



The Comparison of Student Learning Motivation Based on the Study Period

Bambang Budi Wiyono¹(✉), Burhanuddin Burhanuddin¹, Dedi Prestiadi¹,
and Arifin Arifin²

¹ Universitas Negeri Malang, Malang 65145, East Java, Indonesia
bambang.budi.fip@um.ac.id

² Universitas Negeri Gorontalo, Gorontalo, Indonesia

Abstract. Learning motivation is one of the variables that determine student achievement. Student learning outcomes will be achieved optimally if the students have high learning motivation. Therefore, to improve student learning outcomes, it is necessary to increase student learning motivation. This study aimed at determining the comparison of student learning motivation based on the study period. By knowing the comparison of student learning motivation, it will be used as a base for maintaining or increasing student learning motivation. This research was conducted at Universitas Negeri Malang and Universitas Negeri Gorontalo, with a total sample of 570 students. Data collection techniques used in this research are questionnaires and were analyzed using descriptive statistics and analysis of variance. The research instrument was developed based on construct variables and validated using total item analysis, and Cronbach's Alpha reliability analysis. The results showed that there were significant differences in students' learning motivation based on their study period. Early semester and final semester students show a higher learning motivation than middle semester students. These findings are discussed from a theoretical point of view and relevant previous research results.

Keywords: Learning Motivation · Study Period · Semester · Students

1 Introduction

Motivation comes from the Latin *movere* which means to move, or in English *motive* which means encouragement. Motive can be interpreted as a power that is within a person who encourages him to do something. Motivation is a motive that has become active.

Looking at its definition, motivation can be interpreted as an internal process that gives strength, direction, and individual resilience to act in certain ways. Kanfer (Hughes, Ginnet & Curphy, 1999a,b) said that motivation is something that gives direction, intensity, and persistence to individual behavior. Motivation cannot be seen, but it can be inferred from the behavior displayed. An individual who has high motivation will do the task seriously. Conversely, someone who has low motivation will not carry out the task seriously.

There are many theories of motivation. The first theory of motivation that has been extensively studied was put forward by Maslow, known as the theory of needs. According

to Maslow, motivation is a driving force in humans that causes humans to act or try to meet their needs. There are five basic human needs, namely physiological needs, safety needs, social needs, esteem, and self-actualization (Steers & Porter, 1991).

Many theories of motivation have been developed by experts. From these various theories, it can be classified into two, namely, motivation which refers to content theory, and motivation which refers to process theory (Kowalsky, 2003). The content theory emphasizes the urge that exists within humans. All humans have the same categories of needs and encouragements, from low to high categories. Process theory sees motivation as a combination of human needs and conditions to fulfill those needs. The emergence of motivation is the result of a combination of human personal conditions and environmental conditions.

In teaching and learning activities, it is known that there is a learning motivation. Learning motivation is the overall psychic moving force within students or students that lead to learning activities. Students who have high motivation have a lot of energy to carry out learning activities. Conversely, students or students who do not have the learning motivation, will not carry out learning activities optimally. Therefore, to improve the student's learning outcomes, it is necessary to increase their learning motivation. Learning motivation is the main determinant of student learning outcomes (Gagne, 1985).

In general, learning motivation can be divided into two, namely intrinsic and extrinsic motivation. Intrinsic motivation is motivation from the inside, namely motivation that is active and functioning comes from the inside, without external stimulation. Meanwhile, extrinsic motivation is the motivation that is active and functioning due to external stimuli. The position of intrinsic motivation is more important than extrinsic motivation.

Several characteristics show high learning motivation in students. These characteristics include: (1) being diligent in facing tasks, (2) being tenacious in the face of difficulties, showing interest in various problems, (3) being happy to work independently, (4) quickly getting bored with routine tasks, (5) can defend his opinion, (6) it is not easy to let go of things that are believed, and (7) likes to find and solve problems.

The size of student learning motivation, in real terms, can be measured by their actions. If students have high learning motivation, they will actively carry out learning activities. Conversely, if students have low learning motivation, they will be not interested in carrying out learning activities. These learning activities can be in the form of activities to take part in face-to-face lectures, activities to do individual assignments, activities to do group assignments, activities to find material sources, activities to solve lecture problems, or carry out learning activities in an integrated way, or independent learning.

This study aimed at comparing students' learning motivation based on their study period. It is suspected that students' learning motivation is not relatively the same during their studies. At the beginning of the study, it is suspected that they have a high learning motivation. Throughout the study, it is suspected that students experience saturation so their learning motivation decreases. However, that is still a question. Therefore, to prove this, this research was carried out. The formulated research hypothesis is that there are differences in student learning motivation based on their study period.

