

The Effect of Stop Motion Learning Media on Learning Motivation

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ABSTRACT

Less innovative learning media causes students to be less motivated in learning physical education. This study aims to determine the effect of stop motion media on learning motivation. The method used in this research is an experiment with a one-shot case study design. The sample used is class XI as many as 45 students. The sampling technique is purposive sampling. The instrument used is a questionnaire of 27 statements for learning media and 26 statements for learning motivation with a Likert scale. The results of the research obtained are stop motion learning media has an effect of 9.1% on learning motivation. The conclusion in this study is that stop motion learning media can be used as a solution to increase students' learning motivation.

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1. INTRODUCTION

Teachers and students play their respective roles in facilitating learning activities; the interaction between students and students must always be built to improve communication and discussion about learning activities (Bahri et al., 2021). The teacher's responsibility is to ensure that students can gain a lot of knowledge and achieve maximum goals. The teacher is not the only source of learning but can also be obtained from learning resources from other students, which are obtained based on phenomena or experiences. Learning has been defined functionally as changes in the behavior that result from experience or mechanistically as changes in the organism that result in experience (de Houwer et al., 2013). The success of the learning process is determined by the teacher's role in using the facilities, methods, and learning media used and the high learning motivation of students. This is very important for the success of the learning process, especially in physical education learning. Through physical education learning, students can participate to show their talents physically.

Physical education is explicitly and directly responsible for the health education of children and young people. Physical education teachers are now responsible for the holistic development of students' physical, social, emotional, and mental well-being (Gray et al., 2018). Almost all educational institutions have physical education lessons. These subjects are included in the matters contained in the curriculum, which are considered to increase students' movement activities. the school has long been identified as an

essential venue for the provision of physical activity, especially during physical education (Kahan & McKenzie, 2015).

Sufficient physical activity is essential in promoting physical and mental health outcomes, like improving aerobic fitness, promoting cognitive development, reducing adiposity rate, and preventing depressive symptoms (Zhan et al., 2021). The existence of physical education can increase changes in children's motivation so that physical education is helpful for exploring changes in each individual and making students motivated to do movement activities (Warburton & Spray, 2017). Learning media are all physical equipment and materials used by instructors, lecturers, teachers, tutors, or other educators in carrying out learning and facilitating the achievement of learning objectives (Reiser & Dempsey, 2012). In an increasingly advanced learning era, of course, educators must have innovations to develop or create good media and on the characteristics of students. Learning media is the right tool to deliver exciting learning materials. They can increase student motivation to be more enthusiastic in the learning process. One of the learning media that is very much discussed is stop motion teaching media.

Stop motion or better known as animation utilizes images to move. The development of animation-based learning media is based on authentic photos of the action on objects and illustrates the forces on these objects (Sastradika et al., 2021). The limitations of communication and meetings due to online learning require teachers to adapt appropriate learning methods and models so that students can receive the material optimally; the advantages of using stop motion learning videos are that they can display an event quickly and can shorten learning time. Still, it includes all material concepts taught that way (Husniah et al., 2020). The use of animation media is more meaningful than other media, such as graphics, audio, etc. Learning media using stop motion animation techniques can facilitate students to have 4C abilities, especially creativity abilities. Animations have been readily available for learning in many content areas, but in nearly all cases, these have been expert generated with students interpreting the information presented (Hoban & Nielsen, 2014). Using media such as stop motion video technology can provide a reasonable explanation through visualization of subject matter to be understood by students (Milkova, 2015). The effectiveness of using stop motion learning media in learning has a high level; it is known that in the small group experiment, a score of 0.9 with high qualifications was obtained, and in the significant group test, a score of 0.8 with increased capabilities (Firdaus et al., 2020). Audiovisual media is very effective in improving student learning outcomes; about 90% of individual learning outcomes are obtained through sight and 5% from hearing, and 5% from other senses. While in the study, 83% was obtained from view, 11% from hearing (T. I. Putri et al., 2019). In another study, it was also stated that there was an influence on the application of animation video-based basketball learning media; the research was conducted in 3 schools, the first school was declared effective with a percentage increase of 25%, the second school was 25.45%, and the third school was 19.03% (T. I. Putri et al., 2019). Several other studies often use stop motion with the type of animated video, but in this study, we will use stop motion learning media with the kind of cutout animation. Cutout animation is a type of animation involving pieces of paper that will be made according to the required shape. Cut-out animation is one way of storytelling animation in which the characters are flat 2d characters designed using forms, scissors, and colors (Anumasa et al., 2013).

