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The Effect of Mindfulness and Wisdom as Intervention to Deal with Collage Students' Internet Addiction

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Abstract

Internet addiction is a problematic behavior characterized by excessive use of the Internet. It is common among college students and to harm to their academic performance, thus it has aroused the public attention in recent two decades. The purpose of this study is to investigate the effect of mindfulness and wisdom intervention on college students' Internet addiction. Samples were screened with the Internet Addiction Test (IAT). The participants were asked to complete the IAT before the intervention, and they must obtain at least 31 points in IAT to meet diagnostic criteria of Internet addiction. Students' interview data were collected and analyzed after these students attended the 9 days' intensive mindfulness meditation practice and learned the Zen wisdom. In this study, a qualitative research method and the semi-structure interview were used to investigate changes in the participants after the intervention. The finding showed that mindfulness and wisdom intervention appeared to be effective approach as they can significantly reduce students' Internet addiction, improve students' self-awareness, self-control, concentration, sleeping quality and duration, thus helping them develop a more positive lifestyle.

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Introduction

Internet addiction is a problematic behavior out of control first proposed by American psychiatrist, Goldberg [1]. It has been a controversial social topic and an emergent clinical problem for nearly two decades [2,1]. Internet addiction is defined as a chronic or periodic fascination caused by repetitive use of the Internet. It can make people have an irresistible desire to reuse the Internet and generate tension to increase the usage of the Internet. Tolerance, restraint, retreat, pleasure and other factors will make people addicted to the Internet, having a psychological and physiological reliance [3].

Another common definition of this phenomenon is "excessive use of the Internet that disturbs the daily life" [1]. The widely accepted criteria to diagnose the Internet addiction still requires further study, and there is only an official diagnosis of the Internet Gaming Disorder (IGD) in DSM-V (Diagnostic and Statistical Manual of Mental Disorders, the 5th version) [4,5].

According to Tang [6], the Internet gaming disorder is prevalent in Asia, especially in China and South Korea. The prevalence rate of the Internet addiction among Chinese college students is 9.8%-13% [7]. In East Asia and South Asia, the number is 7.1%, higher than that in Europe but lower than that in the United States [8].

There are a series of negative effects when people have excessive use of the Internet, and these effects are particularly obvious among university students.

Researches have shown that the Internet Addiction has negative effects on students, causing them to have poor academic performance, awful interpersonal relationships, physical and mental health problems and significant personal distress. In terms of negative effects on students' psychological health, students may continuously develop severe psychological problems such as emotional instability, anxiety, social phobia, depression and memory loss [9,3,10-12]. In addition, the Internet addiction can also lead to terrible physical problems such as a significant decrease of vision, poor diet quality, insomnia symptoms and excessive daytime sleepiness; and it can even cause sudden death [13,12]. Internet addiction has also brought about serious social dysfunctions, especially with regards to juvenile delinquency [14]. What's more, the Internet addiction may also result in truancy, exhaustion with study, dropout, and social abilities [15]. Researches have shown that eighty percent of college dropouts are caused by the Internet addiction [16].

People with the Internet addiction have problems with self-control and self-management [17]. Compared with those who do not have non-problematic Internet use, people who have a self-reported problematic use of the Internet have lower life satisfaction and negative self-esteem, and they are lonelier with more social anxiety [11]. Monaghan [18] found that during gambling, which can easily cause addiction, the lack of self-awareness may make players addicted to the game and spend lots of money and time on gambling. Therefore, the capability of self-awareness and self-control plays an important role in solving the problem of addiction.

To control the Internet addiction, strengthening network management is usually proposed at the macro level. It was mentioned in Bai's study [14] that management can solve problems from the root, but it has limited effect. Furthermore, Cognitive-Behavioral Therapy has been commonly used to treat the Internet addiction [19, 20]. However, currently there are scarce literatures that use the mindfulness approach to treat the Internet addiction.

In the most recent decade, the concept of mindfulness has been widely adopted in Western psychology and psychological treatment.

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Mindfulness has been used in different therapeutic practices, including Mindfulness-based Stress Reduction (MBSR), Mindfulness-based Cognitive Therapy (MBCT), Dialectical Behavior Therapy (DBT), Acceptance and Commitment Therapy (ACT) and Relapse Prevention (RP) [21]. Some studies show that mindfulness is beneficial to various types of psychological disorders, involving generalized anxiety disorder [22], obsessive-compulsive disorder [23], depression [24], attention deficit hyperactivity disorder [25] and some addictive behaviors such as smoking, alcohol dependence and illicit substance use [26]. It is proven that mindfulness training can make a difference to mediate craving symptom in pathological addictions [27,28].

