

A STUDY ON STUDENTS' SOCIAL MEDIA DEPENDENCE AT X JUNIOR SCHOOL IN HUNAN PROVINCE, CHINA

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Abstract: This study aimed to understand the current students' social media dependence at X Junior School in Hunan Province, and to analyze the differences in students' social media dependence at X Junior School under different demographic backgrounds. A quantitative study on students' social media dependence at X Junior School was conducted by distributing survey questionnaires to X Junior School students in Hunan Province. The junior school students had a moderate to high degree of negative social media dependence. There were significant differences in demographic backgrounds such as gender, age, grade, and whether they were only children. There were significant differences in students' social media dependence at X Junior School of different ages, 14-15 years old with students the highest level of students' social media dependence at X Junior School of different grades, with the highest social media dependence among students in sophomores, which was significantly higher than freshmen and juniors. There was a significant difference in students' social media dependence at X Junior School whether they were only child or not, with only child having significantly higher social media dependence than non-only child.

Keywords: Junior School Students; Social Media Dependence; X Junior School in Hunan Province

Introduction

With the continuous development and progress of digitization and technology, the Internet and social media have grown by leaps and bounds in today's world. According to statistics, the number of Internet users worldwide has exceeded billions, and the number of social media users, as an important part of the Internet, is also growing continuously. This phenomenon shows that the Internet and social media have become an indispensable presence globally, with far-reaching impacts on people's lives and social development. According to Zhang (2023) learnt from the statistical report on the state of Internet



development in China, as of January 2023, the number of global social media users reached 4.1 billion, accounting for 90.13% of the entire Internet users, and has even exceeded half of the world's total population. With the acceleration of globalization, communication between different countries and cultures has become increasingly frequent. As a global communication tool, social media provides junior high school students with opportunities to interact with their peers around the world. Junior high school students use social media to learn about different national cultures, broaden their international horizons, and participate in cross-cultural communication and learning.

At the same time, they can also use social media to construct their own online identities and display their personalities and values. Students of cross-cultural communication and online identity construction makes junior high school students more addicted to social media and seek more attention and recognition from the outside world. According to Cai (2022), social media users spend an average of 2 hours and 25 minutes per day on social media, which is more than one-third of the Internet access time. Facing the global challenge of junior high school students' social media dependence, governments have continuously strengthened international cooperation and policy coordination. By sharing experiences, developing institutional standards and strengthening regulation, they are jointly addressing the problems posed by social media dependence. At the same time, international organizations and NGOs play an important role in promoting cooperation and exchanges between countries in social media regulation and education.

In China, in 2023, the State Council issued and published the Regulations on the Internet Protection of Minors, proposing to explicitly strengthen the measures and obligations of advocates of online products and services who discover dispositions that endanger or may directly affect the physical and mental health of minors. Social media dependence can have a direct impact on the physical and mental health of junior high school students. Peng (2019) showed that excessive social media use will directly weaken the real social skills of junior high school students, and the face of public speech or social situations to communicate with others will directly produce fear. Gong (2022) pointed out that when junior high school students invest more time and energy in online social media platforms, their participation in real social interaction and maintenance of interpersonal relationships will be reduced, which may lead to the alienation of real interpersonal relationships. Song (2021) showed that overattachment of personal emotions to a particular social media platform can directly lead to problems such as weak ethical and moral concepts, depression, and misplaced anxiety.

Hunan Province, as a strong education province, attaches great importance to the issue of social media dependence among junior high school students, and the Hunan Provincial Department of Education is even targeting a series of problems such as inducing minors to commit suicide and self-harm, cyber violence, and so on by joining hands with the relevant education departments and law enforcement departments to strengthen and intensify online inspection and law enforcement efforts, so

as to create a healthy cyber environment for the healthy growth of minors. X Middle School in Hunan Province, China, has been under excessive academic pressure from students, which has led to numerous problems such as students' depression and suicide due to social media dependence, cyber violence, and cyber romance in the school. This paper will further explore the differences in social media dependence among junior high school students in X Middle School in Hunan Province, China, under different contextual variables, and propose countermeasures to strengthen social media dependence initiatives in the school.

