The Relationship Between Social Media Use, Mental Health, Self-Esteem, and Substance Use among Kentucky College Students

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PROBLEM & BACKGROUND

- More than 210 million people in the world suffer from addiction to social media and the Internet (Longstreet & Brooks, 2017).
- Research has shown that Instagram has filters to "enhance photos and these images of others can lead to poor psychological well-being" (Sherlock & Wagstaff, 2018).
- Individuals with low self-esteem "need to compensate for their need for real-time interactions for social media connections" (Kircaburun et al., 2019).
- There are many social media ads, posts, and marketing tactics that influence consumers to purchase e-cigarettes (Sawdey et al., 2017).

PURPOSE

- The purpose of this study was to assess the relationship between social media, mental health, self-esteem, and substance use among college students.
- Furthermore, the analysis of these participants will provide essential information and data to address the impact of social media.

Hypotheses
- 1: There will not be a statistically significant difference in social media use between substance use issues among college students.
- 2: There will be a statistically significant difference in social media use between age, gender, and race/ethnicity regarding mental health and self-esteem.
- 3: There will be a statistically significant difference in gender differences due to social media filters affecting self-esteem.

METHODS

Participants
- 162 undergrads enrolled at a Kentucky university.

Survey
- *Social Media Use Among University Students (SMUUS);* 24-item survey was developed by our researchers that measures possible relationships between social media use, mental health, self-esteem, and substance use.
- 4 demographic questions and 20 questions regarding social media platforms preferred, social media usage, social media engagement, mental health attitudes and views, self-esteem attitudes and views, and viewing social media posts or ads that could influence substance misuse.
- The survey was distributed through both in-person and online recruitment.

