

The Effect of Self-Concept on Idol Worship: A Chain Mediation Model

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Abstract. This study investigates the relationship between self-concept and idol worship among Chinese college students, with a focus on the chain mediation roles of Fear of Missing Out (FOMO) and mobile phone addiction. A sample of 605 participants aged 17 to 30 years completed measures of self-concept, FOMO, mobile phone addiction, and idol worship. The results indicated a significant negative correlation between self-concept and idol worship, suggesting that a lower self-concept is a risk factor for idol worship. The study also revealed that mobile phone addiction plays a significant mediating role in the relationship between self-concept and idol worship. Furthermore, FOMO and mobile phone addiction act as chain mediators, influencing the extent of individual idol worship. The findings provide insights into the psychological mechanisms underlying idol worship and offer practical guidance for managing this phenomenon and fostering healthy personal development. The study contributes to the understanding of how self-concept influences idol worship through the dual mediating pathways of FOMO and mobile phone addiction.

Keywords: Self-concept; Idol Worship; Mobile Phone Addiction; FOMO.

1. Introduction

Idol worship is characterized by an intense and unidirectional emotional attachment to an idol. According to McCutcheon's absorption-addiction model (2002), fans invest substantial cognitive resources into their idols, and this level of absorption is both spontaneous and self-sustaining, without the need for conscious effort to maintain it. However, when the intensity of idol worship escalates to excessive levels, it can transition into a state of "addiction." To prevent idol worship from escalating to addictive levels and to foster the healthy development of individuals, it is crucial to investigate the risk factors and mechanisms that influence idol worship. Understanding these factors is essential for effectively managing the phenomenon and ensuring its positive impact on personal growth.

1.1 The Relationship between Self-concept and Idol Worship

Idol worship has emerged as a pervasive phenomenon, with its extent ranging along a continuum from healthy appreciation to extreme obsession, as noted by Sansone & Sansone (2014). This phenomenon can be seen as a process of human self-exploration and world-understanding, a pursuit of the ideal self. According to the preoccupation-addiction model proposed by McCutcheon et al. (2002), individuals with unstable self-structures are more prone to become preoccupied with idols. Self-structure serves as the framework and organization for the self-concept, which is an organized system of learned beliefs, perceptions, and feelings that assist individuals in understanding their own self-conception. This self-conception is nurtured through self-evaluation, as described by Epstein (1973). Research has demonstrated a negative correlation between self-esteem and borderline pathological idol worship ($r = -0.138$), indicating that individuals with lower self-esteem are more likely to exhibit borderline pathological idolatrous behavior, as found by Kusuma & Yuliawati (2013). Self-esteem, a crucial component of self-concept, has been infrequently examined in its entirety in relation to idol worship. Building on these insights, this study investigates the relationship between self-concept and idol worship within the framework of the preoccupation-addiction model. It proposes Hypothesis 1: Self-concept negatively predicts idol worship.

1.2 The Mediating Role of the Fear of Missing out

The fear of missing out (FOMO) is a pervasive anxiety stemming from the potential of missing out on significant information or novel events, characterized by a relentless focus on the activities of others (Przybylski et al., 2013). This anxiety may drive individuals to constantly monitor their mobile phones and social media to ensure they do not miss any icon-related information or events. Research indicates that FOMO is closely intertwined with psychological variables, such as the need for affiliation, and mediates the impact of these variables on online behavior, including intensity and frequency of use (Elhai, 2016). Studies have conducted cross-lagged analyses to explore the relationship between self-esteem, FOMO, and problematic social media use among Chinese college students, revealing a negative correlation between self-esteem and FOMO; that is, individuals with lower self-esteem are more prone to experience FOMO (Zhao, 2024). Furthermore, a meta-analysis has identified a robust relationship between FOMO and mobile phone addiction, with FOMO significantly and positively predicting mobile phone addiction ($r=0.47$). Based on these findings, Hypothesis 2 is proposed: self-concept will indirectly influence idol worship through the mediating effect of FOMO.

1.3 Mediating Role of Mobile Phone Addiction

Research has established that self-concept clarity is negatively associated with problematic smartphone use, and that this relationship is partially mediated by social comparison tendencies and the fear of missing out (Servidio et al., 2021). Additionally, studies have demonstrated that mobile phone dependence significantly and positively predicts idol worship (Jia et al., 2023). Individuals with a less defined self-concept may be inclined to seek validation and construct a positive self-image in the virtual realm through the plethora of information available on mobile phones. In this process, users often follow their idols' developments and engage in discussions via social media, which can lead to an excessive focus on the idol and the development of idolatrous behavior (Liu, 2023). Consequently, mobile phone addiction may also be considered a risk factor for idol worship. Based on these insights, Hypothesis 3 is proposed: self-concept will indirectly influence idol worship through the mediating role of mobile phone addiction.

