maintain their attention to various academic tasks (Sunawan et al., 2017). In addition, Frese and Fay (2001) propose that people will be more zealous when they have a sense of control over their actions. A sense of control over one's actions is referred to self-efficacy, meaning that people who have self-efficacy will be able to take actions effectively (Bandura, 1997). At this rate, people ultimately tend to carry out tasks more successfully and are able to achieve academic goals (Brown & Gali, 2016).

Based on the findings and limitations that exist in previous studies, this study was focused on learning contexts to obtain implications of new findings in the implementation of psychoeducational groups training goal-setting to improve the plurality of self-efficacy and motivation for student's learning. From the

results of several studies above, it is known that goal-setting training has a positive influence on self-efficacy and learning motivation. This is significant given self-efficacy and learning motivation are problems that arise due to the absence of online learning in the digital era. Given, self-efficacy and motivation of learning are a very important factor to achieve the academic success of the student as well as the development of students' potential.

METHODS

The subjects involved in the study were students who had low self-efficacy and low learning motivation in class VIII at Mekar Arum Junior High School, Bandung Regency, with an age range of 13-15 years. The sample selection technique in this study was done using a purposive sampling technique. Table 1 shows inclusion and exclusion criteria of the sampling.

Table 1. Inclusion and Exclusion Criteria

No	Inclusion Criteria	Eksclusion Criteria
1.	Students of Mekar Arum Junior High School class VIII	Students of Mekar Arum Junior High School class VIII and IX
2.	Ages 13-15	Ages ≥ 15
3.	Students with low self-efficacy and learning motivation	Students with high self-efficacy and learning motivation

The level of self-efficacy and student's learning motivation was measured by using the efficacy instruments developed by the researchers with self-efficacy aspects of: level (10 items), strength (7 items), and generality (6 items). Meanwhile, learning motivation includes aspects: encouragement to achieve goals (6 items), commitment (7 items), initiative (4 items) and optimistic (4 items). Both scales use 4 scaling scores (1= very appropriate, 4= very non-conforming). Based on the validity test of the self-efficacy instrument, there found 23 valid items (rxy=0.421-0.758). Meanwhile the self-efficacy instrument obtained the result that 21 items of learning motivation were declared valid (rxy=0.41-0.672) and the alpha reliability coefficient of the self-efficacy instrument was 0.924 while the learning motivation was 0.890.

This study used an experimental method with the pretest-posttest control group design implemented at three stages. First, the researchers measured the level of self-efficacy and learning motivation to select experimental and control group members who had low levels of self-efficacy and learning motivation. The results of the selection determined 14 students who were eligible to engage in psychoeducational group intervention. The 14 students were then divided into 2 groups, namely the experimental group and the control group. The efficacy and learning motivation data of the 14 students were then used as the pre-test data.

Second stage was the provision of intervention to the experimental group in the form of a psychoeducational group of goal-setting training to improve students' self-efficacy. The intervention process of the psychoeducational group was carried out in 3 sessions with a time of 80 minutes in each session of the psychoeducational group. The first session provided information on the importance of self-efficacy and the practice of setting specific goals. The second session explained the understanding of self-strength and belief in self-ability and practiced to strategize to achieve goals. The third session consisted of internalization of behavior that reflects the ability of self-efficacy and courage to take the first step to achieve the goal. Then, the intervention of the psychoeducational group training goal-setting was given to increase student's learning motivation. The intervention process was carried out in 3 sessions with the

duration of 80 minutes in each session. The first session provided information about the importance of learning motivation and the practice of setting specific goals. The second session consisted the understanding of the attitude of commitment and initiative in the learning process and practices to strategize to achieve goals. The third session contained the internalization of behavior that reflects the learning motivation and dare to take the first step to achieve the goal.

At the third stage, the researchers provided a post-test to all members of the experimental group and the control group to measure the level of self-efficacy and the level of learning motivation using the self-efficacy scale and the learning motivation scale.

