

**The Effect of Learning Model and Motivation Level on Students' Self-Efficacy****Muhamad Khaeriva Hasani, Komarudin, Tite Juliantine**

Program Studi Pendidikan Olahraga, Sekolah Pasca Sarjana, Universitas Pendidikan Indonesia

**Article Info***Article History :**Received March 2019**Revised June 2019**Accepted July 2019**Available online September 2019**Keywords :**Learning Model, Motivation Level, Self-Efficacy***Abstrak**

Self-Efficacy adalah suatu keyakinan seseorang terhadap kemampuan yang dimilikinya dalam menyelesaikan tugas tertentu. Tujuan penelitian ini adalah untuk mengetahui perbedaan pengaruh model pembelajaran yaitu Teaching Personal and Social Responsibility (TPSR) dan Cooperative Learning pada siswa yang memiliki tingkat motivasi tinggi dan rendah terhadap peningkatan self-efficacy siswa kelas V. Metode eksperimen dengan desain faktorial 2x2. Sampel penelitian ini adalah berjumlah 105 orang yang diambil menggunakan teknik sampling jenuh pada kelas V di SDN 208 Luginasari Kota Bandung. Analisis data menggunakan SPSS versi 21 dengan pengujian hipotesis melalui Two Way Anova. Hasil analisis dan perhitungan data mengungkapkan bahwa tidak terdapat perbedaan pengaruh yang signifikan antara kedua model pembelajaran terhadap peningkatan self-efficacy, terdapat interaksi antara model pembelajaran dengan motivasi terhadap peningkatan self-efficacy, tidak terdapat perbedaan pengaruh yang signifikan antara kedua model pembelajaran dengan tingkat motivasi tinggi terhadap peningkatan self-efficacy dan tidak terdapat perbedaan pengaruh yang signifikan antara kedua model pembelajaran dengan tingkat motivasi rendah terhadap peningkatan self-efficacy. Kesimpulan penelitian ini adalah kedua model pembelajaran memberikan pengaruh yang sama baiknya terhadap tingkat motivasi tinggi dan rendah pada self-efficacy dan ada interaksi antara model pembelajaran dengan motivasi terhadap peningkatan self-efficacy siswa.

**Abstract**

Self-Efficacy is a person's belief on his ability to complete certain tasks. The purpose of this study was to determine the influence differences between two learning models, namely TPSR and Cooperative Learning on students who have high and low motivation levels to increase self-efficacy of the fifth grade students. Experimental methods with 2x2 factorial design was used. The sample of this research were 105 fifth grade students at SDN 208 Luginasari, Bandung, chosen by using total sampling technique. Data analysis used SPSS version 21 with hypothesis testing through Two Way Anova. The results of the analysis and calculation of the data revealed that; there was no significant difference in the effect between the two learning models on increasing students' self-efficacy; there was an interaction between learning models with motivation towards increasing self-efficacy; there was no significant difference in the effect between the two learning models with high levels of motivation towards the increase of self-efficacy; and there was no significant difference in the effect between the two learning models with low motivation levels on increasing self-efficacy. The conclusion of this study is that both of the learning models have the same effect on both high and low motivation levels on the student self-efficacy and there is an interaction between learning models and motivation on increasing the student self-efficacy.

## INTRODUCTION

Affective value and personality have a close relationship with moral value in daily life personally or socially. Every person has a different personality, personality is a totality of an individual characteristic that create the existed and distinctive pattern thus an individual is different with other individuals (Hidayat, 2017).

Nowadays, affective value and personality are decreasing, we could see this phenomena in our surroundings. Affective value is closely related to moral value in daily life, personally and socially. Therefore, the lack of affective value building could affect the adversity of moral value of the students as the future generation of our nation. Bullying becomes a phenomenon that keeps happening in Indonesia and in the world, even the case involving students is getting higher. It should be our concern. A student who is bullied would lose their self-efficacy on their self and ironically, a belief is a foundation for a person to assess how far they could achieve or accomplish their goals.

