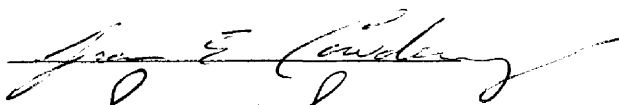
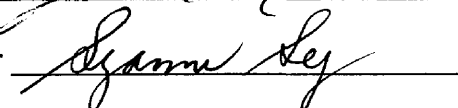


**Bullying Behavior and Teacher Efficacy
in Monitoring and Intervening
with Elementary Age Children**

**Thesis
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First Reader 
Second Reader 

Dedication

I dedicate this project to my mother who taught me to pursue all things worthwhile. Though she was not here to see this project completed, the presence of her spirit during the process was a major impetus for me. I know she'll also be with me as I move on into the field of health education.

I also dedicate this project to my sons, who have the absolute right to grow up in a world where bullying is treated as the violation of dignity and innocence that it is.

Acknowledgments

I want to thank the instructors and staff of the Department of Health Sciences at the University of Michigan-Flint. Their time and dedication to bettering community health and training the people who promote community health has been an inspiration in my goal of a career in health education.

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Table of Contents

Acknowledgments		ii
List Of Tables		iii
Abstract		iv
Chapter I	Introduction	1
	Purpose	
	Significance	
	Definition of Terms	
Chapter II	Review of Literature	5
Chapter III	Methodology and Design	24
	Subjects	
	Variables	
	Procedures	
	Design	
	Analysis	
Chapter IV	Results	27
Chapter V:	Discussion	29
	Conclusions	30
List of References		32
Appendix A:	Rogers Diffusion Curve	36
Appendix B:	Attributes That Are Key Determinants of Diffusion's Speed and Extent	37
Appendix C:	Letter To OLL Teachers	38
Appendix D:	The "Bully-proofing Your School" Program	39
Appendix E:	Teacher Survey	43

Abstract

The purpose of this research was to determine whether a bullying prevention program could affect the incidence of reported bullying behavior in a K-5 environment at a local Catholic school over a specific period of time. The procedure was to monitor the reported incidence during the period that the “Bully-proofing Program” was implemented and to gather data regarding the teachers’ experience and efficacy in dealing with bullying in the school as it may pertain to the success of the program.

This longitudinal study used daily diaries to record the incidence of common bullying behaviors. The teachers’ efficacy and prior experience was assessed using a survey, which indicated that their responses to observed bullying behavior were influenced by on-the-job experience rather than formal training. Even without specific training, the research showed that the number of incidents in fact decreased over the period of time the program was implemented at the school.

Conclusion: More formal training, regardless of the program used, will enhance teacher confidence and efficacy to further effect real change in the prevention of bullying in U.S. elementary schools. Health educators familiar with school-based bullying prevention and intervention strategies can enhance the implementation and diffusion of these programs to positively affect incidence and prevalence statistics.

Chapter I

Introduction

The problem of bullying at school has been evident for generations. However, the problem has only been studied at length for about 30 years. Presently, there are numerous bullying prevention programs, books have been written discussing the issue, a plethora of websites exist that offer help and resources and numerous studies have been done and the findings shared in publications worldwide. Yet the problem still exists. Health Educators, working in the school setting, can work with other educators, students, and staff to monitor efforts to deal with bullying behavior. Staff training and classroom programs designed to teach students appropriate ways to deal with bullying behavior have been shown to be effective in other countries, and health educators in the U.S. have an opportunity to utilize that knowledge for our domestic benefit.

Purpose

The purpose of this study was to describe the incidence of bullying behavior after the implementation of a bullying prevention program.

Research Questions

1. What is the teachers' efficacy in dealing with the problem of bullying?
2. What is the teachers' experience in dealing with the problem of bullying?
3. Can a bullying prevention program affect the incidence of bullying in elementary age children?

Significance

The significance of this research is that it attempts to fill gaps in the literature, specifically a lack of data collected about bullying by elementary school children in America. In the U.S., only one major study has been done to assess the prevalence of bullying (Nansel, Overpeck, Pilla, Ruan, Simons-Morton & Scheidt, 2001). This study looked at bullying in the middle and high school grades across the U.S., but did not look at elementary age children. Since teachers are essentially the “social guardians” on an almost daily basis, monitoring and dealing with aggressive behavior can take up a good deal of daily classroom time. Lacking in the literature is data regarding the self-perceived efficacy of teachers in dealing with bullying behavior or their willingness to deal with these issues day after day, especially at the elementary level.

In the average elementary classroom, two to three students reported spending their day afraid. Some of these students avoid public settings such as the cafeteria, restrooms and hallways to avoid being harassed by bullies (Garrity, Jens, Porter, Sager & Short-Comilli, 1994). In fact, Lee (1993) noted that every school day 160,000 children miss school because of fear. Bullying makes learning difficult: 22% of fourth through eighth grade students reported academic difficulties related to peer abuse (Hoover & Oliver, 1996).

Howard Spivak and Deborah Prothrow-Smith wrote in 2001 that:

Bullying and being bullied appear to be important indicators that something is wrong, and children who experience either or both need help. Furthermore, the primary prevention of bullying/being bullied involves eliminating factors that promote such behaviors (risk reduction) and teaching children the skills for more pro-social interpersonal interaction (resiliency development) (p.7).

They go on to say that:

The epidemic of youth violence does not have a single or simple explanation and will not have a single or simple solution. The epidemic developed and evolved over several decades, so there are no quick fixes or magic pills. Bullying is a red flag indicating risk and the need for prevention and/or intervention. The response to bullying must be part of a much larger effort (Spivak, H. & Prothrow-Smith, D., 2001, p. 2132).

