ORIGINAL RESEARCH

The Impact of Online Social Behavior on College Student's Life Satisfaction: Chain-Mediating Effects of Perceived Social Support and Core Self-Evaluation

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Purpose: To examine the influence of social behavior on college students' life satisfaction and the mediating effects of perceived social support and core self-evaluation.

Methods: 779 college students were investigated with the online social behavior scale, life satisfaction scale, core self-evaluation scale and perceived social support scale.

Results: Online social behavior significantly positively predicted the perceived social support and life satisfaction; Perceived social support significantly positively predicted the core self-evaluation and life satisfaction; Core self-evaluation significantly positively predicted life satisfaction; Perceived social support and core self-evaluation have a significant chain mediating effect between online social behavior and life satisfaction.

Conclusion: This study confirmed the positive effects of online social behavior on college students, through improving college students' level of perceived social support and core self-evaluation to increase life satisfaction.

Keywords: online social behavior, life satisfaction, perceived social support, core self-evaluation

Introduction

According to the 50th Statistical Report on Internet Development in China conducted by China Internet Network Information Center in 2022, as of June 2022, the average Internet user spent 29.5 hours surfing the Internet every week. More than half of the interviewed college students paid attention to and used the online community for more than 40% of their total daily online time.[1] Online social media has gradually become an indispensable tool for social interaction and information acquisition. For contemporary college students, online communication has become a "necessity" for study and life.[2] Online social behavior refers to the behavior of adopting certain social network services and the sum of various related activities based on factors affecting users' wishes such as personal needs, social influence and social network technology.[3]

Research on the influence of online social behavior on psychology, Including both negative and positive effects. Negative aspects: Studies have shown that the use of social networking sites reduces people's happiness. Experience negative emotions such as jealousy and depression.[4] Positive aspects: The use of social networking sites can reduce individual loneliness, Improve individual life satisfaction.[5] Life satisfaction refers to the overall cognitive evaluation of individuals' living conditions for a certain period of time according to their own selection criteria,[6] It is an important indicator to measure subjective well-being. Life satisfaction of college students is not only related to their own happiness

and development, but also related to social harmony and progress.[7] At the same time, high life satisfaction also helps to maintain individual physical and mental health and improve individual's excellent performance in various fields such as study and work.[8] Improving life satisfaction is an important intervention means to promote positive psychological level. There are two hypotheses about the influence of online social behavior on life satisfaction, one is social compensation hypothesis, which holds that people with little social contact use mass media to compensate for social isolation, and the other is social enhancement hypothesis, which holds that individuals with rich social resources can get more positive experiences on the Internet in reality.[9] Both hypotheses show that individual online social behavior enhances their life satisfaction Social networking behavior can positively predict life satisfaction.

Social behavior on the Internet may also indirectly affect college students' life satisfaction through other factors. Self-disclosure, self-presentation and interpersonal relationship establishment in online communication help individuals get social support.[10] Social support is all kinds of help and support that individuals receive in their own social environment. Including material support and emotional support from individuals and groups.[11] Perceived social support refers to an individual's expectation and evaluation of social support, it is a belief that social support may be obtained.[12] Social support obtained by using the Internet can help individuals make up for the lack of social resources in real communication, thus reducing anxiety.[13] At the same time, the main effect model of social support also believes that social support can directly promote physical and mental health.[11] Therefore, for college students, online social behavior may increase their perceived social support to a certain extent, thus improving their life satisfaction. Therefore, this study puts forward hypothesis 2: Perceived social support plays an intermediary role between online social behavior and college students' life satisfaction.

Core self-evaluation may play a bridge role between social behavior and satisfaction. Core self-evaluation refers to the most basic evaluation of one's own ability and value.[14] Previous studies have shown that individuals with high core self-evaluation have higher life satisfaction.[15] However, the influence of social behavior on core self-evaluation is still unclear. At present, the influence mechanism of online social behavior on individual satisfaction mainly focuses on the research field of personality trait variables,[4] and online social media use has an indirect impact on adolescents' life satisfaction through the intermediary variable of self-identity status.[16] At the same time, some studies have shown that self-identity affects subjective well-being through perceived social support and core self-evaluation.[17] Therefore, this study puts forward hypothesis 3: Core self-evaluation plays an intermediary role between online social behavior and life satisfaction.

