

Can 'Reward and Punishment' Improve Student Motivation?

Muhammad Fuad^{1,2}, Edi Suyanto¹, Ulul Azmi Muhammad²

¹Faculty of Teacher Training and Education of University of Lampung, Lampung, Indonesia;

²History Education, STKIP PGRI Bandar Lampung, Indonesia

*Email: abuazisah59@yahoo.co.id

Received for publication: 07 January 2021.

Accepted for publication: 01 March 2021.

Abstract

Learning activities in the classroom will be effective if students are actively involved and enthusiastic in learning. However, effective learning cannot be implemented due to many factors, such as a lack of student motivation. A lack of motivation has been one of the most frustrating obstacles to student learning by teachers. This study identifies the effect and role of reward and punishment by teachers in improving student motivation during classroom learning. This study used an experimental method. Two eleven classes were randomly selected as the experimental class and the control class. This experiment was carried out on Indonesian subjects in a public school in South Lampung, Indonesia. The learning motivation indicators used in the questionnaire include the desire to succeed, the motivation and need for learning, future hopes and aspirations, rewards in learning, interesting learning activities, and a conducive learning environment. Data were analyzed using the instrument test and Theta correlation coefficient test. The results showed that the implementation of reward and punishment had a positive effect on student motivation. The reward and punishment method engages students to be active in various activities, giving rewards as appreciation and punishment as a trigger not to fail, resulting in increased learning motivation. Teachers can use the findings of the current study as a reference and a way to improve student motivation for effective and meaningful learning.

Keywords: reward; punishment; student motivation.

Introduction

In this globalization era, every country is demanded to improve the quality of education, one of which is through equalization and improvement of education. The goal of education is achieved if all parties in an institution, such as a school, have good cooperation and collaboration. Meaningful and effective learning can be realized if a teacher and his students can carry out their respective roles optimally (McLarty & Moran, 2009). The teacher has two roles in the learning process, delivering material and managing class. The teacher as a manager has a role in creating a learning atmosphere that supports students to be actively involved in every activity in the class, making meaningful learning for students. This ideal condition is still difficult to be applied in class due to internal and external obstacles that arise (Dosbenbetova, Kiyassova, Akhmet, Mirzageldiyev, & Aldabergenov, 2020; Yao Dewodo, Agbetorwoka, & Wotordzor, 2019). One of them (Anderman & Hicks, 2013; Collier, 2015) that becomes a scourge for teachers is the lack of student motivation to participate in learning (Jang, Reeve, & Deci, 2010).

Motivation plays an important role in helping achieve one's goals through several stages. The first stage is having an interest, setting a goal, and deciding to take an action accordingly. The next is trying to maintain the interest and struggle to realize the purpose. Slavin (1997) describes motiva-

tion as what gets you going keeps you going and determines where you are trying to go. This concept reveals the reasons for people's actions and thinking as they do (Wlodkowski, 1999). In the classroom context, the concept of student motivation is used to explain the degree to which students invest attention and effort in various pursuits, which may or may not be the ones desired by the teacher. Learning motivation makes the classroom atmosphere more active and has positive effects when learning takes place (Margolang, Hemita, & Antosa, 2019). Students become more active, enthusiastic, and not bored while studying.

The lack of motivation still imposes a serious problem both for teachers and students in classrooms. Timmis et al. (2001) suggest finding out the reasons for the lack of motivation in students by using psychology in the classroom. Thus, teachers must take affective factors into account. Low self-confidence and self-esteem, high anxiety, and inhibition will lead to destroyed motivation levels in students (Engelmann & Pessoa, 2007; Rehman & Haider, 2013). Moreover, teachers' negative attitudes to students and non-supportive classroom environments destroy students' willingness to learn (Dişlen, 2013). Shortage of positive reinforcements, approval, and appreciation of students by teachers has a negative influence on learning motivation. The impact of student low motivation in classroom activities is low enthusiasm in the learning process, leading to an outburst of negative behaviour such as disrupting other students and skipping classes (Anderman & Hicks, 2013; Brewer & Burgess, 2005; Collier, 2015).