To date, there have been over six hundred programs reviewed and evaluated by Dr. Dan Olweus and others at the University of Colorado. Their project, Blueprints for Violence Prevention, looks at programs and recommends them on the basis of evidence of deterrent effects with a strong research design, sustained effect, and multiple site replication. Only eleven of the six hundred programs reviewed meet the strict scientific standard for program effectiveness. Of these eleven programs, only four have children ages 6 to 11 as intervention targets (Olweus, D., Blueprints for Violence Prevention, 2002).

Definition of Terms

Bullying - The definition of bullying is widely agreed upon in the literature. Bullying is a specific type of aggression in which (1) the behavior is intended to harm or disturb, (2) the behavior occurs repeatedly over time, and (3) there is an imbalance of power, with a more powerful person or group attacking a less powerful one (Olweus, 1983). Common bullying actions include grabbing, hitting, pushing, name-calling, teasing, spreading rumors, excluding people from activities/conversations and threatening actions (Johnson, J.L., 2002).

Overt aggression - focuses on harming others through physical means (e.g. hitting, pushing, hair pulling).

Relational aggression - involves harming others through purposeful manipulation of or damage to peer relationships (Crick & Grotpeter, 1996). An example of this is saying hurtful things about a child so that others will not be his or her friend, and name-calling.

HBSC - Health Behavior in School-age Children

DoI Theory - Diffusion of Innovations Theory

Efficacy - one's ability or skill to achieve a specific desired result

Chapter II

Literature Review

The problem of bullying is one which many people are aware of or have experienced first-hand. Systematic attempts to address the problem started in the early 1970's. Historically, the two widely-reviewed studies done on bullying took place in Bergen, Norway and Sheffield, England in 1991.

Dr. Dan Olweus, from the University of Bergen, Norway, spearheaded the first large-scale study of bullying and developed an intervention program to reduce its prevalence. The main components of the program were aimed at teachers and parents as well as students. The four main components of the program were:

- 1) a 32-page booklet given to teachers and administrators that gives detailed suggestions about what the school can do to counteract and prevent problems. Efforts were made to dispel myths about the causes of bully/victim problems.
- 2) a four-page folder with information and advice for parents of victims and bullies
- 3) a twenty-minute video showing episodes of the everyday lives of two bullied children, a ten-year-old boy and a fourteen-year-old girl
- 4) a short questionnaire designed to obtain information about bully/victim problems in the school, including frequency and readiness of teachers and students to interfere with the problem (Olweus, 1991).

The study design used to oversee the impact of the Olweus program was a longitudinal cohort study. Data collections took place at approximately four months before the intervention and at one year and two years after the start of the campaign. The results showed that some 84,000 students, or 15% of the total number of students, were involved in bully/victim problems “now and then” or more frequently. This represents the alarming ratio of one student in seven. Of these, approximately 9%, or 52,000 students, were victims and 41,000, or 7%, bullied other students “now and then” or more frequently. Olweus (1991) goes on to point out that some 9,000 students were both victims and bullies.

Overall, the reductions in bullying reported by students in the study were 50% or more for those reporting being bullied or bullying “now and then” or more frequently (Olweus, 1991). In addition, there was an observed marked improvement with regard to various aspects of the “social climate” of the class; improved order and discipline, more positive social relations, and a more positive attitude toward schoolwork and the school, according to Olweus. It was also noted that there was a decrease in the number of new cases of victimization.

Olweus also concludes that self-reporting is the best data source to study bully/victim problems. He notes that the limitations of this study are possible under-reporting by students, gradual changes in the students’ attitudes toward bully/victim problems, repeated measurement and concomitant changes in other factors. Still, he believes that the reductions in bully/victim problems are likely to be mainly a consequence of the intervention program and not of some other irrelevant factor.

Dr. Olweus (1991) cites six reasons why his intervention program was effective.

They are:

- 1) The program rests on a decent knowledge base. Past beliefs about bully/victim problems were proven to be myths with little or no empirical support. It was possible then to avoid at least some false leads about how to decrease or prevent bully/victim problems in school.
- 2) There is a direct focus on the relevant behavior and associated norms (e.g. “We don’t accept bullying in our school and will see to it that it comes to an end.”).
- 3) Program participants are encouraged to take a clear stance against bullying behavior. The program also makes clear the power relationships in that regard; the adults are in charge and have the authority (and responsibility) to stop such behavior.
- 4) Another presumably important aspect of the program is that it is directed toward the school as a “system” and works simultaneously at several levels; the school, the class, and the individual levels.
- 5) The positive effect of the intervention is likely related to the fact that the program is designed to achieve not only relatively immediate, more or less, short-lived effects on already-existing bully/victim problems, but also to prevent the development of new problems.

- 6) Finally, there are several advantages to formulating the problems to be targeted in the intervention as bully/victim problems and not in some other way, such as problems with aggression and anti-social behavior or conduct disorder problems.

By conceptualizing it as a bully/victim problem, the aggressive behavior is placed or anchored in a socialization context; the recipient of the aggression, the victim, comes into focus in addition to the aggressor. In this way, the repeated humiliation and suffering of the victim are brought into the foreground. This serves as an important function in justifying use of the program (Olweus, 1991).

Olweus also found that long-term consequences of bullying carry negative effects into adulthood. Former bullies were found to have a four-fold increase in criminal behavior at the age of 24 years, with 60% of former bullies having at least one conviction and 35% to 40% having three or more convictions. Conversely, individual former bullies were found to have higher levels of depression and poorer self-esteem at the age of 23 years, despite the fact they were no more harassed or socially isolated than comparable adults (Olweus, 1994).

Briefly, the “core intervention” included:

1. An extensive and thorough process of consultation, which involves staff (including non-teaching staff), parents, administrators, and pupils.
2. A clear definition of what bullying is and explained guidelines for the staff.

3. Addressing issues of creating a climate where children can talk about their feelings and feel able to tell someone if they are being bullied or are aware of someone else being bullied.
4. Being well-communicated through the school community to ensure mutual expectations and consistency in practice.
5. Being monitored to ensure continuous effectiveness over time.

