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Intervention research on school bullying in primary schools

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Abstract Intervention research on school bullying was conducted in a primary school with an action research method. After conducting a five-week intervention program, the occurrence ratio of being bullied on the way to school and back home and the degree to which children were bullied dropped significantly, but the rate of reduction in grade three was greater than that of grade five. Moreover, pupils' sense of security in school and the teachers' awareness and problem-solving ability were also improved.

Keywords school bullying problems, intervention research, action research

摘要 采用行动研究法在某小学进行欺负问题的干预研究, 通过为期五周的干预, 实验班学生上学和放学路上受欺负的比率和在学校情境中受欺负的程度显著下降, 三年级的下降幅度大于五年级的; 学生在学校里安全感增强; 教师的研究意识和解决问题的能力得到增强和提高。

关键词 欺负问题, 干预研究, 行动研究

1 Introduction

Bullying is usually defined as a subset of aggressive behavior characterized by repetition and an imbalance of power (Olweus, 1993). The behavior involved is generally thought of as being repetitive, i.e., a victim is targeted a number of

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times over a period of time. Also, the victim cannot defend himself or herself easily, for one or more reasons. S/he may be outnumbered, smaller or less physically strong, or less psychologically resilient than the person(s) doing the bullying (Smith, 2000). In the past two decades, the problem of school bullying has received much attention among educational authorities, school teachers and researchers in many countries including China and has been investigated in more than 20 countries and areas in the last two decades of the 20th century (Smith, 2000). Research findings from different cultures have consistently indicated that school bullying is a problem of relatively high incidence, both in the East and West (Genta, 1996). For example, Olweus and his colleagues (1993) found, in Norwegian schools almost 15 percent of children were involved in a bullying problem “often” or frequently, among which 9 percent were bullies and 7 percent were victims. In China, Zhang (2002) demonstrated that 22.2 percent and 6.2 percent of the children were bullied or bullied others “sometimes” or more frequently respectively, among which 13.4 percent and 4.2 percent of the children could be regarded as severe victims and bullies respectively (being bullied or bullied others at least “once a week” or more frequently). The above reported percentage of victims among Chinese children remains relatively high as compared with what has been reported in other cultures, though that of bullies seems to be lower than what has been reported in other cultures.

Bullying harms both the society and the individual children involved. In terms of society, bullying damages democracy and human rights. At the individual level, bullying brings about both physical and/or mental injuries on the victims, which seriously damages their well-being. If a child is repeatedly bullied, s/he will gradually lose his/her self-esteem and self-confidence, become anxious and will hardly be able to concentrate on his/her studies and finally lose interest in schooling (Sharp and Smith, 1994). In extreme cases, it can even lead to children’s suicide (Olweus, 1993).

Undoubtedly, the fundamental aim for the research into school bullying lies in the reduction and the termination of the problem. Intervention practices in the past two decades have demonstrated that school bullying can be remarkably reduced through proper interventions, though complete termination of school bullying is difficult. For instance, the largest scale anti-bullying campaign led by Dan Olweus in Norway in the early eighties succeeded in reducing the problem by 50 percent (Olweus, 1993). Interventions in other cultures also resulted in remarkable reduction of the incidence of the problem (Whitney and Smith, 1993; Lagerspetz et al., 1982).

The present intervention study was designed and implemented in a primary school in Jinan with an aim to explore effective intervention strategies to tackle the problem of school bullying in schools in China, upon the invitation of the school. We adopted the framework of action research and focused the

intervention on the problem of bullying/victimization on children's way to school and on the way back home. According to the report from the children and teachers of the school, these were the places where bullying/victimization took place most frequently, due to the lack of the supervision from teachers and other adults.

Briefly, the aim of this study was two-fold: The first was to help the participating school reduce the incidence of bullying and build a more respectful, cooperative, helpful and safe classroom and school atmosphere, through this interventions in which students interacted with their peers and classmates in positive and proper ways. The second was associated with exploring practical intervention strategies to tackle school bullying problems that can be generalized into Chinese primary and junior high schools.

