

**THE**  
**choices**  
**AND CONSEQUENCES** 

**EVALUATION :**

**A Study of Court TV's Anti-Violence Curriculum**

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The Choices and Consequences Evaluation designed by  
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## Introduction

The recent rash of shootings at American high schools and middle schools highlights the fact that adolescents are at greater risk of being involved in violence—either as perpetrators or victims—than any other age group.<sup>1</sup> According to the U.S. Department of Justice, an estimated 100,000 school children carry guns to school each day.<sup>2</sup> Although the adolescent violent crime rate has been declining for the last several years, there is concern that an impending surge in the size of the teen population could result in a 20% increase in the juvenile crime total by the year 2005.<sup>3</sup>

Many violence-prevention programs have been instituted to deal with this important problem, but their effectiveness has seldom been evaluated scientifically.<sup>4</sup> The goal of this study is to evaluate one particular anti-violence curriculum using a rigorous scientific methodology that permits us to test the effectiveness of the intervention.

### Choices and Consequences

*Choices and Consequences* is an ongoing initiative by Court TV, in association with Cable in the Classroom, the National Middle School Association, AT&T BIS, Time Warner Cable, and other leading cable companies. It is a broad-based public service campaign aimed at young adolescents. The campaign includes several elements: live television events featuring adolescent themes, televised local town meetings on issues of concern to adolescents, and a classroom curriculum.

*Choices and Consequences* was created by Court TV as a response to the National Television Violence Study, that was conducted by the University of California, Santa Barbara (UCSB), in conjunction with the Universities of North Carolina, Texas, and Wisconsin. The study found that violence on television often glamorizes the perpetrators of aggression and seldom depicts the harmful consequences of violence. Responding to the study, Court TV decided that an important goal of *Choices and Consequences* curriculum would be to “resensitize” adolescents concerning the risks associated with aggressive and other antisocial behaviors.

The *Choices and Consequences* curriculum, created for middle school students by former National Middle School Association President Ross Burkhardt and University of Maine Education Professor Ed Brazee, is designed to help adolescents make responsible choices in their everyday lives. Young adolescence is the target of the curriculum because this age group, more than any other, is poised to make choices and decisions that can have lifelong consequences. The curriculum features court cases involving teenagers who have engaged in behaviors without considering the potential consequences of their actions.

### Previous Adolescent Violence Prevention Efforts

There are many ways to reduce or prevent violence among adolescents. Previous violence prevention efforts have included programs targeting families (e.g., teaching family problem solving skills), peer groups (e.g., changing peer group norms), school policies (e.g., increasing the clarity and consistency of rule enforcement), and communities (e.g., providing prosocial activities for adolescents). Others have sought changes in society by attempting to decrease adolescents’ access to handguns and firearms.

The effectiveness of these kinds of interventions is not clear. For example, some attempts to change schools’ organizational structures have been effective in reducing delinquency.<sup>5</sup> However, other attempts to change school policies have actually increased delinquency rates in participating schools.<sup>6</sup> Attempts to intervene at the community level are popular— though their effectiveness is rarely evaluated. Evaluations that do exist suggest that

these interventions may be useful in reducing undesirable behavior and arrests for minor offenses, but might also increase the occurrence and arrest rate for serious crimes.<sup>7</sup> Although family interventions are quite effective, they are difficult to implement without sufficient parent motivation and effort. Finally, peer group interventions usually are shown to be ineffective.<sup>8</sup>

Another type of intervention works directly with adolescents rather than outside influences such as families or communities. Several forms of this kind of intervention have not been shown to be effective, including administering psychotherapy (either alone or in combination with visits from social workers), biomedical interventions, and anger management training.<sup>9</sup>

However, there are some forms that deal directly with the adolescents that do work. For example, there is some limited evidence that getting adolescents to change the way they think about other people and potentially risky situations might be effective.<sup>10</sup> These results must be interpreted with caution because they are based on just a handful of scientific studies. Nonetheless, this limited body of research has shown that training adolescents to empathize with others, consider the consequences of their behaviors, and make responsible choices decreases the likelihood that they will commit violence.<sup>11</sup> In fact, interventions that provide training in more than one of these areas are usually the most successful.<sup>12</sup>

