The Addiction Use of Wechat Among Young Adults in China During the Covid-19 Pandemic

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Abstract

During the Covid-19 pandemic, WeChat has gradually become an indispensable social media interaction tool in the life of Chinese people. More than 90 percent Chinese people would log into WeChat every day in the first-tier cities of China. Due to the rising number of WeChat users, it is worth investigating the addiction of WeChat among young adults and to what extent, WeChat is able to create addiction among Chinese young adults. It is also imperative to understand which aspects of WeChat that users are addicted to. This study examines the addiction of WeChat among young adults. In-depth interview is used in this study to understand ten WeChat users' addictive behaviour. By using the Time Perspective Theory, the findings indicate that Present Fatalistic orientations tend to have addiction behaviour while Present Hedonistic orientations also have chance to be addicted. The findings suggest user's addiction behaviour is related to the following four categories: WeChat friendship/relationship addiction, WeChat activity addiction, WeChat information addiction, and miscellaneous WeChat addiction. As a conclusion, users' with Present Fatalistic orientations and Present Hedonistic orientations tend to have WeChat addiction behaviour and they are more likely to have WeChat friendship/relationship addiction and WeChat information addiction.

Keywords: WeChat addiction, Chinese young adults, characteristic orientations, time perspective theory, media.

1. Introduction

The Covid-19 pandemic has ravaged most of the countries in the world (Belkin et al., 2021). In order to prevent it, measures have been taken such as quarantine, lockdown, isolation, and social distancing. People have stay at home study and work online, which might lead to overuse the Internet (Unger, Meiran, 2020). In China, the development of social media interaction technology arrived with an increasing number of young adults, particularly college students, who use social media tools. Social media tools are used to communicate, online shopping, and seek entertainment, among other purposes. Large amounts of Chinese users are attracted by Chinese social media platforms such as WeChat, Weibo and TikTok especially during the Covid-19 pandemic (Zhang, et al., 2022). WeChat has become their preferred choice when it comes to interacting with others. Previous studies in China have shown that the reason for users preferring to use WeChat continually is mainly the fact that the tool provides social and hedonic values (Zhang, et al. 2017).

WeChat has become the most widely used social media tool in China, with approximately 1.2 billion active monthly users using the platform by the end of 2020 and has become an important technology for computer-mediated interaction in young adults's day-to-day activities

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(Pang, 2022). Besides, 60 percent of WeChat users were found to check their application ten times a day and surprisingly, 36 percent of the users were found to open their WeChat almost thirty times a day. These data also indicate that 32 percent of WeChat users would spend around two hours on WeChat a day, and 28 percent of WeChat users have added more than two hundred friends on their WeChat (Zhang et al., 2017).

The increased use of social media has led researches to investigate addiction behaviors (Tang, et al., 2017, Devine et al., 2022). It shows that especially young people who are self-centered, more vulnerable tend to be absorbed by the web and develop addictive behaviors. Nevertheless, people who are indulged in Internet spend a large amount of time on the Internet and ignore their social activities with friends as well as the interaction with their family. It is also illustrated that people surrender themselves to the social sites (Griffiths, 2010).

Therefore, social media addiction is negatively influenced with college students' mental health and academic results (Hou, et al., 2019). Meanwhile, the more people are addicted to Internet, the less optimistic they are (Obeid et al., 2019). According to Griffiths, Internet abuse is classified into six categories which were adapted Young's (1996) Internet addiction typology including cybersexual internet abuse, online friendship/relationship abuse, internet activity abuse, online information abuse, criminal internet abuse, and miscellaneous internet abuse.

Nowadays, although a variety of social media tools are used in China, its citizens are becoming more dependent on using WeChat especially during the Covid-19 pandemic. A marked increase has been noted in the frequency and duration of using of WeChat in that a huge number of people are becoming "WeChataholics," a label that denotes spending too much time visiting WeChat every day. People are glued to their phone screens, either to text or send voice mails, or to use any of its other functions and such are the common sights on the streets and in the public transports in China (China Daily, 2021).

WeChat is getting involved in people's life as never before, and the relationship between people and society is being redefined in the wave of social networks. It becomes a necessity in people's life and also takes lots of time of people. Too much time is spent on the social media also means that people's normal life and work are affected, which also reduces the enthusiasm of active participation in social practice (Bian, 2018).

According to Hong (Hong, 2017), several researchers have highlighted the importance of social media in the context of everyday life, and other researchers have pointed out that people has an addiction behaviour towards social media use. However, most of the studies have focused on the general addiction of social media in the world like Facebook addition (Hossain, Munam, 2022), and not on the addiction behaviour of WeChat during the Covid-19 pandemic.

This study will be guideline for those who have excessive use of WeChat and help then to analyze why they have this addiction behaviour during the Covid-19 pandemic, which will make it easier to use WeChat properly. Moreover, by analysis of addiction behaviour themes, this study also offers social media developers a detailed way to know which part of WeChat is more attractive to users. In sum, it is going to know more about the psychology of WeChat young adults consumers, and also provide opportunities for developers to develop the social media tools.

