Quickly Understanding on Progressive Muscle Relaxation with Video-based Learning in Secondary School Students

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Abstract Progressive muscle relaxation can improve students' learning performance in the classroom because it provides a good focus during classroom learning sessions in developing technical communication for educational institutions. This study aims to determine the effectiveness of video-based learning on the understanding of secondary school students related to Progressive Muscle Relaxation. The research was a quantitative descriptive method. Based on research that has been done, researchers found differences in students' understanding between before and after watching videos related to progressive muscle relaxation. In this study, respondents need to answer questions raised by researchers before viewing the video and after watching the video. The respondents in this study were only six students. The percentage of respondents who answered the question correctly after seeing the video provided by the researcher rose quite significantly. Respondents are interested in the video provided, and respondents can understand the video content they want to convey. The use of video in teaching and learning is beneficial for students to increase their interest and demand Progressive Muscle Relaxation knowledge. Video-based learning can be implemented in teaching and learning in various fields of education. Visual lessons are more quickly remembered and understood by students. Learning to use videos can increase student's interest in learning new things.

Keywords Understanding, Progressive Muscle Relaxation, Video-based Learning, Secondary School Students

1. Introduction

Stress is a person who experiences physical or mental instability related to daily life. Stress also includes anxiety, fatigue, and depression due to a problem that cannot be overcome. Stress and anxiety often occur in a person, including the students. During the learning session,

students need to complete various tasks given by the teacher. Teachers provide much work to students because they want to make sure their students understand the learning content delivered in class. Therefore, students can suffer from stress because many tasks must be completed. One positive way to deal with stress is with specialist therapy in psychiatric nursing through Progressive Muscle Relaxation (PMR), which is part of relaxation therapy (Dolbier & Rush, 2012). Progressive muscle relaxation is a non-pharmacological therapy (Ekarini et al., 2019). Progressive muscle relaxation is a stress management technique that is widely used (Chellew et al., 2015). A continuous muscle relaxation technique is a technique that is done by stretching the muscles and then doing muscle relaxation. Some of the benefits of this technique include reducing muscle tension, anxiety, neck and back pain, building positive emotions from negative emotions. The indications for progressive muscle relaxation techniques are those with insomnia, frequent stress, anxiety, and depression.

Progressive muscle relaxation, as an additional method, can reduce anxiety and improve sleep quality (Liu et al., 2020). Progressive muscle relaxation is also very effective in reducing feelings of stress and acute anxiety (Vancampfort et al., 2011). With continuous muscle relaxation therapy, students can reduce the presence of muscle tension after doing many activities at school. Students will feel pain in their muscles after a day at school with a variety of activities and the number of assignments given. Therefore, students need to do progressive muscle relaxation to reduce pressure on their muscles. Muscles that experience fatigue or pain will make students unable to focus in class for learning sessions. Relaxation can adjust the hypothalamus reaction with the parasympathetic nerve. These conditions allow the body to reduce heart rate, blood pressure, metabolism, and respiratory rate and lower oxygen use and muscle tension (Feldman et al., 2010). Student learning performance deteriorates and will result in students trapped in high-stress situations.

Students can avoid the occurrence of high blood pressure and other diseases with PMR. This condition causes the activities carried out to reduce the pulse and give rest to the body. Students need to take good care of their health so that they do not suffer from dangerous diseases that can affect their lives. Energy-efficient use is manifested as lower VO2, lower heart rate, and more moderate physical consumption seen in response to intense exercise accessible to physical strategies such as spiky or with psychological approaches such as progressive muscle relaxation (Maimunah & Hashim, 2016). Students must practice this progressive muscle relaxation to reduce the risk of hypertension and other dangerous diseases. This continuous muscle relaxation activity also increases circulation throughout the body and increases the body's resistance to viruses and bacteria that enter the institution. Progressive muscle relaxation can reduce anxiety and can increase endurance. Progressive muscle relaxation is beneficial to give rise to calm, comfortable, and relaxed responses (Sulidah et al., 2016).