Despite these promising findings, there are many limitations associated with this research. First, as mentioned above, these conclusions are based on only a very small number of studies that use controlled, scientific methods. Clearly, more research of this type is needed before firm conclusions about the effectiveness of this type of intervention can be made. Second, many of the interventions include training in so many different areas that it is difficult to determine which element of the intervention was responsible for the effects. For example, programs often combine instruction in not only decision-making skills and empathy, but also self-control and developing prosocial attitudes about violence. What is needed, then, is a study that provides instruction in a few key areas. Third, most programs of this type do not properly measure what is probably the most important outcome: antisocial behavior. In fact, many studies simply do not assess adolescents' antisocial behavior prior to and after the intervention is implemented. Studies that do measure adolescents' participation in antisocial behavior are needed if we are to draw any conclusions about an intervention's success at reducing violence.

This study corrects these limitations. We employ a controlled experimental design that allows us to determine with confidence whether the intervention is effective. In addition, the curriculum emphasizes the learning of decision-making and empathy skills rather than a host of other competencies. It is hoped that by improving these specific skills, we will observe a decrease in adolescents' antisocial behavior. Finally, this study includes measures of the adolescents' antisocial behavior — both before and after the curriculum was implemented. As a result, we can judge whether this program is effective in reducing or preventing violence.

*Choices and Consequences* also uses the unique approach of incorporating actual videotaped court cases involving adolescents. These videos concretize the lessons and highlight the very real possibility that bad decisions can lead to tragic consequences, even among “normal” adolescents engaged in seemingly harmless pranks. This approach, then, should increase the participants' interest in the curriculum and possibly the likelihood that they will learn from it.<sup>13</sup>

The curriculum is aimed at the average adolescent rather than high-risk students who have already established a pattern of antisocial behavior. Further, the curriculum targets *young* adolescents rather than older adolescents whose empathy and decision-making skills may be difficult to change. By working with typical, young adolescents, we hope to truly prevent violence before it begins by shaping the way that youngsters think about the choices they face every day and the consequences of those choices for themselves and others.

## The *Choices and Consequences* Evaluation

In June 1998, Court TV commissioned UCSB's Center for Communication and Social Policy to evaluate the effectiveness of the curriculum component of the *Choices and Consequences* initiative. To conduct the evaluation, we recruited seven teachers from three California middle schools to present the curriculum to their students. The 513 young adolescent students participating in the study come from diverse racial and socioeconomic backgrounds. These students were divided into 11 experiment classrooms, which received the curriculum, and 10 control classrooms, which did not. By using this controlled experimental design, we are able to determine with confidence whether this type of program has positive effects. The study tests the effectiveness of the *Choices and Consequences* curriculum in changing the responses of a diverse sample of middle school students. The study is designed to determine whether exposure to the curriculum creates the intended changes in knowledge, attitudes, and behavior. The study focuses on whether the curriculum has the potential for creating change in the following areas:

- decision-making and risk-assessment skills
- empathy and appreciation of the consequences of their actions for others
- knowledge of relevant legal terms
- verbal and physical aggression

## The Curriculum

### Overview

The *Choices and Consequences* curriculum consists of three case study units, based on actual trials involving teenaged perpetrators and victims. The case studies are titled “Stop Sign,” “TeenPranks,” and “Daring Your Friends.” Each of the units was presented to the students over a three-day period. In each unit, students first viewed a videotape created by Court TV describing the facts of the case, including actual trial footage and interviews with the principal participants and their families. The students then discussed critical elements of the case, engaged in role play exercises, and wrote homework assignments about implications of the case. As they viewed and discussed excerpts from the actual trial, students were asked to examine their beliefs about fairness, loss, and the implications of their choices and consequences. Students also learned about the legal system and its role in their lives.

