

The Relationship between Psychological Abuse and Mobile Phone Addiction in Children

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ABSTRACT

Objective: To explore the relationship between psychological abuse and mobile phone addiction in children. **Methods:** A questionnaire survey was conducted among 90 subjects. The method of network survey is adopted, and SPSS is used for statistics and analysis of the data obtained. **Results:** Pearson correlation index between psychological abuse and cellphone addiction was 0.599 ($P < 0.01$). We also found higher levels of psychological abuse and mobile phone addiction among women than boys; Long-term living with parents is less psychological abuse; High-income families had lower rates of psychological abuse and cellphone addiction. In view of the above results, we made a simple cause analysis and improvement plan. **Conclusion:** There is a significant correlation between child psychological abuse and cellphone addiction.

Keywords: childhood psychology, psychological abuse, cellphone addiction, cellphone addiction improvement

1. INTRODUCTION

Psychological abuse on children is a pattern of internal verbal or behavioral actions or lack of actions that convey the message that the child is worthless, flawed, unloved, unwanted, endangered, or only of value to meet someone else's needs. Withholding emotional support, isolation, or terrorizing a child form of psychological abuse, and domestic violence witnessed by a child is also considered a form of psychological abuse. There are nine common types for childhood psychological abuse, which are rejection, scorn, terrorism, isolation, corruption or exploitation, the absence of emotional response (neglect), exposure to domestic violence, showing a lack of regard for the child, saying unkind things to the child. Those psychological abuse might result in difficulties in school, eating disorders, emotional issues, rebellious behavior, sleep disorders and vague physical complaints.

In Fang Liu et al.'s study, in order to investigate the effect of childhood psychological abuse on cellphone addiction, they conducted an experiment: they recruited 1169 college students. The study measured the level of

participants' childhood maltreatment, cell phone addiction using a questionnaire. For the questionnaire which measuring the childhood psychological maltreatment, Pan et al. investigated a scale which consisted of 23 items, and including five types of child psychological maltreatment. The participants answered the items using a five-point scale to indicate the frequency of occurrence in their childhood. The researchers found out that childhood psychological maltreatment significantly predicted smartphone addiction. The results showed that neglect and abuse on psychological aspect could be predictors for the addiction of cellphone.

In Jianing Sun et al.'s study, in order to investigate the effects of childhood psychological abuse on cellphone addiction, they conducted an experiment: they recruited totally 1041 participants who are all males. For measuring child neglect and psychological abuse, the research used *Child psychological abuse and neglect scale*, which contained 31 items. Participants have to use the way of self-report to rate each statement using questionnaire. The addiction of cellphone addiction in adolescents was assessed by the *Smartphone addiction scale*, which consisted of 22 items. It reached a

conclusion that neglect and abuse on psychological aspects during childhood could positively related to addiction of cellphone.

In Yuanyuan Chen et al.'s study, in order to investigate the effects of childhood emotional neglect and problematic cellphone use among Chinese adolescents. They conducted an experiment, measured the neglect during childhood and other aspects of participants, which includes 1987 Chinese adolescents, three times a year. In the study, researchers tested the predictive role of PMPU on childhood neglect. They then reached a conclusion that childhood emotional neglect was positively associated with PMPU (problematic cellphone use), indicating that childhood emotional neglect may be a risk factor for subsequent PMPU both concurrently and over time.

In Wenfu Li et al.'s study, in order to investigate the effects of childhood experiences on addiction of cellphone in students from China, they conducted an experiment with 400 undergraduate students. (Adverse childhood experiences includes physical/emotional neglect and physical/ psychological/ sexual abuse). The study's research method is self-report questionnaire that all the items in this questionnaire were in an easy-to-understand Chinese version: Revised adverse childhood experience questionnaire (ACEQ-R), cellphone addiction index (MPAI), revised adult attachment scale (AAS) and interpersonal relationship comprehension diagnostic scale (IRCDS). For statistical analysis, possible gender difference, urban-rural source difference, and singleton or non-singleton difference in cellphone use, ACE, attachment styles, and interpersonal relationship were analyzed. Since the distribution of ACE was positively skewed that it leads to the conclusion that the scores of ACE, attachment avoidance, attachment anxiety, interpersonal relationship, and cellphone use were positively related to each other.

