

The Relationship Between Short Video Social Media Dependency, Negative Emotional Experiences, and Academic Procrastination among College Students

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Abstract: According to the 52nd "Statistical Report on Internet Development in China," as of June 2023, the number of short video users in China has reached a massive 1.026 billion, an increase of 14.54 million compared to December 2022, accounting for 95.2% of the total internet users. Smartphone dependence, especially on short video social media, significantly impacts students' negative emotions and academic procrastination. Studies have found that dependency on short video social media often leads to poor time management, distraction, and academic procrastination. Negative emotions such as anxiety and depression weaken self-efficacy, increasing procrastination on tasks. Research data indicate that female college students score significantly higher in academic procrastination than male students, and arts students score higher than those in liberal arts and science/engineering fields, although the difference is not significant. Negative emotional experiences have a significant positive impact on academic procrastination, suggesting that negative emotions increase the tendency to procrastinate. Meanwhile, negative emotional experiences do not act as a mediating variable between short video social media dependency and academic procrastination, indicating that short video usage may directly influence academic procrastination rather than indirectly through negative emotions. The study suggests focusing on the direct impact of short video usage on college students' negative emotions and academic procrastination, emphasizing emotional regulation and time management education to mitigate the negative effects of academic procrastination on students' mental health and academic performance.

Keywords: Negative Emotions; Short Video Social Media Dependency; Academic Procrastination.

1. Introduction

Recent years, academic procrastination has become prevalent among college students. Studies indicate that 80%-95% of college students have experienced procrastination (O'Brien, 2000), and more than 50% exhibit long-term stable procrastination behaviors. Young (1998) found that problematic mobile phone use significantly predicts academic procrastination and academic anxiety. Rabin et al. (2011) discovered that procrastination is widespread among college students, and the higher the level of procrastination, the poorer their mental health, as procrastination is often accompanied by higher levels of anxiety or more severe depressive tendencies.

Wang Jianya et al. (2020) found multiple factors influencing college students' addiction to mobile short videos, including peer influence, stress relief, entertainment, escapism, information acquisition, self-control, and media literacy. Qin Pengfei (2020) also found that perceived stress significantly predicts tendencies toward mobile phone addiction. Other researchers have examined motivations for short video use, with Yan Zeru (2018) finding that entertainment motivation is the primary reason users engage with short videos, based on the uses and gratifications theory. Furthermore, short video apps have social functions, and research shows that individuals with lower life satisfaction are more likely to turn to social media for validation, which can evolve into social media addiction (Longstreet & Brooks, 2017). This suggests that those with lower life satisfaction are more inclined to use short videos.

Emotions can be categorized as positive or negative. Negative emotions are a basic subjective experience of low mood and unpleasant arousal, encompassing various

undesirable emotional states (Lovibond & Lovibond, 1995), reflecting an individual's level of mental health (Xu Kai, 2016). Previous research has shown that both direct and indirect effects of mobile phone usage time and dependency can predict negative impacts, such as procrastination (Wölfling et al., 2017). Mobile phone dependency directly influences academic procrastination among college students and can also have an indirect effect through the mediating variable of time management tendencies (Qing Zaishua, 2018). Studies have also shown that short video usage among female college students can affect depression through the mediating role of body satisfaction (Liang Xiaoyan, 2020). Furthermore, the carefully designed nature of most short videos may lead to more negative self-evaluations and dissatisfaction with one's body (Chen et al., 2016).

Research has found that while short video social media dependency can induce positive emotions during use, users increasingly experience negative emotions over time. Studies indicate that mobile phone addiction is negatively correlated with positive emotions and positively correlated with negative emotions, and it positively predicts negative emotions, severely affecting college students' sleep quality. Additionally, negative emotions have a positive predictive effect on academic procrastination, suggesting that negative emotions may act as a mediator between short video social media dependency and academic procrastination.

2. Research Methods

2.1. Research Participants

This study selected full-time college students from across the country as the survey subjects, using random sampling methods. A total of 330 questionnaires were distributed, and

after excluding invalid responses, 319 valid questionnaires were collected, resulting in an effective response rate of 96%.