Self-efficacy was suggested and revised by A. Bandura as a belief or an assessment made by an individual that they could be successful or accomplish the identified task (Green, 2008). Therefore, belief on self is an individual strength to take an action, a person would take an action if they think that they have ability to do something. The bullying victim has a lower life satisfaction and gains more depression and anxiety than those who are not (Weng, dkk. 2017).

Physical education at school should be the part of society hope to solve the social ills that physical education could build Indonesian citizen as a whole, a human who is physically, spiritually, and socially healthy. Sport and physical education represent components in global education for children to grow and develop their movement ability, psychological aspect, and social ability (Dacica, 2015). Therefore, through education, a person has a purpose that they set goals that could develop themselves to be a better person in the future. Learning outcome that they have become a depiction of their cognitive, affective, and movement skills. Other opinions said that physical education could improve self-efficacy and participation of the students, thus it could help the students to have learning achievement improvement (Bertills, dkk. 2018). For that reason, physi-

cal education could give positive contribution on learning achieve at school.

Goal accomplishment depends on learning task in form of physical activities or chosen movement tasks that are delivered with learning method or strategy that is suitable with the specific goals that should be achieved. Besides psychomotor and cognitive aspect in physical education, affective aspect is also important in deciding students learning achievement. One of efforts to solve the problem in education especially education at school is learning model. A learning model refers to a whole comprehensive plan to teach (Metzler, 2005). TPSR model or Model Teaching Personal and Social Responsibility is a model that is suggested by Hellison as a mean to improve personal and social responsibility of the children through physical activity. This learning model is a learning model that put attention on attitude, values, and behavior of the children.

TPSR model suggested by Hellison have a great impact on motor development, responsibility, motivation, and have good validity on the implementation in physical education learning process (Djordjic, 2018). Besides improving responsibility, previous research found that TPSR is effective to move the managerial and social behavior into a more positive direction (Pozo, dkk. 2016). Besides TPSR model, there is also cooperative learning model that besides helping students to achieve learning adjective, it could also give positive impact on students' social skill. The implementation of cooperative learning shows social skill improvement and attitude compared to the group that did not receive cooperative learning model (Goudas & Magotsiou, 2009). Besides affecting social skill of the students, cooperative learning also has impact on students learning motivation, data show that there is improvement on intrinsic motivation and rules that had been identified only on experimental group who received cooperative learning model (Fernandez-Rio, dkk.2017).

A factor that could have impacts on learning achievement is motivation, motivation is a strength that drive a person to take a behavior, the aim of motivation is to have a behavior that could bring highest benefits for a person (Tohidi & Jabbari, 2012). Therefore, motivation becomes a booster for a person that emerge ac-

tivities.

Therefore, according to the explanation above, the researcher conducted a research entitled the effect of Learning Model and Motivation on Self-efficacy on Primary School students.

## METHODS

### Design

This research was an experimental research that was aimed to contribute to new invention in developing reading literacy and the affectivity of education (Ronková & Wildová, 2016). One of research methodology that has several characteristics including manipulating independent variable, randomizing or choosing the sample of the study, and comparing the experimental group with control group.

An experimental research is based on the cause-effect assumption that is formulated as working hypothesis and is conducted in contoured action as the result of the study on the environment characteristics and application, in systemic view, strategic segment (Gheorghe & Nicolae, 2015).

In this research, there was a manipulation or treatment in a group by implementing TPSR model in physical education learning for experimental group. The control group received physical education learning through cooperative learning. The design of this study is factorial design. This design is a design to expand the number of relationship that is probable to be identified in the experiment. The researcher modified the design group whether it is control group posttest-only or control group pretest posttest- that allowed additional independent variable identification (Fraenkel dkk. 2012). The explanation above concludes that other value of factorial design is that it allows the researcher to learn the interaction of independent variable with other variable or we call it moderator variable. The researcher also identified the effects of moderator variable or attribute that affected the result of the research.

