An Evaluation of NCBI Missoula's Violence Prevention Program

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INTRODUCTION

High school bullying and violence have become a well documented cultural reality for many of our youth. High schools across Montana and the country are looking at educational and intervention-based strategies to address this growing concern. Four social work graduate students at the University Montana examined the efficacy of a violence prevention program at Big Sky High School in Missoula, Montana. This program follows a model designed by the Missoula chapter of the National Coalition Building Institute (NCBI Missoula). NCBI Missoula is an organization that provides training to reduce prejudice, prevent violence, and resolve conflict, while identifying and implementing strategies to strengthen communities and institutions.

NCBI Missoula's violence prevention program has been implemented in two Missoula high schools: Big Sky High School and Hellgate High School. Its pilot program was launched at Big Sky High School in the 2007-2008 school year and has continued since. The following school year (2008-2009), the violence prevention program was introduced at Hellgate High School. In both schools, full-day *Preventing Violence* workshops are held periodically throughout the year to groups of 30-40 students until the entire freshmen class has received the training. Workshops are facilitated by both adults and high school students who have gone through a three-day *Train-the-Trainer* workshop, which teaches them how to facilitate the *Preventing Violence* workshops. This peer leadership model is an integral part of NCBI Missoula's workshops. Written evaluations are administered to participating students at each workshop. In this report, we integrated both quantitative and qualitative data, including Big Sky's school disciplinary data records for the past three years, student evaluations of the *Preventing Violence* workshops at Big Sky facilitated in the fall 2009 semester, and tape recordings of focus groups facilitated by NCBI-trained high school students in April 2010. The researchers used an action research methodology to investigate several questions: 1) Has violence been reduced at Big Sky High School? 2) Has NCBI's violence prevention program contributed to a reduction in violence at Big Sky? 3) What feedback do Big Sky students have regarding NCBI's violence prevention program? 4) What is the theory of change for youth violence prevention?

This report traces the beginning of NCBI's involvement at Big Sky High School, followed by a discussion of the methods used to collect data, a discussion of the findings and their implications as well as recommendations for future research.

LITERATURE REVIEW

To be effective, school violence prevention programs must address the root causes of violence. Research shows that bullying and violence are often connected to prejudice. This is especially relevant to Montana, as its communities are increasingly diverse with regard to ethnic and cultural heritage, religion, sexual orientation, economic class, ability, and other factors. It is home to seven reservations representing 12 tribes. Notably, American Indian students in Montana drop out of public schools at an average rate of 10.4 percent, more than twice the dropout rate of all Montana students (Montana Office of Public Instruction [OPI], 2009).

There is a demonstrated need for youth violence prevention work in Missoula. In 2007, 33% of Missoula high school students reported being in a physical fight, and over

22% of high school students had carried a weapon such as a gun, knife, or club in the past 30 days (OPI, 2008). Eleven percent of survey respondents reported that their boyfriend or girlfriend had intentionally hit, slapped, or physically hurt them. Nine percent reported being victims of rape.

Guterman (2004) has discussed the challenges in measuring the effects of programs seeking to prevent violence. He has written, "[T]he aims of such efforts, by definition, are to avert behaviors that have not yet occurred and thus are less readily observable" (p. 300). Not only do researchers need to measure something that has not happened yet, the definition of violence varies with each individual, culture, program, and agency. The result is that those actions reported as "violent" often only consist of the most flagrant forms of interpersonal violence (Guterman, 2004). For a more accurate measurement of violence, less obvious acts such as verbal bullying should be considered.

Focus groups are one way to obtain participant feedback in program evaluations. Morgan (1993, 1998) identifies five appropriate uses for focus groups: 1) when there is a power differential between participants and decision makers; 2) when investigating complex behaviors and motivations; 3) when the researchers want to understand diversity; 4) when the researchers want to learn more about the degree of consensus, and 5) when the researchers need a friendly, respectful research method. Furthermore, they are quick, easy, and inexpensive to conduct; they lend the ability to explore topics and generate hypotheses; and they create the ability to collect data from group interaction (Morgan, 1998). Kitzinger and Barbour (1999) noted that focus groups have the potential for transforming the researcher-researched relationship, and group work can shift the balance of power in favor of the participants, which is consistent with a goal of action research. Farquhar & Das (1999) found that research of focus groups indicated that people are often more likely to self-disclose or share personal experiences in a group than in dyadic settings and even more prone to discuss taboo topics. According to Frankland & Bloor (1999), one potential advantage of focus group methods lies in the richness and complexity of the responses of group members for social researchers to analyze.