The format of each case and related homework assignments was relatively standardized to reinforce the three curriculum learning goals: decision-making and risk-assessment skills; empathy skills and appreciation of the consequences of one’s actions for others; and knowledge of legal terms.

On the first day of each case study, students watched the trial story videotape and were introduced to the legal vocabulary, including such terms as *circumstantial evidence*, *victim*, *manslaughter*, *prosecutor*, *defense attorney*, *defendant*, *leniency*, *remorse*, and *juvenile*. Students then engaged in a classroom discussion of unintended or hidden consequences of a variety of potential actions. The homework assignment for the first day focused on empathy, providing an opportunity for students to take the perspective of one or more the people involved in the relevant trial cases, including perpetrators, victims and their families.

The second day of each case study focused on the development of risk-assessment and decision-making skills. The teachers engaged students in classroom discussion of the particular choices made by the participants in the relevant cases, asking such questions as: What options did key participants have a critical moments? What would have been the consequences of the various options? What would you have done if you were one of the people involved in this situation? The homework assignment for the second night reinforced this theme, for example, asking students to reflect on a personal situation in which they had engaged in choices that had unintended consequences.

On the third day of each case study, students engaged in a role-play activity involving the relevant case, in which they learned to empathize with the people involved in the story and understand their various motivations for engaging in the behaviors that resulted in extremely harmful consequences. The homework assignment for day three emphasized recognition of the immediate and life-long consequences for the perpetrators of antisocial actions.

Following are descriptions of the three court cases used in this study.