According to the theoretical mechanism of the Zen school, the exclusive use of mindfulness is defective and insufficient. Mindfulness has its conceptual roots from the Zen school of Buddhism. The theory of Zen practice advocates and encourages people to practice both of mindfulness and wisdom at the same time. The two studies are closely related, complementary and can benefit each other. In practice, one needs to lay emphasis on both mindfulness and wisdom, which is called "the two studies of mindfulness and Samadhi". Otherwise, it may be very time-consuming or even lead to incorrect cultivation (such as the failure to distinguish right and wrong, so that one's behavior may be influenced in a negative way) [33]. Therefore, when the use of mindfulness for the treatment of mental disorders such as substance abuse and addiction is exclusive, the achievements may be quite limited [33]. To fill this gap of knowledge, this study aims to explore the effects of mindfulness and wisdom as intervention measures for college students who are addicted to the Internet, which is different from other research settings. The purpose of this study is to provide a better understanding of the usage of mindfulness intervention and an effective strategy to treat the Internet addiction.

Methodology

Participants

Eight participants were recruited from Zhuhai, China through the advertising of the recruitment information on the Internet. All participants are college students from different majors, and they are aged 18-22. They were randomly selected to avoid bias. During the recruitment, participants subjectively considered they were suffered by using the Internet too much. Furthermore, participants were asked to complete the online free version of Internet Addiction Test (IAT), and they must obtain at least 31 points in the IAT to meet diagnostic criteria of the Internet addiction.

Research design

This study was designed to investigate the effects of two practices of mindfulness and Zen wisdom on college student's internet addictive behavior. The intervention contains 9 days' intensive mindfulness meditation and wisdom learning retreat. Currently, it mainly includes mindfulness meditation, yoga and Zen wisdom learning. Besides, during the nine days' retreat, mobile phones were taken away from the participants to prevent them from using the Internet.

The internet addiction test

In 1998, Young developed the 20-item Internet Addiction Test (IAT) to diagnose the Internet addiction. Examinees are required to finish the 5-point Likert scale to see whether the inter usage has influenced their "daily routine, social life, productivity, sleeping pattern, and feelings" [34]. Examinees who get scores of 0-30 are considered to have a normal level of Internet usage, those who obtain a point of 31-49 points are considered to have a mild level of Internet addiction; 50 to 79 points indicate a moderate level of Internet dependence; and scores of 80 to 100 indicate a severe level of Internet addiction [35]. Internet addiction test I is reliable and valid [36]. The IAT assessment was used to screen Internet addictive participants in this study.

Data collection

Qualitative research and semi-structured interview approach were used in this study. The open-ended interview question "Do you feel any change in your Internet Dependency Behavior, lifestyle and or other behaviors after attending this program?" was used to collect data. During the interview, each participant was told about the content of consent form, and they voluntarily signed the consent form. Besides, to ensure the integrity of the interview, each draft transcript of the conversation including the specific date of each conversation of researcher and participants was saved perfectly and covertly in a word document named by the number code of different participants for further coding and analysis.

Data analysis

Content analysis approach was used in this research, and researchers were required to deal with the data objectively. At the first stage, researchers read the original transcript repeatedly, carefully and systematically, and then they highlighted meaningful words in the transcript and sorted the content of transcript. At stage two, the researchers considered whether the unmarked text should not be included through re-reading the transcript. If the unmarked text could answer to the research question, it should be included in the analysis. At stage three, the researchers extracted the critical information that could be used to answer the research question from the meaning units and categorized them into different initial themes. At the final stage, the researchers developed the core ideas to define these themes in a more detailed manner and discussed with the peer researchers and the auditor to reach a consensus about the final themes [37]. This study was checked for multiple times through discussion with the peer researchers to ensure the trustworthiness of the findings, which was an excellent way to improve the credibility of this study because it could reduce research bias of subjectivity and promote researchers' self-reflection [38].

Results

All of participants took part in the interview. The interview data were analyzed, and six themes were developed, including: decreased Internet addictive behavior, increased self-awareness of the Internet use, increased self-control on the Internet use, increased concentration, sleep quality and quantity improvement and developing a more positive life style. Each theme will be interpreted in the following article.