RESULTS AND DISCUSSION

The results of pretest of 14 students showed that the mean of self-efficacy in the experimental group was (M= 51.71, SD = 3.73), while the control group was (M = 54.14, SD = 4.34) where both groups had low category of self-efficacy. After being given the treatment, the mean of posttest score of the experimental group obtained (M= 80.86, SD = 1.68) with a high

category. Meanwhile, the control group had the mean of self-efficacy by (M = 56.43, SD = 3.91) with a low category. Alternatively, the results of the pretest of the study motivation of the experimental group gained the mean of (M = 47.29, SD = 3.35), while the control group was (M = 50.14, SD = 5.01) where both groups had low category of learning motivation. After being given the treatment, the mean of posttest learning motivation score of the experimental group was (M= 72.14, SD = 3.13) with a high category. Meanwhile, the control group had the motivation learning mean of (M = 51.00, SD = 2.08) with a low category. Graph.1 shows the results of the level of self-efficacy and learning motivation.

Based on the description of the data and graph 1, it can be concluded that the level of self-efficacy. The effectiveness of the psychoeducational group of goal-setting training to improve self-efficacy and learning motivation in the subjects of this study was determined from calculations using the Wilcoxon Signed Rank Test. Then, to compare the differences in the effectiveness of the psychoeducational group training goal-setting to improve self-efficacy and learning motivation, the Mann-Whitney Test wasused.

Table 1. The Effectiveness of psychoeducational group of goal-setting training to improve self-efficacy and learning motivation

VT	Kel	T_1		T_2		Z^1
		M	SD	M	SD	
Self-Efficacy	K.E	51.71	3.72	80.86	1.68	-2.37*
	K.K	54.14	4.34	56.43	3.91	-1.78
	Z^2	-1.035		-3.141**		
Learning Motivation	K.E	47.29	3.35	72.14	3.132	-2.37*
	K.K	50,14	5,014	51.00	2.082	-853
	Z^2	-1,158		-3,144**		

Description: *p<0.05 **p<0.01, T1: Pretest, T2: Posttest, Z: Score of Willcoxon test, Z2: Score of Mann-Whitney Test, VT: Bound Variables, K.E: Experimental Group and K.K: Control Group.

The results of wilcoxon's data analysis showed that the intervention of the goal-setting

training psychoeducational group was effective in improving self-efficacy (Z= -2.371, p<0.05). The same findings also occurred in learning motivation, where the psychoeducational group training goal-setting was effective to increase student's learning motivation (Z= -2,371, p<0.05).

The results of the Mann-Whitney test confirmed that there was no difference in the level of self-efficacy at the time of pretest (Z= -1.035, p<0.05). However, at the time of the posttest, the psychoeducational group of goal-setting training gained a higher level (significant) than the control group (Z= -3.141, p<0.05). In the control group there was no difference in the level of learning motivation at the time of pretest (Z= -1.158, p<0.05). However, at the time of the posttest, the psychoeducational group of goal-setting training had a higher level (significant) than the control group (Z=-3.144, p<0.05). Based on the effectiveness comparison using level of the Z2 (mann-whitney), it can be concluded that the goal-setting training psychoeducational group was more effective in increasing learning motivation than self-efficacy although both were equally effective.

The findings of this study showed that there were still students with conditions of self-efficacy and low learning motivation . Regarding the data, the factors of self-efficacy, including levels, strength, and generality were still in the low category indicated by the absence of confidence to do tasks according to the students' limits and low behavior. Then the data obtained also showed that the learning motivation with factors of encouragement to achieve goals, commitment, initiative and optimism was in the low category where the subject has not had the drive to achieve the goal, commitments to determine priorities in doing tasks, initiatives to do something on the existing opportunities and lacked optimistic attitude.

From these findings, it could be seen that basically there still found some class VIII students at Mekar Arum Junior High School, Bandung Regency who had low conditions of self-efficacy and learning motivation. Given, self-efficacy has a very important role in student achievement in the learning environment (Ejubović & Puška, 2019; Joo, Lim, & Kim, 2013; Wang, Shannon, & Ross, 2013). It is because a lack of knowledge, skills and self-efficacy will hinder the learning process.