This study will focus on the influence of stop motion media on students' motivation when participating in the learning process. Motivation is one factor that encourages students to want to learn (Emda, 2017). A person will succeed in learning if he desires to learn; the desire to learn is called motivation (Schunk, 2012). However, the results of the research by Kao & Luo (2019) stated that as many as 115 students in Taiwan had low learning motivation towards physical education. Research conducted by Yli-Piipari et al. (2009) related to learning motivation of as many as 429 students in Australia in physical education with the result that 52% of students have low learning motivation both internal and external learning motivation. The results of the Granero-Gallegos et al. (2012) study on student motivation in 2002 in Spain in terms of gender and length of practice showed that as many as 463 boys who did less than 3 hours of physical activity per week had moderate learning motivation, as many as 545 girls who did less than 3 hours of physical activity. hours per week have low learning motivation, and as many as 910 boys

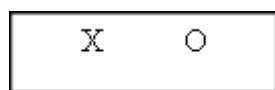
who do physical exercise for more than 3 hours per week have high learning motivation. Student learning motivation in Indonesia from the results of Davilla (2018) shows that students' intrinsic motivation has an achievement level of 78.93%, which is classified as adequate, while students' extrinsic motivation has an achievement level of 77.30%, which is classified as sufficient. Another study conducted by Hendri (2020) showed that 78.90% of intrinsic motivation was in a good classification, while 60.28% of extrinsic motivation was in a fairly good classification. The results of Sin & Hudayani (2020) are that the achievement of students' intrinsic motivation scores in participating in the physical education learning process is 37.72%, while the achievement of students' extrinsic motivation scores in participating in the physical education learning process is 42.98%, all of which are included in the low category.

Each student's motivation is different and influenced by several factors, namely intrinsic and extrinsic factors. Intrinsic factors that often appear in male students are the need for power, competition, and challenge, while outside factors that mostly encourage female students are weight control and appearance. Motivation significantly affects individual performance in situations where a person is physical to perform tasks that can indirectly affect effectiveness in learning (Kondrić et al., 2013).

Motivation is an essential aspect of the learning process; if students have high motivation, they will get maximum results. If students have strong motivation, students will try to fulfill the achievement or learning objectives optimally. Based on the results of the literature review and logical arguments, the solution obtained is to develop an instrument that can be used to measure/assess the motivation of students. The determination of the motivational assessment instrument in this study was in the form of a questionnaire (questionnaire). Therefore, this study aims to determine the effect of the application of stop motion media on learning motivation.

2. METHODS

This research is quantitative. The selection of quantitative research is based on Arikunto's (2013) opinion, including (1) clarity of elements in the form of goals, subjects, and data sources that are solid and detailed from the start, (2) can use samples, (3) clarity of research design, and (4) Data analysis was carried out after all data were collected. The research data obtained in the form of numbers are described by the data obtained. The method used in this research is an experiment with a one-shot case study design which is presented in Figure 1



Picture 1. One Shoot Case Study

X = Treatment given (Independent Variable)

O = Observation / Result (Dependent Variable)

This research was conducted at the Bandung National High School. The sample used was 45 students of class XI. The sampling technique used is purposive sampling. This technique was chosen because not all models have criteria that match the phenomenon under study (Sugiyono, 2016)

The instrument used is an open questionnaire consisting of 27 statements for stop motion media and 26 statements for learning motivation. Stop motion requires more information; more statements are given than statements for motivation indicators. Student responses to this questionnaire used a Likert scale ranging from 1-5, at a value of 1 = strongly disagree, 2 = disagree, 3 = disagree, 4 = agree, 5 = strongly agree. There are several indicators that are assessed on the stop motion indicator, namely the ease of the material, the clarity of the material, and the understanding of the material in the form of stop motion.

Analysis of the validity and reliability of the questionnaire using the SPSS version 21 application. For testing the fact using the product-moment test and reliability using Cronbach's alpha. It is said to be valid if t is more significant than 0.05 and reliable if the alpha coefficient is greater than 0.60. How to use validity and reliability and the conditions are good if the sign is less than 0.05 and the correlation is positive. Cronbach's alpha value is more than 0.60. Data on the effect of using stop motion media on learning

motivation was analyzed using a simple linear regression test with the help of SPSS 22. The hypothesis used in this study is H0. There is no linear relationship between stop motion learning media on learning motivation, while H1: there is a linear relationship between the media stop motion learning on learning motivation. The use of stop motion media can be said to have a linear relationship between stop motion learning media and learning motivation if the significance value is less than the significance level ($\alpha = 0.05$), whereas if the significance value is greater than the significance level ($\alpha = 0.05$), the means that there is no linear relationship between stop motion learning media on learning motivation. Furthermore, to see the percentage of the influence of stop motion learning media on learning motivation, you can see the value of R square.

3. FINDINGS AND DISCUSSION

Findings

The learning motivation questionnaire data that has been obtained were analyzed using a simple linear regression test. The first analysis is done by looking at the value of R square. The value of R Square or the coefficient of determination (KD) indicates how well the regression model is formed by the interaction of the independent variable and the dependent variable. The results of the R Square value are presented in Table 1.