1.4 Chain Mediation of the Fear of Missing Out and Mobile Phone Addiction

According to the Uses and Gratifications Theory, an individual's psychological and social needs drive their motivation to seek external information and utilize the Internet. Once these needs are met online, the individual may be more likely to develop problems related to Internet use (Ko et al., 2005). Consequently, individuals with a weak self-concept might constantly monitor information on mobile phones or the Internet to compensate for psychological deficits or to construct a more cohesive self-structure. Empirical studies have indicated that the fear of missing out (FOMO) is a significant predictor of mobile phone addiction; the higher an individual's FOMO, the more severe their mobile phone addiction tends to be (Elhai et al., 2016; Billieux et al., 2015). The Interaction of Person-Affect-Cognition Execution Model (IPAEM) posits that psychopathological factors, including misplaced anxiety, are key contributors to social media addiction (Matthias et al., 2019). Cross-sectional studies have also revealed that higher levels of FOMO predict greater dependence on social media (Dempsey et al., 2019). Zsila et al.'s (2021) research suggests that problematic social media use is associated with idol worship. With the ubiquity of social media and mobile phones, there is an increased quest for information about idols. Individuals with low or unclear self-concepts are more inclined to follow their idols through their mobile phones, potentially leading to stargazing addiction. Based on these findings, Hypothesis 4 is proposed: FOMO and mobile phone addiction act as chain mediators between self-concept and idol worship.

In summary, this study focuses on Chinese college students to investigate the influence of self-concept on idol worship and the chain mediating role of FoMO and mobile phone addiction (see Figure 1).

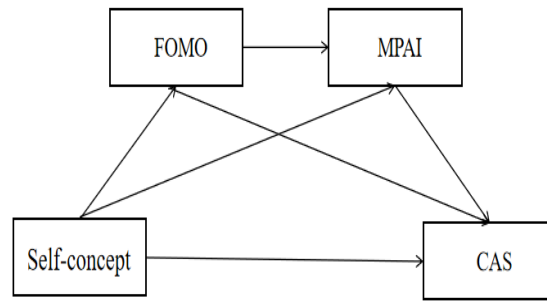


Figure 1. Theoretical model of relations between Self-concept and fear of missing out and mobile phone dependence and idol worship

2. Methods

2.1 Participants

Participants were recruited from Chinese universities by random sampling. A total of 936 people between 17 and 30 years of age participated in the study. After excluding participants who did not complete all questionnaire items and were not college students, data for 605 subjects were available for subsequent analysis. The mean age of participants was 19.48 (SD = 1.67) years and 165 were females, 440 were males.

2.2 Measures

2.2.1 Self-concept

We adopt the Tennessee Self-Concept Scale (TSCS) compiled by Fitts (1965) and revised by Chinese scholar. There are 70 questions in total, including 2 dimensions of self-concept and a total of 10 factors in comprehensive status, namely physical self (PH), moral and ethical self (ME), psychological self (PER), family self (PA), social self (SO), self-criticism (SC), self-concept (ID), self-satisfaction (SA), self-action (B) and total score (TOT). Among them, the higher the score of self-criticisms (SC), the more negative the self-concept, and the higher the score of the remaining 9 factors, the more positive the self-concept. Adopt Likert-5 points scoring (1 = completely different, 5 = exactly the same), in which there are 30 items in reverse scoring, and the scores of each item in each dimension are added to the total score of the dimension. In this study, its Cronbach's alpha coefficient is 0.85, with some reliability and validity.

2.2.2 Fear of Missing Out (FOMO)

We adopted the Fear of Missing Scale developed by Abel et al. (2016) and adapted the Chinese version based on social media usage in China. The scale includes 17 items, which are divided into 4 factors: psychological motivation (3 items; for example, "On mobile social media, as soon as I see a hint of something new, I will be eager to click on it right away"), cognitive motivation (5 items; for example, "Using mobile social media is something I can't live without in my daily life affection"), affective dependence (4 items; for example, "I often delay or interrupt my schedule because of my use of mobile social media") and behavioral performance (4 items; for example, "If I can't use mobile social media for a few days, I will feel lost and uncomfortable"). The scale uses a Likert-5-point score (1 = strongly disagree, 5 = strongly agree), with a higher score indicating a higher level of fear of missing out. In the current study, the Cronbach's α for the total scale was found to be 0.97.