Self-efficacy in the learning process is also an important element in measuring students' readiness to follow learning well (Sun & Rogers, 2021). It is in line with A study conducted by Mukaromah, Sugiyo, & Mulawarman (2018) shows that there is an influence between self-efficacy and student's involvement in learning. Not only self-efficacy, learning motivation also plays a key role in developing learning as well as determining the success of the learning process (Harnett, 2016). Li and Tsai (2017) found that learning motivation determines performance in learning. However, efforts to motivate students to encourage academic success continue to present challenges for the school (Dotson, 2016).

The findings in this study showed that the treatment of psychoeducational groups of goal-setting training has proven effective in increasing self-efficacy and student's learning motivation. It is in accordance with a study conducted by Pangestuti., Wibowo & Japar (2020) that psychoeducational groups with exercise techniques are effective to improve students' self-efficacy. The increase in self-efficacy and learning motivation will certainly lead to success, better personal development, and diversification of skills when facing a failure. Students with a high level of self-efficacy will not give up (Yıldrım & lhan, 2010). Moreover, highly motivated students will be more willing to participate in the learning process (Glynn & Brickman, 2009; Yenice et al., 2012), are more active and strive in classroom activities (Wolters & Rosenthal, 2000), ask questions and participate in learning with passion.

Basically, the psychoeducational group of goal-setting training is described as the identification of specific achievements that will be made in a specific area with measurable results, such as actions and achievement schedules (Rowe et al. 2017). Sullivan and Strode (2010) mention the importance of setting achievement goals. The achievement of goals provides students with a feeling of ability and increases self-efficacy in learning. In addition, feedback on the progress of goals can foster self-efficacy and motivation in students turning them to be capable of and make improvements with their hard work (Putwain, et al., 2018).

Then the findings in this study also showed that even though the psychoeducational group of goal-setting training was equally effective in improving self-efficacy and learning motivation, the results of the effectiveness level of the Z2 value (Mann-Whitney Test) confirmed that the psychoeducational group of goal-setting training was more effective in increasing learning motivation.

Psychoeducational groups aim to promote personal growth according to the stages of individuals' development, the provision of relevant information, and the resolution of problems, or conflicts (Henderson & Thompson, 2016). Psychoeducation as an intervention can improve the academic field of students, evidenced by the study of Onemli (2012) that psychoeducational groups can increase the motivational confidence and academic success rate of students. Travers et al (2015) summarize the theory of goal-setting as one of the most common theories and influence on motivation and performance in the learning process.

This study is supported by the results of previous studies that the psychoeducational group of goal-setting training is effective to increase learning motivation, Rowe et al (2017) found that goal-settings can increase motivation and encourage skill growth as well as involvement in learning. Also, a study conducted by McMillan (2019) and Ramadhani et al., (2021) shows a positive influence of goal-setting training on increasing learning motivation. In terms of quantitative results, the results of statistical tests have proven that the psychoeducational group of goal-setting training was effective in improving students' learning motivational ability. This meant that the psychoeducational group of goal-setting training had a positive impact on the drive to achieve goals in students, increased commitment, initiative or readiness to act or do something on existing opportunities, and increased optimistic attitude, namely enthusiasm in pursuing goals regardless of failures and setbacks.

CONCLUSION

This study was conducted to test the effectiveness of the psychoeducational group of goal-setting training to improve self-efficacy and learning motivation of students at SMP Mekar Arum, Bandung Regency. These findings have proven that the goal-setting training psychoeducational group is effective in improving students' self-efficacy and learning motivation at Mekar Arum Junior High School, Bandung Regency.

Counselors or guidance and counseling teachers in schools can apply this group counseling intervention to address problems related to low self-efficacy and learning motivation. Moreover, future researchers can analyze the level of self-efficacy and learning motivation through gender analysis between male and female students. Some follow-up designs can be made to monitor the effects of the treatment within a certain period.

REFRENCES

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Clinical and Social Psychology*, 4, 359-373.

Bandura, A. (1997). Self-Efficacy:*The Exercise of Control*. New York: W. H. Freeman and company. https://psycnet.apa.org/record/1997-08589-000

Brown, D. & Gali, R. (2016). Personality traits' effects on self-efficacy and outcome expectations for high school major choice. *International journal for educational and vocational guidance*, 16, 343-361.

