

A Study on the Relationship between Social Support Alexithymia and Mobile Paddiction in College Students

Shaoqi Zeng, Lei Yu, Shanji Sui, Jing Lin, Hongwei Lu, Weiqiang Lin

Minnan University of Technology, Shishi 362700, China

Abstract: **Objective:**To conduct a quantitative study on the relationship among social support, alexithymia and mobile phone addiction tendency of college students. **Methods:**Questionnaire survey was conducted among 330 college students in a university in Fujian Province by using the College Students' Mobile Phone Addiction Inventory(MPATS), the MSPSS and the Toronto Affective Disorder Inventory(TAS-20). **Results:**The total score and various factors of social support were significantly negatively correlated with alexithymia and mobile phone addiction tendency. There was a significant positive correlation between alexithymia and mobile phone addiction tendency. Alexithymia played a partial mediating role in the relationship between social support and mobile phone addiction. **Conclusion:**Social support of college students can influence the tendency of mobile phone addiction through the partial mediating effect of alexithymia.

Keywords: Mobile phone addiction; College students; Social support; Alexithymia

Funded Project: Minnan University of Technology, 2020 "The Relationship between Social Support, alexithymia and Mobile Phone Addiction Tendency of College Students" (20KJX033).

1 The introduction

Cell phone addiction is a psychological and behavioral tendency of individuals who are physically and psychologically uncomfortable due to excessive use of cell phones and who know that it is harmful to them but cannot control it. Studies have shown that the lack of social support is an influential factor in the development of behavioral addiction problems such as cell phone addiction in individuals. The results of Guo Ying et al^[1], on the other hand, confirmed that there was a high negative correlation between social support and cell phone addiction among Chinese college students and that social support was a valid variable for predicting cell phone addiction. Social support refers to the behavior of groups in social networks that help individuals with some kind of practical material or spiritual expression. Negative emotions such as loneliness that arise when interpersonal interactions among individuals in real life cannot be satisfied will drive them to rely on cell phones as a medium to seek interpersonal support, i.e., people with low social support are prone to obtain their interpersonal needs that are difficult to obtain in real life through the network social function of cell phones, which will inevitably lead to undesirable behaviors such as excessive cell phone use over time. Other related studies have also found that individuals with weak social support develop a stronger tendency to exhibit cell phone network addiction. Therefore, this study hypothesizes that social support may be an important predictor of the emergence and development of cell phone addiction.

Narrative affective disorder is a psychological developmental disorder related to emotional expression, which refers to an individual's inability to recognize, distinguish, and appropriately express certain emotions in ourselves or others. Ren Yanfei^[2] found that social support acts as a buffer for the development of psychiatric disorders and has a good inhibitory effect on psychotic symptoms, that is, individuals with more social support will have correspondingly fewer psychotic symptoms. This indirectly clarifies that social support is an important source of susceptibility for incurring narrative disorders. Moreover, related studies have confirmed that social support has a significant negative predictive effect on affective disorders. On the other hand, the findings of Hou Riyang et al^[3] revealed that the severity of narrative disorder is one of the predictors of cell phone internet addiction, i.e., people with difficulties in expressing their inner feelings and emotional experiences are more likely to use cell phones as a medium to satisfy their psychological needs. Cell phone communication is more comfortable and comfortable, and cell phone as a communication channel can significantly reduce their discomfort and difficulties in interpersonal interaction in real environment. Therefore, college students who have deficits in identifying and describing emotions have a high probability of relying on cell phones to reduce communicative discomfort. Therefore, it is possible that narrative affective disorder mediates the relationship between social support and cell phone addiction and acts as a pivot-like crosstalk.

To summarize, this study attempted to quantitatively examine the interrelationship between social support, affective disorders and cell phone addiction among college students, to understand the interrelationship between the three and the mechanism of affective disorders in order to provide theoretical support for the prevention and intervention of individual cell phone addiction symptoms.

2 Objects and methods

2.1 Objects

Using the convenience sampling method, 330 college students in a university in Fujian were measured by questionnaire, and 321 valid questionnaires were returned. Among them, 169 were male students and 152 were female students with an average age of 20.28 ± 1.56 years.

2.2 Research tools

(1) The Multidimensional Scale of Perceived Social Support, MSPSS. The Chinese version of the Appreciative Social Support Scale developed by Zimet et al was used, consisting of 12 items divided into three dimensions: friend support, family support, and other support, and scored on a 7 point scale (from "1=strongly disagree" to "7=strongly agree"). The scores reflect the level of social support felt and perceived by the individual. The Cronbach's alpha for the full scale in this study was 0.917.

(2) Toronto Alexithymia Scale-Chinese version, TAS-20. The Chinese version of the TAS-20 was established by Ant Jingyao et al, with 20 items, consisting of three factors: inability to describe emotions, inability to discriminate emotions and extrapolative thinking, using a 5-point scale from 1 (completely disagree) to 5 (completely agree), where questions 4, 5, 10, 18 and 19 are reverse scoring questions, and the higher the total score the more severe the impairment in describing emotions. The Cronbach's alpha for the full scale in this study was 0.814.

