

The Effect of Duration of Social Media (Videos) on Self-Esteem

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Abstract: The goal of the current research is to determine the impact of social media video consumption duration on self-esteem among university students. The sample size for this study was 151 University students, of which 91 were females and 60 were males with the age range of 18 to 25. They participated in a controlled, between-subjects laboratory experiment and were randomly assigned to one of the four conditions, Happy Multiple Videos, Happy Single Video, Sad Multiple Videos, and Sad Single Videos. Their perception of time and self-esteem levels were assessed before and after exposure to these video stimuli. Findings indicate a weak, non-significant correlation between social media usage duration and self-esteem levels. The results suggest that while emotional valence (happiness or sadness) of content may influence mood, the duration of video exposure does not have a substantial effect on self-esteem. The study highlights the need for further research into the nuanced psychological impacts of social media video consumption.

Key Words: Social Media, Videos, Self-Esteem, University Students, Laboratory Environment

Introduction

Our daily lives are increasingly saturated with video content, from heartwarming Commercials to viral dance challenges. But how does the format of this content and the Emotions it evokes affect our experience of time and mood? This study investigates the Interplay between video type (single vs. multiple) and (Self-esteem on Perceived time. Understanding these interactions is crucial for several reasons. First, it discusses media design principles for maximizing engagement and emotional impact. For example, knowing whether multiple short, happy clips outdo a single long, sad video influences mood. Secondly, it Sheds light on cognitive and emotional processing mechanisms. The unequal influence of Video type and emotional polarity on perceived time can reveal insights into how our Attention and internal clock interact with mental states. Previous research suggests that emotions can distort time perception. Happy emotions tend To make time fly, while sad emotions can stretch out moments. Additionally, video format may influence attention allocation and engagement, potentially impacting time perception. However, existing studies often investigate these Factors in isolation, neglecting the potential combined effect on our subjective experience of Time and Self-Esteem.

Research on the relationship between social media use (SMU) and self-esteem has shown weak and inconsistent effects. A study found that 88% experienced no significant impact of SMU on self-esteem, while only 4% experienced positive and 8% negative effects. These findings highlight the importance of individual variability in media effects, aligning with this study's weak and nonsignificant correlation between social media usage and self-esteem. (Beyens et al., 2020). Another study examined the patterns of short video and social media (SVSM) usage among adolescents and their connection to mental health. Using data from 1,263 Chinese junior and senior high school students, latent profile analysis identified four usage profiles: low usage (35.6%), general usage (46.2%), high duration (8.4%), and many

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friends (9.7%). Gender and grade differences were observed across these profiles. Adolescents in the high-duration and many-friends groups showed higher levels of depression, fear of missing out, and lower self-evaluations, with those in the many-friends group also reporting reduced life satisfaction, indicating potential mental health risks (Liu et al., [2024](#))

Rationale and Significance

Social media sites are made to captivate users, which makes them use them longer than they are meant to. Viewers' average time spent on social media has increased due to the trend of watching short video clips/reels on sites like Facebook, YouTube, Instagram, and so on. This has an impact on real-world activities and productivity. If we talk about the variables, Self-esteem is one of the most important variables as it is the core element for the diagnosis of a disorder.

Time and Perception are also equally important as a time frame has been kept for the research and videos have been pitched for equal amount of time, or with equal time gaps.

Hypothesis

- 1) The Time Perception Hypothesis: It posits that those who watch many videos would experience a faster perception of time than those who just watch one. It is anticipated that this impact will hold true regardless of the videos' emotional polarity (happy or sad).
- 2) Self-Esteem Hypothesis: It is predicted that those who watch cheerful videos will feel happier and have better self-esteem than those who watch sad films. It is anticipated that this impact will hold true whether participants watch one or several films.

Literature Review

Rosenberg defines self-esteem as an attitude towards oneself, whether good or negative (p. 15), and his definition is the most widely used and thorough in the field of psychology. According to his claims, self-esteem is often understood as the way people feel about themselves—their self-concepts, which include their sentiments of value and regard for themselves (Rosenberg, [1965](#)).

Children have same basic emotional and cognitive needs from birth. During the first three to four years, early human infants depend on the Attention and care of primary caregivers—parents and other family members. Once these needs are met, the child needs fresh experiences including learning a language. He grows over time in need of responsibility (future obligations in life) as well as of validation and appreciation (self-concept).

Teenagers and young people all around have quickly taken to short-form video services such as Instagram Reels and TikTok. These sites greatly increase engagement and screen time by using fast-paced, visually appealing material and powerful algorithms that customise user experiences (Qin et al., [2022](#)). With TikTok and Instagram topping digital consumption, especially in Latin America, where hilarious and aesthetically pleasing content is strongly favoured, Generation Z's worldwide social media preferences reflect the rising trend (Martínez-Estrella et al., [2023](#)). Although these sites offer amusement and chances for self-expression, questions have been asked regarding how they affect mental health and self-esteem. Studies show that Portuguese teenagers who use TikTok encourage social comparison, which often results in poor self-perception and body discontent (Dias & Duarte, [2022](#)). Moreover, algorithm-driven material encourages obsessive consumption tendencies, which could be negative for mental health (Qin et al., [2022](#)).