Research Objectives:

- (1). To find out basic information about the demographic background variables of the surveyed students in X secondary school in Hunan Province, China.
- (2). To investigate the current status of social media dependence among students in X secondary school in Hunan Province, China.
- (3). To analyze the significant differences in social media dependence among junior high school students in X middle school in Hunan Province, China, under different demographic background variables.

Literature Review

The Concept of Social Media Dependence

At present, the definition of "social media dependence" in the academic world is not conclusive, and we can only draw on some scholars' understanding of "social media dependence". According to Li (2021), "social media dependence" refers to the fact that when individuals spend a lot of time and energy on social media platforms to satisfy their physical and psychological needs, and when they are unable to access these platforms, they experience anxiety, loneliness, and a desire to use them again, and after reconnecting with them, they will be soothed and feel happy. This phenomenon is seen as a form of over-indulgence in social media. Many scholars have also explored the difference between "social media dependence" and "social media addiction". Zhang &Wei (2020) revealed that there is a certain connection between "social media dependence" and "social media addiction" through their research, and they believe that dependence and addiction have some similarities, with the former being the psychological manifestation and the latter the corresponding behavior characteristics. The former is mainly a psychological manifestation, while the latter is a corresponding behavior trait. In short, they are in some ways interchangeable. Based on this, we define "social media dependence" as when people use social media too often or inappropriately to the extent that it takes up too much time and interferes with the normal functioning of daily life, psychological activities, and schoolwork.



Impact of social media dependence on junior high school students

Junior high school students' social media dependence has skewed their values due to the rude and vicious content they are exposed to through social media platforms. This prevents middle school students from properly understanding social norms and developing a correct worldview. This not only harms students' health but also undermines the interests of others and the healthy development of social order. Xu (2021) in his study showed that whenever junior high school students transfer the situation to their lives by watching videos of violent events on social media, it will bring serious consequences for society. Shang (2019) found in his study that a part of junior high school students is violent, impatient and restless when encountering things, and the phenomenon of throwing and smashing is frequent, coupled with a variety of violent problem-solving bad measures on social media, which makes these junior high school students solve everything violently, resulting in fights, gathering of delinquent youths in and out of school, and frequent incidents of bullying in schools.

Social media dependence aggravates the uniformity of aesthetic standards and appearance concerns among middle school students. According to Gong 's (2021) study, many secondary school students lost their basic judgement of beauty due to social media dependence and thought that by adjusting their appearance features they could get more recognition, and could even obtain wider social attention through plastic surgery. Zhai (2021) found that junior high school students began to pursue the perfect image created on social media platforms due to social media dependence, such as swan neck, A4 waist, butterfly back, and weighing no more than 100, which more directly exacerbated junior high school students' anxiety about their body shape and appearance, leading to overweighting and malnutrition among junior high school students. Zhang (2019) found through a survey of young students that the frequency of social media use was positively correlated with an individual's concern for body image, and that frequent use of social media would put junior high school students at greater risk of appearance anxiety. Liu (2022) pointed out that in the context of social media, fragmented information has given rise to "fast-food" aesthetics, and the "ideal beauty" body image under consumerism has kidnapped the aesthetic discourse of social media.

Social media dependence weakens the holistic nature of middle school students' thinking. Yu (2022) argues that although social media provides people with a large amount of information, it also has the problem of fragmentation of learning content. In his study, Song (2022) found that once social media dependence occurs, the fragmentation of information restricts junior high school students' ability to think deeply and systematically, and the serious lack of complete coverage and more in-depth interpretations of an event makes it impossible for junior high school students to think in-depth, which tends to result in out-of-context and one-sided thinking. Sun 's (2021) findings revealed that fragmented social media short videos may lead junior high school students to develop lazy and over-reliant behavior patterns, which makes it difficult to build deep, critical and rational knowledge structures. In addition,

Wang (2020) also pointed out in her study that social media dependence poses a great threat to the development of junior high school students' systematic thinking approach, rational analysis skills, logical reasoning skills, oral communication skills, and language comprehension. Yang (2021) study further showed that the fragmented information brought about by social media dependence makes it difficult for junior high school students who lack sufficient experience and ability to accurately identify and resist it.