### Population and Sample

In this research, the population was the fifth grade students from 208 Luginasari Primary School in Bandung that consisted of 105 students since they had a

similar characteristics with the background of the study that the bullying phenomenon commonly occurred on other students. The sampling technique is a technique of choosing sample who are representative from the population. This research used saturated sampling technique. Saturated sampling technique is a technique where all of the population are taken as samples (Sugiyono, 2014).

For experimental study, minimum 30 samples per groups is suggested although sometimes experimental study involves only q 15 persons in each group if the control is highly conducted (fraenkel dkk. 2012). According to the opinion above, the sample used in this study were 105 male and female students aged 11-12 who are reduced into 60 students represented moderator variable. 30 students had high motivation and 30 students had low motivation, thus there would be 45 students as the range. The average result of self-efficacy improvement was 19,93 and standard deviation was 2,904.

### Data Collection Technique

This research used questionnaire to collect data. Motivation was measured by using SIS instrument, that has been validated in physical education for primary school students by (Sun, Chen, Ennis, Martin, & Shen, 2008). Meanwhile, for measuring students Self-Efficacy, SEQ-C instrument was used (Muris, 2001). The SEQ-C instrument contains 24 problems that evaluate three aspects including academic, social, and emotional of Self-Efficacy. Although the validity and reliability of the two instrument has been tested before, the researcher still conducted the validity and reliability test of both instrument so that it would be suitable for the characteristics of the research.

### Data Analysis

In this research, to analyze the data, the researcher used SPSS 21 started from normality test by using Kolmogorof-smirnov, homogeneity test by using Lavene's test, and hypothesis analysis by using Two Way Anova

## RESULT

The analysis of the data was conducted to answer the research problem and to prove the research hypothe-

sis. In this research, there were four research hypotheses. Therefore, in the discussion section the researcher will present the analysis or the result of hypothesis test. Hypothesis test was conducted by using two directional ANOVA. The following is the result of the test that could be seen in Table 1.

**Table 1.** TPSR and Cooperative Learning on the Self-Efficacy Improvement

Source	Df	Mean Square	F	Sig.
Corrected Model	3	13.200	1.614	.196
Intercept	1	23840.267	2914.119	.000
Learning Model	1	.067	.008	.928
Motivation	1	4.267	.522	.473
MP * Motivation	1	35.267	4.311	.042
Error	56	8.181		
Total	60			
Corrected Total	59			

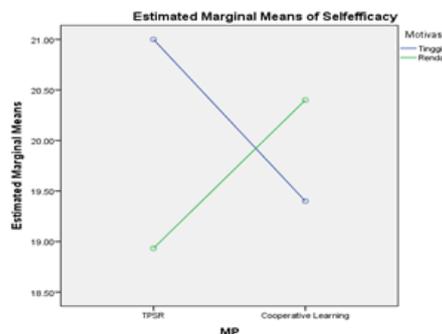
According to table 1, in the Learning model column, it shows that the value of significance 0,928. It indicates that the significance value > 0,05. Therefore, H0 is accepted and H1 is rejected. Therefore, the result concludes that there is no significant self-efficacy difference between TPSR model group and cooperative learning group.

The result of interaction between learning model and motivation on improving self-efficacy can be seen in Table 2.

**Table 2.** Interaction between Learning Model and Motivation on Improving Self-Efficacy

Source	Df	Mean Square	F	Sig.
Corrected Model	3	13.200	1.614	.196
Intercept	1	23840.267	2914.119	.000
Learning Model	1	.067	.008	.928
Motivation	1	4.267	.522	.473
MP * Motivation	1	35.267	4.311	.042
Error	56	8.181		
Total	60			
Corrected Total	59			

According to table 2, the column MP\*motivation shows that the significant value is 0,042. It shows that the significant value is < 0,05. Therefore, H0 is rejected and H1 is accepted. Therefore, the result shows that there is interaction between learning model and motivation on self-efficacy. The following is the picture showing interaction between learning model and motivation of self- efficacy.