Details of the questionnaire are shown in Table 1.

Table 1. Questionnaire Details (N=319)

Demographic Variables		Number	Percentage
Gender	Male	116	36.36%
	Female	203	64.64%
Grade	Freshman	21	6.58%
	Sophomore	72	22.57%
	Junior	41	12.85%
	Senior	129	40.44%
	Other	56	17.55%
Place of Origin	Urban	154	48.28%
	Township	53	16.61%
	Rural	112	35.11%
Field of Study	Science and Engineering	162	50.78%
	Humanities	81	25.39%
	Arts	30	9.4%
	Other	46	14.42%

2.2. Research Instruments

2.2.1. Social Media Dependency Scale

This study used the Social Media Dependency Scale developed by Milošević-Dorđević and Žeželj (2014). The original scale was modified to suit the content of this study by changing "social media" to "short video social apps" in each item. The scale consists of 6 items and uses a 5-point scoring system, with higher scores indicating a greater degree of disruption to an individual's life caused by short video social media dependency.

2.2.2. Positive and Negative Affect Schedule (PANAS)

The Positive and Negative Affect Schedule (PANAS) used in this study is the version revised by Chinese scholar Huang Li et al. (2023). The scale consists of 20 items, and the Cronbach's α coefficient for the Chinese version of the PANAS is 0.82. The scale is divided into two subscales: positive affect and negative affect (each with 10 items). This study uses the negative affect subscale. It employs a 5-point Likert scale, with higher scores indicating greater negative emotional experiences and more distress, while lower scores

indicate calmness. The scale has been found to have good reliability and validity through empirical research.

2.2.3. Procrastination Assessment Scale for Students (PASS)

Guan Xueqing (2006) conducted a Chinese revision of this scale. After translation and modification, 26 items were retained. The questionnaire uses a 5-point Likert scale ranging from "never procrastinate" to "always procrastinate," with higher scores indicating a more severe level of academic procrastination. The Cronbach's α coefficient of the scale is 0.60, and the test-retest reliability is 0.63. This study will use the first part of the scale as revised by Guan Xueqing (2006).

3. Results and Analysis

3.1. Differences in Negative Emotional Experiences, Short Video Social Media Dependency, and Academic Procrastination among College Students across Demographic Variables

Table 2. Differences in Negative Emotional Experiences, Short Video Social Media Dependency, and Academic Procrastination by Gender

Variable	Male (M±SD)	Female (M±SD)	F	Significance
Academic Procrastination	2.48±0.89	2.70±0.85	5.184	0.023*
Short Video Social Media Dependency	24.55±4.98	25.03±4.65	0.743	0.389
Negative Emotional Experiences	2.63±0.53	2.62±0.58	0.002	0.966

Note: * P<0.05 ** P<0.01 *** P<0.001; same applies below.

As shown in the table above, there is a significant gender difference in academic procrastination among college students, with males scoring significantly lower than females

(F=5.184, p=0.023). However, there are no significant gender differences in negative emotional experiences and short video social media dependency.

Table 3. Differences in Negative Emotional Experiences, Short Video Social Media Dependency, and Academic Procrastination Among College Students by Year of Study

Variable	Freshman (M±SD)	Sophomore (M±SD)	Junior (M±SD)	Senior (M±SD)	F	Significance
Academic Procrastination	2.92±0.96	2.41±0.95	2.53±0.72	2.69±0.81	2.114	0.079
Short Video Social Media Dependency	23.19±6.01	25.64±4.87	24.00±4.88	24.62±4.19	1.944	0.103
Negative Emotional Experiences	2.87±0.52	2.51±0.60	2.81±0.54	2.60±0.56	3.029	0.018*

As shown in the table above, there are no significant differences in academic procrastination and short video social media dependency among college students across different years of study. However, negative emotional experiences show significant differences by year of study ($F=3.029$, $p=0.018$), with seniors experiencing the highest levels of negative emotions and freshmen experiencing the lowest.