2. Materials and methods
This research was conducted in the three cities – Beijing, Shanghai, and Guangzhou – and the age of the participants was between 20 and 30. Researchers provide statistics on the population of WeChat users as follows: The residents of Shanghai, Beijing, and Guangzhou represent the first-tier cities in China. 93 % of people living in China's Tier first cities are among WeChat's registered users. Thus, it makes sense to solicit respondents from these large Chinese cities for this study. Nevertheless, younger generations were identified as the target users of WeChat, which reported that 73 % of social networking site users in China are between 13 and 34 years old. China's young, affluent and urban make up the majority of WeChat users and 74 % of them are in their 20s (Lien, et al., 2017).

Convenience sampling was convenient given the constraints of the study, and error can be corrected according to different situations. Besides, the method allowed the researcher to collect readily available data (Christensen, Johnson, 2012). Therefore, convenience sampling was adapted in this study. Ten interviewees were selected to be interviewed, four of whom are from Beijing, three from Shanghai, and three from Guangzhou. Queries on the frequency of WeChat usage were accordingly modified to suit the queries on Internet addiction (Young, 2004). In terms of characteristics of

respondents, according to the concept of different factors, respondents' thought and behaviour of WeChat use, the selected respondents was categorized into five characteristic types.

Before conducting the real discussion, a pilot study was conducted by the researcher prior to the actual in-depth interview sessions. Due to the fact that the participants should be from the three different cites, in-depth interview of pilot test was conducted with three people who are from Beijing, Shanghai and Guangzhou on 8 March, 2022.

The pilot study involved participants aged between 20 and 30 (as indicated in the local WeChat group), and they were randomly selected by the researcher through WeChat local group. The questions were asked online through WeChat by audio, and the responses were recorded by the researcher.

The participants were all volunteers who were interested in this topic and who were willing to answer the questions addressed by the researcher. The interview was performed by audio voice so that participants could have more time to think and speak. Eight questions regarding WeChat addiction were asked directly and clearly without the researcher making any suggestion. The eight criteria of examining whether people are addicted to WeChat were modified by the eight criteria which indicate whether people are addicted to the social net (Young, 1996). After receiving their feedback, the researcher found that the answers to the questions that were related to WeChat addiction were clear and specific.

Convenience sampling was conducted on 9 March, 2022. As every province in China has their own local group named Beijing WeChat Local Group, Shanghai WeChat Local Group and Guangzhou WeChat Local Group, respondents who are from different cities are selected in the different WeChat local group. If the age was beyond or under the target age group, the researcher selected again from that group to make sure the age of respondents is consistent with the target age group. During three hours' selection, the respondents were confirmed in the end.

The in-depth interview (IDI) was conducted on 10 March, 2022. The ten respondents were randomly selected by the researcher through WeChat local group. The ten respondents were interviewed at three different places through online due to the fact that the respondents are from different cities. Interviews with the respondents from Beijing were conducted in the morning; interviews with the respondents from Shanghai were conducted in the afternoon; and interview with the respondents from Guangzhou were carried out in the evening. All the interviews were carried out through WeChat because this research is related to WeChat, and the respondents selected for the interviews were WeChat users (Lien, et al., 2017).

The interview questions were designed to uncover the addiction of it users. Responses obtained from the interview were analysed and grouped by the categories. Internet abuse is classified by Griffiths (Griffiths, 2010) into six categories which were adapted for the present study. The part of WeChat addiction will adopt this category, as Internet abuse behaviour share similar behaviour of WeChat addiction. However, based on the pilot test, it was uncovered that the phenomenon of Cyber sexual WeChat addiction and Criminal WeChat addiction do not exist.

The data were analysed using a thematic analysis approach, which is a common form of analysis in a qualitative research (Jowsey, et al., 2021). The "addition" in this study refers to four categories. The first category is WeChat friendship/relationship addiction, which denotes that WeChat users frequently use this application to interact with their friends and family and that they would check or reply to the messages from time to time.

The second category is WeChat activity addiction, which means that the users are addicted to this application for checking Friend's Circle. The third category of addiction is WeChat information addiction. Many users have followed a public account number to obtain information such as news and celebrity affairs and they would spend much time doing this activity. The fourth category is miscellaneous WeChat addiction. Except for some activities including checking Friend's Circle, some users were found to be addicted to online shopping and online gaming in WeChat.

In terms of IDI, the interviews with the ten people from the three different places were audio-recorded for transcription purposes. The respondents were also assigned by their different time perspectives according to the concept of different orientation characteristics (Zimbardo, et al., 1997). Moreover, the words from respondents such as "I think so", "it depends", and "sometimes" are not specific. The researcher was required to find it out what the respondents wanted to express. By using the mentioned method, WeChat addiction was compared in the selected samples. The Time Perspective (TP) theoretical framework was used for the investigation and the analysis of the users' addiction.

