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Relationship between Perceptions of Control and Victimization of Chinese Adolescents

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Abstract This study explores perceptions of control in victims of school bullying, by surveying 108 adolescents with questionnaires. The result shows that there are significant gender differences in external control in general, internal control of sociality, and victimization of physical bullying. Physical victimization decreases as subjects grow older, but unknown control increases. Social victimization is positively correlated with all factors of external control. Verbal victimization is positively correlated with factors of external control of sociality, general and average; and negatively correlated with factors of internal control of sociality and physicality. Victimization of property bullying is positively correlated with average external control. External control is a predictor of victimization of social, verbal, and property bullying; internal control of body is that of verbal victimization.

Keywords victimization, perception of control, adolescent

Introduction

The early study on bullying in school was initiated by Heinemann in 1972 [1], but the empirical study was started by Olweus in 1973 [2]. Thereafter, it became the focus topic of psychologists in many countries, and gradually became an important field of study in psychology [3]. The present studies focus mainly on two aspects: one is to analyze the characteristics of the bully and victimization; the other is to evaluate school prevention programs on bullying [4].

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At present, many experts support the definition of victimization by Olweus. He suggests that victimization is the phenomenon of being bullied or being hurt, repeatedly and over time, by one or more peers [5]. Its feature is an imbalance of strength (e.g., physically, age, ability, etc.) [6].

Although psychologists have studied the problem of bullying in schools for a long time, there are still some problems waiting to be solved. First, most of the research efforts focused on the bully, whereas study on victimization is relatively rare [7]. The frequency of bullying acts being committed is actually fairly high. Although few students have been bullied repeatedly or hurt severely, a number of adolescents in many countries will confront the problem of being bullied by peers [8]. Second, there is a huge cultural difference between Western and Chinese societies; nowadays, majority of relevant studies are notably based on the western template. There have been several reports on bullying behavior in schools in China, but actual analysis of this problem via empirical study has only emerged in recent years in China [9]. Moreover, owing to the difference in cultural and social standards, there is a difference between Chinese students' perception of control compared to their American counterparts [10]. Third, although many studies have explored the "typical" personality of victimization [3], such as shame, withdrawal and distrust [11], even the physical features [12], most studies did not explore the social cognition process of victimization (i.e., how to recognize the victims or how they feel and try to cope with the victimization status).

From the perspective of the victims' social cognitive development, perception of control is an important factor. This concept is based on J. B. Rotter's social learning theory [13], which can explain why some people cope with difficulties actively while others react passively [14]. Thus, we cannot ignore the fact that development of the adolescent's perception of control has influence on the phenomenon of victimization.

Few researches make the connection between perception of control and victimization at present. Based on a few studies, raising the level of students' perception of control can reduce the incidence of victimization [3]. However, there remains a need for further study on the relationship comparing the three dimensions of perception of control with the type of victimization behavior. Perception of control covers three dimensions: (1) unknown control, which means that one believes uncontrollable factors such as luck or chance could have an impact on his/ her life; (2) internal control, which means that one believes he/she could handle his/her life by himself/herself; (3) external control, which means that one believes that some powerful person can control his/her life.

As noted above, the purpose of this study is to explore the relationship between adolescents' victimization behavior and their perception of control in three dimensions. The aim of this study is to illustrate the psychological process features of victimization, and to provide some theoretical background for schools to help the victims thwart bullying. In addition, adolescence is the key period in the development of perception of control; sex differences are also more stable during this period. This study therefore hypothesizes that there may be differences in perception of control and victimization behavior in relation to the student's grade and sex. Based on an analysis of previous studies, Gregory and Mario [15] suggested that perception of control could be a predictive variable for victimization in the phase of cognitive evaluation. However, it can be a psychological indicator when the victims get out of being bullied. For a more specific consideration of the relationship between perception of control and victimization, we suppose that they will be related to each other. Since this study only refers to the phase of cognitive evaluation, but not the phase of therapy for changing behavior, we designate victimization behavior as the dependent variable, and

perception of control as the independent variable. This study hypothesizes that some dimensions of perception of control maybe have predictive effect on certain types of victimization behavior.

Methods

Participants

Study participants consist of students from a randomly selected class both in middle school and in high school levels ($n = 108$), of which 43.5% were male and 56.6% female. Middle school students comprised 50.9% of the total (age = 14.97 ± 0.73), while high school students represented 49.1% (age = 16.15 ± 0.36).

Materials

Self-report scale of victimization

Multidimensional Peer Victimization Scale refers to the behavior of victimization [16]. The scale used in this study is the Chinese version, which includes 22 items evaluated in a 5-point scale (0 = never happened, 1 = seldom, 2 = few time, 3 = often, 4 = always). This scale contains four factors: social victimization ($\alpha = 0.77$), which means that individuals have been bullied by peers in a personal relationship; property victimization ($\alpha = 0.73$), which means that individuals have been grabbed or had their property destroyed by peers; physical victimization ($\alpha = 0.85$), which means that individuals have been physically attacked by peers; verbal victimization ($\alpha = 0.75$), which means that individuals have been attacked by peers through verbal abuse.