What specific mechanism does online social behavior affect life satisfaction, the self-validation model points out that if people have a firm belief in themselves, they will want others to see themselves and always want to get positive evaluation or feedback. The exchange of information and emotion produced by the process of social networking leads to changes in core self-evaluation. Good social support obtained from social networking also plays a positive role in improving individual self-evaluation.[18] Therefore, this study puts forward Hypothesis 4: Perception of social support and core self-evaluation plays a chain intermediary role between social networking behavior and life satisfaction.

Based on the above discussion, the purpose of this study is to examine the influence of social behavior on college students' life satisfaction, perceived social support and the mediating role of core self-evaluation. Considering that gender may affect life satisfaction, gender is included in the model for control. Based on the existing theoretical evidence, this study proposes the following hypothetical model (see Figure 1):
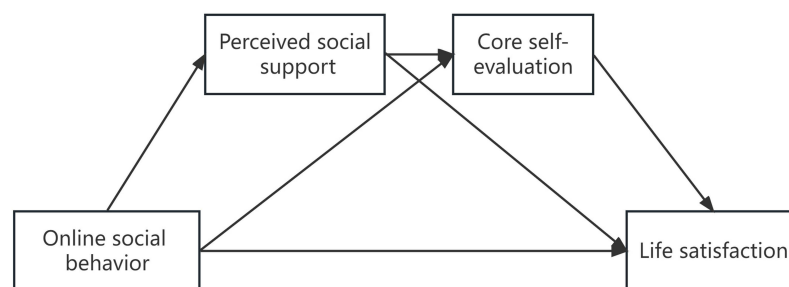

Figure 1 Chain mediation hypothesis model path.

Methods

Subjects of Study

By using cluster sampling method, 779 students of higher vocational colleges in Zhejiang Province were selected as subjects, with an average age of 20.42 ± 1.72 years, including 150 boys (41.96%) and 629 girls (58.04%).

Research Tools

Online Social Behavior Scale

The questionnaire used the online social behavior scale developed by Li.[19] There are 22 items, which are scored by 5 points, 1 means "very inconsistent" and 5 means "very consistent". The test-retest reliability of the scale ranges from 0.624 to 0.794; The reliability of internal consistency ranges from 0.728 to 0.900.

Core Self-Evaluation Scale

Adopt the core self-evaluation scale revised by Du.[20] The scale is a single dimension with 10 items, of which 2, 3, 5, 7, 8 and 10 are reverse scoring questions. Using a five-point scoring method, 1 point means "completely disagree" and 5 point means "completely agree". The higher the score, the higher the core self-evaluation level of the subjects. The Cronbach's α coefficient of the scale is 0.63.

Perceived Social Support Scale

Perceived Social Support Scale(PSSS) is a Perceived Social Support Scale compiled by Blumenthal, a foreign scholar translated by Jiang Ganjin in 1987.[21] The scale includes family support (items 3, 4, 8, 11), friend support (items 6, 7, 9, 12) and other support (items 1, 2, 5, 10)

Life Satisfaction Questionnaire

The Life Satisfaction Questionnaire was developed by Diener[22] and revised by Zheng Xue. It consisted of 5 items, with 7 grades from 1 (very disagree) to 7 (very agree). The higher the total score, the higher the life satisfaction. The Cronbach's α coefficient of this scale in this study is 0.72.

Research Process and Data Processing

Before the test, with the informed consent of college students, all questionnaires were tested collectively, and the tests in each class were conducted by trained psychology graduate students with the assistance of the class teacher. After data recovery, SPSS 25.0 and Mplus 8.0 were used for statistical analysis.

Results

Common Method Deviation Test

In this study, Harman single factor test was used for principal component factor analysis of all items. The results of factor analysis showed that there were 10 factors with eigenvalue greater than 1, and the variance of the first factor before rotation interpretation was 22.62%, which was less than the critical standard of 40%.[23] Therefore, there was no serious common method bias in this study.