The growing use of Instagram Reels and TikTok among teens in Pakistan reflects world patterns. However, cultural elements like society's expectations of family duties, body image, and academic performance help to further define the influence of social media in the nation (Rony & Ahmed, [2021](#)). Global beauty standards stress fair skin and thin physiques, which can lower Pakistani young people's self-esteem and place more pressure on them (Chowdhury & bin Ahsan, [2024](#)). These sites allow teenagers to regularly evaluate themselves against friends and influencers, therefore reinforcing their feelings of inadequacy and lowering their self-worth (Farooq et al., [2023](#)).

Self-Presentation Theory

In 2016, Erving Goffman introduced the Self-Presentation Theory, which elucidates how individuals intentionally curate their self-presentation to create specific impressions on others (Goffman, [2016](#)). Adolescents engage in self-presentation on social media by sharing content that aligns with their desired self-image (Daniels & Willard, [2023](#)). Their idealised online personas and actual identities may differ based on online identity management practices. Adolescents investing significant time and effort in constructing idealised online identities may perceive a disconnect between their online personas and their true selves, potentially diminishing their self-esteem (Zheng et al., [2020](#)).

Positive Influences on Self-Esteem

Studies suggest that social media can improve self-esteem in adolescents. Adolescents who share personal experiences or seek support online frequently report enhanced feelings of connection and self-esteem. Hartikainen et al. ([2021](#)) conducted a study. Additionally, social media functions as a medium for creativity and self-expression, which may contribute to improved self-esteem (Orehek & Human, [2017](#)).

Negative Influences on Self-Esteem

Evidence indicates that social media use negatively affects adolescents' self-esteem. Regular engagement with social media among adolescents correlates with lower body satisfaction, particularly when exposed to idealised beauty standards disseminated on these platforms (Tylka et al., [2023](#)). Cyberbullying, common in digital contexts, correlates with reduced self-esteem in victims (Palermi et al., [2017](#)).

Rising feelings of inadequacy and worse self-esteem have been linked to the FOMO phenomena (Barry & Wong, [2020](#)). The constant flow of apparently interesting events and activities distributed via social media channels sustains FOMO. This review of the literature underlines the need to look at the link between social media and teenage self-esteem by including actual data in addition to theoretical viewpoints. While some studies point to the negative effects of social comparison, cyberbullying, body image issues, and fear of missing out (FOMO), others contend that self-expression and social support given by social media can improve self-esteem. The complicated phenomenon of social media's effect on young people's self-esteem calls for more study and investigation.

Method of Research

Research Design

A single factorial between-group design was used in this experiment, where 151 participants went through only one condition.

Participants

The study consisted of individuals ranging in age from 18 to 25 years who were randomly selected from the private sector of Pakistani universities. There was a total of 151 Participants, 39.7% males (N1=60) and 60.3% females (N2=91). Data of participants who Experienced any traumatic event within the last week of the experiment was discarded. This ensured that the results were not distorted by the impact of traumatic experiences on time Perception and mood. This way, we were able to directly see the effects of video Types on Time Self, self-esteem, and mood, controlling the extraneous variables.

Measures

The following measures were used in the current study:

Demographic Information Form: The form consists of items related to personal and Demographic information as well as questions related to the recent trauma experienced by the participants.

Pre and Post Self Esteem Scales: These scales were used to assess the participants Self Esteem, pre and post, after watching the small videos/movies, and then they were noted down.

Consent Form: The form was given to participants after the experiment highlighting and mentioning the true nature of the experiment and the ethical guidelines followed during the Experiment.



Videos Shown: After participants completed the pre–Self Esteem scale, they were shown four different videos. Each participant was shown either one happy video, multiple happy videos, multiple sad videos or a single sad video.

Procedure

The effect of Instagram reels on Self-esteem and time perception is the subject of the study. Thus, to modify the concept for the research, the supervisor first requested authorization. It was decided to build an Instagram account where users may save and upload happy single videos, happy multiple films, sad single videos, and sad multiple videos. Throughout the experiment, every participant saw every video. Subsequently, the administration reserved the classroom for conducting research participant sessions. Since the classroom was a lab, a guard was assigned a position outside the building to ensure that there would be no disruption from the outside world. One by one, research participants were brought to the classroom with a male and female confederate.

There was deception in place to keep participants in the dark about the principal goal of the study. After filling out a demographic questionnaire and a Self-esteem scale, they watched videos. The participants' actions and facial expressions were noted while they watched the videos. In the second phase, participants completed a post-test in which the effectiveness of the interventions was assessed, and they were given a second mood scale to gauge how they were feeling after seeing the films. After that, an informed consent form was signed outlining the major goal of the experiment. The privacy of the participant's data was preserved. Every session lasted one hour.