**Picture 1.** Interaction between Learning Model and Motivation on Improving Self-Efficacy

**Table 3.** Differences between TPSR and Cooperative Learning model on Improving Self-Efficacy of the Students with High Motivation

Pairwise Comparisons				
Motivation	Learning Model		Std. Error	Sig. <sup>a</sup>
High	TPSR	Cooperative Learning	1.04	.131
	Cooperative Learning	TPSR	1.04	.131
Low	TPSR	Cooperative Learning	1.04	.166
	Cooperative Learning	TPSR	1.04	.166

According to table 3, the high motivation table shows significant value 0,131. It indicates that the significant value is > 0,05. Therefore, H0 is accepted and H1 is rejected. Therefore, the result shows that in general there is no significant effect of TPSR and cooperative learning model on self-efficacy of the students who have high motivation.

The result of differences between TPSR and cooperative learning model on improving self-efficacy of the students with low motivation presented in Table 5.

**Tabel 4.** Differences between TPSR and Cooperative Learning model on Improving Self-Efficacy of the Students with Low Motivation

Pairwise Comparisons				
Motivation	Learning Model		Std. Error	Sig. <sup>a</sup>
High	TPSR	Cooperative Learning	1.04	.131
	Cooperative Learning	TPSR	1.04	.131
Low	TPSR	Cooperative Learning	1.04	.166
	Cooperative Learning	TPSR	1.04	.166

According to table 5, the high motivation column shows the significance level is 0,166. It shows that the significant value is  $> 0,05$ . Therefore,  $H_0$  is accepted and  $H_1$  is rejected. The result indicates that in general there is no effect differences between TPSR and cooperative Learning model on self-efficacy of the students who have low motivation.

## DISCUSSION

### Effect Differences between TPSR and Cooperative Learning model on Self-Efficacy

From the analysis of the data, the result proves that there is an insignificant effect. It indicates that both of the learning model have an equal effect on the improvement of the students' self-efficacy since both of the model have similar characteristics that aims to improve social skills.

The previous research related to TPSR shows that TPSR learning model is an effective teaching instrument for teachers to build responsible behavior (Escartí dkk. 2010). Meanwhile, the previous research related to cooperative learning showed that the implementation of cooperative learning indicates the improvement on social skill and attitude (Goudas & Magotsiou, 2009).

It is probably because there is similarities in learning sequence of the TPSR and cooperative learning model. The TPSR model used daily lesson format containing counseling time, awareness talk, lesson focus, group meeting, and reflection time. Meanwhile, on CL model, there are six phases including delivering objective and motivation, delivering information, organizing students into learning groups, guiding working and learning groups, evaluating, and appreciating.

The implementation of learning model in this research could change the behavior of the students into a better behavior. The habit of disturbing others, laughing at students who did wrong movement, violent behavior, and other negative behaviors decreased through this learning model. It is proven by the changes of behavior that they did during learning process in every meeting through the implementation of cooperative learning model (Yamarik, 2010). Similar with cooperative learning model, TPSR model is effective to change managerial and social behavior into positive direction (Pozo, dkk. 2016).

It is shown that, in the beginning of the meeting, negative behaviors were found that reflect the low level of self-efficacy such as in doing movement task, doubt in making decision, laughing at friends who did mistakes in movement task, doing something that could hurt their friends, and cannot accept the loss.

In the middle period of the research, the negative behavior of the students that reflects the low level of self-efficacy decreased, such as the decrease of mistake in movement task, getting faster in making decision, start to accept the result of competition, rarely laugh at friends who did mistake, and some other still disturbed other students.