The purpose of the present paper is to understand the correlation between cellphone addiction and psychological abuse in childhood. Our hypothesis is that there is a significant correlation between childhood psychological abuse and cellphone addiction. We are doing the correlational study of cellphone addiction and psychological abuse in childhood, and we predict that the correlation is significant between those two variables. As for the method, we use online questionnaire to gather different levels of childhood psychological abuse from participants, which uses Likert scale with 5 points for each item. The total score ranged from 0-60, which means higher the score, deeper the psychological abuse is. However, for the MPA value, we use 'the cellphone addiction questionnaires', which derived from the 'cellphone addiction index scale' compiled by professor Liang Yongchi of the Chinese university of Hong Kong. It is also using the form of Likert scale that has 5 levels options, and has the range from 17 to 85, which means

higher the score, higher the degree of cellphone addiction is. From all 90 participants, we find that there is a significant association between childhood psychological abuse and cellphone addiction, but as it is a correlational experiment that it doesn't make any cause-and-effect conclusion about whether they have the causal relationship.

2. METHODS

We collected 90 valid questionnaire data using online software Wenjuanxing, and data were analyzed by Excel and SPSS.

For the questionnaire on child psychological abuse, we selected 12 questions about child psychological abuse from Wenjuanxing website "A Study on the Influence of child psychological abuse on College Students' social anxiety and corresponding troubles". The Likert Scale with level 5 options was adopted, and the total score ranged between 0 and 60. The higher the score indicated higher degree of psychological abuse. The cellphone addiction questionnaire was derived from the "cellphone addiction Index Scale" compiled by Professor Liang Yongchi of the Chinese University of Hong Kong. The Likert Scale with 5-level options was adopted, with scores ranging from 17 to 85. The lower the score is, the lower the degree of addiction to cellphone is.

For the participants, there were 18 males, 70 females, and the remaining 2 are the third gender. Participants were divided into two types based on their lifestyle. The first type was living with their parents for a long time, with a total of 71 people. Another condition was rarely living with their parents, which included but not limited to parents living separately for a long time (non-divorced) and living with one parent, living with other family members such as grandparents for a long time, and living alone for a long time, with a sample size of 19. The family income was divided into two situations. There were 55 subjects with a total income of 10,000 yuan or more, and 35 subjects with an income of less than 10,000 yuan.

3. RESULTS

SPSS Pearson correlation was used to calculate the correlation between childhood psychological abuse and cellphone addiction. As shown in the table below, VAR00001 is childhood psychological abuse and VAR00002 is cellphone addiction. The total number of subjects was 90. Pearson correlation index between these two variables was 0.599 ($P < 0.01$), and the conclusion was that psychological abuse in childhood was significantly correlated with cellphone addiction.

Table 1. Correlation matrix of the variables

	Psychological Abuse	Cellphone Addiction
Psychological Abuse	Pearson Correlation	1
	Sig. (2-tailed)	.599**
	N	90
Cellphone Addiction	Pearson Correlation	.599**
	Sig. (2-tailed)	.000
	N	90

** . Correlation is significant at the 0.01 level (2-tailed).

In addition to studying the correlation between childhood psychological abuse and cellphone addiction, we also found some comparable items in a social survey of 90 subjects.

3.1 Gender

According to the t-test, the differences of the indices between male (N=18) and female (N=70) was found. In terms of psychological abuse in childhood, males (M= 24.67; SD = 6.69; t = 15.65; P<0.01) suffered less psychological abuse than females (M=26,39; SD= 9.89; t = 22.33; P<0.01). In terms of cellphone dependence, female students (M= 50.21; SD = 13.86; t = 30.32; P<0.01) were generally higher than male students (M= 46.28; SD = 11.93; t = 16.46; P<0.01). However, due to the large difference in the number of male and female subjects, the comparative validity between genders is low. Future studies involving this subject should increase the number of male subjects and try to match the number of female subjects. In this way, gender differences can be compared more objectively.

3.2 Lifestyle

T-test was used to make a comparison between the two group of participants with different lifestyles. Living with parents before age 18 (N= 71; AVG= 48.84 ; SD = 13.90; t = 29.62; P<0.01), compared with living without parents (N= 19; AVG= 53.63 ; SD = 15.56; t = 15.03; P<0.01), but there was no significant difference in the level of psychological abuse in childhood.

