## Virginia Tech Behavior Analysts Reduce Bullying by Rewarding Desirable and Incompatible Behavior

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Bullying is the most common form of violence in our society, with 15 - 30 percent of students being bullies or victims of bullying (Cohn & Canter, 2002). The negative effects from bullying behavior can be detrimental, affecting individual health, school safety, and classroom learning. According to the *Final Report and Findings of the Safe School Initiative* studying 41 individuals involved in the 37 school-based attacks between 1974 and 2000, "most attackers felt bullied, persecuted, or injured prior to their attack (on others)" (U.S. Secret Service and U.S. Department of Education, 2002).

On April 16<sup>th</sup> 2007, 32 individuals lost their lives in the deadliest school shooting on a college campus in U.S. history. Because the shooter responsible for the April 16<sup>th</sup> tragedy was bullied in elementary school, behavior analysts at Virginia Tech are developing, implementing, and evaluating interventions to reduce bullying among elementary-school children.

In an effort to reduce interpersonal bullying among elementary-school students, an actively-caring (AC) intervention, based on research reviewed by Dr. E. Scott Geller (2001), was implemented for fourth, fifth, and sixth graders at an elementary school in Virginia (n=199 in 8 classes). The intervention established a mechanism for recognizing AC behavior incompatible with bullying. Specifically, to be elgible to wear an AC wristband, students had to report their personal observations of AC behavior directed to themselves or to others. At the start of each school day, the teacher selected two students

from an AC story and gave each a green AC wristband to wear as the "Actively Caring Hero of the Day." On the following morning, the teacher selected two new students to wear the AC wristband, and read their AC story to the class. This occurred everyday for five consecutive weeks. Each week, students discussed in dyads answers to a question that activated relationship building. After five weeks, every student who handed in at least one AC story and performed at best one AC behavior received an AC wristband to keep.

The impact of this intervention was assessed by asking students to complete a questionnaire on the Friday of seven consecutive weeks, including a Friday before the intervention began and the Friday after the AC program ended. A time series analysis of the student's behavioral observations indicated a significant decrease in reported bullying behavior over the course of the five intervention weeks, and an increase in performed AC behavior. Overall, the percentage of students labeled (by their own behavioral self-reports) as victims only, bully-victims, and bullies only decreased from respective baselines of 24.1%, 9.5%, and 9% to withdrawal phases of 14.3%, 5.1%, and 1%, respectively.

The researchers are currently developing a multiple baseline design across five schools in rural and urban areas. Additionally, they are already developing materials, training protocols, a teacher manual, and a marketing plan for community-wide dissementation of their evidence-based anti-bullying intervention.

## References

Cohn A., & Canter A. (2002). *Bullying: Facts for schools and parents*. Retrieved from <a href="http://www.naspcenter.org/factsheets/bullying">http://www.naspcenter.org/factsheets/bullying</a> fs.html

Geller, E.S. (2001). The psychology of safety handbook. CRC Press. Boca Raton, Florida.

United States Secret Service and United States Department of Education. (2002, May).

The final report and findings of the safe school initiative. Retrieved from:

http://www.secretservice.gov/ntac/ssi final report.pdf