At the research period, behavior changes started to be obvious in comparison with the first meeting. It is indicated by the ability of the students in making fast and accurate decision, executing movement task well, accepting the loss and appreciating by giving applause to other students or team who did the task well, the behavior that indirectly hurt others rarely found and the student initiated to say sorry. These behaviors showed the development of value, attitude, and behavior of students to be better.

### **Interaction between Learning Model and Motivation on Improving Self-Efficacy**

The second hypothesis test showed that there is interaction between TPSR model and cooperative learning and group with high motivation level and group with low motivation level. The interaction occurred due to these treatments showed different improvement on self-efficacy.

This research shows difference effects of learning model on motivation group. In high motivation level group, the improvement of self-efficacy is higher in TPSR model, while in the low motivation group, the improvement of the self-efficacy is higher that cooperative learning model. It shows that there is an interaction between learning model and motivation level on self-efficacy.

In TPSR group with high motivation students, during the treatment, this group was more dominant that cooperative learning with high motivation group. It is indicated by the attitude of the students of TPSR group with high motivation during learning showed better initiative and responsibility during learning process in finishing movement tasks, besides that the TPSR group seemed to be more often in helping others who faced problems in finishing movement tasks even they helped other groups such as helping them to take the stuck ball. This finding is strengthened by the previous research that the implementation of TPSR model has impacts on behavior changing of the students such as the decrease of irresponsible behavior, the increase of initiative, and increase the awareness (Balderson, 2006).

Meanwhile, the cooperative learning group with high motivation although seemed to be enthusiast and followed the learning process well, this group had less initiative and awareness on others. It is shown in the learning process, they always wanted to be the winner, and sometimes hurt others for their over enthusiast behavior, and they did not always have initiative to say sorry since they though they did not do that purposively.

For the group with low motivation level, cooperative learning group gain better improvement on self-efficacy that TPSR group. It is shown during the treatment the cooperative learning looked more enthusiast

during learning process. It is shown by the role played by individual in group, helping other group members, keep the cooperation during learning process, and being cooperative. It is supported by the statement of (Slavin, 2015) that cooperative learning refers to earning method that the students learn in small group to help each other during learning.

Meanwhile, TPSR group with low motivation level gained slower changes than other groups, although the improvement of self-efficacy occurred. It is indicated from the beginning of the treatment, the changes happened in the fourth and fifth meeting. In the first three meetings, laughing others, disturbing, took a long time in making decision during doing movement task were often found.

As the time goes by, these groups started to change their behavior into more positive direction. It is shown by the ability of the students to take action and make decision, their initiative to help others, the decrease of mistakes in doing movement task.

Most of the students who received TPSR model were successful in showing self-control, respecting others, and obeying the rules of the game (Filiz, 2017). It is supported by the previous research that stated that learning with TPSR method could build a better attitude of the students and support them to be more independent learners (Gordon, dkk. 2012).

The statement highlights that independent behavior is a behavior owned by an individual as a sign of their tendency to make a choice or decision to take action in their society. Therefore, through TPSR learning model, the students have opportunities to gain high initiative in various things during learning without waiting for instruction from the teachers.

Meanwhile, the cooperative learning model group with high motivation level, although they were enthusiast during learning process, it sometimes became a drawback that they hurt others (not purposively) even the student in their own group. The students who received cooperative learning were motivated to give physical and psychological support and instruction and overcoming others' mistakes (Polvi & Telama 2000).

High motivation is highly needed in school lesson so that the students could follow the learning process optimally, but the over motivation could create

incident during learning. It probably affected the improvement self-efficacy of the cooperative learning with low motivation group. Therefore, it is possible that the improvement of the self-efficacy through TPSR learning model is suitable for the students with the high motivation.

### **Effect Differences between TPSR learning model and Cooperative Learning Model on Self-Efficacy of the Low Motivated Group**

The fourth hypothesis testing is about the effect of learning model on self-efficacy of low motivated group. This test showed an insignificant effect differences of TPSR and cooperative learning model. However, the effect of the cooperative learning model on the low motivated students is better than the TPSR model group.