Results

Figure 1

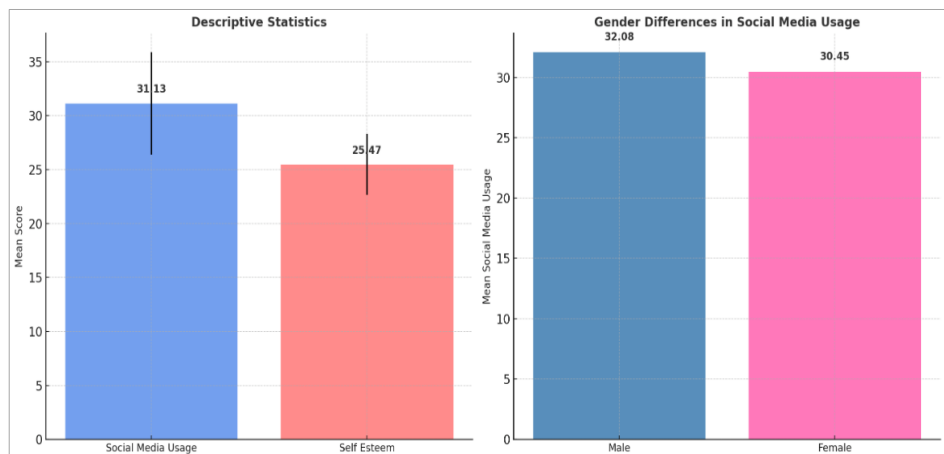


Table 1

Descriptive Statistics

	Mean	Std. Deviation	N
Social Media	31.13	4.745	151
Self Esteem	25.47	2.823	151

Table 2

Correlations

		Social Media	Self-Esteem
Social Media	Pearson correlation	1	.161
	Sig. (2-tailed)		.077
	N	151	151
Self-Esteem	Pearson correlation	.161	1
	Sig. (2-tailed)	.077	
	N	151	151



Table 3

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Social Media	1	60	32.08	5.180	.725
	2	91	30.45	4.315	.512

Table 4

Independent Samples Test

		Levene's Test for Equality of Variance		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
Social Media	Equal Variance Assumed	.443	.507	1.889	120	.061	1.628	.862	-.079	3.334
	Equal Variance is not Assumed.			1.833	95.351	.070	1.628	.888	-.135	3.390

Interpretations:

Descriptive Statistics

Social Media Use: The average score reported by participants on social media usage was 31.13 hours with the value of standard deviation being 4.745. The score would thereby represent moderate consistency across participant responses.

Self-Esteem: The final average self-esteem score was reported as 25.47, with a standard deviation of 2.823 which indicated relatively low variation with the self-esteem levels in the sample population of 151 participants. Hence, the results indicated similar occurrences in social media usage as well as self-esteem within the participants, as shown by lower standard deviations.

Correlation Results

The value of the correlation coefficient ($r=0.161$) between the variables social media usage and self-esteem revealed a weak positive relationship. Thus, the relationship may not be statistically significant at 0.05 level ($p=0.077$).

Hence, Data does not lend much evidence for convincing conclusions of increased social media use having a direct or significant influence on self-esteem.

Group Differences Based on Gender

Group 1 Males had a higher average score of social media usage 32.08 as compared to females (Group 2) with average score of 30.45. However, the t-test results reveal that this difference in mean social media usage between gender is not significant ($p=0.061$). So, although males appear to use social media slightly more than females, this difference is not statistically significant.

Key Findings from the Independent Samples Test

The t-test results show that the determined measure of difference in social media usage between genders was not large enough to be classified as statistically significant.

Summary: This difference in social media usage by gender is small and likely due to chance.

Discussion

The number of videos that are being seen is the independent variable (IV) with the reference to them being happy or sad, and it is used to examine how the length of the videos affects students' behaviour and mood. The two dependent variables (DVs) are a sense of time and Self-esteem. A movie with a shorter runtime might make you feel something



quickly, whereas one with a longer runtime might make you feel something more deeply. Time perception is important since longer movies can seem boring to pupils, which lowers their interest and self-esteem.

According to this research, social media usage correlated weakly but insignificantly ($r=0.161$, $p=0.077$) with self-esteem. The differences in social media usage according to gender were small and not statistically significant ($p=0.061$). These suggest that the duration of usage does not particularly affect self-esteem in this sample. However, longer videos may elicit prolonged higher self-esteem reactions, whereas shorter videos may result in more rapid self-esteem swings. Understanding how students behave with varying videos lengths requires an understanding of the relationship between Self Esteem and time perception. Taking these factors into account sheds light on the complex relationship between the length of a film and its psychological impact on students.

Conclusion

In conclusion, this study involving 151 university students highlights an interesting interaction between the independent variable (IV), perceived time, and the dependent variable (DV), self-esteem.

- ▶ This study presents weak evidences on a positive relationship between the time on social media and self-esteem, as attention-grabbing videos on social media would have no serious effect on enhancing self-esteem.
- ▶ There is a minor difference in terms of gender in social media usage but it is insignificant statistically and hence doesn't reflect a real trend in the population.
- ▶ In general, the evidence is unconvincing that anything serious can be linked to social media usage with self-esteem.
- ▶ While this study provides insights into the psychological effects of social media video consumption, the findings suggest a limited impact on self-esteem. Future research is needed to explore the complex interactions between video content, duration, and cognitive processes in greater depth.

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