Many previous studies sought solutions to improve student motivation by applying rewards and punishment, project-based learning, solution-focused counselling, and gamified flipped classroom environment methods (Asiksoy, 2018; Hardin et al., 2006; Reis, Coelho, & Coelho, 2020; Setiono, 2019; Witte & Grossman, 1971). Of these solutions, the reward and punishment method seemed to be the most-chosen method because it is directly related to the psychological condition of students (Hardin et al., 2006). 'Extrinsic' forms of motivation like rewards and punishments are used by teachers to correct or stimulate certain forms of behaviours (Hegbusi, 2013). They need to understand the implementation of this method more deeply and comprehensively to better improve student motivation. Of particular interest in the present study are the influence and role of the reward and punishment method in improving student motivation in the Indonesian language class. This study answers the question on how the reward and punishment method influences student learning motivation in class. It is expected that this study can provide an overview of the opportunities of implementing the reward and punishment method in Indonesian language learning.

Methodology

This study used an experimental method. Two eleven classes were randomly selected as the experimental class and the control class. This experiment was carried out on Indonesian subjects in a public school in South Lampung, Indonesia. The research stages were (1) treatment of applying reward and punishment method in three meetings and (2) post-test by distributing motivation questionnaires at the end of each meeting.

Data collection techniques were carried out using learning motivation questionnaires and documentation. There are six indicators of learning motivation in the questionnaire; they are (1) the desire to succeed, (2) the motivation and need for learning, (3) future hopes and aspirations, (4) rewards in learning, (5) interesting learning activities, and (6) a conducive learning environment that enables students to learn well. Before being tested, the questionnaire was analysed using Pearson's product-moment correlation test and reliability test, while the Theta correlation coefficient test was performed to determine whether there was a significant effect of the reward and punishment method.

Results and Discussion

The reward and punishment method is a form of positive reinforcement theory from behaviouristics theory (Kubaneck, Snyder, & Abrams, 2015). According to this theory, learning is a change in behaviour as a result of the interaction between stimulus and response. In other words, learning is a change experienced by students in their ability to behave in new ways as a result of the interaction between stimulus and response. Reward and punishment is a form of extrinsic motivation where students participate in an activity to receive a reward or to avoid punishment external to the activity itself (Brewer & Burgess, 2005). In its implementation, this method applies punishment to change and motivate students to avoid predetermined punishment. Meanwhile, giving rewards is a form of motivation as an appreciation for appropriate behaviour to reinforce good behaviour so that it will motivate students in the learning process.

To see the effect of the reward and punishment method on student motivation, testing was carried out in the two classes. Both had normal and homogeneous results after normality and homogeneity tests as shown in Table 1. After the prerequisite tests had been fulfilled, the Theta correlation coefficient analysis was carried out to see the effect of the reward and punishment method. Table 2 shows the relationship criteria and the results of the study. The relationship between the reward and punishment method and improvement of student motivation is in the moderate category, indicating a significant effect with the intensity of the implementation of this method that needs to be increased for a better effect.

Table 1. Results of normality and homogeneity tests

Type of Test	Class	(χ / F) value	(χ / F) table value	Conclusion
Normality Test	Experimental	9.42196	11.070	Normal
	Control	8.18		Normal
Homogeneity Test	2 classes	1.09	1.69	Homogeneous

Based on the average scores of the Indonesian learning motivation (three-time taking), the experimental class scores higher than the control class, $73.5 > 54.7$. Figure 1 shows the number of students from the three categories of motivation levels for each class. High-motivated students dominated the experimental class while the control class was dominated by the low-motivated students. This indicates that the reward and punishment given to the experimental class can create a more active and attractive classroom atmosphere so that students are more motivated in joining learning activities in class. These results are consistent with the previous study (Chang, Fukuda, Durham, & Little, 2017; Lubis, 2019; Rahimi & Karkami, 2015).