Social media dependence makes junior high school students less capable of distinguishing right from wrong. Yu 's (2022) study found that some junior high school students were unable to distinguish between good and bad characters on social media platforms due to social media dependence, and mistakenly thought that "brotherhood" was true feelings and regarded members of the "triads" in movies or TV dramas as heroic characters. They also regard members of "triad societies" in films or TV dramas as heroic characters. However, positive stories of heroes and exemplary behavior in real life are viewed as old and outdated sermons. Zhang 's (2021) study further reveals that this phenomenon stems from the fact that junior high school students' dependence on social media blurs their moral values, confuses them with the correct standards of value judgement, and they even begin to emulate them, ultimately embarking on the path of crime. According to Wang 's research (2022), when junior high school students, due to social media dependence, subvert the interpretation of classic and historical events on social media platforms. Ma (2022) argues that this kind of cheapness can cause junior high school students to misinterpret the essence of literary values as well as misjudge nature, and then lose further inquiry and discovery of deeper issues such as social development.

Factors affecting social media dependence on junior high school students

Psychological reasons of middle school students are the key to social media dependence. The scholarly work "Social Media Addiction" by Liu (2021) published in the Journal of Psychology and Behavior Sciences emphasizes that for those who are addicted to the online world, they tend to show a more pronounced need for emotional catharsis and a desire to show their personal values and to broaden the scope of their social interactions. The authors also mention that some psychological factors may contribute to the tendency of excessive Internet use, such as loneliness and feelings of emptiness and boredom, which may trigger people to spend more time on the Internet, thus creating an uncontrollable urge to satisfy their own inner desires.

Emotional dependence makes junior high school students dependent on social media. In American scholar Benedick's (2022) book Imagined Communities, he first proposed the theory of "imagined communities", which emphasizes that the use of public media can stimulate consensus among all classes and build an imaginary collective with psychological connections. Similarly, Liu 's (2022) study shows that fans have gained more voice on social platforms in the digital age, and a new community called the "rice circle" has been formed by using fans to participate in supporting celebrities

in innovative ways.

When junior high school students find it difficult to satisfy their basic psychological needs in real life, they tend to turn to other environments, such as social media, in order to seek some kind of substitute or compensation. Many studies by scholars at home and abroad have also shown that basic psychological needs have a predictive effect on social media dependence and Internet addiction. For example, Shen (2021) found that junior high school students who are easily attracted to the Internet usually get higher satisfaction of basic psychological needs on the Internet, and there is a big difference in the degree of satisfaction between online and offline.

Bright Kelsey (2021) found that junior high school students with a higher degree of satisfaction of basic psychological needs have a stronger tendency to become addicted to the Internet than those with a lower degree of satisfaction; Yu (2019) pointed out that basic psychological needs' satisfaction can significantly negatively affect social media dependence and Internet addiction, pointed out that basic psychological need satisfaction can significantly negatively predict pathological Internet use. Zhang & Wei (2021) pointed out that maladaptation occurs when basic psychological needs are frustrated; under the effect of maladaptation, individuals manifest themselves as looking for substitutes to satisfy their psychological needs or generating some kind of compensatory behavior in order to avoid the persistent influence of negative emotions.

Real-life self-satisfaction and eagerness for self-presentation make middle school students transfer this need to social media. According to Bai 's (2019) research results, the development of Internet social platforms has led to a significant change in the mode of interaction between people. Because personal identity is hidden and physically absent in the online social environment, this greatly reduces the psychological burden when communicating, thus motivating individuals to present themselves. Similarly, Li 's (2021) findings reveal that those who are usually quiet and lack the ability to express themselves verbally, use online social networking to show their vitality and expand their social circle while expressing their individuality. Based on the Self-Presentation Theory proposed by American sociologist Goffman (2020), we understand that human beings use various methods to adjust and present their own images on different occasions. The study of Sun (2022) further confirmed that in order to satisfy their needs, motivate them, or achieve certain goals, junior high school students will use language or practical actions to appropriately convey information about themselves to other people in order to build up a good image, and then be recognized by others.

Methodology

The subjects of the survey were middle school students in X Middle School in Hunan Province, China. The students at X Middle School in Hunan Province have repeatedly experienced depression-suicide, cyber violence, and cyber-suicide due to their reliance on social media, so it is of some research

value. This study was conducted on 1400 middle school students in X Middle School in Hunan Province.