## Daring Your Friends

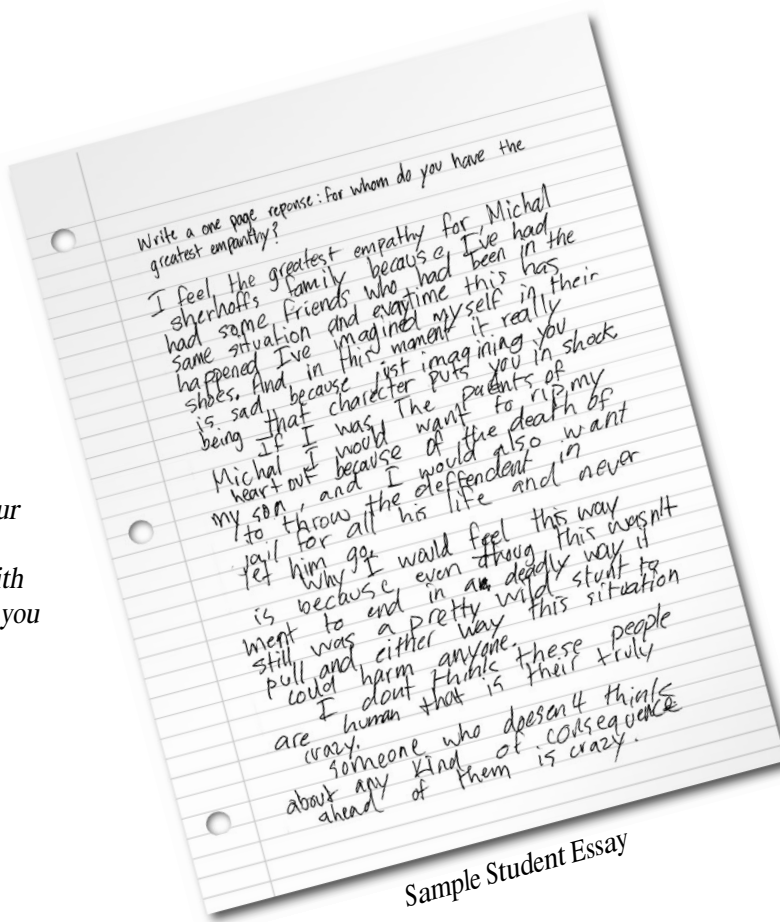


### THE FACTS OF THE CASE

The “Daring Your Friends” case is based on an actual courtroom trial, *Washington v. Schrader*. On January 2, 1996, two groups of teenagers, relative strangers to each other, met for an evening of socializing. While this gathering was hardly a parent’s dream since it involved marijuana and beer, it is the reality of modern-day, middle-class suburbia. After meeting at the apartment complex of two of the individuals in a Seattle suburb, the two groups decided to drive 20 minutes to an area bordering Blyth Park in the city of Bothell, King County. After smoking pot and talking for a few minutes, the group headed back across an abandoned railroad trestle when Michael Schuerhoff was pushed into the Sammamish River slough 36 feet below. Schuerhoff drowned and his body was recovered three days later. Bothell police arrested Brian Schrader, Steven Garza, Tyler Wheaton, Ben Drake, and Larry Edinger; Schrader admitting to pushing Schuerhoff into the slough based on a bet made by his four friends.

### SAMPLE HOMEWORK ASSIGNMENT

Have the students write a one-page response to the following question: For whom do you have the greatest empathy? Michael Schuerhoff’s family and friends; Brian Schrader and family; Families of the other four boys charged in this case; The three friends of Schuerhoff’s who were with him the night he died. Explain why you feel as you do.



Sample Student Essay

## Stop Sign Case



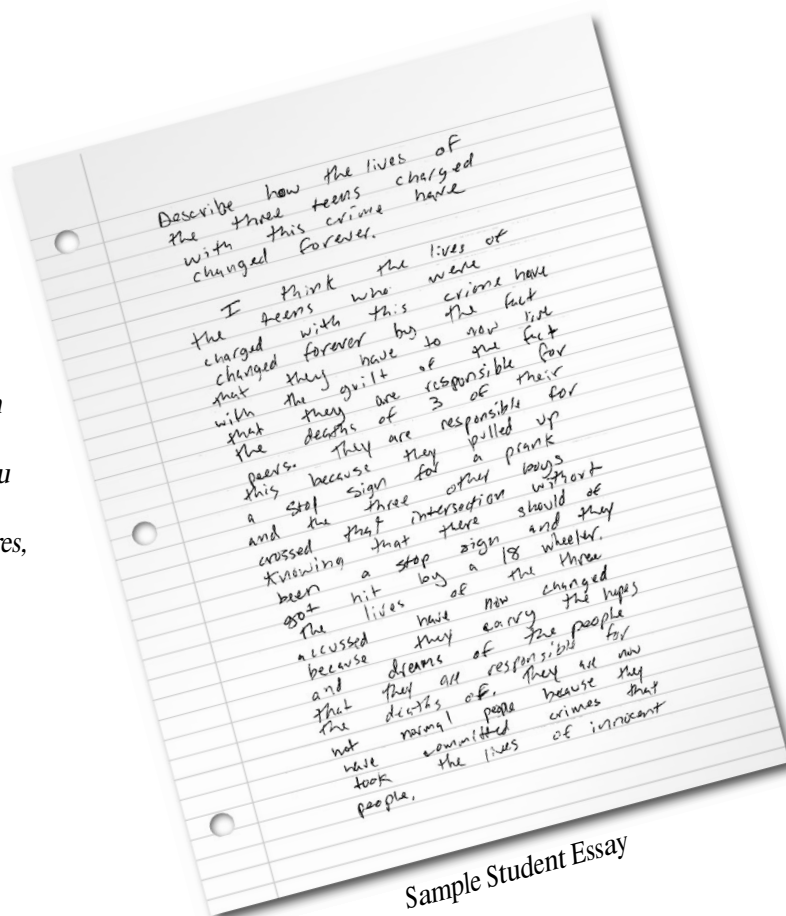
Brian Hernandez/victim

### THE FACTS OF THE CASE

At a busy intersection in Tampa, Florida in February 1996, someone has removed a stop sign. Three young men driving in a car, Keith Farr, Randall White, and Brian Hernandez, died instantly when a large truck hit their vehicle as they proceeded through the intersection. The missing stop sign was the cause of the tragic accident. Christopher Cole, Nissa Baille, and Thomas Miller confessed to stealing several road signs in the area as a prank but emphatically denied that they had taken the stop sign from that particular intersection. They were accused of first-degree manslaughter and put on trial. The jury unanimously reached a guilty verdict for all three defendants. After listening to impassioned pleas from parents and friends of both the defendants and the victims, the judge sentenced each of the defendants to 30 years in prison, suspending 15 years, resulting in prison terms of 15 years plus 5 years probation for each defendant.