Krueger (1994) asserted that focus groups work because "attitudes and perceptions relating to concepts, products, services, or programs are developed in part by the interaction with other people." He discussed how focus groups produce qualitative data that provide insights into the attitudes, perceptions, and opinions of participants. These results are solicited through open-ended questions and procedures in which participants can choose the manner in which they respond and also from observations of those respondents in a group discussion. Focus groups present a more natural environment than that of an individual interview because participants are influencing and are influenced by others. He described the focus group technique as a socially oriented research method capturing real-life data in a social environment, possessing flexibility, high face validity, relatively low cost, potentially speedy results, and a capacity to increase the size of a qualitative study.

METHODS

As previously discussed, inherent difficulty exists in evaluating violence prevention programs. Because of this issue, methods of qualitative and quantitative research were applied in order to triangulate results. The researchers examined three types of data: school disciplinary records, student evaluations of workshops, and focus group commentary.

School Disciplinary Data

Disciplinary data records for the three public high schools in Missoula County were provided by the school district for the 2006-2007, 2007-2008 and 2008-2009 academic years. These records reflect violent incidents as recorded by school officials and are divided into the following incident codes: Sexual Battery; Shotgun/Rifle; Knife, Blade 2.5Inches or Greater; Dangerous Weapon; Other Weapons; Aggravated Assault (Battery); Fighting (Mutual Altercation); Harassment, Bullying, Intimidation; Minor Physical Altercation; and Threat/Intimidation. The total number of annual violent incidents at each high school were analyzed, and school interventions introduced in each year at each high school were considered as well.

Focus Groups

To collect qualitative data regarding student perceptions of the effectiveness of the NCBI training workshops, the researchers chose to use focus groups. Originally, each graduate student planned to co-facilitate a focus group with an NCBI-trained high school student. However, this would have required university institutional review board approval as well as parental consent for each student participant because students are considered a vulnerable population. Alternatively, NCBI staff coordinated the focus groups with Big Sky school staff and NCBI-trained high school students. Each focus group was facilitated by two NCBI-trained high school students and audiotaped. No teachers were present during each focus group. Students were asked not to refer to each other by name during the focus group to protect participant confidentiality.

Four focus groups were held. A purposeful sampling design was used, in that four teachers volunteered their advisory period classes to be used as focus groups. These advisory periods each contained 10 to 15 students and were separated by grade level – freshmen, sophomore, junior, and senior. After completion of all four focus groups, NCBI Missoula staff provided the audiotapes to the University of Montana researchers for analysis.

Beyea and Nicoll (2000) have identified several different methods of data analysis for researchers once focus groups have been completed. The most rigorous and timeintensive method is the traditional verbatim transcript of the audio- or videotapes combined with field notes, but other options include tape-based analysis, note-based analysis, and memory-based analysis. Given time constraints, the researchers chose the second method: tape-based analysis. This method involves the researchers carefully listening to audiotapes and preparing an abridged transcript. All four researchers listened to the tapes independently and took notes, which provided inter-rater reliability. Since the researchers were not present during the actual audiotaping of the focus groups, they were unable to employ the latter two methods mentioned: noted-based and memorybased.

Researchers summarized the data, coded them by identifying idea clusters, and generated a list of key themes to determine key data categories or commonalities among participant comments (Beya & Nicholl, 2000). Potential factors affecting focus group analysis include:

- The rigor with which the focus group was planned and conducted,
- How well the data were analyzed,
- The process used to collect and analyze the data,
- The composition of the focus groups,
- Researcher bias in preparing question or in data interpretation, and
- Reliability and validity.

Particularly relevant to the credibility and trustworthiness of these focus groups, students were first asked to provide their definition of violence. Questions regarding incidents and perception of violence at the high school were then asked. Students were requested to respond based on their own definitions of violence, rather than the researcher's ideas or the school's guidelines. This was done to provide information relevant to the students' lives, as well as to provide the opportunity for comparison between students' perceptions of violence and the decrease shown by school disciplinary data.