3. Discussion

After the Covid-19 pandemic breaks out, university students have engaged themselves more in social media use because of maintaining social distance and long-term quarantine (Anashkina, et al. 2022, Evli, Simsek, 2022). With the frequent and excessive use of social media network (Djumanova, 2022), the word of addiction is frequently used by modern people (Zhao, 2021). More and more people, especially adults who are 18-29 years old, are becoming addicted to the social media use (Anderson, et al., 2017), such as Internet addiction, Facebook addiction as well as online game addiction.

Internet addiction refers to problematic Internet use which is depicted as excessive Internet use that can disturbs people's life. The addiction like Internet addiction is regarded as the inordinate involvement in social media that has disrupted users' daily activities, caused the overuse of the networks, and illustrated itself a neglecting life in the society (Baturay, Toker, 2019, Ozturk, Ayaz, 2021,). According to the previous researchers (Singh, 2019), Internet addiction which can be also called Internet dependence, is similar to other addictions such as drug addiction and nicotine, and is regarded as behaviour of addiction to or dependence of psychology on the Internet. While there are benefits that come with Internet usage, there is also much harm, particularly for adolescents (Waheed, 2019). In line with these points, prior research has proposed several symptoms to identify this kind of addiction (Armstrong, et al., 2000, Lu, Wang, 2008): tolerant or a demand of an increased time length; an undesirable feeling while being off-line or obsessive thinking of the Internet; passive consequences of life like relationships difficulties and poor academic performance and cheat behaviour.

Online game addiction is divided into two categories: one is to release the pressure in reality and to escape from the reality; the other is to be addicted by the game itself in order to get some kind of virtual social payoff from playing online games or to check the level of gaming skills by playing online games (Griffiths, 1997). Researchers have mentioned that the personality, motivation, and self-efficacy are directly related to online game addiction. Among all the factors, motivation has been considered as being the most crucial part (Wang, et al., 2021). As for the motivation, there are motivations including escaping from the reality, self affirmation entertainment and self efficacy and so on, while escaping from the reality and self affirmation plays an important role in these addiction factors.

Researches about WeChat addiction are few. But, since it becomes the primary communication tool in college students' life, young adults become more dependent on WeChat and some of them are not able to think critically in the context of digital content dominance (Alekseeva, 2021). As a result, it is hard for them to differentiate the time of study and leisure which may pose a threat on their life time. Researchers have said that previous mobile phone addiction is on the basis of the investigation of Internet addiction that is thought as behavioural addiction. On the other hand, from another perspective, it is reported also by prior researchers (Zhou, Wang, 2017) that university students' addiction to social media is relative to their self-control. It means those who have bad self-control ability are more likely to have the addiction to social network sites.

Some researchers also have revealed that there is a relationship between symptoms of depression and addiction to the Internet as well as the addiction to Facebook (Blachnio, et al., 2015, Ho, 2021). People who are young adults tend to be more addicted with the social media use which may result in their anxiety. According to the previous scholars (Zhao et al., 2023), the more social media tool they use, the higher risk of developing the anxiety symptoms they get and there is increasing evidence of comorbidity between internet addiction and depression among young people during the the Covid-19 pandemic.

Young people consume a large amount of information which is posted on different platforms, create and share various messages (Genedy, 2021, Frolova, Rogach, 2022) and more researchers have investigated addiction behaviour related to social media in the world such as Facebook addiction (Przepiorka, Blachnio, 2016, Ho, 2021). However, WeChat, as a new social media interaction tool, becomes more and more popular in China, which is similar to the function of Facebook in other countries. Therefore, it is of significance for this study to investigate users' addiction behaviour to WeChat.

Young's Internet addiction test is recently used as the basis for a large European study of addiction behaviour. The researcher (Young, 1996) takes the established criteria for pathological gambling as a starting point and regards Internet addiction as a failure of personal impulse control that does not involve external substances. This failure is described by the following set of criteria:

(1) a preoccupation with the Internet, (2) the need to use the Internet for increasing amount of time, (3) unsuccessful efforts to stop the use of the Internet, (4) mood change while attempting to stop or cut down Internet usage, (5) staying online longer than intended, (6) jeopardizing of significant relationships or opportunities because of excessive Internet usage, (7) lying about the use of Internet, (8) using the Internet as an escape from problems or seeking to release bad mood. Apart from Young's Internet addiction test, there are other tests for Internet addiction such as components model by Griffiths. However, the addiction criteria has similarities which includes feeling a loss of control over Internet use, ensuing psychological, social, or professional conflict or problems, and preoccupation when users are not using the Internet (Antonius, Nicole, 2014, Ozturk, Ayaz, 2021).