Table 1. Value of R Square

Variabel	R	R square
Learning Motivation	0.302	0.091

Other variables outside of the stop motion learning media. Table 1 shows that the value of R square or the coefficient of determination obtained is 9.1% which can be interpreted that stop motion learning media has a substantial contribution effect, namely 9.1% on learning motivation, and other factors influence the additional 90.9%. The second analysis was carried out by looking at whether there was a linear relationship between stop motion learning media and learning motivation, as presented in Table 2.

Table 2. Linear Relationship of Learning Media on Learning Motivation

Variabel	Sig
Learning Motivation	0.039

Table 2 shows that the significance value obtained is less than the significance level ($\alpha = 0.05$), so it can be concluded that there is a linear relationship between stop motion learning media and learning motivation.

Discussion

Learning media is very necessary in today's online-based education world. In the world of online based education, it has limitations in delivering material due to limited meetings and available time. At the end of the learning process, it is difficult for students to receive the material. The learning objectives are not achieved optimally for teachers who have difficulty providing material, especially in the physical subject matter, which is essentially a subject that requires an assessment of skills. Students must have critical thinking skills to solve existing problems, including in the learning process. Physical education is often done outside the room to carry out movement activities in delivering material. Outdoor physical activity is preferable; adding active components to all videos would provide at least adequate physical activity levels (Norozzi et al., 2020). Solving skills need to be trained from an early age; students will be more memorable if they are curious about the provision of material in the learning process. This curiosity will trigger the motivation of students to carry out learning. Teachers play an essential role in overcoming these problems. The teacher does not only provide knowledge material,

but the teacher must also be able to create conditions and situations for students when the learning process takes place. To trigger curiosity to increase students' motivation in learning, teachers can use appropriate learning methods and models so that students can play an active role in growing thinking, reasoning, critical, and intelligent power in the learning process. A simple linear regression test by looking at the R square or the coefficient of determination shows that the stop motion learning media has a substantial contribution effect, namely 9.1%, on learning motivation. The other 90.9% is influenced by other factors outside the stop learning media variable motion. The cause of each student is different and influenced by several factors, namely intrinsic and extrinsic factors.

Intrinsic factors that often appear in male students are the need for power, competition, and challenge, while outside factors that mostly encourage female students are weight control and appearance. Motivation significantly affects individual performance in situations where a person is physical to perform tasks that can indirectly affect effectiveness in learning (Kondrič et al., 2013). The use of stop motion media is used as a teacher's tool for communication with students. With the provision of this media, it can increase students' motivation to be able to solve problems during the learning process; this was expressed by several students when interviewed who stated that the provision of media Stop motion is exciting and makes it a challenge for students, because during the learning process students are required to be able to imagine, reason, analyze, and identify from the learning videos provided through stop motion media.

Husniah et al., (2020) explain that the advantages of using stop motion learning videos are that they can display an event quickly and shorten learning time. Still, it includes all the concepts of the material being taught. The use of animation media is more meaningful than other media, such as graphics, audio, etc. Research by H. E. Putri et al., (2020) explains that audiovisual media is very effective in improving student learning outcomes; about 90% of individual learning outcomes are obtained through sight and 5% from hearing, and 5% from other senses. While in the study, 83% was obtained from view, 11% from hearing. The multiple linear regression test can also be seen whether there is a linear relationship between the media and learning motivation. The results showed that the significance value obtained was less than the significance level ($\alpha = 0.05$), so it can be concluded that there is a linear relationship between stop motion learning media and learning motivation. This is also to the research results revealed by Mudita & Saptaningrum, (2017), stating that in addition to using the correct method, other efforts that can be made are using learning media as a tool for teachers to communicate with students. The use of stop motion video is a good study guide in the learning process because students can learn anywhere and anytime, and it can be repeated continuously. IT-based learning media can increase an active and fun learning atmosphere. The use of stop motion media has a positive impact on students, namely in terms of activity when the learning process takes place; the advantage of using stop motion media is that it can be stored for a long time so that the media can be repeated according to existing needs. Sumardi, Umamah, (2020) explains that the effectiveness of using stop motion learning media in learning has a high level; it is known that in the small group experiment, a score of 0.9 with high qualifications, and in the significant group test a score of 0.8 with increased capability. Similar research was also revealed by Ahmad Sulaiman, (2016), stating that the use of stop motion media can influence students' interests, motivation, and learning outcomes. This can be seen in the learning; students' attention is more focused, thus creating a vibrant and conducive classroom atmosphere. Students seemed enthusiastic during the learning process by giving their respective opinions.

4. CONCLUSION

The results showed that the stop motion learning media had a considerable contribution effect, 9.1%, on learning motivation. The other 90.9% was influenced by other factors outside the stop motion learning media variable. In addition, the study results also show that there is a linear relationship between stop motion learning media and learning motivation. This research can contribute to further

research to increase learning motivation in physical education subjects which are carried out online, and provide innovations in using alternative learning media for physical education teachers.

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