2.2.3 Mobile Phone Dependence

The Mobile Phone Addiction Index Scale (MPAI), as developed by Leung (2008), is a tool used to evaluate the extent of mobile phone addiction among participants. This scale comprises 17 questions

across four dimensions: inability to control cravings (7 items; for example, "Your friends and family have complained about your mobile phone use"), feelings of anxiety and being lost (5 items; for example, "When you are out of mobile range for a while, you are preoccupied with the fear of missing a call"), withdrawal/escape (3 items; for example, "You use your mobile phone to talk to others when you feel isolated"), and productivity loss (2 items; for example, "You find yourself preoccupied with your mobile phone when you should be doing other things, leading to problems"). Participants rate each item on a 5-point Likert scale, with 1 indicating 'Never' and 5 indicating 'Very often'. The aggregate score from these 17 questions, with a higher score signifying a greater dependency on mobile phones, has demonstrated a high level of reliability in this study, with a Cronbach's alpha of 0.96.

2.2.4 Idol Worship

The dedication of participants to their favorite celebrities was measured using the 23-item Celebrity Attitude Scale (CAS), as developed by McCutcheon et al. (2002, 2016) and further refined by McCutcheon and Aruguete (2021). The CAS is composed of three subscales: Entertainment-Social (ten items; e.g., "Following news about my favorite celebrity is an entertaining pastime"; Cronbach's $\alpha = 0.885$), Intense-Personal (nine items; e.g., "I am obsessed with details of my favorite celebrity's life"; Cronbach's $\alpha = 0.860$), and Borderline-Pathological (four items; e.g., "I often feel compelled to learn about the personal habits of my favorite celebrity"; Cronbach's $\alpha = 0.669$). Participants rate each item on a 5-point Likert scale, where 1 corresponds to 'strongly disagree' and 5 corresponds to 'strongly agree'. In the current study, the Cronbach's α for the total scale was found to be 0.98.

2.3 Statistical Analysis

We used SPSS26.0 for data processing, including common bias tests, descriptive statistics and correlations, and mediating effects.

3. Results

3.1 Test of Common Method Bias

To reduce the bias from the subjects' self-reports, polygraph tests and anonymous surveys were conducted. Results of the Harman's test showed that the characteristic root of 17 factors was greater than 1, and the explanation rate of the first factor was 28.15%, far less than the critical value of 40%. Thus, no serious common method bias was detected.

3.2 Preliminary Analyses

Self-concept, fear of missing out, mobile phone use and idol worship were described statistically and correlated. There was a significant negative correlation between idol worship and self-concept ($r_p = -0.083$, $p < .05$), and a significant positive correlation between idol worship and fear of missing out ($r_p = 0.610$, $p < .001$) and mobile phone use ($r_p = 0.731$, $p < .001$). And self-concept, fear of missing out and mobile phone use are also significantly correlated, so the chain mediation effect test is considered in the follow-up. See Table 1.

Table 1. Correlation matrix of Self-concept, fear of missing out, mobile phone use and idol worship

	<i>M</i>	<i>SD</i>	1	2	3	4
1.Self-concept	266.62	26.84	1			
2.FOMO	45.78	18.18	-0.105*	1		
3.MPAI	37.97	18.19	-0.253***	0.809***	1	
4.CAS total	44.16	25.14	-0.083*	0.610***	0.731***	1

Note: *, $p < 0.05$; **, $p < 0.01$; ***, $p < 0.001$

3.3 Chain Mediation Effect of Fear of Missing Out and Mobile Phone Addiction

Mediation was performed using Model 6 in the SPSS macro program PROCESS 3.3 plug-in (Hayes, 2017). Before model checking, the data were processed, and the samples were sampled 5000 times with Bootstrap, and 95% confidence interval was calculated, and the significance test of mediating effect was further tested. The mediating effect results showed that the total indirect effect was -0.158, 95% CI [-0.212, -0.106], and the confidence interval did not contain 0, indicating the existence of mediating effects in the mediating variables constructed by this model. The mediating effect consists of three paths: the indirect effect 1 produced by path 1 (effect value is -0.002), 95% CI is [-0.013, 0.006], and the confidence interval contains 0, so the mediating effect is not significant. Indirect effect 2 produced by path 2 (effect value of -0.105) with 95% CI of [-0.134, -0.078]. Indirect effect 3 produced by path 3 (effect value -0.051), 95% CI [-0.993, -0.010]. The 95% CIs for both path 2 and 3 did not include 0, indicating that the mediating effect was significant. See Table 2 and Figure 2 for details.