Table 2. Results of Theta correlation coefficient test

Interval of CC (Correlation Coefficient) Values	Category Relationship	Results	Interpretation
CC = 0.00	No	0.48875	Moderate category, more frequent implementation of reward and punishment method will improve learning motivation
$0.00 < CC \leq 0.20$	Very low		
$0.20 < CC \leq 0.40$	Low		
$0.40 < CC \leq 0.70$	Moderate		
$0.70 < CC \leq 0.90$	High		
$0.90 < CC \leq 1.00$	Very high		
CC = 1.00	Perfect		

Reward and punishment affect developing and optimizing students' intrinsic motivation through positive relationships established by teachers and students, namely activities that engage students by giving gifts as appreciation and punishment as a trigger not to fail (Kubanek et al., 2015). For a maximum effect, reward and punishment must be tailored to time, place, personality, facilities, and other variables (Margolang et al., 2019).

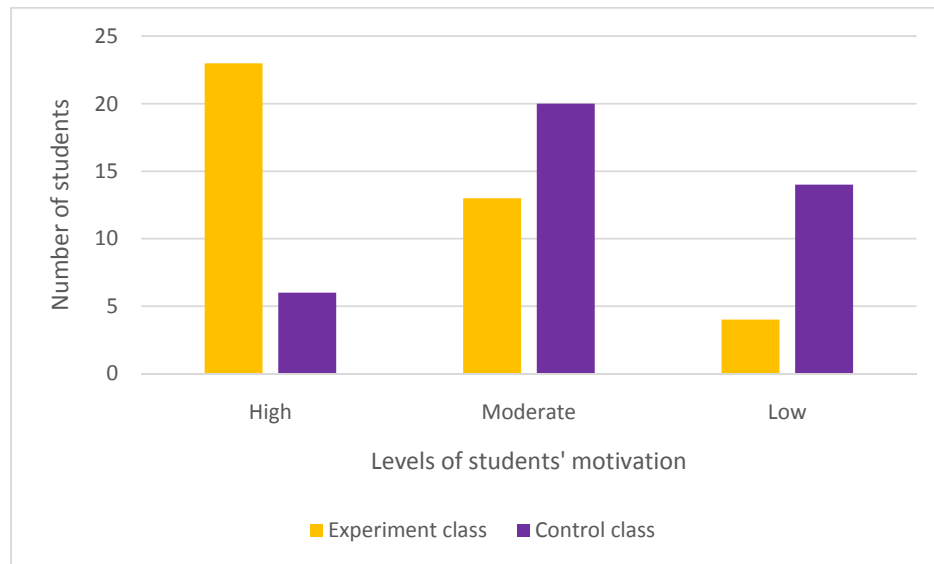


Figure 1. Level of students' motivation

Evertson, Emmer, & Worsham (2003) explained that to prevent bad habits, some teachers used rewards intrinsically and extrinsically. Intrinsic reward is by giving something intangible, such as time with the teacher to build a positive relationship, while the extrinsic reward is by giving gifts, good grades, stickers, candy, or applause that influence the students' behaviour (Evertson et al., 2003; Stevens, 2018). Rewards or reinforcements are considered to reduce tension through satisfying drive conditions like learning is thought to be facilitated more than would normally have been the case (Hegbusi, 2013). Thus, if students know that they will get a reward after completing a certain task, they will be motivated to work hard to get the reward. This reward indeed changes the attention in actual life situations so that an activity originally disliked becomes liked, at least for the reward that will come out of it for the time being and the interest may be sustained for some time beyond the immediate present. The use and effect of rewards seem to go deeper than simply attaching a pleasant tone to an activity (Murty, Labar, & Adcock, 2017). In so as it is not inhibitory in its effects but is positively reinforcing, the actual reward permits more freedom of action to the individual. Students have been known to meet the teacher's challenge and produce excellent work just because they expect to teacher approval or praise or obtain good marks.

Punishment is done to change student behaviour in the future by preventing students from doing something they want to do and encouraging them to do better. The punishment in question takes the form of giving advice and reprimand without violence (Lubis, 2019). Punishment by the teacher is done when students are not orderly in class; for example, they are lazy to learn and make noise in class so that it disturbs the other friends. Punishment can also be like giving a warning to students, advising, and giving other penalties that are not in the form of violence. Penalties are given

to make students concerned feel embarrassed or deterred and make other students not make the same mistakes because they do not want to be punished.

