Effect of Motivation on Exam Scores in College Students

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Introduction

Students at any level are primarily interested in the grade they receive on an assignment (academic success) rather than instructor feedback (MacDonald, 1991). Abdulghani and colleagues (2014) identified a number of factors that contribute to academic success including prioritization of learning needs, time management, and family support.

One of the most common themes among studies assessing academic success is motivation. A number of studies have shown that higher motivation is associated with positive academic outcomes (Alivernini & Lucidi, 2011; Frymier & Shulman, 1995; Wolf, Smith, & Birnbaum, 1995).

One factor that increases motivation is media (Al-Eisa et al., 2016). Grant (2015) assessed the effect of motivational media on students in psychology classes. She did not find a significant effect of motivation on exam scores, however there were some limitations to her design. The manipulation of motivation was confounded with affect and presence of a video. Additionally, the test scores from her participants that were in different classes may not have been equivalent.

The current investigation addressed a number of the limitations of Grant's (2015) study: participants in both conditions were exposed to a video and completed the same dependent variables.

It was hypothesized that those who watched a motivational video would perform better on an exam than those who watched a positive video.

Method

Participants
Sixty-one (58 females and 3 males) psychology students participated in the research for extra credit.

Materials and Procedure
Participants watched one of two five-minute videos. Those in the control group watched a funny video by British Airways about flight safety (see *Figure 1)*. Those in the experimental group watched a motivational video by 'Motivation 2 Study' (see *Figure 2*), which consisted of encouraging messages from a motivational speaker and inspiring music.

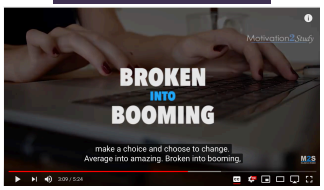
At the conclusion of the video, each participant was given a multiple-choice reading comprehension test with two passages, and questions following each. The first passage was about Ferdinand Magellan and land exploration, and the second was about Marie Curie. There were seven multiple choice questions associated with each passage.

The number of correct responses across both reading passages was added to create a total performance score (possible range 0-14).

Figure 1: Funny video

"Now the air in this rather wonderful jacket can be topped up using this neat little mouthpiece. There's also a charming whistle and light combination for attracting attention, should you be one of those people who enjoys attention."

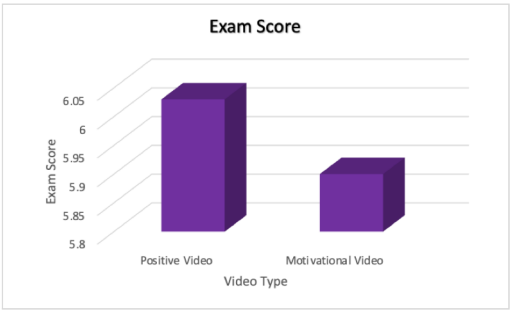
Figure 2: Motivational video



"I dare you, yes you, to make a choice and choose to change. Average into amazing. Broken into booming ..."

Results

Data was analyzed using an independent-samples t-test. There was no significant difference in exam score between those who watched the positive video and those who watched the motivational video (t (59) = 0.858, p > 0.05; d = 0.05). See the graph below for means.



Discussion

The hypothesis that those who watched a motivational video would perform better on a test than those who watched a positive video was not supported. The type of video viewed prior to taking an exam had no significant effect on exam score.

These results support previous research showing no overall effect of motivational media on academic success (Grant, 2015).

Future directions could include replicating this study in a real class environment to see if the results generalize when participation is not voluntary or incentivized with something other than a grade.

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