Scholars (Zimbardo, et al., 1997) proposed that the Time Perspective Theory has five factors: past positive, past negative, present hedonistic, present fatalistic, and future. This theory reveals individuals' perception including the attitude and thought about their life (Siu, et al., 2014), and it suggests that people focus on certain dimensions of time. Therefore, the Time Perspective Theory can be used to explain social media addiction and users' personal development. And it may also play a significant role in understanding individuals' motivation and goal setting as well as their daily behaviours. Prior study has indicated that the Time Perspective Theory had been used to investigate individuals' behaviour such as alcohol addiction, consumption of fatty food (Hall, et al., 2012), as well as obesity and being overweight (Price, et al., 2017). Other researchers have used this theory to explain impusive consumption (Unger et al., 2018) and the relationship between the theory and virtual presence as well as hedonic gratification (Fu, et al., 2022).

Researchers (Przepiorka, Blachnio, 2016, Przepiorka, et al., 2019) also used this theory to examine Internet and Facebook addiction. In their study, they used the fives factors to examine people's behaviour in social media use. They found out that both past negative and present fatalistic positively influenced users' social media addiction behaviour whereas future time perspective negatively influenced users' social media addiction behaviour. However, until today, this theory has not been used to detect WeChat addiction. Therefore, the present study will use this theory to examine WeChat addiction among the young adults in China and the resulting personal development of its users.

4. Results

In this research, in-depth interview was employed to investigate users' addiction. It presents the findings from the interviews with the interviewees from Beijing, Shanghai, and Guangzhou. Among the three cities Beijing, Shanghai, and Guangzhou, the former city has four participants and the other two cities have three participants, respectively.

Table 1. Participants' Profiles

Interviewee	City	Vocation	Age
BJ1	Beijing	A financial assistant from Beijing	26
BJ2	Beijing	A structural engineer from Beijing	24
BJ3	Beijing	A university student from Beijing	23
BJ4	Beijing	A seller from Beijing	26
SH1	Shanghai	E-business manager from Shanghai	24
SH2	Shanghai	UI designer from Shanghai	23
SH3	Shanghai	A math teacher from Shanghai	25
GZ1	Guangzhou	A postgraduate student from Guangzhou	23
GZ2	Guangzhou	A teacher from Guangzhou	27
GZ3	Guangzhou	A language trainer from Guangzhou	25

The questions from IDI were designed based on the eight criteria in order to examine the users' addiction to the social media tool (Young, 1996). If five or more of the answers to the questions are positive, it was concluded that the users were addicted to using WeChat. Table 3 presents the results in regard to the users' addiction. The finding indicates that among the ten interviewees, four (BJ1, BJ3, SH1, GZ2) were addicted to using WeChat. The percentage of WeChat use is 40 percent. The positive questions from SH1 are five, whereas the positive questions from

BJ3 are seven, and both of these numbers are considered high. Both BJ1 and GZ2 gave six positive answers from the eight questions addressed to them.

Respondents were divided into a specific personality based on their conversations and use behaviours. Only BJ2 appeared to exhibit a past-positive personality, whereas BJ1, SH1, and GZ2 have present-fatalistic personalities that are all addicted to WeChat. However, BJ3, BJ4 and SH2 are Present-Hedonistic characteristic and BJ3 is also addicted to WeChat. This is not consistent with prior researchers (Przepiorka, Blachnio, 2016) that only Present-Fatalistic characteristic people tend to be addicted to Facebook use. In particular, other respondents, SH3, GZ1, and GZ3, have a future-oriented personality.

Table 2. Addiction Detection from Interviewees

Interviewee	Positive Question Numbers	Addicted or Not	Characteristic from TP
BJ1	6	Yes	Present-Fatalistic characteristic
BJ2	4	No	Past-positive characteristic
BJ3	7	Yes	Present-Hedonistic characteristic
BJ4	3	No	Present-Hedonistic characteristic
SH1	5	Yes	Present-Fatalistic characteristic
SH2	1	No	Present-Hedonistic characteristic
SH3	2	No	Future-oriented characteristic
GZ1	2	No	Future-oriented characteristic
GZ2	6	Yes	Present-Fatalistic characteristic
GZ3	4	No	Future-oriented characteristic

Given the fact that WeChat is a social media interaction tool, people have been using it mainly for communication (Ma, Fan, 2022). As mentioned by all the interviewees, WeChat has always been used for communication with family and friends. Four of the interviewees (BJ1, BJ3, SH1 and GZ2) mentioned that they would send and receive messages using this application every day in order to maintain their relationships with their family and friends. In other words, WeChat has created a way to help people escape from the reality or release their pressure from the reality by interacting with others, and this very advantage has made WeChat users feel satisfied with their life. The four interviewees all are satisfied with using WeChat and felt pleasant whenever they use WeChat to communicate with others. Moreover, BJ1 and BJ3 both said that using WeChat gave them a sense of being protected and relaxed. WeChat always focuses on the demands of users, and therefore, online interaction has become an indispensable way for the Chinese society to communicate. WeChat offers users a way to maintain their relationship with their family and friends. In other words, WeChat has created addiction by offering people a sense of satisfaction through instant communication with their family, friends, or even strangers.