3.3 Family income

The t-test was used to make a comparison between the cellphone addiction of two kinds of family income. The results showed that families with an income of 10,000 yuan and above (N= 55 ; AVG= 24.36; SD = 8.69; t = 20.80; P<0.01) tend to have cellphone addiction than those with an income of less than 10,000 yuan (N= 35; AVG= 29.60; SD = 10.88; t =16.10; P<0.01). And the subjects from families with an income of 10,000 yuan and above (N= 55; AVG=47.93; SD=13.40; t= 26.53; P<0.01) were higher than those from families with an income of less than 10,000 yuan (N= 35 AVG=52.40 SD= 14.54; t=21.32; P<0.01) are less likely to experience psychological abuse.

4. DISCUSSION

In view of the above research results, our team members reached the following opinions after discussion.

First about childhood psychological abuse and cellphone addiction, because both of these factors have significant correlation, and childhood is psychological abuse for most of the participants has been the fact that the irreversible (age 18 and older are defined as do not belong to childhood, including the investigation of the subjects over the age of 18 in N = 81, 90% of the total number of participants). Psychological abuse of children includes harmful parental behaviors (such as humiliation, accusation, threat, ridicule and contempt, etc.), damage to children's emotional and psychological functions, and premeditated punishment and control aimed at children's vulnerability [1]. Meanwhile, cellphone addiction is considered as a behavioral addiction, and has been listed as a public health problem by the World Health Organization (WHO) [2], which is an important factor threatening students' study, adult life and physical and mental health. Psychological abuse in childhood is an influential factor of cellphone addiction, which has a direct effect on cellphone addiction. Tian et al. [3] found in their study that individuals who experienced childhood psychological abuse showed poor adaptability and quality of life and low life satisfaction in adulthood. The desire to seek solace from other ways, as mobile phones can create virtual space to achieve this purpose, easily lead to people's dependence on cellphones. In addition,

the leisure and entertainment functions of cellphone can help effectively relax and relieve negative emotions. Liang Jiayi et al. [4] also mentioned that the versatility, portability and timeliness of cellphone can meet their needs for communication with peers and help them escape from anxiety in interpersonal communication. Cellphones can temporarily increase life satisfaction. Therefore, people are prone to rely on cellphones, and even reach the state of addiction.

So here we can put forward some suggestions to slow down cellphone addiction.

For students in school and young people who have entered society. First of all, school administrators can try to improve students' life satisfaction and psychological stress resistance by using emotional regulation to improve students' emotional regulation ability, which is of great significance to improve their dependence on cellphones. The guardian of the students should also communicate with the students in daily life and care more about the students' life. Use their past life experience to give them advice in social life. Students or cellphone addicts themselves should try to focus on real life rather than the virtual world of the network, communicate more with relatives and friends around them, distract their attention from cellphones, and do not use cellphones to enrich their lives. There are a lot of software on the Internet that can lock your phone for a certain period of time. You can try to improve your self-discipline by using this external tool. If you find yourself addicted to cellphones has reached an irreversible degree, it is recommended to take early attention and go to the hospital to find the relevant psychological department to solve the problem.

Parents should pay more attention to their children when they are still in their childhood. According to attachment theory[5], children experience pain, fear and other negative emotions due to the bad behavior of their caregivers towards children, and gradually form an avoidant or contradictory attachment style during their growth. This can lead to the child being prone to lack of love as an adult and looking for other dependents. Therefore, we suggest that even in the event of parental divorce or other environmental factors such as not being able to stay with children for a long time, children should also try to feel the love of their parents or other relatives. Do not let children feel lonely, because loneliness can easily lead to anxiety about interpersonal communication and dependence on the virtual world. In addition, the society should actively guide parents to raise their children's basic knowledge and skills through the media and establish a correct family education thinking. Governments should establish regular monitoring and reporting systems for child abuse and improve relevant laws to minimize unnecessary psychological harm to children in their formative years.

5. CONCLUSION

As hypothesized, there was a significant association between child psychological abuse and cellphone addiction. In addition, we found that cellphone addiction and psychological abuse in childhood are both harmful factors to mental health, so we hope to get attention.

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