Cahyani, A., Listiana, I. D., & Larasati, S. P. D. 2020. Motivasi Belajar Siswa SMA pada Pembelajaran Daring di Masa Pandemi Covid-19. IQ (Ilmu Al-qur'an): *Jurnal Pendidikan Islam*, 3(01), 123-140. https://journal.ptiq.ac.id/index.php/iq/article/view/57

Chernisss, C. & Goleman D. (2001). The Emotionally Intelligent Workpalace. San Fransisco: Jossey-Bass.

Dotson, R. (2016). Goal-setting to increase student academic performance. *Journal of School Administration Research and Development*, 1(1), 44-46.

Ejubović, A., & Puška, A. (2019). Impact of self-regulated learning on academic performance and satisfaction of students in the online environment. *Knowledge Management & E-Learning*, 11(3), 345–363.

Fitriyani, Y., Fauzi, I., & Sari, M. Z. (2020). Motivasi Belajar Mahasiswa Pada Pembelajaran Daring Selama Pandemik Covid-19. Jurnal Kependidikan: *Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran.* https://doi.org/10.33394/jk.v6i2.2654

Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st century. In BM Staw & RI Sutton (Eds.), *Research in organizational behavior* (Vol. 23, pp. 133–187). Elsevier Science.

Glynn, SM, Taasoobshirazi, G., & Brickman, P. (2009). Science motivation questionnaire: Construct validation with nonscience majors. *Journal of Research in Science Teaching*, 46(2), 127-146. https://doi.org/10.1002/tea.20267.

Hartnett, Maggie (2016) Motivation in Online Education. *Springer Science Business Media Singapore*. https://doi.org/10.1007/978-981-10-0700-2

Henderson, D. A., & Thompson, C. L. (2016). Counseling Children Ninth Edition. Boston, USA: Cencage Learning

Jacobs, EE, Masson, RLL, Harvill, RL, & Schimmel, CJ (2011). Konseling Kelompok: Google Scholar

Joo, YJ, Lim, KY, & Kim, J. (2013). Locus of control, self-efficacy, and task value as predictors of learning outcome in an online university context. *Computers & Education*, 62, 149–158.

Li, Liang-Yi & Tsai, Chin-Chung (2017). Accessing online learning material: Quantitative behavior patterns and their effects on motivation and learning performance. *Computers and Education* 11DOI:10.1016/j.compedu.2017.07.007

McMillan, Danielle. (2019). "What are the Effects of Goal-Setting on Motivation and Academic Achievement in a Fourth Grade Classroom?". *Retrieved from Sophia, the St. Catherine University repository website:* https://sophia.stkate.edu/maed/337

Mukaromah, D., Sugiyo, S., & Mulawarman, M. (2018). Keterlibatan Siswa dalam Pembelajaran ditinjau dari Efikasi Diri dan Self Regulated Learning. Indonesian *Journal of Guidance and Counseling: Theory and Application*, 7(2), 14-19. https://doi.org/10.15294/ijgc.v7i2.17949

Onemli, Mehmet. & Yodem, Zeynep, D. (2012). The Effect of Psychoeducational Group Training Depending on Self Regulation on Students' Motivational Strategies and Academic Achievement. Educational Sciences: Theory & Practice, 12(1), 67-73. *Educational Consultancy and Research Center* www.edam.com.tr/estp

Pangestuti, Riana & Wibowo, Mungin & Japar, Muhammad. (2020). The Effectiveness of Psychoeducational Group with Group Exercises Technique to Improve Student's Self-Efficacy. Islamic Guidance and Counseling Journal. 3. 38-45. https://doi.org/10.25217/igcj.v3i1.673.

Pratiningsih & Sahrah. (2016) Pengaruh Pelatihan Goal-setting terhadap Efikasi Diri Manajer Tingkat Menegah Di Pt Bat Yogyakarta. http://ejurnal.mercubuana-yogya.ac.id/index.php/psikologi/article/view/396

Putra, A. S., & Soetikno, N. (2018). Pengaruh intervensi psikoedukasi untuk meningkatkan achievement goal pada kelompok siswi underachiever. *Jurnal Muara Ilmu Sosial, Humaniora, Dan Seni*, 2(1).https://doi.org/10.24912/jmishumsen.v2i1.1514

Putwain, DW, Symes, W., Nicholson, LJ, & Becker, S. (2018). Achievement goals, behavioral engagement, and mathematics achievement: A meditational analysis.

