

Cyberbullying Perpetration and Victimization among Chinese Adolescents

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ABSTRACT

Cyberbullying is a prevalent phenomenon among Chinese adolescents and has severe consequences. The common forms of cyberbullying engagement include cyberbullying victimization and cyberbullying perpetration. Previous studies focused more on cyberbullying victimization. Thus, the current study reviews research concerning cyberbullying among Chinese adolescents to summarize the correlates of the two forms of cyberbullying engagement and compare them with each other. The main findings of the current review include that: (1) male adolescents are more likely to cyberbully others while the gender difference in cyberbullying victimization is still on the debate; (2) traditional bullying victimization is the strongest predictor of cyberbullying victimization and a moderate predictor of cyberbullying perpetration; (3) parental psychological control predicts both cyberbullying victimization and cyberbullying perpetration while the predictive effect is mediated by avoidance motivation and revenge motivation respectively; (4) cyberbullying victimization is positively correlated with depression while the positive correlation between cyberbullying perpetration and depression is even stronger. Cyberbullying victimization and perpetration may be intertwined with each other to present an integrative effect on the individual. Prevention strategies at different levels to reduce cyberbullying engagement are raised and a 'whole-school anti-bullying approach' is suggested.

Keywords: *Cyberbullying victimization, cyberbullying perpetration, adolescence, China.*

1. INTRODUCTION

Because of the rapid development of technology, the usage of smartphones and computers had become highly prevalent among Chinese people. According to Statista, in 2019, 69.4% of Chinese people possessed their smartphones in China [1], while the ownership of computers reached 53.2 per one hundred Chinese households [2]. And those proportions were predicted to rise until 2026. The usage of such technologies allowed more Chinese people to access the Internet, resulting in 988.99 million Chinese Internet users in 2020, which is a huge number [3].

Despite bringing people more opportunities to acquire information and communicate with others, devices like smartphones and computers also raise the risks of cyberbullying among Chinese people. Cyberbullying is defined as the event in which a person or a group sends hostile messages to others via the media on the Internet [4]. Cyberbullying engagement primarily consists of being bullied by others, which is called cyberbullying victimization, and bullying others, which is known as cyberbullying perpetration [5]. Both

cyberbullying perpetration and victimization are prevalent among Chinese adolescents and thus are noteworthy social issues in Chinese society. In a recent study on cyberbullying among Chinese adolescents, 28.0% of the participants reported perpetrating cyberbullying during the previous 6 months while 44.5% reported being bullied online [6].

Adolescence is a life stage with lots of challenges and difficulties and adolescent cyberbullying engagement can cause severe consequences. Under particular circumstances, it can be even more harmful than traditional bullying (e.g., school bullying) [7]. Common consequences of cyberbullying include depressive mood, anxiety, low self-esteem, self-injurious behaviors, suicidal ideation, and even suicidal attempts [8]. Therefore, cyberbullying is highly associated with the mental states and life quality of adolescents.

Cyberbullying has been receiving considerable attention from psychological researchers in recent years. Nevertheless, there is a lack of review papers concerning cyberbullying in the Chinese context.

Moreover, most of the previous studies emphasize cyberbullying victimization, failing to illustrate the situation about cyberbullying perpetration among Chinese adolescents. Besides, several previous research has shown that both cyberbullying perpetration and victimization are positively correlated with risks of depression and suicidal behaviors among Chinese adolescence [9-11]. However, existing studies in the Chinese context seldom compare and integrate the two kinds of cyberbullying engagement with each other. Therefore, the current review intends to illustrate a clearer overview of cyberbullying engagement among Chinese adolescents and compare cyberbullying perpetration and cyberbullying victimization by analyzing their relationships with some correlates (e.g., gender).

2. CYBERBULLYING

2.1. Cyberbullying Perpetration

Cyberbullying perpetrators, or cyberbullies, are defined as people who deliberately assault others in cyber settings [12]. Forms of cyberbullying perpetration include rumor spreading, flaming, posting of pictures and videos, information spreading, impersonation, cyberstalking, tagging, threats, and exclusion [8]. Flaming, which means quarrels on the Internet with profanities or obscenities, is suggested to be the most common type of cyberbullying perpetration, according to a survey in Guangdong, a southern province in China, in which 22.1% of the cyberbullying perpetrators reported that they had conducted flaming online [6]. Another study also suggested that insulting and humiliation are conducted most frequently by Chinese cyberbullies [13].