3.2. Correlation Analysis of Academic Procrastination, Negative Emotional Experiences, and Short Video Social Media Dependency Among College Students

Table 4. Correlation Analysis of Academic Procrastination, Negative Emotional Experiences, and Short Video Social Media Dependency Among College Students

	Academic Procrastination	Negative Emotional Experiences	Short Video Social Media Dependency
Academic Procrastination	1		
Negative Emotional Experiences	0.338**	1	
Short Video Social Media Dependency	0.001	0.394**	1

As shown in the table above, there is a significant positive correlation between short video social media dependency and negative emotional experiences. However, there is no correlation between short video social media dependency and academic procrastination. Additionally negative emotional experiences and short video social media dependency are significantly positively correlated.

3.3. Regression Analysis of Negative Emotional Experiences, Short Video Social Media Dependency, and Academic Procrastination Among College Students

3.3.1. Regression Analysis of Negative Emotional Experiences on Academic Procrastination

A regression analysis was conducted with academic procrastination as the dependent variable and the total score of negative emotional experiences as the predictor variable. The results are as follows:

Table 5. Regression Analysis of Negative Emotional Experiences on Academic Procrastination

Dependent Variable	Predictor Variable	R ²	Adjusted R ²	Beta	F
Academic Procrastination	Negative Emotional Experiences	0.114	0.122	0.342	41.466

The linear regression analysis shows that the R² value of the model is 0.114, indicating that negative emotional experiences account for 11.4% of the variance in academic procrastination. This suggests that negative emotional experiences have a significant positive impact on academic procrastination.

3.3.2. Regression Analysis of Negative Emotional Experiences on Short Video Social Media Dependency

A regression analysis was conducted with short video social media dependency as the dependent variable and the total score of negative emotional experiences as the predictor variable. The results are as follows:

Table 6. Regression Analysis of Negative Emotional Experiences on Short Video Social Media Dependency

Dependent Variable	Predictor Variable	R ²	Adjusted R ²	Beta	F
Short Video Social Media Dependency	Negative Emotional Experiences	0.155	0.362	0.621	59.035

The R² value of the model is 0.155, indicating that negative emotional experiences explain 15.5% of the variance in short

video social media dependency. This suggests that negative emotional experiences have a significant positive impact on

short video social media dependency.

3.3.3. Relationships Among Negative Emotional Experiences, Short Video Social Media Dependency, and Academic Procrastination

Table 7. Mediation Test with Negative Emotional Experiences as the Mediator

Pathway	c (Total Effect)	a	b	a*b (Mediation Effect)	a*b (95% BootCI)	c' (Direct Effect)	Conclusion	Effect Ratio
Short Video Social Media Dependency => Negative Emotional Experiences => Academic Procrastination	0.000	-0.047**	0.618**	-0.029	-0.227 ~ -0.097	0.029**	Suppression Effect	99.571%

Since both a and b are significant, and c' is also significant with a*b and c' having opposite signs, this indicates a suppression effect, with an effect ratio of 99.571%. Therefore, negative emotional experiences do not have a mediating role between short video social media dependency and academic procrastination.

4. Discussion and Recommendations

4.1. Current Status and Differences in Negative Emotional Experiences Among College Students

The study results indicate that negative emotional experiences among college students are at a normal level. By year of study, seniors exhibit the highest levels of negative emotions, while freshmen show the lowest, with little difference between sophomores and juniors. As students' progress through their academic years, particularly in their senior year, they face significant academic pressures, such as graduation projects, internships, and job searches, which may contribute to higher negative emotional experiences. Literature suggests a positive correlation between academic pressure and negative emotions (such as anxiety and depression), especially when nearing graduation, where pressure significantly increases. Seniors also face critical decisions regarding career choices and further studies, which adds to their uncertainty and increases negative emotional experiences. Additionally, students from rural areas exhibit higher levels of negative emotions than those from towns, and town students show higher levels than urban students. Rural students may face greater cultural adaptation challenges and may feel more loneliness and discomfort in urban settings, impacting their emotional experiences.

4.2. Current Status and Differences in Academic Procrastination Among College Students

The study results indicate that the scores for academic procrastination among college students are at a moderate level. Consistent with previous findings, female students score significantly higher than male students in terms of academic procrastination. By field of study, arts students score higher than those in humanities and science/engineering fields, although the differences are not significant. There are no significant differences in academic procrastination by year of study or place of origin.