In broad terms, the Sheffield project is similar to the Norway campaign (Sharp & Smith, 1991). The project started with a survey at each school. However, the interventions were based on ideas and approaches already present or under development in the United Kingdom. The first survey results indicate on average that 27% of primary age pupils and 10% of secondary age pupils had been bullied during the term up to the survey dates. Of these, 10% and 4% respectively reported being bullied once or several times per week (Sharp & Smith, 1991).

Twenty-three schools were involved in the study and one school was used as a control. The project schools were given information about a range of interventions and asked to select those they were most interested in or felt were most appropriate to the situation within their schools. This is a notable difference from the Norway study where only one choice was given.

Name-calling was the most-prevalent form of bullying. Consistent with the Olweus study, boys seemed to be more involved in more physical forms of bullying and bullying involving threats. Girls reported more verbal and socially-based bullying; being

called nasty names, being excluded from the peer group, or being the victim of a campaign. Boys seemed to experience only slightly more bullying than girls, but boys certainly seemed to be the perpetrators of bullying behavior more than girls. The playground was noticeably the most common place for bullying to occur, especially in primary school. Bullies and their victims tend to be within the same class year or group (Sharp & Smith, 1991).

Enabling the schools to choose the extent of their involvement was felt to be an important feature that would contribute toward motivation and commitment. The only demand that the project team made was that each school should be involved in developing and establishing a whole-school policy that would address the problems of bullying (Sharp & Smith, 1991).

The Sheffield intervention cites using the curriculum for raising issues of bullying as being perhaps one of the least-intrusive interventions, slotting neatly into the required curriculum. The intervention used a video to stimulate discussion and role-play, creative work and discussion around the subject of bullying, and the use of age-appropriate fiction (books) and drama (a play) which involves bullying as a central theme. The Sheffield approach also used two methods for peer intervention; “Quality Circles” and “Bully Courts.” These enabled all pupils, including those who weren’t involved as bullies or victims, to take a proactive role in preventing and responding to bullying. An added bonus was that the skills of problem identification, solution development and planning, inter-group communication and presentation skills which they learned along the way can be applied throughout and beyond their education experience (Sharp & Smith, 1991).

The student survey indicated that on average 50% of pupils are not telling anyone of their bullying experience and that limited discussion with the schools suggest that bullying often goes on without adults in quite close supervisory capacity being aware of its existence. Classmates of the victim and the bully, however, may be fully aware of the bullying behavior even if they are not involved in it themselves. Involving peer groups in developing strategies may generate some interesting results in terms of both outcome and process efforts (Sharp & Smith, 1991).

The study found that non-teaching staff, and in particular midday (recess) supervisors, play an important part in promoting cooperative behavior since fifteen of the seventeen primary schools studied selected the playground as a key target area for their involvement in the project. Playground supervisors were given training sessions and provided with information about the nature and extent of the problem as well as methods of identification and responses to bullying situations. Continued monitoring of incidents of bullying by lunchtime supervisors was then ongoing, as was monitoring of implementation of the whole-school policy including content and outcome of staff discussions, school events, parent workshops, and class activities.

Ratings were then given each term to grade the efforts which schools have put into the intervention. Quantitative aspects were actual time spent with quality questions, subjective feelings of staff within the school regarding commitment, priorities, etc. The outcome of the Sheffield project was the ability to offer a clear guide for schools and other people concerned with the problem of bullying which will define the steps that can be used to tackle bullying behavior (Sharp & Smith, 1991).

Another study of bullying behavior took place in Malta and looked at prevalence of the problem. Survey data from 6,282 pupils in primary and secondary schools was collected and analyzed. The primary school sub-sample was made up of students of ages 9 to 11 and secondary school students were ages 11 to 14. The questionnaire itself was based on the one developed by Olweus and other researchers. Care was taken to develop an instrument that was suitable for use in both primary and secondary school context (Borg, 1989).

The results showed that 60.5% of students were self-declared victims of bullying and 48.9% were self-declared bullies at least once since the beginning of that school year. Results showed that 35.3% of the sample were both victims and bullies at least once over the survey period (6 months). These figures are the highest ever reported in the literature (Borg, 1989).

Consistent with other studies' findings (Nansel, et al, 2001; Olweus, 1991; Sharp & Smith, 1991), boys use more overt aggression and girls use more relational aggression while younger students used more physical aggression than did secondary students. There is also general agreement with other studies (Nansel, et al, 2001; Olweus, 1991; Sharp & Smith, 1991) as to where most bullying takes place. The two most "popular" places for bullying are the school playground (indicated by over 50% of victims and bullies) and the classroom (indicated by greater than 40%) of victims and bullies.

Borg (1989) states, "It may appear strange that the two most 'popular' bullying venues should also be the ones where pupils are supposed to be under supervision. Clearly, in the school's playground one can do very little about most verbal forms of

bullying since most are not discernible from a distance. Hence, there is a limit to how much one can curtail this type of bullying behavior by means of increased or more efficient supervision.”

The results of the Malta study show that there is agreement between victims and their bullies that both are usually from the same age group, with 66.7% of victims saying that they were bullied by peers and 78.7% of bullies said they victimized peers. A substantial proportion (44.4%) of victims was bullied by older pupils, however. With regard to the general trend over grade level, it appears that the number of victims who are involved in serious bullying decreases as pupils grow older (Borg, 1989).

This study also showed that most bullying is done on one’s own (53.4%). A close second is with the help of the group (40.1%) and lastly with a single friend (33%). Analysis indicates that the most common type of bullying engaged in by single bullies is violent behavior/beatings (Borg, 1989).

Borg (1989) concluded by saying that it is evident that the problem took years to reach the current, disturbingly high levels and it will take several years of committed work before it is reduced to more manageable levels.