2 Methods

Based on the research objectives, the research design employs descriptive comparative research. This research was carried out by Universitas Negeri Malang and Universitas Negeri of Gorontalo. The research sample was 570 students. The sampling technique uses cluster random sampling.

Data collection techniques employ questionnaires and documentation. The research instrument was developed based on the construct of the research variables. The instrument for measuring student learning motivation is formulated with 20 instrument items. There are five answer choices provided, from strongly agree to strongly disagree, with a score of strongly agree = 5, agree = 4, not decide = 3, disagree = 2, and strongly disagree = 1. For negative statements, a score is given otherwise. Before conducting the implementation, instrument trials were carried out to test the validity and reliability of the instrument. The results of item validity analysis obtained item correlation coefficients with a total of 0.512, 0.390, 0.591, 0.567, 0.497, 0.630, 0.609, 0.620, 0.296, 0.535, 0.378, 0.349, 0.551, 0.516, 0.489, 0.489, 0.603, 0.603, 0.555, and 0.443. All values are above 0.3, and only one is under, but close to 0.3. Thus it can be concluded that the research instrument meets a good level of item validity. The results of the Alpha Cronbach reliability analysis obtained a reliability coefficient of 0.843. The value is above 0.7. Thus, it can be concluded that the research instrument meets the criteria of good reliability (Marten, 2010; Christensen, 2004).

Regarding the research objectives, to process the data, descriptive statistics and analysis of variance were employed. The research aims to compare students' learning motivation based on their study period. There is one dependent variable and one independent variable indicated by the study period group. Therefore, the appropriate analysis technique is the analysis of variance. The calculation is done using SPSS.

3 Results and Discussion

The results of variance analysis are broadly presented in Table 1. Based on Table 1, it can be underlined that there are differences in the mean value of student learning motivation based on the study period. It can be seen successively the highest student learning motivation is in semester 7, followed by semester 1, semester 3, and semester 5. The standard deviation value is relatively small compared to the mean value. Therefore, it can be concluded that there are not too many different students learning motivations from one another. To prove whether the differences are significant, it is necessary to look at the results of the analysis of variance. In general, the summary of the results of the analysis of variance is presented in Table 2.

The results of the variance analysis showed that the F value was 2.724, with a significance of 0.044. The significance value is under 0.05, thus, it can be concluded that there are significant differences in student learning motivation based on the study period. To find out which groups are different, it is necessary to do a post hoc analysis. In this study, the Bonferroni analysis technique was used. The results of the analysis are presented in Table 3.

Based on Table 3, it can be seen that students who have a significance value of <0.05 are students who are in the 5th and 7th semesters of study. Thus, it can be concluded

Table 1. Mean Value and Standard Deviation of Student Learning Motivation

Semester	N	Mean	Std. Deviation
Semester 1	31	81.00	5.550
Semester 3	192	79.55	8.611
Semester 5	275	78.27	7.700
Semester 7	72	80.64	7.568
Total	570	79.15	7.944

Table 2. Results of Variant Analysis of Student Learning Motivation

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	511.103	3	170.368	2.724	.044
Within Groups	35399.811	566	62.544		
Total	35910.914	569			

that the a significantly different in the learning motivation of students in semester 7 and semester 5.

The highest student motivation is in semester 7, and the lowest is in semester 5. It can be underlined because students in semester 7 are preparing a thesis, so they are more independent in doing learning activities, while the lowest point of student learning motivation is suspected of experiencing saturation. In the high initial semester, semester 3 decreased, and the lowest was in semester 5, while semester 7 experienced an increase due to completing the final assignment, so the motivation to study to complete the final assignment was relatively high. The description of student learning motivation can be presented in the form of Fig. 1 as follows.

Based on Fig. 1, it is seen clearly that the highest student learning motivation is in semester 7, followed by students in semester 1, semester 3, and finally semester 5.

Learning motivation is one of the important aspects that can influence the success of student learning in tertiary institutions. Students who have high motivation in learning will affect high achievement of learning outcomes. On the other hand, students who have low learning motivation will have low learning outcomes. In addition, students who have high learning motivation will have more opportunities to succeed in their studies than those who do not have learning motivation (Medicine et al., 2018; Patrick, 2011; Potter, 2020; Wlodkowski, 2008). The results of the research can be seen in the Table 1, it shows that students who have high motivation will influence the results of student learning outcomes. It can be seen from the data that successively the highest student learning motivation is in semester 1 with a score of 81.00, then semester 7 with a score of 80.64, then semester 3 with a score of 79.55, and semester 5 with a score of 78.27.