2 Research methodology and procedure

2.1 Research design

The design of pre- and post test with a control group was employed in the present study. Both the experimental group and control group received pre- and post test via a questionnaire method. The intervention lasted for five weeks in the winter of the year 2000. The methodology of action research was adopted for the experimental group.

2.2 Subjects

The subjects were 354 students of grade three and grade five from a primary school in Jinan City, capital of Shandong Province. Within each grade, two classrooms were randomly assigned as the experimental group, and the other two were assigned as the control group (Table 1).

Table 1 Distribution of subjects by gender and grade

	Grade 3		Grade 5		Total
	Boy	Girl	Boy	Girl	
Experimental group	63	55	59	56	233
Control group	36	23	34	28	121
Total	99	78	93	84	354

2.3 Intervention methodology and procedure

The paradigm of action research was adopted in the intervention. The basic

procedure designed for a five-week program contained three steps which were described as follows.

Step one: Teacher training. To some extent, teachers work as practitioners and play a key role in action research, so it was necessary for them to master the relevant knowledge and skills that would be used for the intervention through a training program before the intervention actually started. For the purpose of the present intervention, the training program designed for the participating teachers involved four types of content: (1) basic knowledge of the procedure and methodology of educational research; (2) knowledge of school bullying; (3) action research; and (4) intervention skills, including brain storming, quality circle, self-confidence training, role playing, etc.

Step two: Designing a five-week intervention program. The intervention program was located basically at the class level. Intervention at the individual level, both for the victims and the bullies were nested into the interventions at class level.

Step three: Implementing the intervention program. The intervention program of each week was conducted in accordance with the model of action research: Planning-Action-Observation-Reflection, which is illustrated in Figure 1.

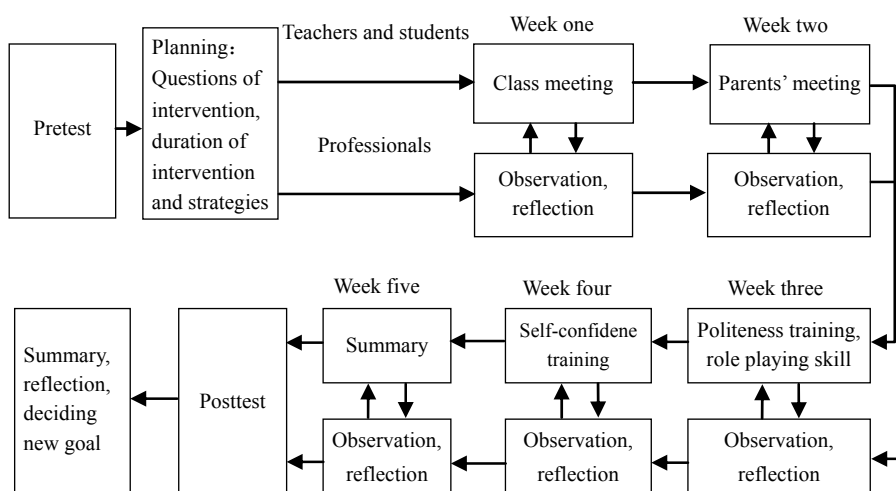


Fig. 1 The process of intervention and activity arrangement

2.4 Evaluation of intervention effect

According to the result of the investigation prior to the intervention and also interviews with teachers and students, bullying/victimization among students took place not only within the school setting but also more frequently and

seriously on the children's way to school and the way back home. Evaluations of the intervention effect in both settings were evaluated respectively via the following two different measures.

2.4.1 Questionnaire of bullying/victimization

The questions used to assess the incidence of bullying/victimization on the way to school and the way home were adopted from the modified Chinese version of the Questionnaire of Bullying/Victimization by Olweus. The Anonymous Bullying/Victimization Questionnaire (Olweus, 1993; Zhang and Wu, 1999) is a self-report questionnaire that has been widely used in research of school bullying in different cultures. The questions were modified to focus on the bullying/victimization problem on the way to school and the way back home. A couple of open-ended questions were created for children's experiences of bullying/victimization on the way to school and back home.