Cyberbullying perpetrators can have different incentives. Cyberbullies can be divided into four types, including “vengeful angels”, “power-hungry”, “mean girls” and “inadvertent cyberbully” [14]. “Vengeful angels” are the bullies who have been bullied by others before, online or offline, and believe their perpetrating behaviors are out of justice. They believe the victims “deserve it” and are the most common type of cyberbullies [8]. “Power-hungry” cyberbullies are also called “revenge of nerds”, indicating perpetrators who offend others due to their need to show their authority and be seemingly powerful. “Power-hungry” cyberbullies are also often victims of offline bullying with a low level of self-esteem. “Mean Girls” are bullies who offend other people for fun. Though Aftab suggested that both the perpetrators and victims of the “mean girls” type of cyberbullying were more likely to be female, no empirical data were provided. The last kind of cyberbullies suggested by Aftab is “inadvertent cyberbullies” who send messages on the Internet without enough thinking and offend other people

indeliberately. However, this type of cyberbullies is inconsistent with the most widely accepted definition of cyberbullies, since the intention to insult others is included in the criteria of cyberbullying perpetration [14].

Numbers of previous studies in the Chinese context have shown significant gender differences in cyberbullying perpetration, suggesting that male adolescents are more likely to cyberbully others than females [5, 6, 13]. The potential reason for this gender difference is that male adolescents are more aggressive and impulsive than females and male students accept using IT devices during classes more than females [6]. Flaming is the most common kind of cyberbully perpetration for both males and females [6, 13]. Hinduja and Patchin suggested that rumor spreading is more likely to be used by female online perpetrators than males [8], which is inconsistent with Rao et al. suggesting that no matter which form of cyberbully was perpetrated, the proportion of male cyberbullies is larger than female cyberbullies [6].

Apart from gender, there are also other predictors to cyberbullying perpetration. According to the ecological system theory [15], factors relevant to cyberbullying include individual factors and environmental factors at diverse levels. From the individual perspective, negative self-concept, certain personalities (e.g., neuroticism), and past experiences (e.g., breaking the rules, being the bullies, or victims of traditional bullying) are positively correlated with cyberbullying perpetration [8]. Previous studies suggested that cyberbullying perpetration has a significant positive correlation with callous-unemotional traits in adolescents, which means that they have a low level of empathy for others and are not concerned about the potential consequences of their behaviors [16]. Callous-unemotional traits are also positively associated with moral disengagement, a regulatory strategy through which people, after hurting other people, convince themselves that their behaviors are morally acceptable to avoid self-reproach. Moral disengagement is suggested to be a significant catalyst for cyberbullying perpetration by lots of Chinese researchers [16-19].

From the environmental perspective, strong emotional bonds with the family members and continued parental supports are negatively associated with cyberbullying perpetration [20], school absenteeism is suggested to be negatively correlated with cyberbullying engagement [21], which is consistent with Bronfenbrenner’s theory that ecological systems at micro-and meso- levels influence one’s development of mental states. At a more macroscopic level, the cultures in different countries and societies affect the behavioral pattern of cyberbullying perpetration. According to Chen and Chen, although Internet users in Mainland China (CN), Hong Kong (HK), and Taiwan (TW) all use flaming the most when assaulting others, the second

common form of perpetration in CN is “sending maliciously modified or defaced photos”, which is not popular in HK or TW. The second common method of perpetrators in both HK and TW is “threatening or intimidating”. Cyberbullies in TW also tend to “make unwanted sexual remarks, jokes or comments”, which almost occurs the least prevalently in CN and HK [13].

2.2. Cyberbullying Victimization

Cyberbullying victimization is the situation of being bullied or insulted on Internet platforms or media [12]. Two surveys about cyberbullying among Chinese adolescents suggested that flaming is the particular form of cyberbullying from which most of the Chinese victims suffer [6, 13]. As for other common forms of cyberbullying in victimization, the two surveys indicated different orders of frequency. While Rao et al. suggested a higher likelihood of exclusion and information spreading, Chen and Chen indicated that posting pictures and videos is more common in the Chinese context [6, 13].