More current U.S.-based research looked only at U.S. students in Grades 6 to 10. This study used self-report data from a questionnaire containing 102 questions about health behavior and relevant demographic variables. Items were based on both theoretical hypothesis related to the social context of adolescents and measures that had been validated in other studies or previous WHO-HBSC surveys, and measures were pre-tested (Nansel, et al., 2001).

This study provided data that associated bullying and being bullied with poorer psycho-social adjustment; however, there were notable differences among those bullied, bullies, and those reporting both behaviors. For instance, those bullied demonstrated poorer social and emotional adjustment, reported greater difficulty making friends, poorer relationships with classmates, and greater loneliness. Persons who bullied others were more likely to be involved in other problem behavior, such as drinking and smoking. They showed poorer school adjustment, both in terms of academic achievement and perceived school climate. Youths who reported both bullying and being bullied demonstrated poorer adjustment across both social/emotional dimensions and problem behaviors. Considering the lack of social isolation, lack of success in school, and involvement in problem behaviors, youths who bully and are bullied may represent an especially high-risk group (Nansel, et al., 2001).

Nansel states that “current research provides a foundation for an understanding of the bullying problem. However, it is insufficient to guide intervention and policy development. Moreover, little is known specifically about bullying among U.S. youth” (Nansel, et al., 2001). This study, however, reported that 29.9% of the 15,686 students sampled reported moderate or frequent involvement in bullying, as a bully (13%), one who was bullied (10.6%), or both (6.3%). The study also concluded that bullying decreases with age. Overall, the study concluded that the prevalence of bullying among U.S. youth was substantial (Nansel, et al., 2001).

The limitations of this study as seen by Nansel were the use of self-reporting, though common and accepted, for the measurement of bullying. She states that

“individual perceptions of bullying nevertheless may vary.” The use of the HBSC survey was also noted as a limitation since it was broadly focused on the health behaviors of middle and high school youth rather than just bullying and does not address elementary school youth (p. 2099). This article also cites the tenets of interventions discussed earlier in the Norway and Sheffield Projects and states that “this approach has not been tested in the U.S.” (p. 2100).

Borg (1989), in his concluding remarks in his article, states, “It makes very little sense to tackle the problem only in the state school (public school) sector as if the private school sector were immune to the problem. Indeed, a similarly large-scale study is required in the private school sector so as to eventually enable a more holistic approach to the problem of bullying in schools.”

A national study of the public’s perception of school violence indicated that respondents believed one of the primary factors contributing to school violence was the inability of school staff to resolve conflict between students. The same study identified training of school staff on how to prevent violence as an effective violence-prevention measure (Elam & Rose, 1994). School violence prevention should focus on changing habitual behaviors, and it begins with training teachers to teach pro-social ways of dealing with conflict to students (Willert & Willert, 2000). Present thought continues to indicate that teachers and other school staff are overwhelmed by and unsure of how to deal with school-related violence (Poland, S., 1994).

An examination of pre-service teachers’ perceived self-efficacy in teaching violence prevention may provide some interesting insights into addressing the issue of

school violence at the pre-service level. This was the purpose of a study done during the 1998-1999 academic year at six different Ohio universities using undergraduate and graduate students enrolled in student-teaching field placements (Kandakai & King, 2002).

A 31-question survey instrument was developed using Bandura's model of self-efficacy (Bandura, A., 1991a). The survey included background questions, outcome-expectation questions, efficacy-expectation questions, outcome-value questions, belief questions, and 1 question examining the level and type of violence-prevention training received (Kandakai & King, 2002).

Less than one fourth (23%) of the 871 pre-service teachers reported having received violence-prevention training from their university. Pre-service teachers who reported receiving violence-prevention training were significantly more confident than those who had not received training in their ability to teach students to use conflict-resolution skills (Kandakai & King, 2002).

To date, the only other comprehensive bullying program to be systematically evaluated is "Bully-proofing Your School" (Garrity, Jens, Porter, Sager, and Short-Camilli, 1994), which is based on principles of the Olweus program and contains many of the same program elements. The program includes three major components:

- (a) increasing awareness about bullying;
- (b) teaching protective skills and techniques to help students learn strategies to deal with and resist bullying;
- (c) creation of a positive school climate through promotion of a "caring majority" in the school.

Results of a four-year intervention in a suburban elementary school in Colorado using “Bully-proofing Your School” revealed significant decreases in physical, verbal, and exclusionary bullying behavior, as well as increases in students’ sense of safety on the playground, in the cafeteria, and going to school (Epstein, Plog, & Porter, unpublished manuscript).

The studies reviewed all call for more research to find the best way to combat the problem of bullying in schools worldwide. Also, researchers (Olweus, 1991; Nansel, et al, 2001) recommend more studies devoted to following both victims and bullies into adulthood to assess the psychosocial impact bullying has had on their lives. Current research in educational settings will focus not only on the bullies and their victims, but also the teacher’s role in how bullying is manifested in schools.

After reviewing the literature regarding bullying behavior, involvement in a bullying prevention project by a health educator can be beneficial for all involved. Health educators bring their knowledge of theory about health behavior and social issues to the pool of knowledge in the discussion. Health educators can help evaluate program options which are available, guide the planning and implementation and maintenance of a bullying prevention program, assess limitations and communicate outcomes. By actively observing and assessing the steps necessary to achieve the best outcome for the program, the health educator expands the knowledge base on the bullying issue, can address gaps in past research and can share this knowledge with other health educators and the psychological and educational communities.

A broad social psychology/sociological theory called “Diffusion of Innovations (DoI) Theory” purports to describe the patterns of adoption, explain the mechanics and assist in predicting whether and how a new program will be successful (Rogers, E.M., 1983). DoI Theory is concerned with the manner in which a new program migrates from creation to use. The diffusion process involves attending to the innovation as well as to the channels used to communicate the innovation (*communication channels*) and to the characteristics of the systems or environment in which this process takes place (*diffusion context*) (Rogers, 1983). Effective diffusion involves more than program dissemination at an individual level; it involves the implementation of strategies through various settings and systems, using a variety of formal or informal media and communication channels (Basch, 1984).