Multidimensional measure of children's perceptions of control

This measurement is adapted from the original version of multidimensional measure of children's perceptions of control (MMCPC) [17,18]. This study selects three subscales of it: social dimension, general dimension and physical dimension. There are a total of 36 items, which differentiate three factors: unknown control (UC), internal control (IC) and external control (EC). After reversion, it becomes a 5-point scale; the repeated correlation is 0.83, when the sample is Chinese adolescents. Past studies suggested that the structure validity of the three subscales is fairly good [14]. Cronbach's α of every dimension is as follows: social dimension, UC (0.60), IC (0.62), EC (0.70); general dimension, UC (0.65), IC (0.51), EC (0.57); physical dimension, UC (0.66), IC (0.55), EC (0.68).

Procedure

Data are collected in the classroom. To reduce the effect of social support, we put the victimization scale into the scale of perception of control [19].

Results and analysis

Victimization behavior of adolescents

To explore the victimization behavior of adolescents, if we make the standard that any type of victimization score is more than two, we obtain results that rates the types of victimization as follows: property victimization, 36.1%; verbal victimization, 14.8%; social victimization, 9.26%; physical victimization, 8.33%. Through χ^2 test, we can see that there is a significant difference between the four types of victimization behavior. It shows that the most frequent type of victimization that adolescents suffered from is property victimization, and the least frequent one is physical victimization.

Based on MANOVA test of 2 (Sex) \times 2 (Grade), there is no significant difference in all types of victimization behavior. However, there are significant sex ($F = 10.194, P < 0.01$) and grade ($F = 7.896, P < 0.01$) differences in physical victimization (male > female, middle school > high school). It suggests that adolescents suffer less from physical victimization as they grow older. Moreover, there is no significant sex and grade difference in other dimensions. It illustrates that male and female students are similar in these dimensions, and as they are grow older, these dimensions cease to undergo any significant change.

Adolescents' perception of control

Based on MANOVA test, there is no significant interaction effect on sex and grade in all dimensions of perception of control. However, two dimensions have significant sex differences: general EC ($F = 4.065, P < 0.05$) and social IC ($F = 10.201, P < 0.01$). The score of male students is significantly higher than that of female students, suggesting that male students are more likely to attribute to external control in general; however, male students are more likely to attribute to internal control in social activity. Two dimensions were found to have grade differences: social UC ($F = 10.194, P < 0.01$) and average UC ($F = 10.224, P < 0.01$), in which middle school students scored significantly lower than high school students. It suggests that UC of adolescents is increased by age. In addition, there is no sex and grade difference in other dimensions of perception of control, which means that male and female students are similar in these dimensions, and these dimensions are not significantly affected by age.

Relationship between the types of victimization and perceptions of control

To explore the relationship between victimization and perception of control, we first tested the types of victimization and the dimensions of perception of control, and its relatedness to sex and grade. Then, we focused on perception of control, which is significantly related to victimization as the independent variable, and examined its influence on victimization by regression analysis.

First, based on correlation analysis, social victimization is significantly positively correlated with factors of social EC, physical EC, general EC and average EC (see Table 1). It suggests that if adolescents are more dependent on external control, then their report on the frequency of social victimization will be higher.

Table 1 The factors related to social victimization

	Social EC	Physical EC	General EC	EC
<i>R</i>	0.290	0.229	0.362	0.415
<i>P</i>	0.002	0.017	0.000	0.000

Verbal victimization is positively correlated with factors of social EC, general EC and average EC; and negatively correlated with factors of social IC and physical IC (see Table 2). This means that adolescents depend more on social and general external control and less on social and physical internal control, the higher rate of verbal victimization reported by adolescents.

Property victimization is positively correlated with average external control ($r = 0.237, p < 0.05$), suggesting that adolescents depend more on external control, the higher rate of property victimization reported by adolescents.

Physical victimization is negatively correlated with grade ($r = -0.313, p < 0.05$), and positively correlated with sex ($r = 0.260, p < 0.1$). However, it is not significantly correlated with any dimension of perception of control. It suggests that male students report higher rate physical victimization than female students. And along with age, physical victimization of adolescents is decreased significantly, but it has no relation with perception of control.

This study used stepwise regression analysis to clarify the important factors influencing four types of victimization behavior, and defines types of victimization as dependent variable, and the factors significantly related to these as independent variable. The result shows that external control is the factor influencing social victimization. It suggests that EC has predictive effects on social victimization, with an explanation rate of 18.6% ($F = 24.209, P < 0.01$). It means that if students are inclined to depend on EC, then they are probably more likely to be bullied socially.