2.4.2 "My School Life" checklist

A checklist was developed to investigate the children's experience of bullying/victimization in the whole school settings (not only limited to their experiences on the way to school and the way back home) based upon "My School Life" checklist by Arora¹. The participating students completed this checklist upon a weekly basis. With this measure, the researchers and participating teachers were able to learn about the situations of the bullying/victimization (including what happened to the children both within the school and out of school) and make timely judgments of the effects of the interventions.

3 Result and analysis

3.1 Effects of interventions on peer victimization on the children's way to school and on the way home after school

3.1.1 Changes in the percentage of victims on their way to school and back home

After the intervention, the percentage of children who reported ever being bullied during the course of the past five weeks on their way to school, which was 32

¹ Arora C M J (1994). Measuring Bullying with the "Life in School" Checklist. Sheffield University, Education Division.

percent before intervention in the experimental group, dropped to 14 percent and children who reported being bullied “often” or more frequently dropped from 10 percent to 5 percent. The percentage of children who reported being bullied “at least once or twice” and “often” in the control group dropped respectively from 37 percent and 11 percent to 22 percent and 5 percent in the posttest after the intervention (Fig. 2).

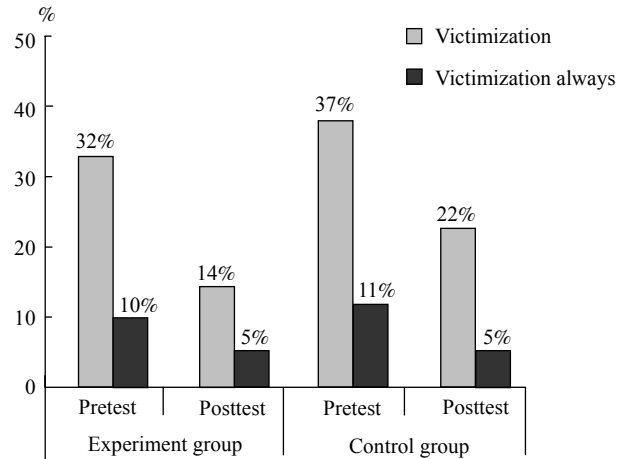


Fig. 2 Changes in the percentage of children reported being bullied on their way to school

In terms of the incidence of being bullied on the way back home from school, the percentage of children in the experimental group who reported being bullied “once or twice” or more and “often” or more frequently dropped from 35 percent and 11 percent before the intervention to 17 percent and 7 percent after the intervention, respectively. While for the control group, the percentage of children reported being bullied “once or twice” at the pretest and posttest were respectively 45 percent and 38 percent, and the percentage of children who reported being bullied “often” or more frequently at the pretest and posttest was respectively 10 percent and 9 percent (Fig. 3).

So it is evident that the number of students reported being bullied on the way to school and on the way home both in the experimental group and the control group, reduced to some extent in the posttest. However, the reduction of the incidence of reported peer victimization in the experimental group, reached approximately as much as 50 percent, both on the way to school and on the way home, a reduction that was significantly greater than that in the control group.

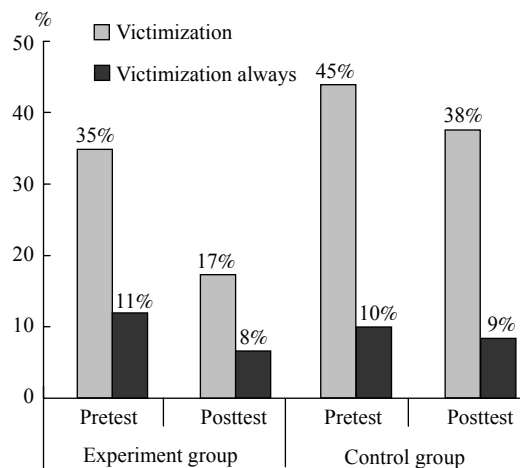


Fig. 3 Changes in the percentage of children reported being bullied on their way back home from school