### SAMPLE HOMEWORK ASSIGNMENT

What are the consequences for the three young adults accused of stealing the stop sign that led to the death of three other people? In one page, describe how this event has changed their lives forever. You may discuss legal outcomes, emotional effects, effects on their futures, and so on.



## Teen Pranks

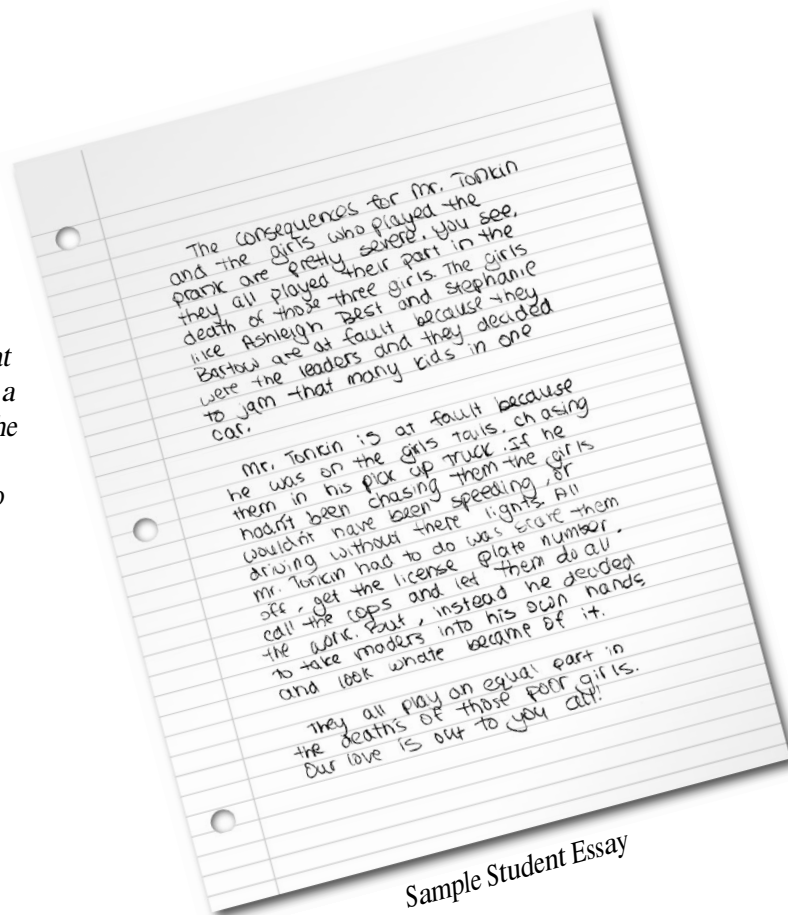


### THE FACTS OF THE CASE

“Teen Pranks” is based on an actual courtroom trial, *Georgia v. Tonkin*. In this case, a high school prank turned deadly when two carloads of teenage girls “rolled” the yard of freshman cheerleader Sabrina Tonkin with toilet paper. Sabrina’s father, Brett Tonkin, with his wife, Margaret, chased the two cars in his pickup truck to get their license numbers. One car, driven by 16-year-old Ashleigh Best, failed to make a curve in a road and crashed into a tree about 1.6 miles from the Tonkins’ home. Best was driving with only her parking lights on at the time of the crash; it was just after midnight on Wednesday, October 30, 1996. Three girls were injured and three girls were killed. Best survived, but suffered mild brain damage. She was charged with three counts of felony vehicular homicide, prosecuted as a juvenile, pled guilty, and was sentenced to two years of probation and community service. She also lost her license for three years. Tonkin says he gave up the chase long before the girls say he did and that he is not responsible for the crash.