I think WeChat provides me with a feeling of being protected. When I am not happy, the message sent from my family or friends makes me warm. It is WeChat that can provide us with a way to interact with others (BJ1)

I feel guilty if I play it for a long time but sometimes I do feel happy to use it to release my pressure. As life is sometimes too busy and I have to find something interesting or make conversations with my friends, which makes me relaxed (BJ3)

Based on the addiction type of Internet (Griffiths, 2010), it can be concluded that three of the interviewees (BJ1, BJ3, SH1 and GZ2) have a strong motivation to use Friend's Circle. BJ2 believed that the most important reason for WeChat being favoured by most of the people is that WeChat offers good privacy protection. In terms of the current usage of Friend's Circle, BJ1 said that she would check her "Friend's Circle" because she wanted to know about the happenings of her friends and she wanted to share her own information through it. As for BJ3, she preferred to check Friend's Circle from time to time, which later became a habit. Moreover, the researcher also found that WeChat Pay becomes indispensable in the life of BJ1 and BJ3. From their responses, it was learnt that using WeChat Pay has played a significant role in their life because the feature is convenient and time-saving. WeChat, to an extent, therefore, can stimulate economic development in China.

WeChat is also better than other software in its confidentiality and authenticity. I feel safe when I post something in my Friend's circle because I know only my friends can see the thing that I post (BJ2)

I always use Friend's Circle. When something good or bad happens, I will post text or pictures on it because I want to share it with my friends. In my daily life, I often use it for interacting with people and also, I always use WeChat Pay when I buy something (BJ1)

And if I am bored or being outside having nothing to do, I will use the Friend's Circle to find something interesting. WeChat pay plays an important role in my life, too. I do not have to carry money with me when I go outside which is quite convenient (BJ3)

In addition, WeChat provides users with a convenient payment method which can be regarded as a big move for the economy of the Chinese society. It was learned from the interviews that compared with payment by cash, the interviewees preferred to use WeChat Pay, and this payment method has gradually replaced the previous payment method. Specifically speaking, WeChat is more than just communication software in people's life. Users can almost do everything online such as going shopping, booking tickets, reading news, and watching movies.

The answers given by BJ1, BJ3, and SH1 in regard to WeChat Public Number are similar in that they all thought that using this account, to a large extent, has taken much of their time in a not meaningful way, although they have used the feature for different purposes. WeChat engage users by turning them from being passive readers to becoming active readers. Traditional media carry out media communication, consultation services, audience interaction, sound communication and video broadcasting through news public accounts and media platforms on WeChat. Through WeChat, there has been a huge innovation in news reporting. It not only carries more information in terms of content, but also conveys more rich feelings. The audio-visual media features have the function of audience comment, which has exerted profound influence on users' willingness to engage them in reading and commenting news.

I really like the account of Da Zhang Yu Le and Ba Gua Xie Hui which are about account number offer us exactly what we like (BJ1)

Another is to use some WeChat public platforms to improve my cultural level and professional ability (SH1)

The Official Accountant always updates the article for us to get information and can let us know what happened to China and the world (BJ3)

Miscellaneous WeChat addiction refers to the many activities not found in the above mentioned categories. GZ2 stated that the games on WeChat are convenient to play compared to other online games. The games on WeChat do not take time to download and playing the game can easily be resumed after exiting. Unlike GZ2, BJ3 mentioned that she enjoyed using the applications on WeChat, which she has been using for online shopping. Given the fact that individuals have to be preoccupied with their work and have less available time to do what they want to do (such as going shopping in a shopping mall), the programmes offered by WeChat give users a better way to improve their life quality.

Unlike other online games, the game is easy to stop and easy to go on playing. Also, I do not have to download it when I want to play. I can just click it from WeChat. I really think I am a big fan of this kind of game (GZ2)

Oh, I really want to say that I like to use Mogujie from WeChat, which is used for online shopping. It is quite handy for us to use it (BJ3)

5. Conclusion

Judging from the findings of the IDI, this study indicate that Present Fatalistic orientations tend to have addiction behaviour while Present Hedonistic orientations also have chance to be addicted. And this study also shows that there are four types of addiction behaviour which are WeChat friendship/relationship addiction, WeChat activity addiction, WeChat information addiction, and miscellaneous WeChat addiction. Nevertheless, it can be noticed that their self-control ability is worse than those who do not have WeChat addiction behaviour.

In order to make analysis on WeChat consumption with regard to the addiction, IDI was used for this study and the Time Perspective Theory was based upon to draw the conclusion of the finding. Five characters in Time Perspective Theory were used to examine people's addiction behaviour. All the interviewees who were addicted to WeChat have the friendship/relationship addiction behaviour and WeChat information addiction behaviour, whereas some of them were addicted to WeChat activities and other miscellaneous of WeChat.