People react differently after being cyberbullied. Common responses can be categorized into four types: withdrawal or avoidance (e.g., tolerating or doing something else), revenge taking (e.g., hurting or harming the bullies), passive reaction to the bullying episode (e.g., deleting the webpages or logging off the devices), and actively seeking help from others (e.g., informing their cyberbullying experiences to their family or friends). Lots of the research agreed that male victims in China are more likely to revenge or bully others after being cyberbullied [8, 22]. However, although previous literature suggested a higher likelihood for female adolescents to disclose their cyber victimization experiences to other people [8], results consistent with this claim have not been found in the Chinese context [22]. The potential reason may be that Chinese parents tend to treat their daughter as strictly as their son due to the one-child policy.

Past literature has not reached an agreement on the gender difference in cyberbullying victimization in China. While some research suggested that male adolescents are more likely to be victimized on the Internet [22], other research indicated that female is more prone to cyberbullying victimization [6]. There are also researchers believing that there is no significant difference between the two genders in cyberbullying victimization, both accounting for a relatively small proportion of the sample [23].

Although gender is not a significant predictor for cybervictimization, some other individual factors are associated with cyberbullying victimization. Adolescents with a higher level of loneliness, depression, anxiety, and attention deficits are more likely to be bullied online, whereas adolescents with a

high level of self-esteem are less likely to be victimized. Besides, the individual ability to solve conflicts, showing empathy, competing with others, social interaction, and self-control is negatively correlated with cyberbullying victimization. Past deviant behaviors (e.g., fighting against peers, skipping classes) and past involvement in traditional bullying (as bullies or as victims) are related to a higher possibility of being victims of cyberbullying [24]. It is worth mentioning that past experiences of being traditionally bullied are the strongest predictors of being cybervictimization [25].

The environmental predictors for cyberbullying victimization include different levels. At the micro-level, the family relationship is relevant to cyberbullying victimization. Both authoritarian and uninvolved parenting styles are correlated with a higher likelihood of being cyberbullied. Lack of communication with family members also predicts cyberbullying victimization [24]. At the meso level, the school climate is also an essential issue. Positively perceived school climate is negatively correlated with cybervictimization [26]. From the macro perspective, the order of the frequencies of forms of cyberbullying victimization is diverse in different societies as mentioned before. In CN, TW and HK, though all the victims of flaming are most prevalent, adolescents in CN are more likely to be victims of rumor spreading. Meanwhile, adolescents in TW and HK are more likely to suffer from sexual comments and computer virus spread, respectively [13].

2.3. Relationship between Cyberbullying Perpetration and Victimization

Cyberbullying perpetration and victimization are not two issues that are irrelevant to each other. As suggested by previous studies, perpetrators and victims of traditional bullying have different characteristics and there are some interplays between perpetration and victimization [27]. This should be applicable to cyberbullying, which is also bullying but in a different form.

2.3.1. Comparison

Adolescents involved in cyberbullying perpetration and victimization have different traits. The main difference in the correlates between the two kinds of cyberbullying engagement is illustrated in Table 1.

First, one essential difference is about gender. As mentioned in the current review, while adequate studies in the Chinese context have indicated that male adolescents are much more likely to bully others online [5, 6, 13], the gender difference in cyberbullying victimization is still in debate [6, 22, 23]. Multiple factors can influence the relationship between gender and cyber victimization and one of the factors may be culture. Previous research in UK, USA, and Canada

indicated a higher possibility for the female to be cyberbullied, while cyberbullying victimization is suggested to be more prevalent among males in China, Korea, and Germany [24], illustrating a potential cultural difference. China is a country with vast territory and thus various cultures are distributed in different regions of China, which may lead to different gender ratios in cyberbullying victimization. The studies mentioned in the current review selected their participants from different regions of China. One study in Hong Kong, a special administrative region (SAR) of China, indicated a higher proportion of male than female victims of cyberbullying [22], whereas research done by Rao et al. which suggested no gender difference in cyberbullying victimization was conducted in Guangdong, a southern province in China [6]. The research with participants selected from seven cities scattered in different geographical areas in China indicated a higher possibility for the female to be cyberbullied than males [23].