During the treatment of the group with low motivation, the cooperative learning model group were more dominant during the lesson and more active during the games. It is shown by how the students played their role in group very well. They helped each other (in group), being cooperative, had good communication, appreciated each other.

Cooperative learning helped students to gain social skills through participation in group activities (Lavasani & Afzali, 2016). Besides that, the previous research stated that students who received cooperative learning model were significantly more motivated in learning (Hancock, 2010).

Group is a media for the students to listen when other person talks, practicing self-control, and learning not to disturb others when they are talking. Cooperative learning model would result in empathy among group member, trust of other group member to accomplish an agreement, acceptance and respect others' point of view (López-mondéja, dkk. 2017).

Meanwhile, the TPSR group with low motivation gained slower changes than other groups, although they gained self-efficacy improvement. However, during the treatment, the changes of attitude was slower. The changes started to come up in the fourth and fifth meeting. In the first meetings, laughing others, disturbing behavior, taking a long time to make decision happened.

However, as the time went by, this group started

to change to be more positive. It is indicated by their ability in executing movement task, fast in making decision and taking action, sportive in games, helping others who faced difficulties, and respecting others' point of view. The Hellison model give great impacts on motor, responsibility, and motivation development (Djordjic, 2018). Therefore, it is possible to improve self-efficacy through cooperative learning model for the students with low motivation level.

### **CONCLUSION**

According to the result of theoretical study of dependent variable, moderator variable, and independent variable, it concludes that: First, TPSR learning model and cooperative learning model had impacts on the improvement of self-efficacy and there was no significant differences between the two models. Secondly, there was interaction between learning model and the level of motivation on self-efficacy. The interaction happened since both of the treatments presented different improvement on self-efficacy result. For the group with high motivation, the higher improvement on self-efficacy happened in the group with TPSR learning model. Meanwhile, for the group with the low motivation, the better effect on self-efficacy was gained by the students in cooperative learning model group. Third, teaching personal and social responsibility model was better than cooperative learning model group on self-efficacy improvement on the high motivated group. However, the difference was not significant. Fourth, the cooperative learning model is better than the teaching personal and social responsibility in the improvement of self-efficacy in low motivated group. However, the difference was not significant.

### **REFERENCES**

- Balderson, D. W. (2006). The effects of a personal responsibility model on individual student and class-wide social behaviors.
- Bertills, K., Granlund, M., Dahlström, Ö., & Augustine, L. (2018). Relationships between physical education (PE) teaching and student self-efficacy, aptitude to participate in PE and functional skills: with a special focus on students with disabilities. *Physical Education and Sport Pedagogy*, 23(4), 387–401. <https://doi.org/10.1080/17408989.2018.1441394>