Workshop Evaluations

Evaluations were administered to participating students following each workshop at Big Sky High School. Participating students were asked to fill out a written evaluation of the workshop following the completion of each workshop. Researchers compiled and identified common themes of 186 workshop evaluations completed by students in the fall 2009 semester.

RESULTS

School Disciplinary Data

Table 1 shows the total number of incidents of violence at all three high schools as reported by disciplinary data records.

Table 1: Total Incidents of Violence				
School Year	Big	Hellgate	Sentinel	
	Sky			
2006-2007	52	25	42	
2007-2008	35	54	30	
2008-2009	18	29	31	

There are also other efforts present at these schools to improve academic achievement, address conflict, and prevent dropouts. These interventions are shown in Table 2. Freshmen teams are implemented by putting teachers into one team, and assigning the same students to all of the teachers in that team. As a result, freshmen are divided into different teams, each team with its own set of teachers. Advisory periods are weekly 45-minute periods in which a teacher acts as an advisor to a small group of students. "NCBI" represents the *Preventing Violence* workshops that the entire freshmen class attends.

Table 2: High School Interventions				
School Year	Big Sky	Hellgate	Sentinel	
06-07	No intervention	No intervention	No intervention	
07-08	Freshmen teams Advisory periods NCBI	Freshmen teams	Freshmen teams	
08-09	Freshmen teams Advisory periods NCBI	Freshmen teams NCBI	Freshmen teams	
09-10	Advisory periods NCBI	Freshmen teams NCBI	Freshmen teams	

The year Big Sky implemented NCBI's violence prevention program, reported violent incidents were reduced by 33%. The following year, they were reduced by 49% - resulting in an overall reduction of 65% over a two-year period. Because Big Sky also implemented freshmen teams and advisory periods at the same time, it is important to consider data from other high schools to evaluate the impact of NCBI's violence prevention program.

The implementation of freshmen teams without accompanying intervention has not been shown to be effective in reducing school violence in Missoula. For example, Hellgate High School implemented freshmen teams in 2007, but this intervention did not appear to reduce violent incidents in the school. In fact, violent incidents actually increased by 54% that school year. In 2008, Hellgate implemented NCBI's violence prevention program and saw a decrease of 46% in violent incidents from the previous year.

Sentinel High School has not yet implemented NCBI's violence prevention program but has implemented freshmen teams in the 2007-2008 school year. It has experienced a 26% decrease in violent incidents over the past two years.



Figure 1: Rates of Violence at Missoula's Public High Schools

Focus Groups

In reviewing and discussing audiotapes of the focus groups, five themes emerged. These themes, identified by the researchers, were present in discussions of all four grade levels.

Division between Grade Levels

Students expressed that the line drawn between grade levels was not simply a division of years, but a boundary across which others were viewed with stereotypes and judgments. All groups, including the freshmen themselves, described a high level of violence among the freshman class. In sophomore, junior, and senior groups, freshmen were viewed as "mouthing off" and "needing to be put in their place." Freshmen described seniors as believing they were superior to all other grades. Discussions of these divisions led to students offering solutions as to how to bridge these gaps. One freshman said, "The upper classmen need to step up and be more involved with the freshmen." Groups discussed the possibility of having seniors be mentors to freshmen. This solution makes sense in light of the theme of empathy (see below). According to students, when they know more about others and what they have been through, students are less likely to be violent toward one another.

Violence as Normal

Students also described violence, especially verbal bullying, as a common, everyday experience. One student said, "Maybe it depends on the situation; if it's just like verbal ... it's kind of normal. I feel like it's not really our business." Even if the discussion between peers appeared heated, students had a hard time justifying intervening. However, when students did identify an incident as violent, it was not something out of the ordinary. "I think everyone sees [bullying] every day but we just kind of blow it off," said one student, "...we just look at is as something that always happens... you don't really think about it." Others added that violence is just something that occurs with students – especially freshmen. Students described how it was not uncommon for their peers to leave school grounds to fight and expressed it would be very difficult to make violence anything but "normal."

Barriers to Intervening

Students also discussed the barriers which prevent them from intervening in violent situations. In all grades they voiced concern about repercussions. This fear came from two sources—either students thought they would be bullied themselves for intervening, or that they would be punished by the school for getting involved. Additionally, students expressed it was difficult to try to draw the distinction between verbal forms of violence and normal disagreements. This follows the theme of violence as normal; students felt they could not spend their time intervening in situations which, though they might be called violent, were far too common to get involved.