Data Analysis
- Descriptive statistics, Chi-square test of independence, and Spearman rank correlation were used for the statistical analyses on the latest version of Jamovi software.
- P-value was set at the 0.05 significant level for this analysis.
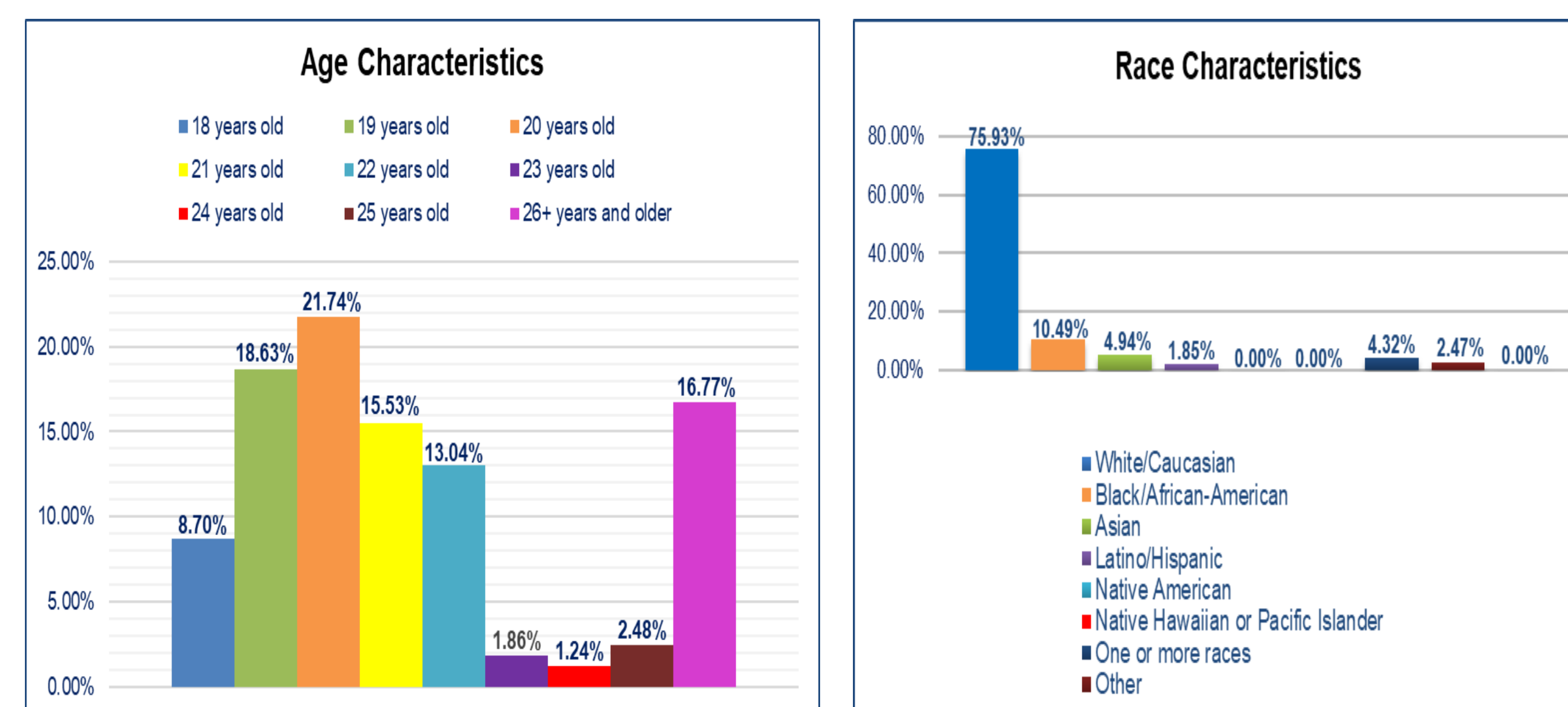
Figures 1. Age and Race Demographic Characteristics
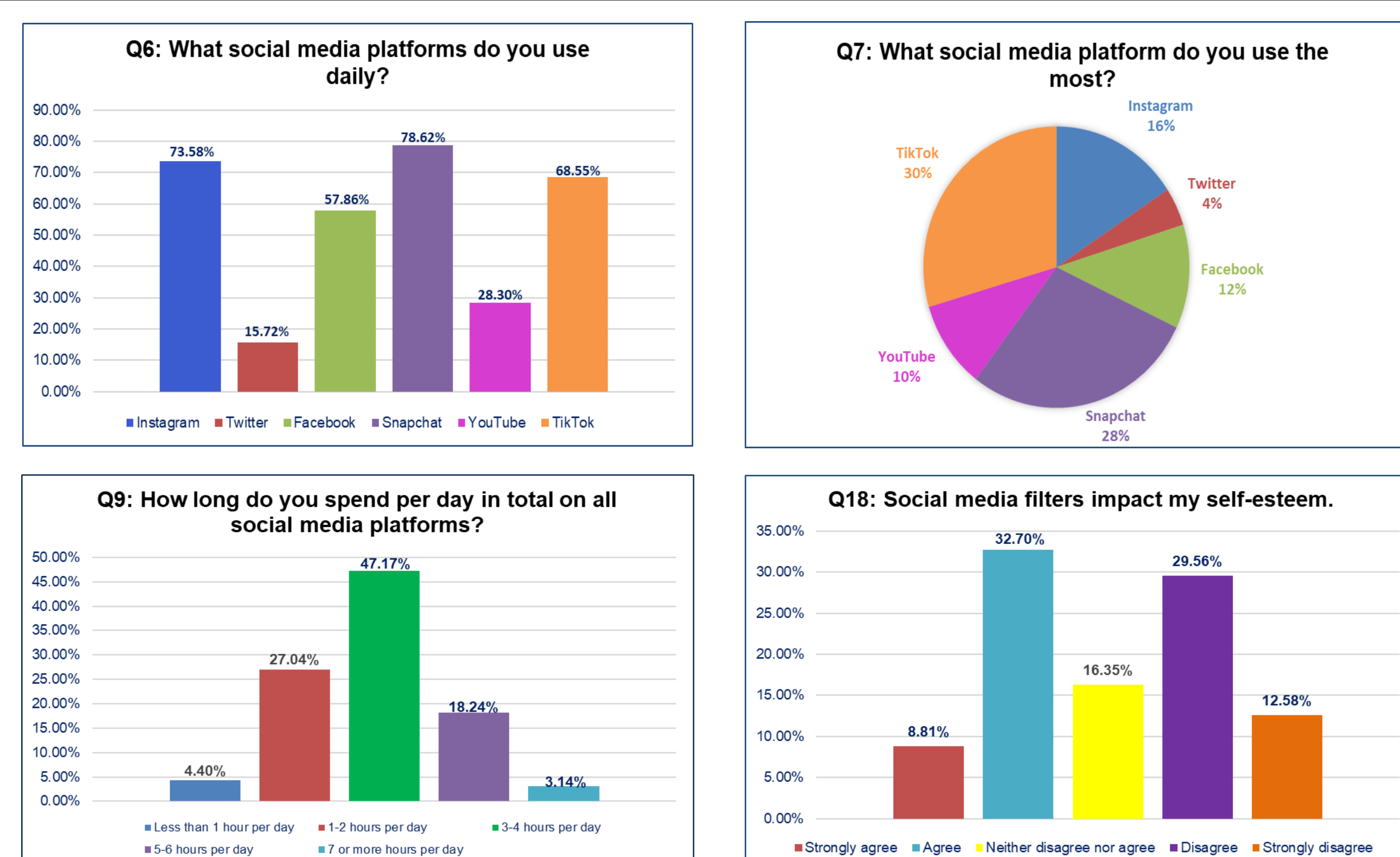