EC and physical IC are the factors influencing verbal victimization, with predictive effects on this type of victimization and a total explanation rate of 17.9% ($F = 11.449, P < 0.01$). It suggests that if students tend to have EC, then they are more likely to be verbally bullied; if students tend to have physical IC, then they are less likely to be verbally bullied.

EC is also the factor influencing property victimization. Exerting certain predictive effects on this type of victimization, it has an explanation rate of 8.5% ($F = 9.822, P < 0.05$). It suggests that if students tend to have EC, then they are more likely to experience property victimization.

Grade and sex are the factors influencing physical victimization. With predictive effects on physical victimization, their total explanation rate is 13.8% ($F = 8.397, P < 0.01$). Male students are more likely to suffer from physical victimization than female students; and middle school students are more likely to be bullied than high school students.

Table 2 The factors related to verbal victimization

	Social EC	General EC	EC	Social IC	Physical IC
<i>R</i>	0.230	0.347	0.334	-0.234	-0.241
<i>P</i>	0.017	0.000	0.000	0.015	0.012

Discussion**Sex and grade differences in adolescents' victimization and perception and control**

Based on results relating to sex differences, male students scored higher than female students in reporting general EC, social IC and physical victimization. Study results about sex differences on general EC and physical victimization are similar to those of previous research in China and in other countries [9,10,18]. The probable reason why male students are more likely to suffer from physical victimization is that male students are more diverse in terms of physical growth during adolescence, and their interest in outdoor activities increase [9]. And since physical bullying often happens in the playground and on the way home from school, the odds for male students to be physically victimized are consequentially increased. In addition, male students are more often inclined to general EC and social IC than their female counterparts. It might be because the personal relationship of male and female students is different. Female students may be independent of the control of teachers and parents generally earlier in life; however, they often join an intimate group in peer interaction, and they will ask for suggestions from their peers when facing difficulties. In contrast, peer relationships of male students are more loose and open, and they are relatively more independent in peer relationships.

Based on the result relating to grade differences, there are significant grade differences on social UC, average UC and physical victimization. In reporting physical victimization, junior middle school students scored higher than senior middle school students. It might be because older peers usually bullied the younger victims. However, with increasing age, the number of older peers who bully their victims will decrease relatively, so report of victimization is fairly decreased. Meanwhile, with increasing age, the individual's self-control increases along with an increasing awareness of the legal consequences of aggression; therefore physical bullying decreases correspondingly. This result corresponds to the report of Olweus [15]. Furthermore, with increasing age, adolescents' UC of perception of control also increases. This result agrees with the viewpoint of Weisz [18]. It might be because as they grow older, the self-centeredness of adolescents will be tempered by their growing ability to understand, and conformity towards life's events is enhanced. Their self-evaluation becomes more realistic, and they begin to distinguish the possibility of control in real life.

The relationship between victimization and perception of control

Through correlation analysis, we can see that social, verbal and property victimization is positively correlated with all kinds of external control. Moreover, regression analysis shows that EC is the most important factor influencing victimization. This finding is similar to many reports [20,21]. It reflects that victims tend to let parents, teachers and other important people influence them on their social behavior psychologically. The Cognitive-Knowledge System Model can explain this phenomenon [10]. In this systematic model, the past knowledge and experience of the individual in different areas can be called as "knowledge system". When the victims react to bullying, they need to estimate their control of their own reactions. During this time, the experience is very important. If victims are more inclined towards EC in every situation, then the victims often do not know how to judge their ability to control due to lack of experience, or lack of help from others. So they are more likely to be bullied.

Therefore, if we let the victims learn to become independent of teachers and parents, it might help the victim break free of the status of being bullied. However, the actual interferences are still waiting to be proved.

In addition, verbal victimization is negatively correlated with social IC and physical IC. Moreover, regression analysis shows that physical IC has certain effects on verbal victimization. It suggests that students who tend to have physical IC are less likely to be verbally victimized. But it has no relation to other types of victimization. This result agrees with the report of Boulton [4]. It might be because verbal victimization is mainly the distorted evaluation of the victim, and students who tend to have IC pay less attention to the evaluation of others. Therefore, if they do not give the bully the positive reinforcement, and they will be less likely to suffer from verbal victimization.

The report of victimization in this study is mainly analyzed from the students' personal factors. Further research should consider several factors, including the following: (1) it should discuss on a much larger developmental context, then it can analyze the influence of parents and teachers on adolescents [22]; (2) it should explore the duration of victimization, which might correlate with the adolescents' perception of control. This study hopes to call the attention of schools and parents to the victimization of adolescents. And when we interfere with bullying, we should help the victims to get out of bullying from the perspective of perfecting student's perception of control.

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