- Dacica, L. (2015). The Formative Role of Physical Education and Sports. *Procedia - Social and Behavioral Sciences*, 180(November 2014), 1242–1247. <https://doi.org/10.1016/j.sbspro.2015.02.256>
- Djordjic, V. (2018). The Effectiveness Of Hellison ' S Model Of Personal And Social Of Personal And Social Responsibility In Physical Education Teaching, (January). <https://doi.org/10.22190/FUPES171110060B>
- Escartí Gutiérrez, M., Pascual, C., & Llopis, R., A. (2010). Implementation of the personal and social responsibility model to improve self-efficacy during physical education classes for primary school children. *International Journal of Psychology and Psychological Therapy*, 10(3), 387–402.
- Fernandez-Rio, J., Sanz, N., Fernandez-Cando, J., & Santos, L. (2017). Impact of a sustained Cooperative Learning intervention on student motivation. *Physical Education and Sport Pedagogy*, 22(1), 89–105. <https://doi.org/10.1080/17408989.2015.1123238>
- Fraenkel, J.R., Wallen, N.E., & Hyun, H.H. (2012). *How To Design and Evaluate Research In Education*. USA: McGraw Hill. Inc
- Filiz, B. (2017). Applying the TPSR Model in Middle School Physical Education, 3084(April), 3–6. <https://doi.org/10.1080/07303084.2017.1281672>
- Gheorghe, Ș. O., & Nicolae, M. (2015). The Usage of Benchmarking as a Specific Management Method within the Experimental Research at University Sport Club. *Procedia - Social and Behavioral Sciences*, 180(November 2014), 1330–1335. <https://doi.org/10.1016/j.sbspro.2015.02.273>
- Goudas, M., & Magotsiou, E. (2009). The effects of a cooperative physical education program on students' social skills. *Journal of Applied Sport Psychology*, 21(3), 356–364. <https://doi.org/10.1080/10413200903026058>
- Green, D. M. (2008). *Journal of Teaching in Social Work Self-Efficacy*, (October 2014), 37–41. <https://doi.org/10.1300/J067v23n03>
- Hancock, D. (2010). Cooperative Learning and Peer Orientation Effects on Motivation, (December 2013), 37–41. <https://doi.org/10.3200/JOER.97.3.159-168>
- Hidayat, Y. (2017). *Pengantar Psikologi Olahraga*. Bandung: CV Bintang WarliArtika
- Lavasani, M. G., & Afzali, L. (2016). *Cypriot Journal of Educational*, (January).
- López-mondéjar, L. M., Ma, L., & Pastor, T. (2017). Development of socio-emotional skills through cooperative learning in a university environment. *Procedia - Social and Behavioral Sciences*, 237(June 2016), 432–437. <https://doi.org/10.1016/j.sbspro.2017.02.086>
- Metzler. (2005). *Instructional Models For Physical Education*. Holcomb Hathaway, Inc
- Muris, P. (2001). A Brief Questionnaire for Measuring Self-Efficacy in Youths, 23(3).
- Polvi, S., & Telama, R. (2000). The Use of Cooperative Learning as a Social Enhancer in Physical Education. *Scandinavian Journal of Educational Research*, 44(1), 105–115. <https://doi.org/10.1080/713696660>
- Pozo, P., Grao-cruces, A., & Pe, R. (2016). Teaching personal and social responsibility model-based programmes in physical education: A systematic review. <https://doi.org/10.1177/1356336X16664749>
- Ronková, J., & Wildová, R. (2016). Reading Strategies Activated in Experimental Research. *Procedia - Social and Behavioral Sciences*, 217, 363–371. <https://doi.org/10.1016/j.sbspro.2016.02.103>
- Slavin, R. E. (2015). Cooperative learning in elementary schools. *Education 3-13*, 43(1), 5–14. <https://doi.org/10.1080/03004279.2015.963370>
- Sugiyono, 2014. *Metode Penelitian Pendidikan*. Bandung: Alfabeta
- Sun, H., Chen, A., Ennis, C., Martin, R., & Shen, B. (2008). An examination of the multidimensionality of situational interest in elementary school physical education. *Research Quarterly for Exercise and Sport*, 79(1), 62–70. <https://doi.org/10.1080/02701367.2008.10599461>
- Tohidi, H., & Jabbari, M. M. (2012). The effects of motivation in education. *Procedia - Social and Behavioral Sciences*, 31(2011), 820–824. <https://doi.org/10.1016/j.sbspro.2011.12.148>
- Weng, X., Chui, W. H., & Liu, L. (2017). Bullying Behaviors among Macanese Adolescents — Association with Psychosocial Variables. <https://doi.org/10.3390/ijerph14080887>
- Yamarik, S., & Yamarik, S. (2010). The Journal of Economic Does Cooperative Learning Improve Student Learning Outcomes? Research in Economic Education Student Learning Outcomes?, (May 2013), 37–41.