Decreased in internet addictive behavior

After attending the mindfulness and Zen wisdom program, seven out of eight participants subjectively reported a significant decline in their Internet dependence. Participant F said: "I am not as addictive to the Internet as before. After attending the course, I play online games and chat online significantly less". Participant A said: "Taking this course helped me reduce the Internet use." "Attending this courseclearly helps me to reduce my shopping time." said participant C.

Participant D also shared her thought: "After these days' mindfulness and Zen wisdom practice, I use the Internet less frequently and spend less time on it. After the course, I am used to this mode. I will not use the Internet as frequently as before."

Increased self-awareness of the internet use

All participants in this study reported they had gained a better understanding of their Internet additive behaviors when using the Internet. This program helped them to get rid of negative thoughts and take positive actions. Participant D shared: "I think this course helped me improve my awareness of the use of web". Participant B also said: "I will be aware of the time I spend on the Internet." Furthermore, Participant G said: "I pay more attention to time when I surf the Internet. Once I find myself have unnecessary Internet use, such as shopping and playing games for too much time, I would immediately recognize it and remind myself to stop in time."

Increased self-control on the internet use

Five participants reported they could better control their emotions and Internet use. Once they realize that they are spending too much time on the Internet, some would take a lot of actions to stop it. Participants A said: "I could automatically control myself when surfing the Internet." Participant E also said: "I would take some tough measures initiatively to control myself not using the mobile phone."

Increased concentration

Six participants responded that the course had improved their concentration on the present things, and they spent less time on other irrelevant things. For instance, when they had a plenty of thoughts and could not fall asleep, they would take deep breath and remind themselves to focus on here and now rather than the future. While taking an exam, Participant G said: "I could focus myself on the exam paper and keep other things out of mind." Participant E even said: "I could feel the taste of food when eating. What's more, Participant H said: "In the past, I could not concentrate on my homework, and I would not prevent myself from using my phone! Eventually, it came out that I spent too much time on the Internet and always failed to complete my daily study plan. However, this situation changed during these days! I feel that I can now better focus on my homework for a long time, just like when I was taking the course."

Sleep quality and quantity improvement

Fifty percent of participants said the program helped them fall asleep earlier, improved their sleeping quality and prolonged their sleeping duration. Before sleeping, they consciously put away their phones to stop surfing the Internet. "After taking this course, I improved my sleep quality," said Participant G. Participant H said: "I will remind myself not to think about the past and the future before I go to sleep, so I get rid of insomnia, and my quality of sleep has improved." Participant B shared his experience: "In terms of living habits, my sleep duration has been significantly extended. In the past, I used to stay up late or even did not sleep, but now I choose to go to bed early and have a rest at noon. And I no longer feel back pain when sleeping. I can fall asleep quickly now."

Developing a more positive life style

Three participants reported that they had positive changes in life, and they would do healthier and more meaningful things such as reading books and playing sports instead of playing games on the Internet. Participant A said: "I begin to change my lifestyle". Participant B said: "When I use the network, I will pay attention to the time I spend and try to replace online entertainment with healthier and more meaningful things." Furthermore, Participant E said: "the course has helped to reduce my procrastination. I am now having more interest in enriching my life. When I am aware that I waste my time on the Internet, I would tell myself to do something meaningful instead of being dominated by mobile phones. "

Discussion

It is found in the study that this intervention measure has helped seven out of eight participants significantly reduce their Internet addictive behaviors. Moreover, it can increase all participants' self-awareness and five participants' self-control on the time they spend on the Internet. Previous studies mentioned that having a high level of awareness could effectively and significantly decrease the possibility of problematic Internet use [39]. Mindfulness can help people who are Internet addictive to improve their sleep quality and extend their sleep duration [40-42]), as was found in our study.

There was a limitation in this study. As the mindfulness course requires participants to remain quiet during the meditation and keeps the participants at a comfortable state, participants may doze off during practice, which would affect their mindfulness. Moreover, it is suggested to conduct a further quantitative study about pretest-posttest comparison to evaluate the intervention effect of Internet addiction.

Conclusion

Internet use is indispensable in modern life. People's everyday learning, work, and social interaction all require the use of the Internet. To completely get rid of Internet addictive behaviors is inappropriate and impractical. Therefore, the intervention measure is designed to improve participants' self-control and self-awareness so as to control their Internet addictive behaviors and make them have normal use of the Internet. To sum up, it is found in the study that Mindfulness and Wisdom appear to be an effective intervention measure that can significantly alleviate the Internet addictive symptoms and improve psychological health and life quality.

Competing Interests

The authors declare no competing interests.

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