Research consistently finds that female students score higher in academic procrastination, possibly due to differences in emotional regulation and self-evaluation. Females may be more affected by emotional fluctuations, such as anxiety or perfectionistic tendencies, which can lead to procrastination. Additionally, females may have a higher

sensitivity to failure, which influences their academic behavior. The arts, with their higher freedom and creative space, may lead to less structured time planning and task management, making procrastination more likely. In contrast, the more structured and scheduled nature of humanities and science/engineering courses may help students better manage their time and reduce procrastination.

4.3. Relationship Between Short Video Social Media Dependency and Negative Emotional Experiences Among College Students

The study results show a significant positive correlation between short video social media dependency and negative emotional experiences among college students, consistent with previous research. Content on short video platforms often showcases others' "highlight moments," and passive browsing of these contents can lead users to compare with their own lives, resulting in increased feelings of inferiority, anxiety, and depression. Negative effects of social comparison are common in social media use, especially when consuming content passively. Excessive dependence on short video social media can consume a large amount of time, interfere with daily study and life, and lead to poor time management and increased procrastination. This procrastination often results in self-blame, anxiety, and other negative emotions. Users may feel stressed due to wasted time, especially when academic or work tasks are not completed on time, further exacerbating negative emotional experiences.

Short video social media provides a means of escaping real-life problems; when faced with real-life challenges, users may prefer to scroll through short videos temporarily. Although this escapism can offer short-term relief, it does not solve underlying problems, and accumulated issues and increased pressure can exacerbate negative emotions.

4.4. Relationship between Negative Emotional Experiences and Academic Procrastination Among College Students

The study results show a significant positive correlation between negative emotional experiences and academic procrastination among college students. Negative emotions such as anxiety, depression, and stress can make it difficult for individuals to regulate their emotions, making it challenging to focus on academic tasks. These emotions consume cognitive resources, making it easier to procrastinate as a way to avoid potential emotional discomfort. Procrastination becomes a short-term coping strategy for escaping negative emotions. When students face pressure, fear of failure, or feelings of incompetence, they are more likely to procrastinate to temporarily escape these negative

experiences. Although this avoidance can provide temporary emotional relief, it does not resolve the underlying issues and instead exacerbates negative emotional experiences. Negative emotions can also weaken students' self-efficacy, causing them to doubt their ability to complete academic tasks. Low self-efficacy can increase procrastination, as students may feel unable to complete tasks effectively and thus choose to procrastinate to avoid failure or further negative emotions.

4.5. The Mediating Role of Negative Emotional Experiences Between Short Video Social Media Dependency and Academic Procrastination

According to the study, negative emotional experiences do not play a mediating role between short video social media dependency and academic procrastination. Short video social media dependency may directly influence academic procrastination without requiring the mediation of negative emotions. For example, the instant gratification and high attraction of short videos can directly disrupt study plans and task completion times, and this direct interference is more significant than the indirect effect through negative emotions. The relationship between short video social media dependency and negative emotions may not always be linear; sometimes, using short videos can temporarily relieve negative emotions rather than aggravate them. This complex relationship may result in negative emotions not having a significant mediating effect. Academic procrastination is often driven by multiple factors, including time management skills, self-discipline, and interest in tasks, rather than solely by negative emotions. Short video social media dependency may directly affect procrastination by reducing study time and concentration, without involving negative emotions.

4.6. Recommendations

Given the widespread issue of time management among college students, schools should strengthen time management training to help students develop reasonable study plans and schedules, reducing dependence on short videos and other entertainment activities, thereby decreasing academic procrastination. Schools can offer emotional management courses or workshops to teach students how to cope with negative emotions such as anxiety and depression, improving their emotional regulation abilities. Providing psychological counseling services and student support groups can offer necessary psychological assistance to alleviate the distress caused by academic pressure or other negative emotions. Encouraging students to participate in more offline social activities and interest groups can increase face-to-face social opportunities and reduce dependence on virtual social media. Real social interactions can enhance life satisfaction and reduce negative emotions arising from social comparisons.

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