Descriptive Statistics and Correlation Analysis

Descriptive statistics and Pearson correlation analysis are carried out on online social behavior, life satisfaction, social support and core self-evaluation. The results are shown in Table 1. Online social behavior is significantly positively correlated with life satisfaction and social support; Life satisfaction is positively correlated with core self-evaluation and social support. There is a significant positive correlation between core self-evaluation and social support.

Mediation Model Testing

First, social networking behavior has a significant positive predictive effect on life satisfaction (β= 0.14, p < 0.001). Secondly, using social networking behavior as predictive variable, life satisfaction as outcome variable, social support

Table 1 Descriptive Statistics and Correlation Analysis Results

	M ± SD	I	2	3	4	5	6	7
I The social behavior of network	63.54 ± 12.28	I						
2 Life satisfaction	20.83 ± 4.63	0.14***	I					
3 Core self-evaluation	32.58 ± 4.93	0.51	0.48***	I				
4 Social support	61.83 ± 10.68	0.20***	0.48***	0.40***	I			
5 Sex	1.81 ± 0.40	0.18***	0.03	−0.01	0.11***	I		
6 Age	20.42 ± 1.72	−0.07**	−0.03	0.01	−0.03	−0.07	I	
7 Socioeconomic status	3.02 ± 0.47	−0.07	−0.19***	−0.11***	−0.17***	−0.11***	0.04	I

Note: ***p < 0.001, **p < 0.01.

and core self-evaluation as mediating variables, the results show that the model fits well [χ^2/df = 1.21, CFI = 0.99, TLI = 0.99, RMSEA (90% CI) = 0.02 (0.00–0.06), SRMR = 0.02]. The results of path analysis show that social networking behavior significantly positively predicts social support (β= 0.20, p < 0.001) and social support significantly positively predicts life satisfaction and core self-evaluation (β= 0.33, p < 0.001; β= 0.41, p < 0.001) after controlling for gender, age and family socioeconomic status), core self-evaluation significantly positively predicted life satisfaction (β= 0.34, p < 0.001) (see Figure 2).

Using bias-corrected non-parametric percentile Bootstrap method to estimate the confidence interval of mediating effect quantity, we found that the mediating effect value of social support between social behavior and life satisfaction is 0.08, 95% confidence interval is [0.04, 0.10], the mediating effect of social support is significant. The mediating effect value of core self-evaluation between social behavior and life satisfaction is-0.01, 95% confidence interval is [−0.03, 0.02], the confidence interval includes 0, the mediating effect of core self-evaluation is not significant. In addition, the chain mediating effect value of social support and core self-evaluation is 0.03, 95% confidence interval is [0.02, 0.04].It is clear that online social behavior can affect individual life satisfaction by affecting social support and core self-evaluation (see Table 2).

Discussion

In this study, we found that online social behavior has a significant positive predictive effect on life satisfaction, which supports the result that online social behavior improves individual life satisfaction.[24,25] At the same time, this study also supports the theory of social compensation hypothesis and social enhancement hypothesis. Many research results confirm that college students with high social anxiety can make up for the shortage of social resources in real communication,[13] build a more positive friend relationship, and online social behavior can meet individual psychological needs. Self-disclosure in social networking sites is positively correlated with adolescent life satisfaction.[25] As a prolonged life of real circles, online social communication can make up for the alienation caused by inconsistent distance and time, so that individuals can have social relationships anytime and anywhere, get instant information feedback and get emotional support. At the same time, others' praise, comment and reply on social media amplify the individual's sense of existence
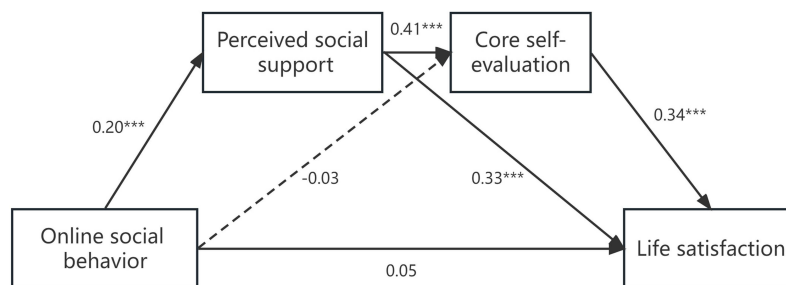

Figure 2 Chain mediation model of online social behavior, perceived social support, core self-evaluation and life satisfaction.
Note: ***p < 0.001, the same below.