Empathy Prevents Violence

Another common theme between groups was the idea that empathy works as a powerful violence prevention tool. Students said that as they got to know each other, they would be less likely to fight. All grades voiced appreciation for this aspect of the NCBI workshops. One student said of the process of participating in a workshop, "It kind of erases those 'first judgments' that you have." Another said, "We found out a lot about each other." Students agreed that by learning about their peers and gaining awareness regarding where they were coming from, they could now approach each other with more empathy and understanding. This, they believed, served to decrease violence.

Desire for More Frequent Workshops

Throughout the focus groups, students expressed a desire for more frequent NCBI workshops. They also emphasized that violence prevention programs should start earlier.

Students identified that the "cycle of violence" begins at least in middle school, if not earlier, and should be addressed at that point to decrease violence by the time they are in high school. Students also brought up the idea of having those students receiving inschool suspension for fighting or bullying attend NCBI workshops instead of out of school suspension.

Workshop Evaluations

When rating the workshop, the majority of students rated it a 3 or above (on the workshop evaluation, it is noted that a 1 is equivalent to a "poor" rating and a 5 is equivalent to an "excellent" rating). Twenty-three percent of students rated the workshop a 5, 45% rated it a 4, and 23% rated it a 3. Five percent gave the workshop a score of 1 or 2.



Figure 2: How would you rate this workshop?

When asked what improvements could be made to the workshop, students gave a wide variety of answers. The length of the workshop was mentioned in 41 evaluations, whether that was to make it longer or shorter. The most prominent theme was that

students desired more movement, activities, or student participation. Selected quotations are included below:

- "Less sitting, more participation."
- "Having more activities where you could talk to other classmates and maybe activities that are more like games and would be more fun than just sitting."
- "More activities where you have to find someone you don't know and talk to them and get to know them and what their like."
- "More activities and get more involved (the kids)."
- "Do more activities that get students to realize how they are affecting each other. More ways to have students interact and meet each other."
- "More hands on things."



Figure 3: What improvements could be made to the workshop?

When asked what the most effective part of the workshop was, students identified several activities. Skits, up/downs, and caucuses were the most popular activities. These

are also the activities that incorporate movement and require a high degree of student participation.

Twenty-five students identified personal connections with students as being an effective part of the workshop. Some selected quotations are included below:

- "When we did up/downs, we got to show who we were without being afraid and learned how to accept others."
- "Talking to people that we don't usually talk to and hearing how they feel about school life and bullies. Getting a new perspective on people that we didn't really know before."
- "Mixing up and meeting new people."
- "Getting to know where people come from (their background)."
- "When we talked about personal feelings."
- "Hearing other people's stories and what happened to them."
- "Hearing everyone's perspective."



Figure 4: What was the most effective part of this workshop?

When asked whether they would be able to use the skills learned in the workshop to build a safer and more inclusive school, 77% of responding students said yes, 8% said no, and 14% gave an answer indicating "maybe" or "it's possible." One percent of students did not respond to the question.

Figure 5: Do you think the skills you learned in this workshop will allow you the tools to build a safer and more inclusive school?



DISCUSSION & THEORY OF CHANGE

Grounded theory suggests that by gathering data and information from participants, mental models that will drive practice and research can be revealed. Mental models are the images, assumptions, and stories that we carry in our minds about ourselves, others, institutions, and every aspect of our world (Senge, 1990, p. 8). By using a process of reflection and inquiry, the focus groups revealed several central mental models. According to Senge et al. (1994), the process of identifying and exploring mental models is integral to change efforts. NCBI's violence prevention program aims to help participants recognize the root causes of violence, address the impact of violence, identify ways to prevent violence, as well as learn and practice age-appropriate intervention techniques when confronted with violence. To do this, students must examine their own ideas about violence and how it affects others.

These focus groups reveal that more work is needed to help students begin to construct newer mental models about violence and its effects. The theory of change points to the use of focus groups and program evaluation to pursue an ongoing dialogue with the students of Big Sky High School. Outcomes and participatory action research can influence the NCBI program as an adaptable, effective, and integrated component of the high school experience. Argyris (1996) attributes a drive toward Model II program management as a means to critically reflect on a program and be willing to make adjustments. This double-loop strategy suggests that feedback and student input should continually influence programming and intervention.

The next page in this report shows our theory of change.