Progressive muscle relaxation (PMR) is a systematic technique for achieving a level or state of total relaxation in the muscles. This activity involves the use of the whole body to reduce heart rate and relax muscles. A technique used to teach patients to relax muscles through a two-step process. At PMR, the patient first makes movements so that the muscles contract and hold tension. Second, they release all tension and focus on the sensation of relaxation (Lauche et al., 2013). Therefore, students need to do progressive muscle relaxation activities. Progressive muscle relaxation can give students many benefits and overcome problems that occur in students. Besides, students who practice this activity can also improve their learning performance in the classroom because they will provide good focus during the learning sessions in class. In addition, developing technical communication is very important for educational institutions (Jamaludin et al., 2019).

2. Methodology

The research method used in this study was a quantitative descriptive method in which researchers look for differences between before and after viewing videos related to progressive muscle relaxation. Quantitative methods are a way of approach to quantitative data involving numerical measurements (Mustafa et al., 2020). Descriptive statistics refer to the collection, submission, description, analysis, and interpretation of data collection (Franzese & Iuliano, 2018). Respondents were physical education students at the Abu Bakar Temerloh Vocational School to respond to the questions given. The number of respondents selected was only six students. This study uses SPSS 23 to analyze the data obtained.

The research instrument is a series of questions that researchers have given to respondents. There are five questions related to progressive muscle relaxation (PMR) given to six students, namely about how well-positioned to do progressive muscle relaxation and which parts of the body need to be done progressive muscle relaxation. A series of questions is given to students via Google forms. A set of questions is given to students before they can see the video provided by the researcher. Students must answer the questions posed without seeing the video. They will then see videos related to progressive muscle relaxation supplied by researchers. After that, students answer back all questions given by researchers after watching the video.

3. Results and Discussion

In this section, researchers will tell the results of the survey conducted to respondents. The results of this study will illustrate the answers of respondents before and after seeing the video.

Table 1. Respondent Survey Results

No.	Question	Answer Choice	Pre-Test		Post-Test	
			Frequency	Percentage	Frequency	Percentage
1	Questions 1. What is Progressive Muscle Relaxation (PMR)?	Yes	0	0	19	83.3
		No.	26	100.0	7	16.7
		Total	**26**	**100.0**	**26**	**100.0**
2	Questions 2. What is the function of using progressive muscle relaxation?	Yes	21	66.7	26	100.0
		No	5	33.3	0	0
		Total	**26**	**100.0**	**26**	**100.0**
3	Questions 3. When is the best time to do progressive muscle relaxation?	Yes	22	66.7	26	100.0
		No	4	33.3	0	0
		Total	**26**	**100.0**	**26**	**100.0**
4	Questions 4. What is an excellent position to do progressive muscle relaxation	Yes	3	16.7	24	83.3
		No	23	83.3	2	16.7
		Total	**26**	**100.0**	**26**	**100.0**
5	Questions 5. Which part needs to be started to perform progressive muscle relaxation?	Yes	13	50	26	100
		No	13	50	0	16.7
		Total	**26**	**100**	**26**	**100**

Based on table 1, the first question above, the students do not get the right answer before watching the video provided by researchers. Therefore, the table can show six learning frequencies equal to 100%. Respondents did not know about progressive muscle relaxation and were not exposed to progressive muscle relaxation. After the respondent sees the video given by the researcher about progressive muscle relaxation, the respondent can answer the question correctly. Thus, the percentage of students who answered the questions precisely increased, a table showing five respondents able to answer correctly 83.3%. Researchers have stated the video determines muscle relaxation. While one respondent mistakenly answered 16.6%. This student is because respondents did not focus on the video. After all, the definition of muscle relaxation was mentioned at the beginning of the video.

Based on table 1,in the second question, the chart shows the results showing four respondents who answered correctly together with 66.7% without seeing the video. The answer given in the subject is as much as the word itself. Meanwhile, two respondents failed to answer correctly at 33.3%. These respondents are less involved in co-curricular activities. After responding to the video provided, the percentage of respondents who responded successfully increased to six respondents with 100% success. This question is easy to understand and closely related to the fact that the item was written.