Rogers’ diffusion curve (see Appendix A) shows the five adopter categories identified by Rogers. They include innovators, early adopters, early majority adopters, late majority adopters, and laggards (Rogers, 1983).

Earlier adopting individuals tend not to be different in age, but to have more years of education, higher social status, have greater empathy, less dogmatism, a greater ability to deal with abstraction, greater rationality, greater intelligence, a greater ability to cope with uncertainty and risk, more contact with other people and engage in more active information seeking (Clarke, R., 1999). Rogers (1983) and Zaltman and Duncan (1977) have identified those attributes or characteristics most likely to affect the speed and extent of the diffusion process (see Appendix B).

An innovation needs to be considered in relation to achieving the ideal “fit” between innovation and user. Maximizing this fit requires detailed consideration of the appropriate communication channels to use as well as an understanding of the environment and context in which diffusion is occurring. The environment or context in which the diffusion process occurs is inevitably dynamic and unpredictable rather than static and unidimensional. The aim of diffusion in health promotion and health education is to maximize the exposure and reach of innovations, strategies, or programs for which there is already established evidence of their efficacy and effectiveness. This requires development of the innovation, followed by its dissemination (Oldenburg, B., Hardcastle, D.M., Kok, G., 1997).

Various steps for the implementation and diffusing of program contents have been identified by various researchers:

Dissemination is defined as, “an active approach for knowledge transfer from the resource system to the user system” (Orlandi, 1990). It involves the identification of communication channels and systems (either formal or informal) that are best used for the diffusion of an innovation to a target audience (e.g. teachers).

Adoption refers to the uptake of the program by the target audience. During this step, the target adopters need to be identified along with any relevant subgroups (e.g. lunchroom and playground staff) and their characteristics. The following points generally require attention: the needs of the target adopters, their current attitudes and values, their probable response to the innovation, the factors that will increase the likelihood of adoption, and the ways those barriers can be overcome.

Implementation refers to the initial use of the program in practice. A major focus here is on improving the self-efficacy and skills of adopters, and encouraging trial of the innovation. A *linkage agent* can play a major role, facilitating the smooth implementation of the program by providing training, troubleshooting problems that arise, and answering any questions (Orlandi, Landers, Weston, and Haley, 1990).

Maintenance refers to the ongoing implementation and continued use of the innovation in practice. Programs may be terminated for many reasons. Encouraging sustained use of the program and addressing reasons for termination (such as the lack of financial incentives for preventive medicine activities) is a challenging task for health professionals.

In school situations, the linkage agent might take the form of a liaison group including representatives of the user system, representatives of the resource system, and a change agent facilitating the collaboration. Diffusion of the innovation may be carried out collectively by the members of this liaison group. The critical point is that the innovation development and diffusion-planning processes should be conducted to improve the fit between innovation and user, to attune intervention innovations to practical possibilities and constraints, and to facilitate widespread implementation.

Communication channels are an important component of diffusion theory. Recent examples of diffusing innovations through schools and other systems or settings illustrate the shift in focus from considering innovation attributes and adopter characteristics to considering communication channels and the diffusion (Fullan, 1991; Kolbe & Iverson, 1981; Rogers, 1983).

Diffusion Theory has been used in many venues for program adoption. School-based health promotion programs have used the principles of DoI Theory for implementing a wide array of programs such as smoking cessation, alcohol use (Hardcastle, D.M. and others, 1995), and AIDS education curricula (Paulsen, Kok, & Schaalma, 1994, 1995).

Basch, Eveland, and Portnoy (1986) have identified and compared many barriers to and enhancers of diffusion of specific health promotion innovations in health care, workplace, and school settings. It is important to bear in mind that an innovation needs to be seen as such by the potential adopter, and that the essence of an innovation is information and knowledge. Activating a change process at a personal, organizational, or community-wide level, rather than relying solely on passive diffusion, becomes a major challenge for practitioners and researchers alike.

According to Clarke, “DoI Theory is at best a descriptive tool, less strong in its explanatory power, and less useful still in predicting outcomes, and providing guidance as to how to accelerate the rate of adoption. Nonetheless, it provides one valuable ‘hook’ on which research and practice can be hung.”

Applying DoI Theory to the implementation of an anti-bullying program offers a framework for moving forward with the program to achieve smoother diffusion and a better outcome. This framework requires some pre-implementation work. The principal or other pro-active school administrator would be the *innovator*; (see Appendix A) seeing the need for an intervention even if bullying is not necessarily a problem in their school. This innovator could enlist the help of a health educator in this early phase to help choose

the best program for the school and help the school proceed with implementing that program.

The innovator could next approach the teachers and staff who are respected opinion leaders. These are the *early adopters*. This small, but important group will rally behind the idea of implementing a new program and see its benefits to the school population.

The *early majority* is the teachers and staff who see a need for a change, but will need to be nurtured to enhance the speed and extent of diffusion. This group is willing to move ahead if they are sold on the program's compatibility, complexity, impact on social relations, communicability, time investment, level of risk, and level of commitment as it applies to them. The attitude and commitment of this group (34%) is very important in predicting whether and how this new program will be successful.

The health educator becomes very important, especially when working with the next group, the *late majority*. This group (34%) is slow to buy into the idea of the new program. *Adoption* by this group may take some time, as they are skeptical and will question the program's complexity, its impact on their social relationships and their time. Also, this group is less comfortable with risk and commitment. The late majority adopters will want the opportunity to update and modify the program over time.

The *laggards* see little benefit for themselves or the school, and may fail to invest themselves for personal reasons as well. The health educator may have to pull this group along to help them see where they "fit" in the implementation process.