Table 1. The main difference in the correlates between cyberbullying victimization and cyberbullying perpetration

	Cyberbullying victimization	Cyberbullying perpetration
Gender difference	Still on debate	Male more frequent than female
Traditional bullying victimization	The strongest predictor	A moderate predictor
Parental psychological control	Predictive effect mediated by avoidance motivation	Predictive effect mediated by revenge motivation
Depression	Highly correlated	Even more highly correlated

Second, cyberbullying victimization and perpetration among adolescents share several risk factors, including individual factors such as past deviant behaviors, past bullying experiences, and certain personality traits (e.g., neuroticism) [8, 16, 24, 25, 28, 29]. However, the strength of different predictors varies for the two types of cyberbullying engagement. As mentioned above, having the experience of being the victim of traditional schoolyard bullying is suggested to be the most robust predictor of cyberbullying victimization [25]. Besides, victimization experiences in the schoolyard can also predict cyberbullying perpetration, in a significant but relatively moderate way [23]. Those cyber bullies who have suffered from schoolyard bullying are described as “power-hungry” type by Aftab [14]. Traditional bullying perpetration is a predictor of both cyberbullying victimization and

perpetration, although it is not the strongest predictor for either [23]. The causal relationship between traditional bullying engagement and cyberbullying engagement is still unclear [23].

And then, environmental factors which are positively correlated with both cyberbullying victimization and perpetration include unhealthy parenting styles, dysfunctional families, toxic school environments, and so on [20, 21, 24, 26, 28]. Family environment affects adolescents’ development of personality and parents play a vital role in adolescents’ behaviors. Previous research suggested that parental psychological control (PPC), which means invasive parenting that invalidates and manipulates children's feelings and views to control their behavior and thinking, is a predictor of both types of cyberbullying engagement. Due to the intense parent-child relationship during adolescence and the Eastern collective culture which provides motivation and excuses for parents to psychologically control their children, PPC occurs prevalently among Chinese adolescents. Adolescents cope with emotions caused by PPC in different ways. While utilizing revenge as the strategy fully mediates the relationship between PPC and cyberbullying perpetration, the relationship between PPC and cyberbullying victimization is partially mediated by the motivation to socially withdraw [29].

Finally, both types of cyberbullying engagement are correlated with several kinds of negative mental states (e.g., depression, suicidal ideation) [9-11]. One critical correlate of cyberbullying engagement is depression. Plenty of previous research has suggested that both types of cyberbullying are positively correlated with depression [9-11, 30-32]. However, the predictive relationship between them has been controversial. According to a longitudinal study conducted in southern China, depression is a significant predictor of both cyberbullying victimization and perpetration, not vice versa. Neither cyberbullying victimization nor perpetration can predict subsequent depression [30]. Another two studies, nevertheless, indicated that cyberbullying perpetration and victimization can predict depression, respectively [11, 32]. One potential explanation for this incongruence can be that a large number of mediators (e.g., mindfulness, neuroticism) and moderators (e.g., student-student relationship, self-control) [11, 18, 31, 32] can influence the relationship between cyberbullying engagement and depression. As a result, the relationships may vary under different circumstances. Despite the inconsistent conclusions on the predictive relationships, previous research has generally reached an agreement that cyberbullying perpetration has an even higher positive correlation with depression, compared with cyberbullying victimization [8].

2.3.2. *Interplay*

Cyberbullying victimization and perpetration are not two events happening individually. Indeed, as long as one cyber victim exists, there must be at least one cyberbully offending him or her. Cyberbullying victimization and perpetration are always happening simultaneously.

Abundant studies have indicated a predictive effect of cybervictimization on online offending behaviors [22, 32]. The mechanism might be that cyberbullying victimization increases one's feeling of depression, which is positively correlated with cyberbullying perpetration [32]. As mentioned above, male cyber-victims are more likely to take revenge after being bullied, indicating that gender is a moderator of the relationship between cyberbullying victimization and perpetration [22].