(3) Mobile Phone Addiction Tendency Scale, MPATS. Xiong Jie et al. compiled a total of 16 items, including four dimensions of social comfort, withdrawal symptoms, salient behavior, and mood change, with a 5-level score ranging from 1 (very inconsistent) to 5 (very consistent). The higher the total score, the more obvious the tendency of individual mobile phone addiction. The Cronbach's alpha of the whole scale in this study was 0.896.

2.3 Data processing

SPSS21.0 and AMOS21.0 software were used for statistical analysis of the collected questionnaire data.

3 Results and analysis

3.1 Basic situation of college students' mobile phone addiction tendency

The Mobile Phone Addiction Tendency Scale (MPATS) for college students was used to determine whether individuals had a tendency to become addicted to cell phones. The data analysis showed that the MPATS scores of 321 college students were normally distributed, with a minimum score of 16 and a maximum score of 73, and a mean score of (44.2 ± 9.6) . The overall mean of the 16 items was 44.2, and the standard deviation S was 9.6. Through frequency analysis, 14.3% of college students are cell phone addicts, 72.3% are cell phone dependent, and 14.3% are non-mobile phone addicts. This shows that 86.6% of college students are dependent on cell phones.

3.2 Correlation analysis of social support, alexithymia and mobile phone addiction tendency of college students

As can be seen from Table 1, the total score of social support and various factors of college students are significantly negatively correlated with alexithymia and mobile phone addiction tendency. There was a significant positive correlation between alexithymia and mobile phone addiction tendency.

Tab.1 Correlation analysis of social support, alexithymia and mobile phone addiction tendency

	M	SD	1	2	3	4	5	6
1 Social support	54.73	10.51	1					
2 Family support	18.45	4.15	0.872**	1				
3 Friends support	18.36	3.85	0.875**	0.611**	1			
4 Other support	17.92	3.89	0.905**	0.684**	0.724**	1		
5 Alexithymia	53.19	8.01	-0.285**	-0.240**	-0.249**	-0.268**	1	
6 Mobile phone addiction	44.20	9.62	-0.278**	-0.314**	-0.187**	-0.231**	0.302**	1

Note: *** $P < 0.001$, ** $P < 0.01$, * $P < 0.05$, the same as below.

3.3 Analysis of the mediating role of alexithymia

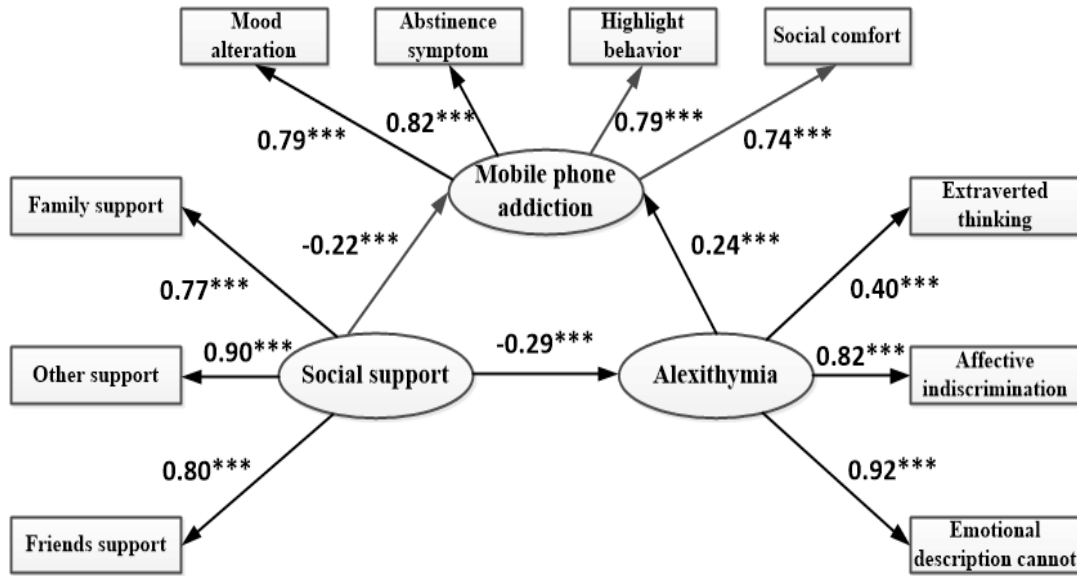
According to the analysis, there is a significant correlation between social support, alexithymia and mobile phone addiction tendency, and the mechanism of these three factors can be further explored. Taking social support as the independent variable, the tendency of mobile phone addiction as the dependent variable, and alexithymia as the mediating variable, a mediating effect model was established (see Figure 1). The fitting indexes of the model were shown in Table 2, which showed that alexithymia played a partial mediating role in the relationship between social support and the tendency of mobile phone addiction.