Implementation may be easier for some adopters than for others. Efficacy can be enhanced by the health educator by offering training sessions, role-playing and answering questions that arise.

Open and on-going communication is essential as implementation and diffusion of the program moves forward. Adopters should be informed about what is working well in the school and where the trouble spots exist that may require a more skilled staff member.

This research project will add to the knowledge base of bullying behavior by providing knowledge and information as well as heighten the awareness and thus the efficacy of teachers, administrators and staff in monitoring bullying behavior, dealing appropriately with such behaviors, and creating an environment where learning is done in a safe and nurturing atmosphere.

Chapter III

Methodology and Design

Subjects

The subjects were eleven elementary school teachers who were introduced to a program to reduce bullying in a Catholic elementary school in Oakland County, Michigan.

Variables

The *independent variables* are: 1) the efficacy of the teachers involved with the study to monitor bullying in the school; 2) the experience of the teachers involved with the study to deal with bullying in the school. The *dependent variable* is the change in the number of incidents of bullying seen by the teachers.

Procedures

Implemented as follows:

- The teachers were given a monthly calendar on which to record incidents of bullying behavior.
- A letter explaining the purpose of the study, the definition of bullying and the four types of behavior to be recorded; hitting, pushing, name-calling and exclusion was given to the teachers (see Appendix C).
- No children's or teachers' names were included to maintain confidentiality as well as lessen any bias.

- The calendars were collected at the end of each month and the number of recorded incidents of each behavior were counted.
- Human Subjects approval was requested from the University of Michigan-Flint for the use of a short questionnaire related to the teachers' training and experience with bullying at the school (see Appendix E).

Design

This study used a longitudinal study of three months' duration to monitor trends in observed bullying behavior by teachers of 331 pupils in grades Kindergarten through 5th grade. This period of time reflected the months following Christmas break and prior to Easter break to maintain the least disruption in normal school routine. The teachers were introduced to an intervention that was implemented concomitantly called the "Bully-proofing Your School" program, which is described in Appendix D. Also, age/grade appropriate books and hands-on materials were purchased to be used in class discussions about bullying.

Analysis

Trends in the incidence of described bullying behavior were charted for this longitudinal study to show any change in incidence over the three-month duration of the study. Qualitative data was used to analyze data from the teacher surveys, which were based on the one developed for and included with the "Bully-proofing Your School" program. This eleven-item survey included:

- 2 background questions
- 2 bullying awareness questions
- 2 bullying location questions
- 1 belief question
- 1 efficacy question
- 1 outcome-value question
- 1 question examining the level and type of violence-prevention received
- 1 open-ended question asking for suggestions to reduce and/or stop bullying in the school.

Chapter IV

Results

The survey information was compiled at the conclusion of the three-month period. As shown in Table 1, the number of observed incidences of bullying behavior decreased overall during the time the “Bully-proofing Your School” program was introduced. The most dramatic change came in the area of hitting, which decreased by nearly 80%. Although “pushing” and “exclusion” increased slightly from the second to third month of observation, the overall number of incidences was still down from the inception of the program.

Table 1

Observed Incidences of Bullying Behavior At Our Lady Of The Lakes Elementary School

Observed Behavior	Incidence		
	January 03	February 03	March 03
1. Hitting	36	25	8
2. Pushing	33	15	17
3. Name-Calling	31	24	14
4. Exclusion	12	4	7

The observations noted in Table 1 were compiled from the teacher bullying survey results. The cooperation level of the teachers was very high, with an overall return rate of 91%. These teachers represented Kindergarten through Fifth Grade and had various levels of teaching experience ranging from one year to thirty years, with an average of 13.35 years. Within that range of experience, 80% of the teachers reported having little or no formal training about bullying intervention while 10% had utilized worksheets or reading assignments to learn about the issue. The other 10% had no formal training, but were involved in at least some classroom discussion.

All the teachers reported having observed bullying in school at some point, and they also reported that each of them has been approached by a student or students regarding a bullying incident or concern. There was no clear evidence of one population being involved in bullying more than another. Boys and girls were equally represented, as were all class levels. The locations where bullying was observed had more distinctions, however. The most frequent environment noted was at lunchtime (70%) followed by recess (40%). The hallway, in class, and the bathroom were all tied at 30% with the most infrequent incidences occurring during class change (20%).

Chapter V

Discussion

We can see from the findings of this research that a positive outcome was realized in spite of the minimal education the teachers had been exposed to in the area of bullying prevention. The number of reported incidents of bullying behavior decreased after the “Bully-proofing Your School” program was implemented. This outcome is consistent with other intervention efforts, such as those observed by Olweus or noted in the Sheffield project.

There were limitations within the program implementation, however. It was not implemented school-wide, thereby creating a possibility for bullying behavior to be experienced or instigated by students outside of the target group. Also, although the teachers involved were exposed to the program beforehand and educated in the recognition of bullying behavior, parents, administrators, non-teaching staff, and pupils had no involvement or consultation. As was the case with the Sheffield approach, the possibility and likelihood that bullying behavior occurs without actually being reported by the student is quite high. An additional factor is that adults in a close supervisory capacity may not witness the behavior or recognize it if they did observe it since the teachers and staff have had little or no training resulting in limited efficacy. In retrospect, the survey itself contained limited detail as well and could have been much more specific.

Although the opportunity for incomplete data does exist in this case, so does the possibility that the strengths of the program were even more effective than realized and non-reported or observed behavior decreased as well. The “Bully-proofing Your School”

program is a good one, paralleling Olweus' "Bully-proofing Program." In this case, it was a good fit for this school at this time, and overall was certainly a commendable first effort.

