

To what extent does exposure to short-form media affect attention span and working memory in terms of immediate measurable outcomes?



measurable outcomes?

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Abstract

Hypothesis: The exposure to short-form media used in this study will prove a decrease in attention span.

Objective: Assess if even short-duration exposure to short-form media will affect attention span in adolescence.

Methods

- This study used a Quantitative experiment based design was the main method in order to identify trends and remove any bias.

Materials

Materials included: an online survey used to gather preliminary research, a slide show used to administer the attention test, a set of pre-selected YouTube shorts to use as short-form media, a puzzle for the control group to use for the experiment, and paper packets to collect responses for the attention test.

Experiment

To begin, participants were sent an online survey via email to complete questions on preliminary information. This survey was used to obtain information on the amount of short-form media that is already present in the lives of the adolescence and to obtain an opinionated response of how well they feel like they can retain their attention. This was to look for awareness such as if the participant can feel that they are losing their attention. Then, participants who took the survey were asked to come take an attention test to measure their attention after being exposed to short-form media or if not exposed at all. Participants either watched a preselected set of YouTube reels for 5 minutes or worked on a puzzle to consume time for 5 minutes. Immediately after, they were shown a slideshow of images to test attention. They completed the 13 question packet for their test.

Graph

Figure 1. Measures of attention scores

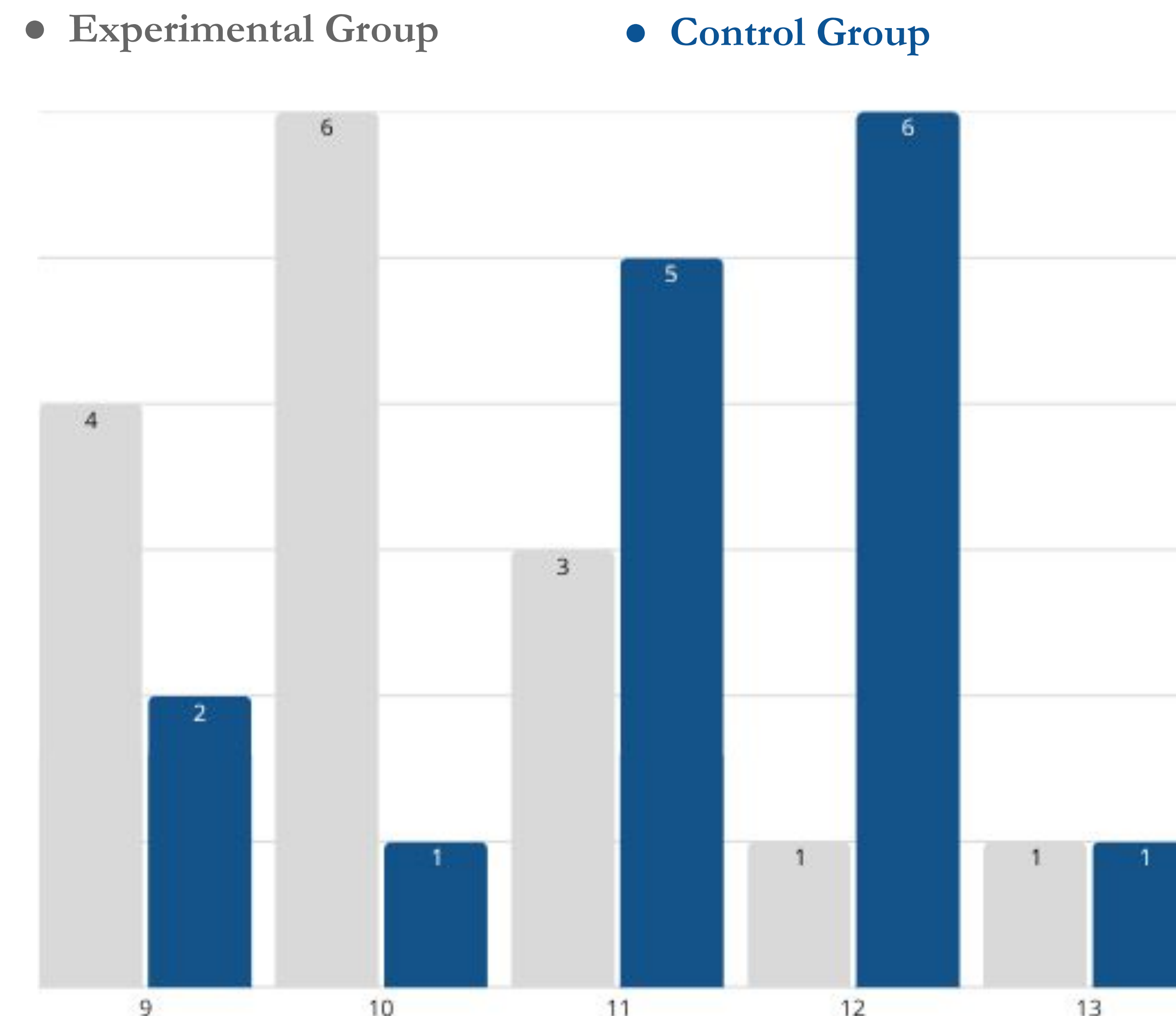


Figure 1. Shows the participants accuracy when completing the attention test. The test was 13 questions and the lowest score was a 9 out of 13. The left gray column represent participants from the experimental group and the right columns represent the control group.

Results

Based on the data collected in this survey, many teens use social media daily. They responded in the survey that they often watch short-form media in the form of reels right before completing tasks such as homework. Many of the adolescents believe that they can sustain their attention span to the same level of before and after being exposed to the reels. However, after conducting the attention test the participants exposed to the short-form media showed lower levels of attention. Ashley Hinten and her associates “ suggest that even a few minutes of exposure to these features may be at least temporarily cognitively depleting for children's attention and EF”, Executive functions(EF) are the cognitive skills used to achieve goals such as the ability to plan and organize (Ashley Hinten, et. al, 2025). My findings are aligned with the little research done on this topic.

Conclusion

Social media plays a large role in the lives of adolescence it is used daily for many hours by adolescents. After conducting this survey I found that even short durations of short-form media exposure can decrease attention span in adolescence. Even though the participants felt like they were able to retain their attention before the test after the test they were able to describe that their attention was shrinking. This study shows the effects of social media in short time frame. In reality, people use social media hours and hours daily. This increases the effects on attention span. “While smartphones and related mobile technologies are recognized as flexible and powerful tools that, when used prudently, can augment human cognition, there is also a growing perception that habitual involvement with these devices may have a negative and lasting impact on users’ ability to think, remember, pay attention, and regulate emotion.” (Henry Wilmer, et. al, 2017). A massive amount of adolescence abuse technology and this study shows that even if for a short period the exposure of short-form media can limit the functioning abilities of growing adolescence.

Limitations

- Due to time and willingness constraints:
 - Participants were selected from only one geographical area.
 - Only one high school was used in this experiment.
 - The sampling size was relatively low with 30 participants.

References

- Wilmer, Henry H, et al. “Smartphones and Cognition: A Review of Research Exploring the Links between Mobile Technology Habits and Cognitive Functioning.” *Frontiers in Psychology*, U.S. National Library of Medicine, 25 Apr. 2017
- Hinten, Ashley E, et al. “Meta-Analytic Review of the Short-Term Effects of Media Exposure on Children’s Attention and Executive Functions.” *Developmental Science*, U.S. National Library of Medicine, Nov. 2025