Previous study has confirmed that the past-negative characteristic of past-orientation characteristic is associated with high risks of addiction behaviour of internet use and Facebook use, whereas past-positive characteristic and future orientations have less tendency of addiction behaviour (Przepiorka, Blachnio, 2016). This notion is consistent with the findings of the following present study in the sense that interviewee BJ2 who has past-positive characteristic, does not have a WeChat addiction behaviour. According to BJ2, he preferred to focus on the old memories, which encouraged him to do better and have hope for the future. Moreover, future characteristic users have no addiction to WeChat use. On the contrary, users (SH3 GZ1 and GZ3) have a better use that most of the present characteristic. As shown in Table 2, most of the interviewee (BJ1, SH1 and GZ2) who are addicted to WeChat possess a Present Fatalistic orientation. Likewise, it is also confirmed that people with Present Fatalistic orientations are found to be more related to Internet and Facebook addiction (Settanni, et al., 2018).

Researchers (Fu et al., 2022) have pointed out that Present Hedonistic orientations are more likely to be able to obtain pleasure from the present events but this characteristic does not mean that this person of this characteristic has more chance to develop online addiction. Unlike this study, BJ3, one of the four addicted interviewee, admitted that whenever she used WeChat, she would focus on playing it and would only enjoy this moment. She also mentioned that whenever she used WeChat to chat with others, she tended to live and seek pleasure in this moment and tried to avoid pain, which can be divided into Present Hedonistic characteristic. This study uses IDI method which reveals more subjective and in-depth opinions from interviewers which account for the different results.

With this kind of information about WeChat use, this study helps to know more about the psychology of WeChat young adults consumers, and it offer a guideline to media consumption study. This study therefore adds to the literature of social media consumption in China which attaches great importance in filling in the gap in regard to information on the consumption of WeChat, particularly in terms of its addiction behaviour of user.

Due to the lack of samples of IDI, among the characteristic orientations of ten interviewees, only four characters are examined, so more samples are needed for the future study. Moreover, because of the lack of studies on WeChat addiction behaviour among the young adults in China, more studies are necessitated to examine whether more samples from other cities in China would produce similar findings. Future studies may consider examining more types of addiction behaviour and involve interviewee from other places in China. In doing so, the study would improve and help to add more value to this specific study.

References

Alekseeva, 2021 – *Alekseeva, L.V. (2021)*. Developing critical thinking skills of students in the media environment. *Media Education (Mediaobrazovanie)*. 17(2): 189-200.

Anashkina, et al., 2022 – *Anashkina N. Shmatko, M. Anashkina, S*. (2022). Media-communicative occupational guidance based on the platform of online game. *Media Education (Mediaobrazovanie)*. 18(1): 14-23. DOI: 10.13187/me.2022.1.14

Anderson, et al., 2017 – *Anderson, E.L., Steen, E., Stavropoulos, V*. (2017). Internet use and problematic Internet use: A systematic review of longitudinal research trends in adolescence and emergent adulthood. *International Journal of Adolescence and Young adults*. 22(4): 430-454.

Antonius, Nicole, 2014 – *Antonius, J.V.R. Nicole, P.* (2014). A critical review of "Internet addiction" criteria with suggestions for the future. *Journal of Behaviour Addictions*. 3(4): 203-213.

Armstrong et al., 2000 – *Armstrong, L., Phillips, J.G., Saling, L.L.* (2000). Potential determinants of heavier Internet usage. *International Journal of Human-Computer Studies*. 53(4): 537-50.

Baturay, Toker, 2019 – *Baturay, M.H., Toker, S.* (2019). Internet addiction among college students: Some causes and effects. *Education and Information*. 24: 2863-2885. DOI: 10.1007/s10639-019-09894-3

Belkin et al., 2021 – *Belkin, G., Appleton, S., Langlois, K.* (2021).Reimagining mental health systems post COVID-19. *The Lancet Planetary Health*. 5(4): 181-182, DOI: 10.1016/s2542-5196(21)00037-1

Bian, 2018 – *Bian, X.L.* (2018). Research on WeChat usage dependence of college students. *Modern Business Trade Industry*. 32: 97-98. Doi: 10.19311/j.cnki.1672-3198.2018.32.047

Blachnio et al., 2015 – *Blachnio, A., Przepiorka, A., Pantic, I.* (2015). Internet use, Facebook intrusion, and depression: Results of a cross-sectional study. *European Psychiatry*. 30(6): 681-684.

China Daily, 2021 – China Daily. Social media addicts mourn lost time. 2021. [Electronic resource]. URL: https://www.chinadaily.com.cn/a/202103/08/WS604561f3a31024ad0baad6e 2_2.html

Chittaro, Vianello, 2013 – *Chittaro, L., Vianello, A.* (2013). Time perspective as a predictor of problematic Internet use: A study of Facebook users. *Personality and Individual Differences*. 55(8): 989-993.

Christensen, Johnson, 2012 – *Christensen, L., Johnson, B.* (2012). Educational research: Quantitative, qualitative, and mixed approaches (4th ed.). Thousand Oaks, Calif.: Sage.