Table 3. Results of Post Hoc Analysis of Student Learning Motivation

Multiple Comparisons						
LSD		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) semester	(J) semester				Lower Bound	Upper Bound
1	3	1.453	1.531	.343	-1.55	4.46
	5	2.735	1.498	.069	-.21	5.68
	7	.361	1.699	.832	-2.98	3.70
3	1	-1.453	1.531	.343	-4.46	1.55
	5	1.281	.744	.085	-.18	2.74
	7	-1.092	1.093	.318	-3.24	1.05
5	1	-2.735	1.498	.069	-5.68	.21
	3	-1.281	.744	.085	-2.74	.18
	7	-2.373*	1.047	.024	-4.43	-.32
7	1	-.361	1.699	.832	-3.70	2.98
	3	1.092	1.093	.318	-1.05	3.24
	5	2.373*	1.047	.024	.32	4.43

*The mean difference is significant at the 0.05 level.

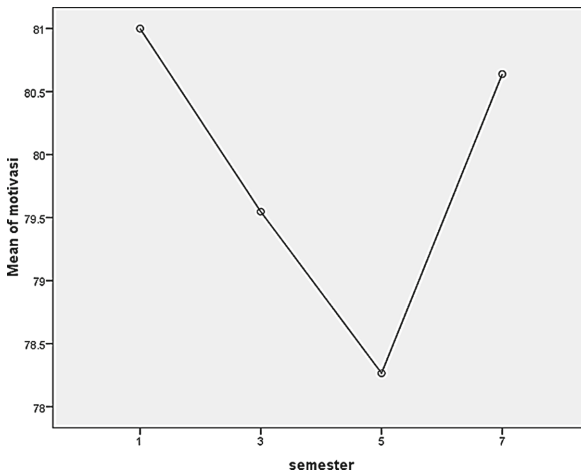


Fig. 1. Student Learning Motivation Level in Semesters 1, 3, 5, and 7

Based on the results of this study, it can be seen that in the early and final semesters, students with high levels of motivation show higher learning outcomes compared to students in the middle semester where learning motivation has begun to decrease. Such conditions are acceptable, student learning motivation can increase or decrease. Learning

motivation can arise because of intrinsic encouragement in the form of a desire from within the desire to succeed, the encouragement to learn, and the hope of ideals. While the extrinsic factor is the existence of encouragement from outside which can be in the form of environmental awards and a conducive learning atmosphere (Uno, 2021), (Dörnyei, 2020; Dörnyei & Ushioda, 2013; Lasagabaster et al., 2014; Paris et al., 2017). Research from Saptono showed that intrinsic motivation is more durable and stronger than extrinsic motivation to encourage interest in learning. However, extrinsic motivation can also be very effective because interest is not always intrinsic. Good teachers, fair and objective grades, many learning opportunities, a warm and dynamic classroom atmosphere are effective sources of extrinsic motivation to increase interest and learning behaviour (Saptono, 2016). It was also reinforced by another study conducted by Palittin et al. which conducted a study of the relationship between motivation and student learning success. The results of the study concluded that the level of motivation is always used as an indicator of the merits of student learning achievement. Students who like certain subjects will be happy to follow and eagerly learn it. Motivation will determine the level of student achievement (Palittin et al., 2019). Meanwhile, according to Aritonang, the main factors that influence learning motivation are the way of teaching of the teacher, the teacher's character, the class atmosphere is calm and comfortable, and the learning facilities (Aritonang, 2008).

Student learning motivation also has an impact on student learning outcomes. From the research results in Table 2, data is obtained if the F value is 2.724, with a significance of 0.044. The significance value is below 0.05, thus, it can be concluded that there are significant differences in students' learning motivation based on their study period. Furthermore, to see which groups are different, it is necessary to do a Post Hoc analysis of student learning motivation. From the results of the Post Hoc analysis which can be seen in Table 3, it is known that those who have a significance value of < 0.05 , are students who are in semester 5 and semester 7. Based on these data it can be concluded that what is significantly different is the learning motivation of semester 7 students and semester 5. The highest student motivation is in semester 7, and the lowest is in semester 5.