3.1.2 Severity of being bullied on children's way to school and back home from school

The changes in the reported severity of peer victimization were used as an alternative way to further evaluate the effects of the intervention program. The means and standard deviations of severity of being bullied, both on the way to school and on the way home in the experimental and control groups are presented in Table 2. Data analysis indicated that the severity of being bullied for the children in the experimental group and control group did not differ significantly in the pretest ($t=-0.139$, $t=-0.486$, $ps>0.05$), and the degree of severity of being bullied was also similar between the experimental group and control group in the posttest ($t=-1.057$, $p>0.05$). However, the intervention succeeded in reducing the reported severity of those children who reported being bullied during the intervention in the experimental group. Children suffered much less victimization than ones in the control group ($t=2.58$, $p<0.05$) on their way back home. Correlated samples t -test of the mean score of the pretest and posttest for both the experiment group and control group on the way to school indicated that both the mean score of the severity of being bullied of both groups in the posttest were lower than in the pretest (experiment group: $t=4.54$; control group: $t=3.19$, $ps<0.01$). However, in terms of the change of severity of being bullied on the way home, a significant reduction in the severity of victimization was found for the children in the experiment group ($t=3.86$, $p<0.01$), while no significant difference was found between the mean scores of the pretest and

posttest for the control group. Put together, these findings indicated that the intervention was successful in effectively reducing the severity or frequency of being bullied or victimization by peers on the way to school and on the way home.

Table 2 Mean score of victimization on children's way to school and way back home from school

	Experiment group				Control group			
	Way to school		Way from school		Way to school		Way from school	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Pretest	1.57	1.08	1.58	1.03	1.59	1.00	1.64	0.93
Posttest	1.24	0.72	1.30	0.81	1.32	0.73	1.55	0.91

3.2 The effect of bullying intervention in school setting

As can be seen from Figure 3, the mean score of the children's reported victimization kept decreasing from 2.21 in week one to 1.96 in week four during the intervention process. Results of repeated measure ANOVA indicated that changes in scores of being bullied between successive weeks were significant ($F(4,800)=66.67, p<0.001$). Although no significant interaction between week and gender existed ($F(4,800)=1.49, p>0.05$), significant interactions between week and grades emerged ($F(4,800)=6.70, p<0.001$). Further analysis indicated that there were significant differences between the two adjacent weeks, from week one to week four, but such a difference was not found between week four and week five. The interaction of week and grade (grades 3 and 5) were found mainly between week one and week two and between week four and week five (Fig. 3). As can be seen from Figure 1, the frequency of victimization declined more rapidly from week one to week two for the third graders than the fifth graders. Moreover, the frequency of victimization decreased continuously among the third graders from week four to week five, but slightly increased among the fifth graders. These results suggested that the interventions produced remarkable effects on reducing the severity of peer victimization but the effects were more obvious among the third graders than among the fifth graders (Fig. 4).

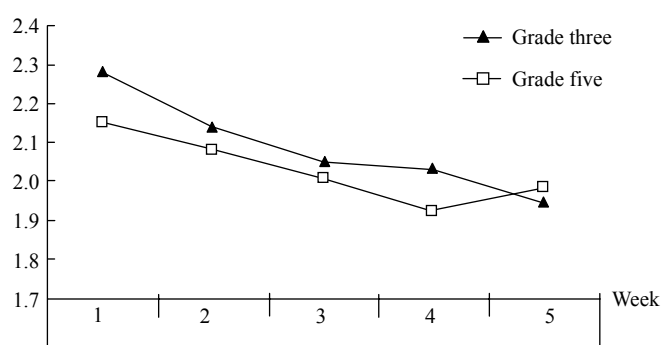


Fig. 4 Changes of victimization in experimental group during intervention

3.3 Changes in students' feelings after intervention

In response to questions about their feelings of the school life after the intervention, most students gave answers like “There is a decrease in the number of victims”, “The number of bullies is going down”, “I am bullied by others much less than I used to”, “Civilized habits are getting more popular than before in our class”, “Teachers now pay more attention to our life in school”, “I can complain freely”, “I can say anything in my mind”, “I feel that school teachers and counselors are concerned about the bullying and victimization problem a big issue”, “I feel good” and so on. These answers in general indicated that the intervention brought about a positive influence on students' feelings.