### SAMPLE HOMEWORK ASSIGNMENT

We all make choices – hundreds of choices every day. In one page, write about a choice you made that began innocently enough, but had a bad ending. As you look back on the situation, what were the turning points? Were there opportunities to change direction and perhaps, the ultimate outcome? Describe when those points occurred.



Sample Student Essay

## Method

### Participants

A total of 513 middle school students participated in the study. Of these, half were in 7<sup>th</sup> grade and half were in 8<sup>th</sup> grade. The average age of the students was 13 years old (range from 11 to 16 years of age). Approximately half were girls (49%) and half were boys (51%). The young adolescents attended one of three schools in southern California: Blackstock Junior High School in Ventura County, Colina Middle School in Los Angeles County, or Los Cerritos Middle School in Los Angeles County. The schools were chosen to represent diverse racial and socioeconomic family backgrounds. The majority of adolescents from Blackstock were from lower-socioeconomic families, whereas the majority of adolescents from Colina and Los Cerritos were from middle- and upper-socioeconomic families. Race also differed among the three schools, as shown in the chart below.

Racial Composition of Participating Schools

	White	Hispanic	Asian	African American	Other
Blackstock	11%	65%	16%	7%	1%
Colina	77%	13%	7%	1%	2%
Los Cerritos	79%	11%	8%	1%	1%

All adolescents received written parental permission before participating in the study. Each adolescent also consented in writing to participate in the research.

### Design of the Study

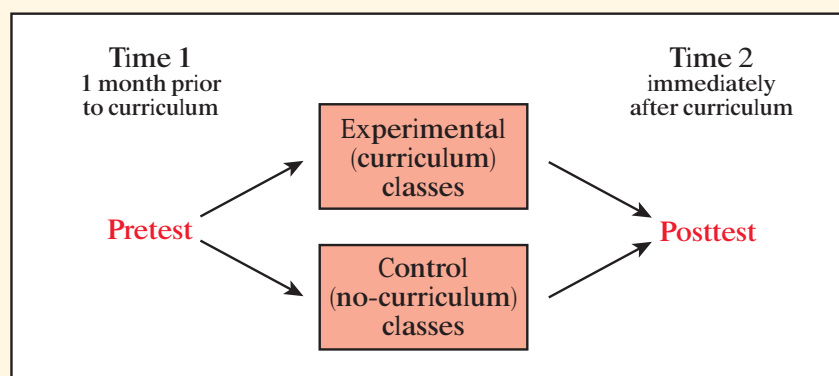
*Choices and Consequences* focuses on social issues related to teen decision making so it fits nicely into social studies as an educational subject matter. In our study, the *Choices and Consequences* curriculum was presented by the regular teachers in the schools as part of the social studies/social science class. Prior to the study, the teachers met for a three-hour orientation and training session to ensure that uniform procedures were employed across classes and schools.

We used a scientific experimental design to test the curriculum's effectiveness. Entire classrooms were randomly assigned into one of two groups: the experimental group which received the curriculum, or the control group which did not. Seven different teachers across the three schools were involved in the study. Each teacher had classes that received the curriculum and classes that did not, allowing us to reduce the effect of individual differences in teaching style. In total, 11 classrooms were in the experimental group (3 from Blackstock, 6 from Colina, 2 from Los Cerritos), and 10 were in the control group (3 from Blackstock, 4 from Colina, 3 from Los Cerritos).

The *Choices and Consequences* curriculum lasted three weeks, one week per court case. During this time, classes in the experimental group received a standardized set of lessons and homework assignments about these cases. In contrast, classes in the control group received traditional instruction that contained no information about court cases, antisocial behavior, or risk taking.

To test the impact of the curriculum, we administered a questionnaire to students before the study began, called a *pretest*, and again after the curriculum ended, called a *posttest*. The pretest and posttest assessed students' knowledge, attitudes, and behaviors, described in more detail in the section below. All classes in both the experimental and control groups filled out the pretest and the posttest. The pretest was given one month before the curriculum was presented to students in order to separate it as much as possible from the content of the lesson plans. The posttest was given immediately after the lesson plan to assess changes in knowledge, attitudes, and behaviors. The overall study is a *pretest-posttest experimental design*, as diagramed below.