The relative effectiveness of each type of punishment will depend on the individual personality, his cultural milieu, his relationship with the punishing authority, and the situation under which the punishment is inflicted (Lubis, 2019). The ineffectiveness of giving punishment can make students tend to be motivated because of fear. Even if the fear of learning has disappeared, students will always remember it while studying, which is not good to occur permanently (Hegbusi, 2013). The present study recommends changing punishment into positive discipline. Positive discipline is focused on teaching children to do things right rather than giving punishment (Education, 2012). It aims to teach students to understand and obey social rules both in the classroom and outside without physical or emotional violence. Positive discipline refers to teachers working with students instead of working against them (Stevens, 2018). This emphasizes building on learners' strengths rather than criticizing their weaknesses and using positive reinforcement to promote good behaviour.

There are many ways for teachers to create an interesting and fun classroom atmosphere to make students not bored and active in learning activities. The reward and punishment method is one of them. Such a learning process will create a learning atmosphere that is fun, exciting, and motivating for students to better master the material and, eventually, improve their motivation. However, it all depends on the implementation and classroom management by teachers. When it comes to the teacher attitude factor, there is a remarkable interconnection between student motivation and teacher strategies (Ekiz & Kulmetov, 2016). The students admitted that they are more motivated when teachers create realistic learner aims and give clear information related to why they are involved in an activity and its goal. The friendly behaviour of teachers in learning is one of the best strategies to improve student motivation.

Conclusions

The implementation of the reward and punishment method has a moderate effect on improving student motivation. Students compete to get rewards from their teacher and try to avoid punishments given for making mistakes such as disturbing their friends when learning. Activities carried out in class make students more actively involved, making the class livelier. Besides improving motivation, giving rewards can make the relationship between teachers and students closer. On the other hand, over-punishment can create a gap because students feel scared and try to avoid their teacher and classroom learning. Therefore, giving punishment can be replaced with the positive discipline to students. The reward and punishment method is one solution for teachers to improve student motivation. Yet, the teacher's strategy in creating a conducive and fun classroom atmosphere remains the most important factor.

References

- Anderman, E. M., & Hicks, A. (2013). *Classroom Motivation* (2nd ed.). Upper Saddle River: Pearson.
- Asiksoy, G. (2018). The effects of the gamified flipped classroom environment (GFCE) on students' motivation, learning achievements and perception in a physics course. *Qual Ity & Quantity*, 52, 129–145. <https://doi.org/10.1007/s11135-017-0597-1>
- Brewer, E. W., & Burgess, D. N. (2005). Professor's Role in Motivating Students to Attend Class. *Journal of STEM Teacher Education*, 42(3), 23–47.