4 Discussions

4.1 Effects of intervention

Through a 5-week intervention, a remarkable reduction was observed both in the incidence (namely, proportion of victims) and the extent of the severity of victimization among the students of the experimental group both on the way to school and on the way home. The proportion of victims dropped by as much as 50 percent, and severity of peer victimization has also reduced significantly. At the same time, through experimental intervention, positive changes also took place with regard to the bullying problem in the school setting as indicated by the reduction of the severity of peer victimization. The extent to which children were bullied declined continuously during first anterior 4 weeks of intervention among children of the experimental group. The participating students expressed that they

felt safer after the intervention, the classroom atmosphere became even more positive and their satisfaction with school increased. This demonstrated that the intervention produced very positive effects on reducing the problem of bullying in the school.

As can be seen in the result section, a decline of the incidence of peer victimization was also observed among the children in the control group who did not receive the intervention on the way to school or on the way home between the pre- and post test, although the degree of decline in the control group was much less than that of the experimental group. Moreover, the severity level of victimization among students of the control group on the way to school also declined significantly, which in large part can be attributed to the spread of the experimental treatment in the experimental group. Since all of the teachers in the same grade shared one office room and the experimental classes were in neighboring classrooms, the effect of intervention could easily have produced a spread effect on the teachers and the students of the control group. Similar phenomenon was also observed in previous studies (Smith and Shu, 2000; Olweus, 1991).

Consistent with what has been reported in other cultures, the results of the present study indicated that the effect of the intervention varied according to the grade (age) of the target children. This was reflected by a great reduction of the incidence of victimization in the third graders than among the fifth graders, indicating that the intervention program was more effective among younger children than among older children. The differentiation of intervention effect is much associated with the changes in the characteristics of the children involved in the bullying/victimization episode. Some researchers have found that with the increase of age bullies are increasingly inclined to rationalize their own bullying behavior when an episode occurs, such as considering victims to be withdrawn, unvalued or deserved, while bystanders give less help to victims and the victims request less aid from others. The older children possessing those changeable features and attitudes on bullying, the changes of the characters of bullies, bystanders and bullies with age, may increase the difficulties of changing their behavior and thereby constrain the actual effect of the intervention.

4.2 The methods and strategies of intervention of the study

Given that the goal of the present study was to help the school tackle the problem of school bullying, the methodology of action research seems to be the right choice for the intervention program. This methodology focuses on the change in the target behaviors in real situations. However, from the methodological point of view, while action research usually has good ecological validity it has been criticized for a lack of scientific rigorousness or lower internal validity of

research. In the present study we adopted the conceptual structure and procedures of action research for the intervention program, but also used the experimental design of the experiment-control group with pre-posttest. It is expected that such a combination of the advantages of action research and experimental design will help to overcome the shortages of each independent approach and help keep both a relatively high external and internal validity of the intervention research.

4.3 Future research directions

Although the present intervention study produced very inspiring positive effects on reducing the incidence and severity of children's victimization by peers both in the school setting and on the way to school and back home from school, it is not without limitations. First of all, the intervention strategies of this study were designed mainly for bullying/victimization at a group level or classroom level, it is to much less degree an individual oriented program that focuses on the intervention with typical bullies and victims. To the extent that bullying/victimization is both an individual and group process, future research needs to pay more attention to how to use the various psychological skills in intervening with typical bullies and victims on an individual level. Secondly, the social contexts of the children including family, school, peer, social network and so on, all have influences upon the incidence and development of children bullying. Therefore, an integrated model of intervention that can integrate the resources in family, school, peer and community will be the direction for research in this area. The last but not least issue was concerned with the long term effect of the intervention. The evaluation of the intervention effect in the present study was based upon the concurrent assessment of intervention effect, and information of the long term effect of the intervention is still lacking. Future researchers should consider the assessment for the long term effect of the intervention program.

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Glossary

action research 行动研究
brain storming 头脑风暴法
bullying 欺负
classmate 同学
classroom 班级

control group 控制组
correlated samples *t*-test 相关 *t* 检验
evaluation 评估
experimental group 实验组
intervention 干预

intervention effect 干预效果	school 学校
peer 同伴	self-confidence training 自信心训练
posttest 后测	significant difference 显著差异
pretest 前测	subject 被试
quality circle 效果循环评估	victimization 受侵害
role playing 角色扮演	

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