Previous studies have suggested that both cyberbullying perpetration and victimization are correlated with negative mental states among Chinese adolescents (e.g., depression, suicidal ideation) [6, 8-11, 30-33]. Being both victims and perpetrators, which is called being perpetrator-victims, is even a stronger predictor of negative mental health. Perpetrator-victims in cyberbullying suffer from severer depression and a more dramatic drop in self-esteem [6, 8]. The potential rationale underlying this strengthened relationship, however, has not been figured out yet. This may suggest a potential interaction between cyberbullying victimization and perpetration that influences adolescents' mental states, or it can be a simple synergistic effect.

2.4. *Potential Prevention Methods*

Cyberbullying engagement is a sophisticated issue involving correlates in various levels of ecological systems and thus intervention at diverse levels is necessary to prevent and deal with cyberbullying. From the individual perspective, a healthy mentality with positive coping strategies can prevent cyberbullying engagement. Educating the students to be aware of cyberbullying and protect their personal information is also important as a prevention strategy [8]. At the family level, an authoritative parenting style can reduce the likelihood of children engaging in cyberbullying [6]. Therefore, publicity of the appropriate parenting style can be a potential method of preventing cyberbullying. Moreover, from the perspective of the school, a harmonious school atmosphere that encourages social interaction and discourages deviant behaviors can lessen the probability of adolescent cyberbullying engagement [16]. The educators also have to restrict students' off-campus behaviors, by clearly identifying the punishment once students' cyberbullying perpetrating behaviors were uncovered [8]. The awareness of school professionals concerning the consequences of

cyberbullying should also be raised to implement early prevention [33].

However, according to Bronfenbrenner, different ecological systems interact with each other to have an integrative effect on the individuals [15]. Hence, anti-bullying programs in the single-level setting are not enough to prevent cyberbullying. Instead, Chan and his colleagues recommended the utilization of a 'whole-school approach' in solving cyberbullying. 'Whole-school approach' is an anti-bullying approach that used to be implemented to resolve traditional school bullying, which emphasizes intensive supervision and constraints from the integration of the school level, the classroom level, the individual level, and the community level [34]. Although this suggestion came up several years ago, very few empirical supports could be found, and more practical experiences and empirical studies are needed to verify the feasibility of a 'whole-school anti-bullying approach' to resolve cyberbullying in China.

3. LIMITATIONS AND FUTURE IMPLICATIONS

This study has several limitations that require future studies. First, though trying to summarize the predictive factors of cyberbullying engagement, this review fails to include all levels of ecological systems suggested by Bronfenbrenner. With mentioning the individual level, the micro-level (e.g., parents), the meso-level (e.g., schoolyard), and the macro-level (e.g., culture), the exosystem and the chronosystem are not involved. More investigation concerning the effects of those two levels of ecological factors on cyberbullying engagement can be conducted in the future.

Second, this review fails to include all forms of cyberbullying engagement. Online communication seldom occurs in an enclosed environment. Instead, most cyberbullying events are seen by users other than the victims or the bullies. Engaging in cyberbullying as a bystander can also result in some consequences and future research may focus on the by-standers involved in cyberbullying.

Third, raising several potential mechanisms underlying the phenomenon, the current study does not conduct empirical research, failing to provide more supportive evidence. Studies with rigorous empirical designs about the impact of cultures on the gender difference in cyberbullying victimization, the reason why Chinese female adolescents do not disclose their cyberbullying experiences that much, and the potential interplay between cyberbullying victimization and perpetration can be considered in the future.

4. CONCLUSION

To sum up, this review provides an overview of cyberbullying in the Chinese context, especially the situation about cyberbullying perpetration in China which has seldom been illustrated before. Moreover, instead of perceiving cyberbullying victimization and perpetration as two separate things, this review compares the two forms of cyberbullying engagement and attempts to figure out the relationship between them, suggesting a potentially complicated interplay of them and deepening our insights concerning cyberbullying among Chinese adolescents.