Learning and Individual Differences, 68, 12-19. doi: 10.1016/j.lindif.2018.09.006.

Ramadhani, I. W. ., Fahmawati, Z. N. ., & Affandi, G. R. . (2021). Pelatihan Goal-setting Untuk Meningkatkan Motivasi Belajar Pada Siswa Di SMP Muhammadiyah 1 Sidoarjo. *Altruis*: *Journal of Community Services*, 2(3). https://doi.org/10.22219/altruis.v2i3.18044

Rowe, DA, Mazzotti, VL, Ingram, A., & Lee, S. (2017). Effects of goal-setting instruction on academic engagement for students at risk. *Career Development and Transition for Exceptional Individuals*, 40(1), 25-35. doi: 10.1177/2165143416678175.

Schunk, D. H., & Zimmerman, B. (2003). Self-Regulation and Learning. In W. M. Reynolds, & G. E. Miller (Eds.), Handbook of Psychology http://dx.doi.org/10.1002/0471264385.wei0704

Shores, ML, & Shannon, DM (2007). The effects of self-regulation, motivation, anxiety, and attributions on mathematics achievement for fifth and sixth grade students. School Science and Mathematics, 107(6), 225-236. doi: 10.111/j.1949- 8594.2007.tb18284.x.

Simamora, R. M. (2020). The Challenges of Online Learning during the COVID-19 Pandemic: An Essay Analysis of Performing Arts Education Students. *Studies in Learning and Teaching*, 1, 86-103. https://doi.org/10.46627/silet.v1i2.38

Sullivan, GS, & Strode, JP (2010). Motivation through goal-setting: A self determined perspective. Strategies: *A Journal for Physical and Sport Educators*, 23(6), 19-23. doi: 10.1080/08924562.2010.10590899.

Sun, Y., & Rogers, R. (2021). Development and validation of the Online Learning Self-efficacy Scale (OLSS): A structural equation modeling approach. American *Journal of Distance Education*, 35(3),184 199. https://doi.org/10.1080/08923647.2020.1831357

Sunawan, S., Yani, SYA, Anna, CT, Kencana, TI, Mulawarman, -, & Sofyan, A. (2017). Dampak Efikasi Diri terhadap Beban Kognitif dalam Pembelajaran Matematika dengan Emosi Akademik sebagai Mediator. *Jurnal Psikologi*, 44(1), 28-38– 38. https://doi.org/10.22146/jpsi.22742.

Usher, E. L., and Pajares, F. (2008). Sources of self-efficacy in school: critical review of the literature and future directions. Rev. *Educ. Res.* 78, 751–796. doi: 10.3102/0034654308321456

Wang, C.-H., Shannon, DM, & Ross, ME (2013). Students characteristics, self regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education*, 34(3), 302–323. doi: 10.1080/01587919.2013.835779

Wolters, CA, & Rosenthal, H. (2000). The relation between students' motivational beliefs and their use of motivational regulation strategies. *International Journal of Educational Research*, 33, 801-820. https://doi.org/10.1016/S0883-0355(00)00051-3.

Yenice, N. Saydam, G. & Telli, S. (2012). İlköğretim öğrencilerinin fen öğrenmeye yönelik motivasyonlarını etkileyen faktörlerin belirlenmesi Determining factors effecting on primary school students motivation towards science learning]. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi Ahi Evran University Journal of Kırşehir Education Faculty*, 13(2), 231-247.

Yıldırım, F., & İlhan, İ.Ö. (2010). Genel özyeterlilik ölçeği Türkçe formunun geçerlilik ve güvenilirlik çalışması. [The validity and reliability of the general self-efficacy scale-Turkish form] *Türk Psikiyatri Dergisi*. 21(4), pp. 301-308

Zimmerman, WA, & Kulikowich, JM (2016). Online learning self-efficacy in students with and without online learning experience. *American Journal of Distance Education*, 30(3), 180-191. Doi: 10.1080/08923647.2016.1193801