Figure 3-6. Participant Feedback on Social Media Platforms, Frequently Used Social Media, Social Media Usage, and Social Media Filters Impact on Self-Esteem.

Table 1. Chi-Square Analysis and Spearman's Rank Correlation Comparison

Research Hypothesis	Correlation	X^2	df	p
H1: Social media use will not increase substance use issues among college students. (Spearman)	-0.125			0.117
H2(a): Social media use among age will affect mental health and self-esteem. (Chi-square)		66.2*	32	0.001*
H2(b): Social media use among gender will affect mental health and self-esteem. (Chi-square)		15.0	8	0.059
H2(c): Social media use among race/ethnicity will affect mental health and self-esteem. (Chi-square)		31.7*	20	0.047*
H3: Social media filters will affect gender self-esteem. (Chi-square)		15.2	8	0.056
*p < .05.				

RESULTS & DISCUSSION

- 162 students participated in this study.
- 80.75% (n=130) female, 18.63% male (n= 30), 0.62% (n=1) transgender male.
- A chi-square test of independence showed that there is a significance between race and social media affects mental health, X2 (20, N = 159) = 31.7, *p* = .047, which means there is a strong association between race and how social media affects mental health.
- Most strongly agree or agree responses among race were represented by 85.8% (n=6) One or more races, 66.7% (n=2) Latino/Hispanic, 56.5% (n=69) White/Caucasian, and 17.6% (n=3) Black/African-American.
- There is a significant difference between age and social media affects mental health, X2 (32, N = 158) = 60.5, *p* = .002, which means there is a strong association between age and how social media affects mental health.
- Most strongly agree or agree responses among age were represented by 75% (n=3) 25 years old, 60% (n=21) 20 years old, 58.6% (n=17) 19 years old, and 56% (n=14) 21 years old.
- H1: No statistical significance (*p* > .05) between increased social media use and substance use.
- H2: Statistical significance (*p* < .05) between age and race among mental health and self-esteem. Gender had no statistical significance (*p* > .05).
- H3: No statistical significance between gender and social media filters, X2 (8, N = 158) = 15.2, *p* = .056.
- The limitations of this study included time, sample size, and demographics among race and gender.

IMPLICATIONS & CONCLUSIONS

- Further research should be conducted to explore the relationship between social media, social media ads, and the influence on substance use among college students.
- Research should include a larger sample size to ensure more accurate findings and possible trends.
- More educational interventions are needed on college campuses that address the negative impact social media may have on self-esteem and substance use.

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