Based on the research findings, indicates that there are differences in motivation based on the student's study period. Students in the final semester seem to experience an increase in motivation when compared to the students in the middle semester. This condition can occur due to the influence or encouragement from both internal and external which causes changes in learning behavior (Middleton & Perks, 2014; Spector & Park, 2017; Takahashi, 2022). Of course, it has a big role in increasing learning motivation and learning success (Gonida & Lemos, 2019; Hartnett, 2016; Hoffman, 2015; Hymans, 1999; Wigfield & Guthrie, 2013). This condition is related to the indicators of learning motivation which can be seen from; 1) there is a strong desire and encouragement, 2) there is an encouragement and need in learning, 3) there are hopes and ambition for the future, 4) appreciation in learning, 5) interesting learning activities, and 6) an interesting learning environment (Uno, 2021).

Regarding this theory, final semester students generally begin to increase due to the targets to complete their final assignments and pursue timely graduation. This indicates that the strong desire and hope of students to complete the final assignment quickly and that they want to graduate on time influences increasing student motivation in achieving

their learning outcomes. Besides that, the encouragement of future hopes and ambitions also influences the increase in student learning motivation. Students in the early semester generally have high motivation at the beginning of the semester because of their high ambition to achieve their goals, so this research is relevant to the study of motivation theory if hopes and ambitions are some of the indicators that can affect student learning motivation. Meanwhile, on the other hand, it is also known that in the middle semester students experience a decrease in learning motivation, this can occur because, in the middle semester, students begin to experience saturation which can occur due to internal and external encouragement.

Based on the results of this study, it is related to the previous theories and research which state that learning motivation has a strong influence on learning success (Hasan & Tolga, 2021; Pintrich et al., 2012; Ross, 2002). Therefore, it is necessary to have efforts made by both lecturers and students to always increase learning motivation. One of the main factors that influence interest and motivation to learn is the way of teaching the lecturer, the character of the lecturer, and the condition including the calm and comfortable classroom atmosphere, as well as the learning facilities (Katznelson et al., 2017; Renninger & Hide, 2019). The lecturers also need to apply the conceptualization of “expectations and rewards” which is also following Bandura’s theoretical construct known as “social cognitive theory”, where teachers can generate motivation to learn in their students through several sources, namely: projections/estimates about the possibility of success or failure; knowledge about the consequences/effects of success or failure based on one’s own experience or observation of the experiences of others; based on an interpretation of one’s abilities in a particular field (Saptono, 2016).

4 Conclusions

Based on the results of the study, there are differences in student learning motivation based on their study period. The highest student learning motivation is in the first semester (1) and the final semester (7). This is understandable because new students relatively have high learning motivation because they are still new and their curiosity in lectures is still very high. As time goes by, the students experience a decrease, because it is suspected that there is saturation in learning. At the end of the studies, the motivation to study increased again, because in the final semester many courses had already been completed, and all that remained was to complete the final project, namely the thesis. Therefore, in this case, students learn a lot independently, so their learning activity is very high. Therefore, the data understood that the learning motivation score rose again. Based on these findings, to maintain and increase students’ learning motivation, it needs to look at their study period. In the second and third years, student learning motivation tends to decrease, because it is suspected that they are experiencing saturation. Therefore, lecturers should provide better teaching and learning processes, to increase student learning motivation. Likewise, management in study programs, faculties, and universities needs to do better management in providing services to students, both learning and administration. This research can be followed up to obtain more comprehensive findings. Future researchers need to examine more deeply from the substance side, supplemented by qualitative research methods, to obtain more comprehensive results.