### Experimental Design



## Measuring the Impact of the Curriculum

We collected several measures during the pretest and posttest to assess the impact of the *Choices and Consequences* curriculum. All measures were embedded in a large questionnaire that took two class periods to fill out. Students were told that the questionnaire was part of a large-scale survey of the attitudes and behaviors of middle school students, sponsored by the University of California, Santa Barbara (UCSB). The pretest and posttest questionnaires were administered by UCSB researchers rather than the teachers themselves, in an effort to downplay any association between the curriculum and the questionnaire.

Prior to any testing, we assured students that their answers to the survey were confidential, that we did not want their names on the questionnaire, and that they should feel free to answer as honestly as possible. We devised a set of nine questions involving personal information (e.g., “What is the natural color of your eyes?” “What month were you born in?”) that could be used to match students' questionnaires over time while maintaining anonymity.

Four different outcome measures were used in the study. First, we assessed students' *legal knowledge* of vocabulary and concepts presented in the curricula. For example, terms such as “manslaughter,” “second-degree murder,” “prosecutor,” and “felony” were introduced in the videotapes and defined for students as part of the court cases. To measure legal knowledge, students were given a list of legal terms and a list of possible definitions (some were part of the lesson plans and some were not), and they were asked to match each word with its proper definition.

Second, we measured students' *perspective-taking and empathy skills*. Much of the instruction in the *Choices and Consequences* curriculum is designed to increase young adolescents' ability to understand and share the perspective of other people, especially the victims of antisocial behavior. To assess perspective taking and

empathy, students read three short stories about teen protagonists in emotional situations.<sup>14</sup> For example, one story involved a boy named Joe who is transferred to a new school only to find out that most of the other kids are unfriendly and call him names. After reading each vignette, students were asked to identify how the protagonist in the story felt (see example below). Those who accurately identified the main emotion of the protagonist scored higher on perspective taking. Students were also asked to identify how they themselves felt in response to the story. Students who reported feeling similar emotions with the protagonist of the story scored higher on empathy.

### SAMPLE VIGNETTE USED TO MEASURE PERSPECTIVE TAKING & EMPATHY SKILLS

Joe has just transferred from another school and today is his first day in a new junior high school. He is very excited about meeting new people and making new friends. When he arrives at school, however, he finds that the other students are not very friendly at all. He notices that when he walks down the hallway, the other kids point and laugh at him. At lunchtime, he doesn't have anyone to sit with, so he sits all by himself. Later, he overhears a couple of kids from his homeroom call him names like "geek" and "loser."

1. How does this story make you feel? (Circle only one response.)

jealous    scared    happy    just okay    sad    angry

2. How does Joe feel? (Circle only one response.)

jealous    scared    happy    just okay    sad    angry

Third, we assessed students' *perceptions of risk* in hazardous situations. Again, the main goal of the curriculum is to get students to think before acting and to more accurately appraise possible risks in challenging situations. To test the effectiveness of this instruction, students were presented with four hypothetical scenarios that often confront teens.<sup>15</sup> For example, in one scenario a group of teens are at a friend's house when one boy takes out a gun and starts pointing it at people. The other scenarios involved drinking alcohol, riding in a car with a reckless driver, and shoplifting. After reading each scenario, students were presented with three possible outcomes that could occur as a result of the situation. For each outcome, they were asked to judge "How likely it is that this might happen?" and "How harmful or serious would it be if this happened?" Students circled their responses on a 9-point scale. See page 11 for an example.

Fourth, we measured students' *antisocial behavior*. To do this, we used a modified self-report scale based on the Achenbach Behavioral Checklist.<sup>16</sup> The 30-item scale consists of a list of sentences describing different antisocial feelings and behaviors that people can have. Students were asked to judge how descriptive ("not true," "sometimes true," "often true") such tendencies were of them in the previous month.