Conclusions

The indication is that even with little, if any, prior formal education, a bullying-prevention program can be quickly and effectively implemented at the elementary school level. The process is still evolving on a larger scale as well, as more and more school districts explore and assess various programs to implement at their locations. When a consensus is eventually reached, community health programs can be formed by health educators to train and support school staffs in their ongoing efforts to confront and reduce bullying behavior. Action is even being taken on a governmental level, as evidenced by House Bill 92 currently being reviewed by the Michigan legislature. This states that the board of a school district or board of directors of a public school academy must adopt a policy prohibiting harassment, intimidation, or bullying at school.

Recommendations

There are a number of actions that would seem to be able to produce immediate results based on the research of this study. Certainly more training of teachers and staff in the area of bullying recognition and intervention would be positive, both those currently teaching and as part of the education of new teachers. Continued monitoring over a longer duration would result in better data to evaluate and use to form action plans. In the short

term, increased staff presence in areas where reported incidents were higher should offer both a deterrent and opportunity for intervention. A specific policy should be developed and implemented, and the details should be very explicitly spelled out in the school's Parent/Student Handbook.

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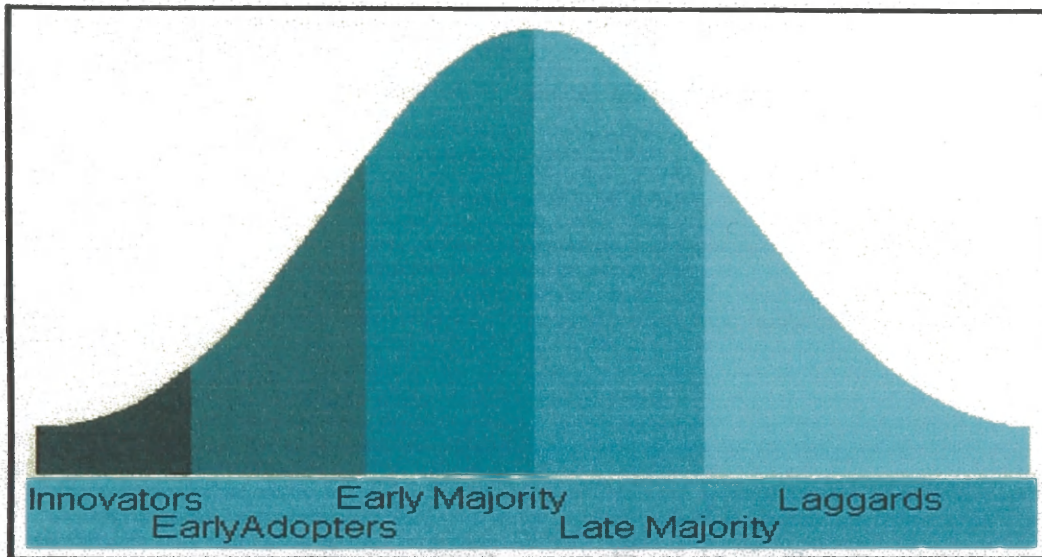
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Rogers Diffusion Curve



Adopter Categories

- A. The **Innovators** (2.5%) – are venturesome, the visionaries, the wild-eyed revolutionaries, at least to the others, who feel threatened by change and risk-taking. To the innovators themselves, the adoption is a no-brainer.
- B. The **Early Adopters** (13.5%) – are respectable opinion leaders. They can function effectively as evangelists and missionaries.
- C. The **Early Majority** (34%) – is very deliberately ahead of the curve, but willing to make safe investments.
- D. The **Late Majority** (34%) – is skeptical and often part of a backlash.
- E. The **Laggards** (16%) – possess almost no opinion leadership. Laggards are the most localite in their outlook of all adopter categories; many are near isolates in the social networks of their system. The point of reference for the laggard is the past. Decisions are often made in terms of what has been done previously. Laggards tend to be suspicious of innovations and change agents. Resistance to innovations on the part of laggards may be entirely rational from the laggard's viewpoint, as their resources are limited and they must be certain that a new idea will not fail before they can adopt.

Appendix B

Attributes that are Key Determinants of Diffusion's Speed and Extent

Relative Advantage	Is the innovation better than what it will replace?
Compatibility	Does the innovation fit with the intended audience?
Complexity	Is the innovation easy to use?
Trial ability	Can the innovation be subjected to trial?
Observability	Are the results of the innovation observable and easily measurable?
Impact on social relations	Does the innovation have a disruptive effect on the social environment?
Reversibility	Can the innovation be reversed or discontinued early?
Communicability	Can the innovation be understood clearly and easily?
Time required	Can the innovation be adopted with minimal investment in time?
Risk and uncertainty level	Can the innovation be adopted with minimal risk and uncertainty?
Commitment required	Can the innovation be used effectively with only modest commitment?
Modifiability	Can the innovation be updated and modified over time?

Appendix C

Letter To OLL Teachers

Dear Teachers,

I am asking for your help with my Master's thesis on Bullying Behavior in elementary age children. With Mrs. Smolinski's help, I am going to studying the results of the upcoming "Bullyproofing Your School" program.

I would like to collect data on the incidence of bullying behavior at OLL. Collecting this data before the start of the education program will help me follow any trends in behavior change.

I realize that horseplay is expected in the elementary grades. Bullying, however, is behavior aimed to intentionally hurt, intimidate, single out or even exclude a child. It is also repetitive acts directed toward one or more persons. Hitting, pushing, tripping, taking another's belongings, put-downs and exclusion of one or more children are all considered bullying behavior.

Please use your best judgment and experience when filling in the calendar.

I understand this may be time consuming and tedious for you, but I believe we will all benefit in the long term with everyone's help with this project.

Thank you for all of your help!

Sincerely,

Sue Prange
Masters candidate in Health Education, U of M-Flint

Appendix D

The Bully-Proofing Program

“Bully-Proofing Your School” (Garrity, et al. 1997) presents both a process and all the materials necessary for the adoption of a school-wide program against bullying.