Devine et al., 2022 – *Devine, D., Ogletree, A. M., Shah, P., Katz, B.* (2022). Internet addiction, cognitive, and dispositional factors among US adults. *Computers in Human Behavior Reports*. 6: 100180. DOI: https://doi.org/10.1016/j.chbr.2022.100180

Djumanova, 2022 – *Djumanova, S.* (2022). Media consumption and media literacy level of Uzbek youth. *Media Education (Mediaobrazovanie)*. 18(2): 157-168. DOI: 10.13187/me.2022.2.157

Evli, Simsek, 2022 – *Evli, M., Simsek, N.* (2022). The effect of COVID-19 uncertainty on internet addiction, happiness and life satisfaction in adolescents. *Archives of Psychiatric Nursing*. 41: 20-26. https://doi.org/10.1016/j.apnu.2022.07.008

Frolova, Rogach, 2022 – *Frolova, E., Rogach, O.* (2022). Media competence of modern students: problems and possibilities of its formation in the system of higher education. *Media Education (Mediaobrazovanie)*. 18(1): 46-54.

Fu et al., 2022 – *Fu, Q., Rodríguez-Ardura, I., Meseguer-Artola, A., Wu, P.* (2022). Self-disclosure during the COVID-19 emergency: Effects of narcissism traits, time perspective, virtual presence, and hedonic gratification. *Computers in Human Behavior*. 130: 107-154. DOI: https://doi.org/10.1016/j.chb.2021.107154

Genedy, 2021 – *Genedy, L.M.S.* (2021). The implementation of smartphones in the instructional process in the views of the female students at Hail University. *International Journal of Advanced and Applied Sciences*. 8(11): 30-36.

Griffiths, 1997 – *Griffiths, M.* (1997). Psychology of computer use: some comments on addictive use of the Internet by young. *Psychological Reports*. 80(1): 81-82.

Griffiths, 2010 – *Griffiths, M.* (2010). Internet abuse and Internet addiction in the workplace. *Journal of Workplace Learning*. 22(7): 463-472.

Hall et al., 2012 – *Hall, P.A., Fong, G.T., Cheng, A.Y.* (2012). Time perspective and weight management behaviours in newly diagnosed type 2 diabetes: A mediational analysis. *Journal of Behavioural Medicine*. 35(6): 569-580.

Ho, 2021 – *Ho, T.T.Q.* (2021). Facebook addiction and depression: Loneliness as a moderator and poor sleep quality as a mediator. *Telematics and Informatics*. 61: 16-17. DOI: https://doi.org/10.1016/j.tele.2021.101617

Hong, 2017 – *Hong, J.H.* (2017). Social media in China: An unprecedented force for an unprecedented social change? *Telematics and Informatics*. 34: 691-693.

Hossain, Munam, 2022 – *Hossain, A., Munam, A.M.* (2022). Factors influencing facebook addiction among Varendra University students in the lockdown during the COVID-19 outbreak. *Computers in Human Behavior Reports*. 6: 100181. DOI: https://doi.org/10.1016/j.chbr.2022.100181

Hou, et al., 2019 – *Hou, Y., Xiong, D., Jiang, T., Song, L., Wang, Q.* (2019). Social media addiction: Its impact, mediation, and intervention. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace.* 13(1). https://doi.org/10.5817/CP2019-1-4

Jowsey, et al., 2021 – *Jowsey, T., Deng, C., Weller, J.* (2021). General-purpose thematic analysis: a useful qualitative method for anaesthesia research. BJA Education. 21(12): 472-478. DOI: https://doi.org/10.1016/j.bjae.2021.07.006

Lien et al., 2017 – *Lien, C.H., Cao, Y., Zhou, X.* (2017). Service quality, satisfaction, stickiness, and usage intentions: Anexploratory evaluation in the context of WeChat services. *Computers in Human Behaviour.* 68: 403-410.

Lu, Wang, 2008 – *Lu, H.P., Wang, S.M.* (2008). The role of Internet addiction in online game loyalty: an exploratory study. *Internet Research.* 18(5): 499-519.

Ma, Fan, 2022 – *Ma, X., Fan, X.* (2022). A review of the studies on social media images from the perspective of information interaction. *Data and Information Management.* 100004. https://doi.org/10.1016/j.dim.2022.100004

Obeid, et al., 2019 – *Obeid, S., Saade, S., Haddad, C., Sacre, H., Khansa, W., Hajj, R.* (2019). Internet addiction among Lebanese adolescents: The role of self-esteem, anger, depression, anxiety, social anxiety and fear, impulsivity, and aggression – a cross-sectional study. *The Journal of Nervous and Mental Disease.* 207(10): 838-846.

Ozturk, Ayaz-Alkaya, 2021 – *Ozturk, F.O., Ayaz-Alkaya, S.* (2021). Internet addiction and psychosocial problems among adolescents during the the Covid-19 pandemic: A cross-sectional study. *Archives of Psychiatric Nursing.* 35(6): 595-601.