Tab.2 Model fitting index of social support alexithymia and mobile phone addiction tendency

MODEL	X ² /df	SRMR	GFI	NFI	IFI	CFI	RMSEA
Fitting index	2.59	0.06	0.95	0.95	0.97	0.95	0.07

A bias-corrected nonparametric percentile sampling method was selected to calibrate the mediating role of narrative impairment in the relationship between social support and the propensity for cell phone addiction. The results show that, the confidence intervals for all three pathways did not include 0 and p was less than 0.05, indicating that all three effects reached significant levels. The total effect of individual social support to cell phone addiction tendency was -0.25, and the proportion of the indirect effect to the total effect was 0.24, which means that 24% of the effect of individual social support to cell phone addiction tendency was achieved through the variable of narrative impairment. The above results again confirmed that the relationship between individual social support and cell phone addiction tendency was partially mediated by affective disorder.

Fig.1 Model diagram of the relationship between social support,alexithymia and mobile phone addiction tendency



4 Discuss

The results of correlation analysis confirmed that individual social support has a negative predictive effect on the tendency of cell phone addiction. The lower the subjective support of individuals, the more likely they are to become addicted to cell phones. The frequency of individual Internet use has a negative predictive effect on social interactions. The more frequently an individual uses the Internet, the less real social interaction he or she has, and the more socially detached he or she feels. Therefore, college students with the tendency of cell phone network addiction tend to fall into a bad cycle: lacking support in real social life, they turn to the virtual world of the Internet mediated by cell phones for psychological comfort, and lack of normal interpersonal interaction and communication makes the lack of social support in reality more serious, and they become more and more dependent on the virtual world of the Internet, which eventually leads to cell phone network addiction. In addition, social support can reduce the frequency of cell phone use by individuals. This suggests that it is of great significance to guide college students to construct their own social support system. If individuals have better interpersonal support in their normal academic life, they will be more willing to actively seek help and adopt positive coping methods when they encounter stressful events, rather than escaping from reality through the virtual online world.

Meanwhile, the results of this study further suggest that affective disorders play a part in mediating the relationship between social support and cell phone addiction tendency, which means that not only does social support directly affect cell phone addiction tendency behavior, but also affective disorders can indirectly affect cell phone addiction tendency. Research confirms that the more support an individual receives, the less likely they are to develop mental health problems. Social support protects individuals and acts as a buffer against stress, and is essential for maintaining a basic positive emotional experience. A good emotional state is an important cornerstone for individuals to express their emotions; therefore, a low level of social support may be a trigger for students' affective disorders and may also be an important risk factor for their psychological and behavioral problems. In addition, the analysis of the relationship between narrative disorders and cell phone addiction tendency showed a significant positive prediction of the former on the latter, which is similar to the findings of Xu, Guang et al^[4]. People with narrative disorders usually lack imagination and have difficulty recognizing changes in emotions, have poor emotional understanding, and are therefore more likely to be self-absorbed, and their interpersonal relationships, emotional expression, learning ability, social adjustment, and somatization symptoms are thus affected. Good interpersonal interactions cannot be achieved without communication and appropriate emotional expression, and individuals with narrative disorders are usually unable to express their emotions appropriately in interpersonal interactions, and they tend to express their emotions more through the online world, which undoubtedly increases the risk of cell phone addiction. Therefore, the effect of social support on the tendency of cell phone addiction can be partly realized through the mediating effect of narrative disorder.

This reveals that, on the one hand, college teachers can strengthen physical and mental health education for college students through courses related to mental health education to help them form a sound personality and psychology; at the same time, schools should actively carry out dormitory- and class-based group activities to strengthen communication and contact among individuals, thus helping them to have better interpersonal relationships and social support. On the other hand, through emotional expression training, college students can develop their empathy ability, improve their feelings and understanding of others, and help them build a harmonious social network. When individuals have better social support system and know how to express their emotions reasonably, it means that their internal and external psychological mechanisms are relatively stable and healthy, and the occurrence of a series of psychological behavioral problems such as cell phone addiction will be reduced accordingly.

About author:

Shaoqi Zeng(1996-), male, born in Jinjiang, Fujian Province. Research interest: Mental health education.

References:

- [1] Guo Ying, He Xiang-Cai (2017). The Relationship between Social Support and Mobile Phone Dependence among College Students: A Meta-analysis Based on Chinese Samples[J]. *Journal of Sichuan Normal University (Social Science Edition)*, 44(06):91-101.
- [2] Ren Yanfei, Yin Yuqing (2019). On the influence of social support system on college students' mental health[J]. *Journal of Chifeng University (Natural Science Edition)*, 35(03):125-127.
- [3] Hou Riyang, Yang Rui, Hu Jieman, Jiang Bo (2016). The relationship between mobile phone addiction and alexithymia in college students in Changchun[J]. *Chin J School Health*, 37(03):361-363+367.
- [4] Xu Hongtu, Yang Qi, Wang Haibin (2018). The influence of alexithymia on mobile phone addiction in college students: A mediated role of security[J]. *Journal of Huzhou Normal University*, 40(04):88-92.