A total of 302 questionnaires were distributed according to the Morgan scale calculation, and the questionnaires used the convenience sampling method, 302 questionnaires were expected to be distributed this time, 2 invalid questionnaires were excluded, and the recovery rate reached 97.94%, which was considered to be in line with the requirements. This scale was prepared by Bing Zhang and Wei Xiao (2021) to measure the social media dependence scale for middle school students based on the combination of theory and practice, which has good reliability and validity. The questionnaire consists of 23 questions with 5 dimensions. Among them are salience (5.6.13.16.17), social gain (11.12.23.24.25), compulsion (14.15.26.27), conflict (9.10.20.21.22), and withdrawal (7.8.18.19). The scale is rated on a five-point Likert scale ranging from 1-5.

Results

This study was distributed through the online questionnaire link of Tencent Questionnaire, and a total of 302 questionnaires were distributed and 300 valid questionnaires were recovered. The basic information of the questionnaire is mainly investigated for gender, age, grade and whether it is an only child related background variable.

Statistical Results of Basic Information

 Table 1: Demographic Backgrounds Analysis for Samples

Demographic backgrounds	Group	Number	Percentage
Grade	Freshman	105	35.00
	Sophomore	105	35.00
	Junior	90	30.00
Gender	Male	139	46.33
	Female	161	53.67
	Under 13 years old	81	27.00
Age	14-15 years old	119	39.67
	Over 15 years old	100	33.33
Only child or not	Only child	180	60.00
	Non-only child	120	40.00

From the statistical results of the basic information of the subjects in Table 4.1, it can be seen that in the gender variable, there are 139 males, accounting for 46.33 per cent, and 161 females, accounting for 53.67 per cent, with slightly more girls than boys participating in the survey, and the overall gender ratios are relatively similar. In the age variable, there were 81 people under 13 years old, accounting for 27 per cent, 119 people aged 14-15 years old, accounting for 39.67 per cent, and 100 people aged 15 years old or older, accounting for 33.33 per cent, with a slightly larger number of people aged 14-15 years old, and the overall age ratios were more similar. Among the grade variables, 105 or 35 per cent were in the first year, 105 or 35 per cent in the second year, and 90 or 30 per cent in the

third year, and among the variables of whether or not they were only children, the number of only children was 180 or 60 per cent, and the number of children who were not only children was 120 or 40 per cent, and the number of only children was higher among the students who participated in the survey.

To analyze the differences in social media dependence and dimensions and gender of junior high school students in X Middle School, independent samples t-test was used to statistically analyze the differences in junior high school students' social in social media dependence and dimensions and gender. Combining these data, it was found that there were significant differences in social media dependence across genders in the dimensions of social gain and compulsion included in social media dependence.

Descriptive Analysis

The mean of social media dependence scores was at a high level (M=3.15), and the mean of all dimensions scores was above the medium level, with only the withdrawal scores being slightly lower. In Secondary School X in Hunan Province, China, we observed that students' preferences for social media use focused on five dimensions: salience, coercion, conflict, social gain, and withdrawal. Based on the statistics of the scores of these aspects, salience was rated the highest (M=3.37), followed closely by coercion (M=3.22), while withdrawal was the worst (M=3.01). Therefore, we can surmise that the tendency of adolescents in this school towards social media dependency is high.

 Table 2: Descriptive Statistics for Different Dimensions

Dimension	M	SD
Salience	3.37	0.816
Social benefits	3.14	0.963
Obsessive compulsive	3.22	0.996
Conflict	3.17	0.923
Withdrawal	3.01	0.978

Differences Analysis

To analyze the differences in social media dependence and dimensions of junior high school students in X Middle School with respect to age, a one-way ANOVA was conducted on the levels of scores of junior high school students of different ages on each dimension of social media dependence, and a post-hoc multiple ANOVA (LSD) was conducted on the dimensions in which there were significant factors.) The mean scores of the groups with significant differences were "14-15 years old > 13 years old or younger; 15 years old or older > 13 years old or younger", in which there were significant differences in social media dependence among junior high school students of different ages in the dimensions of social gain and withdrawal.