This school-wide adoption process is comprised of six main components: (1) staff training, (2) student instruction, (3) support of the victims, (4) intervention with the students exhibiting bullying behavior, (5) development of the caring majority, and (6) working with parents.

The sequence of the program manual is as follows:

- Chapter 1: Defining Bullying

This chapter defines the bullying behavior that will be addressed by the program and identifies specific forms which that behavior takes. Also described are the characteristics of both bullies and victims and the dynamics of their relationships within a school.

- Chapter 2: Intervention in Bullying Situations

This chapter makes the case for the necessity of adults to intervene in bullying situations and provides guidelines for situations requiring adult intervention. A handy “Developmental Guide to Conflict-to-Conflict Resolution” is also provided for quick reference.

- Chapter 3: Adoption of A School-Wide Program

This chapter presents the philosophy and the importance of effective school-wide intervention. It identifies some common attitudinal roadblocks among staff members and provides some suggestions for removing these impediments. The Colorado School Climate Surveys can be found in this chapter as well as the steps to creating a caring and safe climate. Finally, it provides an agenda for the orientation to staff members and parents necessary to introduce the program and obtain support from those involved in implementing it.

- Chapter 4: The Staff Training Curriculum

This chapter presents a complete training outline for presentation to the staff, including handouts and transparency masters. The training can be conducted in six sessions or as a half-day or full-day workshop, depending on time resources available in the particular school.

Besides the information provided with this program for presentation to the staff, a very important process occurs within this component of the program – **staff involvement**. As part of the staff training sessions, staff members are guided in identifying their own predominant styles of conflict resolution (with the “Conflict Resolution Questionnaire”), brainstorming and agreeing upon strategies for addressing bullying situations that are feasible with **their** student body and staff (through role play and discussion), and customizing and fine-tuning the bully-proofing program for the needs of **their** building.

- Chapter 5: Student Instruction

This chapter provides a complete classroom curriculum to educate all students about bullying and what they can do about bullying occurring around them. Role-play, modeling, class discussion, and classroom materials (posters, etc.) are utilized to teach students specific strategies

and techniques to cope with and prevent bullying behavior. Additionally, “The Bully Survey” found in Chapter Three is administered to students to assess the degree of bullying behavior occurring in each classroom.

The curriculum consists of eight weekly sessions with an additional follow-up session but is meant to be used flexibly to conform to the demands of individual classroom schedules. The classroom curriculum has activities and instructions specified for Grades 1-6.

- Chapter 6: Creating and Maintaining the Caring Majority

This chapter provides specific techniques for shaping the climate of the school into a safe, respectful, and inclusive environment. Intervention skills for changing the silent majority of children into a caring majority are described. The caring majority provides strength and support to the victims and defuses the power of the students exhibiting bullying behavior. This is the most powerful resource in creating a safe and caring school environment.

- Chapter 7: Supporting The Victims

This chapter presents a curriculum designed to be used in a one-to-one (individual) or small group format with victimized students. When used in conjunction with the classroom curriculum, these six interrelated sessions assist students being victimized by bullies to increase their self-esteem, decrease their isolation, and improve their social skills and friendship-making behaviors.

- Chapter 8: Changing The Bullies

This chapter presents a curriculum to be used in individual sessions or in small groups with the bullies. These six sessions focus on changing errors in thinking, learning anger control, and developing empathy. When used as preparation for the classroom curriculum (which is the

ideal method), these sessions prime the students exhibiting bullying behavior for the presentation of social skills exercises.

- Chapter 9: Effective Pro-social Discipline

This chapter shows how to construct a discipline policy that is consistent with bully-proofing. Students who repeatedly use aggression, alienation, and intimidation require specific disciplinary tools. A variety of tools are described that create pro-social consequences for the bully and protection for the victim.

- Chapter 10: Collaboration With Parents

This chapter details methods for effectively communicating with the parents of both students exhibiting bullying behavior and victims to ensure collaborative relationships between the school and home.

- Chapter 11: Coming From and Going To School

Conclusion: Maintaining and Supporting The Change

A caring community stretches from home to school and back again. A comprehensive plan for building a caring community on the school bus is presented. Surveys for assessing safety on the bus as well as a parent letter and behavioral warning form can be found in this chapter.

- Resource Guide/Reproducible Materials

Recommended resources for teachers, parents, and students on topics such as collaboration, discipline, conflict resolution, coping skills, and assertiveness are referenced throughout the chapters. Reproducible materials are also provided within the appropriate chapters. (Bully-Proofing Your School: A Comprehensive Approach For Elementary Schools, Second Edition, Garrity, et al., 1997)



Our Lady of the Lakes Catholic School



Teacher Bullying Survey

Bullying is defined as something that a person or group repeatedly does or says to gain power over, to dominate, or to intentionally hurt (emotionally or physically) another person.

1. I teach: _____ Kindergarten _____ 1st Grade
_____ 2nd Grade _____ 3rd Grade
_____ 4th Grade _____ 5th Grade
2. Number of years teaching: _____
3. Information you gained in University classes / training about Bullying:

4. Do you see Bullying in the school? _____ Yes _____ No
5. If Yes, please check the areas you see it happening:
_____ Hallway _____ Lunch _____ In Class _____ Bathrooms
_____ Before School _____ After School _____ During class changes
_____ Other _____
6. I see Bullying *more* in the following population (check one):
_____ K _____ 1st _____ 2nd _____ 3rd _____ 4th _____ 5th
_____ Boys _____ Girls
7. Have students come to you with a bully/victim concern? _____ Yes _____ No
8. If Yes, do you mostly (check one): _____ Handle it yourself
_____ Refer to counselor _____ Refer to administration
_____ Other: _____
9. Do you feel that Bullying is a problem at OLL? _____ Yes _____ No
10. Do you feel that intervening helps reduce Bullying? _____ Yes _____ No
11. What can we do to reduce and/or stop bullying in our school?