Table 2 Mediation Effect Test

Path	Effect Value	95% Confidence Interval of Path Effect Value
Social Behavior-Perceived Social Support-Life Satisfaction	0.08	[0.04, 0.10]
Social Behavior-Core Self-Evaluation-Life Satisfaction	− 0.01	[- 0.03, 0.02]
Social Behavior-Perceived Social Support-Core Self-Evaluation-Life Satisfaction	0.03	[0.02, 0.04]

in the community and enhance their sense of belonging. This shows that online social behavior has a positive impact on life satisfaction.

This study found that social networking behavior significantly positively predicted perceived social support, perceived social support significantly positively predicted individual life satisfaction, and perceived social support significantly mediated between social networking behavior and life satisfaction.This study supports the social cognitive theory of individual interaction in the community, enhancing their self-efficacy and thus producing positive experiences. Through the interaction with others, individuals constantly compare and form self-cognition. At the same time, they observe and understand the substitution experience of others and the positive feedback of others to enhance their self-confidence. Related studies have shown that online social behaviors can enable individuals to obtain emotional support, social members' support, instrumental support and information support. Researchers found that time spent on social networking sites, interaction, number of netizens, self-disclosure can positively predict the amount of online social support, while high social support will lead to increased life satisfaction, reduced stress and enhanced mental health.[26] Active participants in online interaction reported more social support.[27] This study supports the theory of social capital, that is, individual social networking input and received support are positively correlated. Thus, social networking behavior through strengthening social support, thereby improving life satisfaction, that is to say, social support plays an intermediary role in social networking behavior and life satisfaction.

The mediating effect of core self-evaluation between online social behavior and life satisfaction is not significant, which is inconsistent with the original hypothesis of this study. Core self-evaluation significantly predicts life satisfaction, which is consistent with previous studies.[28] The influence of online social behavior on life satisfaction cannot be achieved by improving individual core self-evaluation. The possible reason is that the internalized attitude towards self in childhood will continue into adulthood, and the core self-evaluation of college students is relatively stable, so it is difficult for online social behavior to have a substantial impact on core self-evaluation.

This study also found that social networking behavior can influence the core self-evaluation and ultimately affect the individual's life satisfaction. The information exchange and emotional interaction generated by college students' social networking behavior, such as getting friends' care and praise, can bring positive experience of social support, which is mainly reflected in substantive support, emotional support, cognitive information support and verbal guidance support. These social support enhances the individual's sense of existence in the group, enlarges the individual's influence, enhances the individual's self-esteem level,[4] reshapes self-cognition, promotes self-acceptance,[16] forms a positive evaluation of their own ability, makes the core self-evaluation higher, increases their confidence in overcoming difficulties, and thus enhances their life satisfaction.

Conclusion

In this study, we found that online social behavior has a significant positive predictive effect on life satisfaction; Perceived social support and core self-evaluation play a Chain-Mediating role between network social behavior and life satisfaction.

This study confirmed the positive effects of online social behavior on college students, and further investigated the internal psychological and behavioral mechanism of life satisfaction, which provided theoretical support for the intervention path to improve college students' life satisfaction, that is, through improving college students' level of perceived social support and core self-evaluation to increase life satisfaction and promote college students' positive and healthy physical and mental development. This study still has the following limitations: sample representativeness is slightly insufficient, in the future, we can further study the subjects in different levels of universities and different cultural

backgrounds; Self-report method is adopted in the study, and the survey results may have social approval effect. In the future, objective research methods such as behavioral observation can be used to collect data.

Data Sharing Statement

The dataset analyzed during the current study is available from the corresponding author on reasonable request.

Informed Consent

All participants in the study provided informed consent.

Ethical Approval

All procedures performed in this study involving human participants were in accordance with the ethical standards of Zhejiang Normal University and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This study was reviewed and approved by the Ethics Committee of Zhejiang Normal University.

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Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be.

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Disclosure

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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