Pang, 2022 – *Pang, H.* (2022). Connecting mobile social media with psychosocial well-being: Understanding relationship between WeChat involvement, network characteristics, online capital and life satisfaction. *Social Networks.* 68: 256-263.

Price, et al., 2017 – *Price, M., Higgs, S., Lee, S.* (2017). Self-control mediates the relationship between time perspective and BMI appetite. *Appetite.* 108: 156-160.

Przepiorka et al., 2019 – *Przepiorka, A., Blachnio, A., Cudo, A.* (2019). The Role of depression, personality, and future time perspective in internet addiction in adolescents and emerging adults. *Psychiatry Research.* 272: 340-348.

Przepiorka, Blachnio, 2016 – *Przepiorka, A., Blachnio, A.* (2016). Time perspective in Internet and Facebook addiction. *Computers in Human Behaviour.* 60: 13-18.

Settanni, et al., 2018 – *Settanni, M., Marengo, D., Fabris, M.A., Longobardi, C.* (2018). The interplay between ADHD symptoms and time perspective in addictive social media use: A study on adolescent Facebook users. *Children and Young adults Services Review.* 89: 165-170.

Singh, 2019 – *Singh, S.* (2019). A multifaceted approach to understand the problem of internet addiction among the young Indian students. *Development.* 62: 86-95. DOI: 10.1057/s41301-019-00218-z

Siu et al., 2014 – *Siu, N.Y., Lam, H.H., Le, J.J., Przepiorka, A.M.* (2014). Time perception and time perspective differences between adolescents and adults. *Acta Psychologica.* 151: 222-229. DOI: 10.1016/j.actpsy.2014.06.013

Tang et al., 2017 – *Tang, C.S., Koh, Y.W., Gan, Y.Q.* (2017). Addiction to Internet use, online gaming, and online social networking among young adults in China, Singapore, and the United States. *Asia-Pacific Journal of Public Health.* 29(8): 673-682.

Unger et al., 2018 – *Unger, A., Lyu, H., Zimbardo, P.G.* (2018). How compulsive buying is influenced by time perspective-cross-cultural evidence from Germany, Ukraine, and China. *International Journal of Mental Health and Addiction.* 16(3): 525-544. DOI: 10.1007/s11469-018-9942-4

Unger, Meiran, 2020 – *Unger, S., Meiran, W.R.* (2020). Student attitudes towards online education during the COVID-19 viral outbreak of 2020: Distance learning in a time of social distance. *International Journal of Technology in Education and Science.* 4(4): 256-266. DOI: 10.46328/ijtes.v4i4.107

Waheed, 2019 – *Waheed, M.* (2019). Online threats and risky behaviour from the perspective of Malaysian young adultss. *SEARCH.* 11(2): 57-71.

Wang et al., 2021 – *Wang, X., Abdelhamid, M., Sanders, G.L.* (2021). Exploring the effects of psychological ownership, gaming motivations, and primary/secondary control on online game addiction. *Decision Support Systems.* 144: 113512. DOI: https://doi.org/10.1016/j.dss.2021.113512

Young, 1996 – *Young, S.K.* (1996). Internet addiction: The emergence of a new clinical disorder. *CyberPsychology and Behavior*. 1(3): 237-244.

Young, 2004 – *Young, S.K.* (2004). Internet addiction: a new clinical phenomenon and its consequences. *American Behaviour Scientist*. 48(4): 402-415.

Zhang et al., 2017 – *Zhang, C.B., Li, Y.N., Wu, B., Li, D.J.* (2017). How WeChat can retain users: Roles of network externalities, social interaction ties, and perceived values in building continuance intention. *Computers in Human Behaviour*. 69: 284-293.

Zhang et al., 2022 – *Zhang, M., Xu, P., Ye, Y.* (2022). Trust in social media brands and perceived media values: A survey study in China. *Computers in Human Behavior*. 127: 107024. DOI: https://doi.org/10.1016/j.chb.2021.107024

Zhao et al., 2023 – *Zhao, Y., Qu, D.Y., Chen, S.Y., Chi, X.L.* (2023). Network analysis of internet addiction and depression among Chinese college students during the Covid-19 pandemic: A longitudinal study. *Computers in Human Behavior*. 138: 107424. DOI: https://doi.org/10.1016/j.chb.2022.107424

Zhao, 2021 – *Zhao, L.* (2021). The impact of social media use types and social media addiction on subjective well-being of college students: A comparative analysis of addicted and non-addicted students. *Computers in Human Behavior Reports*. 4: 100122. DOI: https://doi.org/10.1016/j.chbr.2021.100122

Zhou, Wang, 2017 – *Zhou, X.H., Wang, X.* (2017). The relationship between self-control ability and WeChat addiction among university students. *China Journal of Health Psychology*. 25(8): 1254-1257.

Zimbardo, Boyd, 1999 – *Zimbardo, P.G., Boyd, J.N.* (1999). Putting time in perspective: a valid, reliable individual differences metric. *Journal of Personality and Social Psychology*. 77: 1271-1288.