REFERENCES

- [1] Number of smartphone users in China from 2015 to 2020 with a forecast until 2026. Statista, 2020. Retrieved from <https://www.statista.com/statistics/467160/forecast-of-smartphone-users-in-china>
- [2] China: number of computers per 100 households, Statista, 2020. Retrieved from: <https://www.statista.com/statistics/278758/number-of-computers-per-100-households-in-china/>
- [3] Statistics: China internet users. China Internet Watch, 2020. Retrieved from <https://www.chinainternetwatch.com/statistics/china-internet-users/>
- [4] R. Tokunaga, Following you home from school: A critical review and synthesis of research on cyberbullying victimization, *Computers in Human Behavior*, vol. 26, no. 3, pp. 277-287, 2010.
- [5] Z. Zhou, H. Tang, Y. Tian, et al., Cyberbullying and its risk factors among Chinese high school students, *School psychology international*, vol. 34, no. 6, pp. 630-647, 2013.
- [6] J. Rao, H. Wang, M. Pang, et al., Cyberbullying perpetration and victimisation among junior and senior high school students in Guangzhou, China, *Injury prevention*, vol. 2, no. 1, pp. 13-19, 2019.
- [7] R. Broll, C. Dunlop, C. V. Crooks, Cyberbullying and internalizing difficulties among Indigenous adolescents in Canada: Beyond the effect of traditional bullying, *Journal of child & adolescent trauma*, vol. 11, no. 1, pp. 71-79, 2018.
- [8] S. Hinduja, J. W. Patchin, *Bullying beyond the schoolyard: Preventing and responding to cyberbullying*, second edition, Thousand Oaks, Corwin Press, California, 2014.
- [9] F. Chang, C. Lee, C. Chiu, et al., Relationships Among Cyberbullying, School Bullying, and Mental Health in Taiwanese Adolescents, the *Journal of School Health*, vol. 83, no. 6, pp. 454-462, 2013.
- [10] G. Niu, J. He, S. Lin, et al., Cyberbullying victimization and adolescent depression: the mediating role of psychological security and the moderating role of growth mindset, *International Journal of Environmental Research and Public Health*, vol. 17, no. 12, pp. 43-68, 2020.
- [11] W. Wang, X. Xie, X. Wang, et al., Cyberbullying and depression among Chinese college students: A moderated mediation model of social anxiety and neuroticism, *Journal of Affective Disorders*, vol. 256, pp. 54-61. DOI:10.1016/j.jad.2019.05.061
- [12] J. W. Patchin, S. Hinduja, Bullies move beyond the schoolyard: A preliminary look at cyberbullying, *Youth Violence and Juvenile Justice*, vol. 4, no. 2, pp. 148-169, 2006.
- [13] J. Chen, L. Chen, Cyberbullying among adolescents in Taiwan, Hong Kong, and Mainland China: A cross-national study in Chinese societies, *Asia Pacific Journal of Social Work and Development*, 3, vol. 30, no. 3, pp. 227-241, 2020.
- [14] P. Aftab, What methods work for different types of cyberbullying?, 2007, Retrieved from <http://www.stopcyberbullying.org/parents/howdoyouhandleacyberbully.html>
- [15] U. Bronfenbrenner, *The ecology of human development: Experiments by nature and design*. Cambridge, Harvard University Press, Massachusetts, 1979.
- [16] J. Fang, X. Wang, K. Yuan, et al., Callous-Unemotional traits and cyberbullying perpetration: The mediating role of moral disengagement and the moderating role of empathy, *Personality and individual differences*, vol. 157, 109829. DOI: 10.1016/j.paid.2020.109829
- [17] X. Yang, Z. Wang, H. Chen, D. Liu, Cyberbullying perpetration among Chinese adolescents: The role of interparental conflict, moral disengagement, and moral identity, *Children and Youth Services Review*, vol. 86, pp. 256-263, 2018.
- [18] L. Gao, J. Liu, W. Wang, et al., Moral disengagement and adolescents' cyberbullying perpetration: Student-student relationship and gender as moderators, *Children and Youth Services Review*, vol. 116, pp. 105-119, 2020.
- [19] X. Wang, F. Zhao, J. Yang, L. Lei, School climate and adolescents' cyberbullying perpetration: A moderated mediation model of moral disengagement and friends' moral identity. *Journal*