To analyze the differences in social media dependence and dimensions among junior high school students at X Middle School and their grades, a one-way ANOVA was conducted on the levels



of scores of the dimensions of social media dependence among junior high school students of different grades, and post-hoc multiple ANOVA (LSD) was conducted on the dimensions where significant factors existed. The mean scores of the groups with more obvious differences were "junior high school students > first year; junior high school students > first year, in which there were significant differences in social media dependence among junior high school students of different grades in the four dimensions of salience, compulsion, conflict, and withdrawal.

To analyze the differences between junior high school students' social media dependence and dimensions and whether they are only children in X Middle School, a one-way ANOVA was conducted for the score levels of the dimensions of junior high school students' social media dependence for whether they are only children or not, and a post hoc multiple ANOVA (LSD) was conducted for the dimensions where significant factors existed. Among the dimensions of social gain, conflict, and withdrawal, there were significant differences in social media dependence among junior high school students who were only children or not.

There are significant differences in social media dependence among junior high school students of different genders, different ages, different grades, and whether they are only children. There were significant differences in social media dependence among junior high school students of different ages in 14-15 years old > less than 13 years old; more than 15 years old > less than 13 years old; among junior high school students of different grades in junior high school in the second year > first year of junior high school; third year of junior high school > first year of junior high school; and among junior high school students of different genders and whether or not they were only children.

Discussion

The study showed that on the background variable of gender, the results of this study found that the ratio of male to female students among the surveyed junior high school students was close to 2:3, and there was a significant difference between junior high school students of different genders in terms of their social media dependence status. In terms of standard deviation, female junior high school students have a higher degree of social media dependence than male junior high school students. This can indicate that girls prefer to express their emotions and get emotional support on social media platforms, which is consistent with the findings of Zhang (2021).

The study showed that in terms of the contextual variable of grade level, there was a significant difference in social media dependence among junior high school students in different grades, with junior high school students having the highest level of social media dependence. This is consistent with the results of Xiao's (2021) research analysis. This can indicate that with the high degree of internalization of education in China and the high academic pressure on junior high school students, more junior high school students are biased towards negative emotional output from social media platforms. Gao (2021)



pointed out that when students are in different grades, they are at different levels of knowledge, cognitive level, and life experience, which overall will be reflected in significant differences in social media dependence among students in different grades.

The study shows that in terms of the background variable of age, there is a significant difference in the degree of social media dependence among junior high school students under 13 years old, 14-15 years old, and 15 years old and above, which suggests that there is a significant difference in the perception and understanding of social media dependence among junior high school students in different age groups, which is homogeneous with the conclusion of the study proposed by Liu (2021). The significant difference in junior high school students' dependence on social media in different age groups is due to the fact that there is a significant difference in the perception of self-concept and identity construction among junior high school students in different age groups, which is in line with the research findings presented by Ma (2021).

In terms of the contextual variable of whether or not they are only children, the study showed that only children have a higher level of reliance on social media when faced with interpersonal complications, while non-only children have a lower level of reliance on social media. This is consistent with the findings of Han (2019). There is a significant difference in the degree of reliance on social media between middle school students who are only children and those who are not, mainly because of the lack of emotional expression between only children and their parents and the lack of emotional companionship, a reason that is consistent with the results of Zhai's (2021) study.

Conclusions

- 1) The social media dependence of middle school students in X Middle School in Hunan Province, China, was moderately high, and the overall dependence was high.
- 2) There is a significant difference in the social media dependence of junior high school students of different genders.
- 3) The social media dependence of junior high school students in different grades was significantly different, and the social media dependence of junior high school students in the second and third grades was significantly higher than that of students in the first grade.
- 4) There is a significant difference in social media dependence among junior high school students of different ages, and the degree of social media dependence among junior high school students aged 14-15 and 15 or older is significantly higher than that of junior high school students aged 13 or younger.
- 5) There is a significant difference in the social media dependence of junior high school students who are only children, and the degree of social media dependence of only children is significantly higher than that of non-only children.