LIMITATIONS

Any research study is not without limitations. Our use of three sources of data, both quantative and qualitative, is aimed at expanding the validity and reliability of our results. However, we have identified three major limitations of our work: that we used a secondary data analysis of focus group commentary, a lack of consistency in focus group facilitation methods used by student facilitators, and a lack of generalizability of our results due to the evaluation of just one program. Future continued research could yield stronger results.

Because we did not play a role in coordinating or facilitating the focus groups, we had no control or oversight regarding the manner in which these data were gathered. This is especially relevant given Guterman's (2004) discussion regarding the complexity in collecting data about violent incidents. Studies using self-report measures tend to underreport violent experiences and official record data rarely include lower level and less overt violence. It is hoped that the use of three different data collection methods in this report will serve as a counterbalance to these biases.

Additionally, each focus group was run by a different pair of student facilitators. These student facilitators used different facilitation strategies when leading discussions. It is unknown how the variation between facilitators may have influenced which topics students felt comfortable addressing and the manner in which they did so.

Finally, because of the specific nature of this report—the evaluation of one violence prevention program in Western Montana—results cannot be generalized to other groups of people or agencies. The focus groups, workshop evaluations, and school disciplinary data all portray a relatively small sample size and a particular population.

While the knowledge gained by this evaluation procedure will be valuable to NCBI Missoula, results should not be generalized to represent those with characteristics widely varying from the population studied.

IMPLICATIONS

One aspect that our study did not investigate was that some of the seniors in the focus group perceived that there was actually more aggression this year, which contradicts the disciplinary data. The seniors noted that sometimes students engage in violent behaviors off of school property. Students attributed the increased aggression to society in general. It is possible that the current economic recession is having an impact on students' emotional wellbeing, thereby impacting school violence levels. Unemployment in Missoula is at all time high at 7.7% as of March 2010 (Bureau of Labor Statistics, 2010). On December 31, 2009, Smurfit-Stone Container Corporation permanently closed its large paper mill, affecting 417 manufacturing jobs with an annual \$45 million payroll in western Montana and another 1,000 in related industries such as logging, trucking and rails (Brown, 2009). This closure came after two other local mills recently closed and western Montana's timber and forest products industry struggled with the declining demand for lumber used in new-home construction and the overall downturn in the global economy. (Szpaller, 2010). Research correlating school violence to economic downturns could be a potential study.

RECOMMENDATIONS

Analysis of focus group commentary and workshop evaluations indicates several areas in NCBI Missoula's violence prevention program at Big Sky High School that can be improved. The following recommendations recognize the importance of a dynamic and adaptable program that continues to meet the needs and concerns of the Big Sky students.

- Expand movement-based activities requiring high levels of student participation.
 Students rated these activities as the most effective parts of the workshop and suggested that more of these activities be included to expand student learning.
- Continue to prioritize the personal nature of workshops, including the sharing of personal stories and an emphasis on students learning more about one another.
 Participatory feedback indicates that hearing stories from other students was a valuable way to build empathy for others, serving as an effective way to reduce violence.
- 3. Examine current disciplinary policy to ensure that students are not punished for intervening in bullying incidents and ensure that students have a safe and confidential means of reporting incidents. Students identified that they often do not get involved in fights because they will be punished for intervening by school officials.
- 4. Workshops should be expanded beyond the freshman class to maintain dialogue and skills development. Sophomores and juniors stated that they no longer remembered what they had learned in workshops, while seniors seemed to feel that they had been excluded from the program.
- 5. Expand the workshops to cover a full day, rather than only three periods of the day. Many students wrote on workshop evaluations that they wanted the workshop to be longer, or to be expanded into 4th period. Longer workshops will create time for more activities and student learning.

- 6. Workshops should include students from multiple grade levels to promote school unity and address the conflict division between grade levels. Many students identified the source of the problem as students in other grade levels. This mental model prevents students from working together to address violence in their school.
- Hold focus groups annually to continue collecting valuable feedback regarding program development.

CONCLUSION

Our findings show a significant correlation between NCBI Missoula's violence prevention program and a reduction in school violence. In addition, workshop evaluations and focus groups revealed themes that contribute to a theory of change validating NCBI Missoula's workshop methodology. It is hoped that this report has generated helpful recommendations that will improve NCBI Missoula's efforts at reducing school violence.

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