References

- Hughes, R.L., Ginnet, R.C., & Curphy, G.J. (1999). *Leadership: Enhancing the lessons of experience*. Boston: McGraw-Hill Companies, Inc.
- Aritonang, K. T. (2008). Minat dan Motivasi dalam Meningkatkan Hasil Belajar Siswa. *Jurnal Pendidikan Penabur*, 10(7).
- Dörnyei, Z. (2020). *Innovations and Challenges in Language Learning Motivation*. Routledge.
- Dörnyei, Z., & Ushioda, E. (2013). *Teaching and Researching: Motivation*. Routledge.
- Gagne, M. (2014). *The Oxford Handbook of Work Engagement, Motivation, and Self-Determination Theory*. Oxford University Press.
- Gonida, E. N., & Lemos, M. S. (2019). *Motivation in Education at a Time of Global Change: Theory, Research, and Implications for Practice*. Emerald Group Publishing.
- Hartnett, M. (2016). *Motivation in Online Education*. Springer.
- Hasan, U., & Tolga, K., Alper. (2021). *Motivation, Volition, and Engagement in Online Distance Learning*. IGI Global.
- Hoffman, B. (2015). *Motivation for Learning and Performance*. Academic Press.
- Hughes, R.L., Ginnet, R.C., & Curphy, G. (1999b). *Leadership: Enhancing the lessons of experience*. McGraw-Hill Companies, Inc.
- Hymans, M. (1999). *Motivation to Learn in the Secondary School*. Taylor & Francis Group.
- Katznelson, N., Sørensen, N. U., & Illeris, K. (2017). *Understanding Learning and Motivation in Youth: Challenging Policy and Practice*. Routledge.
- Lasagabaster, D., Doiz, A., & Sierra, J. M. (2014). *Motivation and Foreign Language Learning: From theory to practice*. John Benjamins Publishing Company.
- Medicine, N. A. of S., Engineering, and, Education, D. of B. and S. S. and, Education, B. on S., Sciences, B. on B., Cognitive, and Sensory, & Learning, C. on H. P. L. I. T. S. and P. of. (2018). *How People Learn II: Learners, Contexts, and Cultures*. National Academies Press.
- Mertens, D. M. (2019). *Research and Evaluation in Education and Psychology: Integrating Diversity With Quantitative, Qualitative, and Mixed Methods*. SAGE Publications.
- Middleton, M., & Perks, K. (2014). *Motivation to Learn: Transforming Classroom Culture to Support Student Achievement*. Corwin Press.
- Palittin, I. D., Wolo, W., & Purwanti, R. (2019). Hubungan Motivasi Belajar Dengan Hasil Belajar Siswa. *Magistra: Jurnal Keguruan Dan Ilmu Pendidikan*, 6(2), Article 2. <https://doi.org/10.35724/magistra.v6i2.1801>
- Paris, S. G., Olson, G. M., & Stevenson, H. W. (2017). *Learning and Motivation in the Classroom*. Routledge.
- Patrick, F. (2011). *Handbook of Research on Improving Learning and Motivation through Educational Games: Multidisciplinary Approaches: Multidisciplinary Approaches*. IGI Global.
- Pintrich, P. R., Brown, D. R., & Weinstein, C. E. (2012). *Student Motivation, Cognition, and Learning: Essays in Honor of Wilbert J. Mckeachie*. Routledge.
- Potter, S. M. (2020). *How to Motivate Your Students to Love Learning*. Skaludy Press.
- Renninger, K. A., & Hidi, S. E. (2019). *The Cambridge Handbook of Motivation and Learning*. Cambridge University Press.
- Ross, B. H. (2002). *Psychology of Learning and Motivation: Advances in Research and Theory*. Elsevier.
- Saptono, Y. J. (2016). Motivasi Dan Keberhasilan Belajar Siswa. *Regula Fidei: Jurnal Pendidikan Agama Kristen*, 1(1), Article 1.
- Spector, J. M., & Park, S. W. (2017). *Motivation, Learning, and Technology: Embodied Educational Motivation*. Routledge.
- Takahashi, C. (2022). *Motivation to Learn Multiple Languages in Japan: A Longitudinal Perspective*. Channel View Publications.

- Christensen, P. N., Rothgerber, H., Wood, W., Matz, D. C. (2004). *Social norms and identity relevance: a motivational approach to normative behavior*. *Pers Soc Psychol Bull.* 30(10):1295–309. doi: <https://doi.org/10.1177/0146167204264480>. PMID: 15466602.
- Dörnyei & Ushioda (2013). *Teaching and Researching: Motivation*. London: Routledge.
- Steers, D., & Porter, F. (1991). *Citation Information: J Clin Invest.* 88(5):1709–1715. <https://doi.org/10.1172/JCI115488>.
- Gagné, Robert M. (1985). The conditions of learning. *Includes indexes*. Bibliography: pp. 331–349.
- Kowalsky, M. J. (2003). The Limitations and Performances of Different Displacement Based Design Methods. *Journal Of Earthquake Engineering*, 4(3):201–241.
- Marten, Gerald G. (2010). *Human Ecology Basic Concepts for Sustainable Development*. Routledge.
- Uno, H. B. (2021). *Teori Motivasi dan Pengukurannya: Analisis di Bidang Pendidikan*. Bumi Aksara.
- Wigfield, A., & Guthrie, J. T. (2013). *Motivation for Reading: Individual, Home, Textual, and Classroom Perspectives: A Special Issue of educational Psychologist*. Routledge.
- Wlodkowski, R. J. (2008). *Enhancing Adult Motivation to Learn: A Comprehensive Guide for Teaching All Adults*. Wiley.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