References

- Adder. I. M., Maker. A., & Marcom. S. et al. (2022). Information-seeking bias in social anxiety disorder. . *Journal of Abnormal Psychology*, 122(1), 7-12.
- Berger, C. R., & Calabrese, R. J. (2021). Some Explorations in Initial Interactions and Beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research*, 109-112.
- Caplan, S. E. (2021). Theory and measurement of generalized problematic internet use: A two-step approach, *Computers in Human Behavior*, 26(5), 1089-1097.
- Christy, M. (2022). Exploring the Role of Online Social Network Dependency in Habit Formation[J]. Second International Conference on Information Systems. 8(3),12.
- DesJarlais, M., & Willoughby. T. A. (2021). Longitudinal Study of the Relation between Adolescent Boys' and Girls' Compute Use with Friends and Friendship Quality: Support for the Social Compensation or the Rich-get-richer Hypothesis. *Computers in Human Behavior*, 26(5), 896-905.
- Dimple, R. (2021). *Online Social Network Dependency:* Theoretical Development and Testing of Competing Models. *Computer Society*, 2(2), 23-25.
- Garth, H., Mills, C. (2021). From Max Weber: Essays in sociology. New York: Oxford University Press.
- Griffiths, M. (2022). Sex on the Internet: Observations and Implications for Internet Sex Addiction, Journal of Sex Research, 1(38), 331-351.
- High, A. C. & Caplan, S. E. (2021). Social Anxiety and Computer-mediated Communication During Initial Interactions: Implications for the Hyper Personal Perspective. *Computers in human behavior*, 25(2), 475-482.
- Haylee. (2021). American Psychiatric Association DSM-Task Force Arlington VA US. Diagnostic and statistical manual of mental disorders: dsm-5th. *Codas*, 25(2), 191-198.
- Guo, H.R. (2019). The impact of negative life events on internet addiction in junior school students: the mediating role of network-specific self-efficacy. *Master's thesis at Jilin University*.
- Guo, Y. (2019). A study on the relationship between internet addiction and coping styles, time management, and anxiety among junior school students. *Master's thesis from Central China Normal University*.
- Han, J. F., Nie, J., & Lei, P.C. (2019). Meta-analysis of psychological and physical intervention effects on adolescent mobile phone dependence. *China Health Education*, 36-39.
- He, A.M., &Wang, C. Q. (2021). The relationship between loneliness and mobile phone dependence among junior school students: the mediating and moderating effects of negative coping strategies. *Chinese Journal of Clinical Psychology*, (6), 23-27.
- Hu, W., & Chen, S. (2022). A study on the relationship between interpersonal trust, alienation, and civic



- responsibility among junior school students. *Psychological and Behavioral Studies*, 12 (06), 795-799.
- Gong, Y. (2019). Research on Interpersonal Network Dependence of Middle School Students. *Master's thesis from Changchun University of Technology*.
- Li, Q. L. (2021). A study on the correlation between interpersonal trust and alienation among junior school students. *Master's thesis from Tianjin Normal University*.
- Li, Y. X., Jin, L., & Zhang, S.H. (2019). A study on the relationship between self-control ability and mobile phone dependence among junior school students. *Health education in China*.
- Li, Z.B., Liang, Y., &Wang, T. T. (2021). The impact of mobile phone dependence and self-control on procrastination behavior among junior school students. *Psychological Research*, (02), 91-97.
- Song. (2021). What makes online usage stimulate: potential explanation for pathological Internet use, the 105th Annual Convention of American Psychological Association.
- Tang, J. M., Baumeister, R. F., DeWall, C. N., Cairo, N. J., & Barrels, J. M. (2021). Social exclusion decreases prosocial behavior. *Journal of Personality and Social Psychology*, 92(1), 56-66.
- Xiong, J., Zhou, Z. K., & Zhai, Z. Y. (2021). Middle school students tend to be addicted to mobile phones. *Journal of Mental Health in Chinese*.
- Xu, H., & Bi, X.Q. (2019). A Study on Mobile Phone Dependence and Related Factors among Middle School Students. *Psychological research*, 7 (4), 80-85.
- Xu, H., Wu, X. N., & Chen, Y. H. (2020). Factors of Social Media Dependence among Middle School Students. *Chinese Journal of Clinical Psychology*, 16 (1), 26-27.
- Yan, Z. M., &Teng, J.J. (2022). A study on the impact of mobile phone dependence on academic self-efficacy among junior school students. *Special Education in China*, (11).