Table 2. Mediation effect test

Independent variable	Mediation variable	Beta1(SE)	Outcome variable	Beta2(SE)	Beta3(SE)	Mediation effect (SE)	95%CI
Self-concept	FOMO	-.066(.026)	CAS	-.069(.034)	.032(.063)	-0.002(0.005)	[-0.013, 0.006]
	MPAI	-.107(.015)			.976(.065)	-0.105(0.015)	[-0.134, -0.078]
	FOMO MPAI					-0.051(0.022)	[-0.993, -0.010]
Self-concept	FOMO	-.066(.026)	MPAI	-.107(.015)	.792(.023)	--	--

Note: Beta1: regression coefficient of the independent variable on the mediator variable; Beta2: regression coefficient of the independent variable on the dependent variable; Beta3: regression coefficient of the dependent variable on the mediator variable; Path 1: Self-concept → Fear of missing out → idol worship; Path 2: Self-concept → Mobile phone addiction → idol worship; Path 3: Self-concept → Fear of missing out → Mobile phone addiction → idol worship.

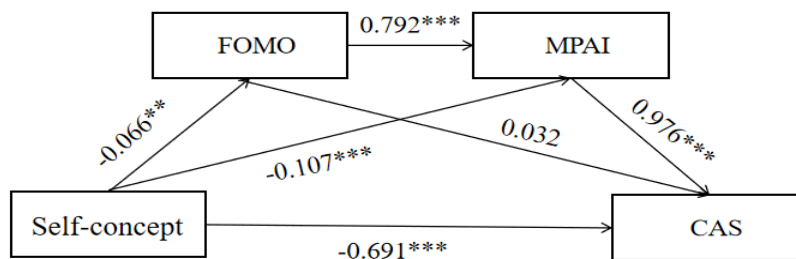


Figure 2. The final chain mediation model plot

4. Discussion

The issue of idol worship among college students is becoming increasingly prominent, yet few previous studies have examined the risk factors of idol worship and the relationship between self-concept and idol worship from the dimension of self-concept. In this study, we explore the influence of self-concept on idol worship and its underlying mechanisms through the lens of the preoccupation-addiction model for the first time. Our findings reveal a significant negative correlation between individual self-concept and idol worship, indicating that self-concept has a significant negative predictive effect on idol worship, suggesting that self-concept may be a risk factor for idol worship. This result aligns with previous research by Cui and Fang (2022), who, in their exploration of the

relationship between idol worship and consideration of cosmetic surgery among college students, found that self-concept, as a mediating variable, was significantly negatively correlated with idol worship. Consequently, individuals with a lower self-concept may be more likely to construct an ideal self by seeking similarities with their idols, thereby exhibiting a higher propensity for idol worship.

This study reveals that mobile phone addiction plays a significant role in the influence of self-concept on idol worship. On one hand, mobile phone addiction mediates the effect of self-concept on idol worship. Self-concept is negatively correlated with mobile phone addiction; individuals with a low self-concept are more likely to exhibit excessive anxiety and concern about their self-image due to an inaccurate and unstable self-concept and self-evaluation. They are more prone to psychological distress (Parise et al., 2019) and, consequently, may rely on mobile phones to numb their egos and alleviate anxiety (Kong et al., 2022). This reliance can lead to excessive dependence on mobile phones, culminating in mobile phone addiction. The preoccupation-addiction model proposed by McCutcheon et al. (2002) suggests that when an individual's ego structure is compromised, they may develop admiration for others to gain identity and a sense of achievement, a motivation that could also lead to addiction. Mobile phones offer abundant information about idols, and various social media or online platforms on mobile phones create a hub for admirers. Therefore, individuals with a low self-concept may access idol information through mobile phones, thereby triggering idol worship.

The FOMO and mobile phone addiction serve as chain mediators between self-concept and idol worship. Self-concept not only has a direct effect on idol worship but also influences the extent of individual idol worship through the chain mediation of FOMO and mobile phone addiction. Research indicates that self-concept is fundamental in the development of FOMO (Zhang et al., 2020). Individuals with a low self-concept are prone to engage in social comparisons, using their mobile phone addiction as a means to compensate for their discomfort stemming from a perceived lack or omission of information from the outside world (Servidio et al., 2021). This behavior may subsequently lead to mobile phone addiction. When combined with FOMO, individuals with a low self-concept may become excessively reliant on their mobile phones, increasing the risk of problematic Internet use. This finding elucidates the dual mediating pathways through which self-concept amplifies idol worship and enhances our understanding of how self-concept influences idol worship.

The present study revealed that the FOMO does not directly predict idol worship but exerts its influence through the mediating variable of mobile phone addiction. This relationship may stem from the tendency of college students to prioritize online socializing in their quest to avoid missing out on important information or novel events over focusing on idols who are more removed from their daily lives. However, FOMO may drive college students to overuse mobile phones and social media, leading to dependence or even addiction, which is recognized as a significant factor influencing idol worship (Jia et al., 2023). Consequently, individuals with high levels of FOMO may become excessively reliant on their mobile phones for idol-related information to mitigate anxiety or panic about missing out on crucial updates. This reliance could be further intensified if the individual struggles to regulate the time or frequency of mobile phone use, potentially culminating in idolatrous behavior.

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