Based on table 1, the third question shows the results of two respondents who managed to answer correctly 33.3% without seeing the video. This is because respondents are given choices to answer questions. Therefore, the respondent guessed the answer correctly. Meanwhile, four respondents failed to answer correctly, which is equivalent to 66.7% because they did not know the progress of muscle relaxation. After responding to the video provided, the percentage of respondents who responded correctly increased to five respondents, with 83.3%. In the video provided, it is mentioned that the right time for progressive muscle relaxation. Meanwhile, one respondent failed to answer correctly, with 16.7%. Respondents are confused by the choice of answers, which is almost exactly the original answer.

Based on table 1. the fourth question shows the results of only one respondent who answered correctly, equivalent to 16.7% without seeing the video. These respondents can guess the answer correctly without knowing about progressive muscle relaxation. Meanwhile, five respondents failed to answer correctly, equivalent to 83.3% because they had not seen the video provided by the researcher. After responding to the video provided, the percentage of respondents who responded correctly increased to five respondents, with 83.3%. This condition is because, in the video provided, we have shown how to do progressive muscle relaxation correctly. Meanwhile, one respondent failed to answer correctly with 16%. The respondents do not understand the movements made in the video.

Based on table 1, the fifth question shows the results of five questions three respondents who answered correctly, and three respondents failed to answer correctly at 50.0% without seeing the video. Respondents understood a little about progressive muscle relaxation through the questions asked. After responding to the video provided, the percentage of respondents who responded correctly increased to 6 respondents with 100.0% success. In the video provided, researchers have shown how to do

progressive muscle relaxation correctly.

Progressive muscle relaxation significantly benefits humanity. Progressive Muscle Relaxation (PMR) is a systematic technique that can be used to achieve deep relaxation conditions and has been shown to increase anxiety, depression, and various medical and psychiatric illnesses (Zhao et al., 2012). Therefore, this activity is highly recommended to be carried out by all levels of society to ensure that the community can live healthy and safe. There is evidence of the use of progressive muscle relaxation for the general population as an effective treatment for sleep problems. However, little evidence exists to support the use of PMR for players (McCloughan et al., 2016). This activity for progressive muscle relaxation is also natural to do and is easy to formulate beforehand because it does not require expensive equipment. All interventions were carried out in a private space with sufficient light and warmth to make patients feel relaxed during the study to conduct PMR exercises (Dikmen & Terzioglu, 2019).

This research also found that learning through technology was very useful for students. There was an increase in all questions answered after respondents saw the video provided to answer questions raised by researchers. Learning to use this video can attract students' interest in learning something new. Results (Mendoza et al., 2015), revealed that learning to use video is very useful in increasing students' effectiveness. At present, the use of technological tools is very useful in communicating information because, through this advanced technology tool, information can be transmitted quickly and easily. Digital cameras and mobile cameras have become popular in our daily lives (Duan et al., 2012). The use of video as a type of computer-oriented communication can be easily accessed through the internet network. The internet is a global computer network that facilitates and accelerates access to the distribution of information and knowledge (learning materials) so that the content in the teaching and learning process can always be updated (Muhson, 2010).

Although the presence of technology does not guarantee equality and accessibility in learning, it can increase students' knowledge in various fields. Forms of development and changes in information technology can change the habits of community activities, no exception in the world of education (Divayana et al., 2016). With the development of the internet, and the availability of video capture devices such as digital cameras, cellphones with cameras, digital video collection sizes are fast on the internet (Li et al., 2009). Based on research conducted by (Richard et al., 2018), it is known that video learning has experienced an increase in interest over the past few years. All students have access to resources, information, and things they want to know regardless of their geographical location. This access will make it easier for students to learn and gain various knowledge. Interactive video technology has become an essential component in the teaching and learning process, in part because of developments in theoretical learning, such as teaching and learning (Kumar, 2010). The role of technology also enables better communication, sharing of resources, and better practices to improve knowledge for students. This opportunity is an excellent time and progress for the use of technology to support learning.

4. Conclusions

Video-based learning can be implemented in teaching and learning in various fields of education, including teaching PMR techniques. The results of this study indicate that video teaching is beneficial for students. There was an increase in all questions answered after the respondent saw the video provided. The visual lesson will be more quickly remembered and understood by students. Besides, learning to use video can encourage students' interest to learn new things.

Acknowledgments

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