- of interpersonal violence, pp. 1-22, 2019, DOI: 10.1177/0886260519860089a
- [20] J. Wang, R. J. Iannotti, T. R. Nansel, School bullying among adolescents in the United States: Physical, verbal, relational, and cyber, *Journal of Adolescent Health*, vol. 45, no. 4, pp. 368-375, 2009.
- [21] C. Yu, Q. Xie, S. Lin, et al., Cyberbullying Victimization and Non-suicidal Self-Injurious Behavior Among Chinese Adolescents: School Engagement as a Mediator and Sensation Seeking as a Moderator, *Frontiers in Psychology*, vol. 11, pp. 1-9, 2020. DOI:10.3389/fpsyg.2020.572521
- [22] D. S. Wong, H. C. Chan, C. H. Cheng, Cyberbullying perpetration and victimization among adolescents in Hong Kong, *Children and youth services review*, vol. 36, pp. 133-140, 2014.
- [23] R. Hu, J. Xue, Z. Han, School bullying victimization and perpetration among Chinese adolescents: A latent class approach, *Children and Youth Services Review*, vol. 120, 1H05709, 2021, DOI: 10.1016/j.childyouth.2020.105709
- [24] Z. Han, Z. Gong, A Systematic Review on Risk Factors of Bullying from the Perspective of Victims, *Advances in China Public Security*, vol. 02, pp. 16-50, 2019. DOI: CNKI:SUN:SGAQ.0.2019-02-002
- [25] Q. Li, Bullying in the new playground: Research into cyberbullying and cyber victimisation, *Australasian Journal of Educational Technology*, vol. 23, no. 4, pp. 435-454.
- [26] H. F. Shi, C. Y. Fan, X.W. Chu, et al., Positive Perceived School Climate and Cyberbullying in Chinese Adolescents: A Moderated Mediation Model from the Perspective of Internet Characteristics, *The Journal of Early Adolescence*, vol. 41, no. 8, pp. 1177 -1202, 2021. DOI: 10.1177/0272431621989816
- [27] D. L. Haynie, T. Nansel, P. Eitel, et al., Bullies, victims, and bully/victims: Distinct groups of at-risk youth, *The Journal of Early Adolescence*, vol. 21, no. 1, pp. 29-49, 2001.
- [28] B. Zhao, C. Jin, Y. Wu, Family Function and Cyberbullying in Adolescents: A Chain Mediation Analysis, *Chinese Journal of Clinical Psychology*, vol. 26, no. 6, pp. 1146-1151, 2018. DOI: 10.16128/j.cnki.1005-3611.2018.06.021
- [29] Y. P. Hsieh, Parental psychological control and adolescent cyberbullying victimisation and perpetration: The mediating roles of avoidance motivation and revenge motivation, *Asia Pacific Journal of Social Work and Development*, vol. 30, no. 3, pp. 212-226, 2020.
- [30] D. Zhang, E. S. Huebner, L. Tian, Longitudinal associations among neuroticism, depression, and cyberbullying in early adolescents, *Computers in human behavior*, vol. 112, pp. 1-9, 2020. DOI: 10.1016/j.chb.2020.106475
- [31] G. Yuan, Z. Liu, Longitudinal cross-lagged analyses between cyberbullying perpetration, mindfulness and depression among Chinese high school students, *Journal of Health Psychology*, vol. 26, no. 11, pp. 1872-1881, 2021. DOI: 10.1177/1359105319890395
- [32] L. Wang, T. Ge, Does victimization predict cyberbullying perpetration? Examining depression as a mediator and self-control as a moderator, *Personality and Individual Differences*, vol. 183, pp. 1-6, 2021. DOI: 10.1016/j.jad.2019.05.061
- [33] Z. Peng, Z. A. B. Klomek, L. Li, et al., Associations between Chinese adolescents subjected to traditional and cyber bullying and suicidal ideation, self-harm and suicide attempts, *BMC psychiatry*, vol. 19, no. 1, pp. 1-8, 2019.
- [33] L. Tian, Y. Yan, E. S. Huebner, Effects of cyberbullying and cybervictimization on early adolescents' mental health: Differential mediating roles of perceived peer relationship stress, *Cyberpsychology, Behavior, and Social Networking*, vol. 21, no. 7, pp. 429-436, 2018.
- [34] H. C. O. Chan, D. S. Wong, Traditional school bullying and cyberbullying in Chinese societies: Prevalence and a review of the whole-school intervention approach, *Aggression and Violent Behavior*, vol. 23, pp. 98-108.