- Chang, R., Fukuda, E., Durham, J., & Little, T. D. (2017). Enhancing Students' Motivation with Autonomy-Supportive Classrooms. In *Development of Self-Determination Through the Life-Course* (pp. 99–110). Lubbock, TX: Springer. <https://doi.org/10.1007/978-94-024-1042-6>
- Collier, L. (2015). Grabbing Students, Monitor on Psychology. *American Psychology Association*, 46(6), 58.
- Dişlen, G. (2013). The Reasons of Lack of Motivation from the Students' and Teachers' Voices. *The Journal of Academic Social Science*, 1(1), 35–45.
- Dosbenbetova, A., Kiyassova, K., Akhmet, L., Mirzageldiyev, B., & Aldabergenov, N. (2020). Preparation Of Future Teachers For The Realization Of The Tasks Of Schoolchildren's Spiritual And Moral Education. *International Journal of Scientific & Technology Research*, 9(04), 1404–1407.
- Education, D. B. (2012). *Positive Discipline and Classroom Management*. Pretoria: Centre for Justice and Crime Prevention.
- Ekiz, S., & Kulmetov, Z. (2016). The Factors Affecting Learners' Motivation in English Language Education. *Journal of Foreign Language Education and Technology*, 1(1), 18–38.
- Engelmann, J. B., & Pessoa, L. (2007). Motivation Sharpens Exogenous Spatial Attention. *Emotion*, 7(3), 668–674. <https://doi.org/10.1037/1528-3542.7.3.668>
- Evertson, C. M., Emmer, E. T., & Worsham, M. E. (2003). *Classroom Management for Elementary Teachers*. Boston, MA: Pearson Education.
- Hardin, M. G., Perez-Edgar, K., Guyer, A. E., Pine, D. S., Fox, N. A., & Ernst, M. (2006). Reward and punishment sensitivity in shy and non-shy adults: Relations between social and motivated behavior. *Pers Individ Dif*, 40(4), 699–711. <https://doi.org/10.1016/j.paid.2005.08.010>. Reward
- Hegbusi, M. L. (2013). An Analysis of the Role of Rewards and Punishment in Motivating School Learning. *Computing, Information Systems & Development Informatics*, 4(1), 35–38.
- Jang, H., Reeve, J., & Deci, E. L. (2010). Engaging Students in Learning Activities: It Is Not Autonomy Support or Structure but Autonomy Support and Structure. *Journal of Educational Psychology*, 102(3), 588–600. <https://doi.org/10.1037/a0019682>
- Kubaneck, J., Snyder, L. H., & Abrams, R. A. (2015). Reward and punishment act as distinct factors in guiding behavior. *Cognition*, 139, 154–167. <https://doi.org/10.1016/j.cognition.2015.03.005>. Reward
- Lubis, W. M. (2019). Reward and Punishment in English Foreign Language Classroom. *Journal of Education, Linguistics, Literature and Language Teaching*, 2(1), 41–54.
- Margolang, N., Hemita, N., & Antosa, Z. (2019). The Correlations between Reward and Elementary School Students' Learning Motivation. *Journal of Teaching and Learning in Elementary Education (JTLEE)*, 2(1), 64–70.
- Mclarty, L., & Moran, R. (2009). *Engaging all young people in meaningful learning after 16: A qualitative study*. Manchester.
- Murty, V. P., Labar, K. S., & Adcock, R. A. (2017). Distinct medial temporal networks encode surprise during motivation by reward versus punishment. *Neurobiol Learn Mem.*, 134(1), 55–64. <https://doi.org/10.1016/j.nlm.2016.01.018>. Distinct
- Rahimi, M., & Karkami, F. H. (2015). Language Teaching Research The role of teachers' classroom discipline in their teaching effectiveness and students' language learning motivation and achievement: A path method. *Iranian Journal of Language Teaching Research*, 3(1), 57–82.

- Rehman, A., & Haider, K. (2013). The Impact of Motivation on Learning of Secondary School Students in Karachi: an Analytical Study. *Educational Research International*, 2(2), 139–147.
- Reis, S. S., Coelho, F. G., & Coelho, L. P. (2020). Success Factors in Students ' Motivation with Project Based Learning From Theory to Reality. *International Journal of Online and Biomedical Engineering*, 16(12), 4–17.
- Setiono, L. (2019). Implementation of Solutions-Focused Counseling (SFC) to Improve Student Motivation : A Single Subject Research. *Journal of ICSAR*, 3(1).
- Slavin, R. . (1997). *Educational Psychology & Smart Schools*. Boston: Prentice Hall.
- Stevens, A. (2018). Positive Discipline as a Part of Effective Classroom Management. *Honors Theses*, 2973.
- Timmis, P., Leadbetter, J., Morris, S., Knight, G., & Traxson, D. (2001). *Applying psychology in the classroom*. Great Britain: David Fulton Publisher.
- Witte, K. L., & Grossman, E. E. (1971). The Effects of Reward and Punishment upon Children's Attention, Motivation, and Discrimination Learning. *Child Development*, 42(2), 537–542.
- Wlodkowski, R. J. (1999). *Enhancing adult motivation to learn: A comprehensive guide for teaching all adults*. United States of America: John Wiley & Sons, Inc.
- Yao Dewodo, C., Agbetorwoka, A., & Wotordzor, P. (2019). Problems of School Supervision at the Basic School Level in the Hohoe Municipality of Ghana. *American Journal of Educational Research*, 7(2), 133–140. <https://doi.org/10.12691/education-7-2-3>