From this scale, we constructed two measures: one involving verbal aggression, and one involving physical aggression. The *verbal aggression* measure consisted of students' responses to the following four sentences:

*I am mean to others.*

*I argue a lot.*

*I swear or use dirty language.*

*I tease others a lot.*

### SAMPLE SCENARIO USED TO MEASURE PERCEPTIONS OF RISK

Several kids are sitting around one of their friend's houses watching TV. The boy who lives there asks the others whether they would like to go upstairs and check out his dad's gun. All of the other kids get really excited and say they would. Upstairs, the boy pulls out the gun and starts pointing it around the room. The other kids ask if they can hold the gun. The boy says "sure," and the group starts passing the gun around.

Here are some possible things that could happen as a result of the situation you just read. First, circle the number that best describes how likely it is that each thing might happen. Next, circle the number that best describes how serious or harmful you think it would be if each thing did happen.

1. The gun could go off accidentally and hurt someone.

- How likely is it that this might happen?

Probably would <u>not</u> happen	1	2	3	4	5	6	7	8	9	Probably would happen
--	---	---	---	---	---	---	---	---	---	-----------------------------

- How harmful or serious would it be if this happened?

Not at all Harmful	1	2	3	4	5	6	7	8	9	Very Harmful
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Higher scores on this combination of items meant that students had engaged in higher levels of verbal aggression in the previous month.

The *physical aggression* measure consisted of students' responses to the following three sentences:

*I threaten to hurt people.*

*I get in many fights.*

*I physically attack people.*

Higher scores on this combination of items meant that students had engaged in higher levels of physical aggression in the previous month.

All four outcome measures—legal knowledge, perspective-taking and empathy skills, perceptions of risk, and antisocial behavior—were assessed during the pretest and the posttest so we could look for change over time as a function of the curriculum.

## Controlling for Students' Personality Traits

We collected information during the pretest phase only that could be used to control for important individual differences related to antisocial behavior. Controls allow us to reduce the effect of extreme differences in personality types that might mask the impact of the curriculum. One personality characteristic that has been shown to be a strong predictor of aggressive behavior is a person's tendency to be impulsive.<sup>17</sup> To measure *impulsivity*, we used the Eysenck Impulsivity Scale which consists of 23 questions reflecting the tendency to do or say things without thinking.<sup>18</sup> For example, one question from the scale is: "Do you often get into trouble because you do things without stopping to think?" Students were asked to circle "yes" or "no" to each question. To comprise our measure of impulsivity, we selected nine items from this larger scale that each reflected a tendency to act before weighing the consequences. Higher scores on these items taken collectively indicated a greater tendency to act quickly without thinking. Impulsivity was statistically controlled for in the analyses involving perceptions of risk and physical aggression.

A second characteristic that has been shown to predict aggressive behavior is a lack of empathy.<sup>19</sup> Empathy can be thought of as an emotional reaction in a particular situation, as reflected in our second outcome measure described above. But empathy can also be viewed as a trait or a more stable personality characteristic—some people are just more empathic than others. We wanted to control for this general tendency in some of our analyses, especially those involving situational empathy and perspective taking. We measured *trait empathy* by using the Davis Interpersonal Reactivity Index.<sup>20</sup> Students were presented with 28 statements and asked to indicate how well each statement describes them, using a 5-point scale from 1 ("does not describe me well") to 5 ("describes me very well"). Seven of the statements reflected the tendency to cognitively appreciate someone else's perspective (e.g., "I usually try to understand my friends better by imagining how things look from their perspective"), and seven statements reflected the tendency to emotionally share others' feelings (e.g., "I often have tender, concerned feelings for people less fortunate than me"). Responses to these 14 items collectively were used as our measure of a student's enduring tendency to be responsive to others. This trait tendency was statistically controlled for in the analyses of responses to the stories used to measure situational perspective-taking and empathy skills. Trait empathy was also statistically controlled for in the analysis of physical aggression.

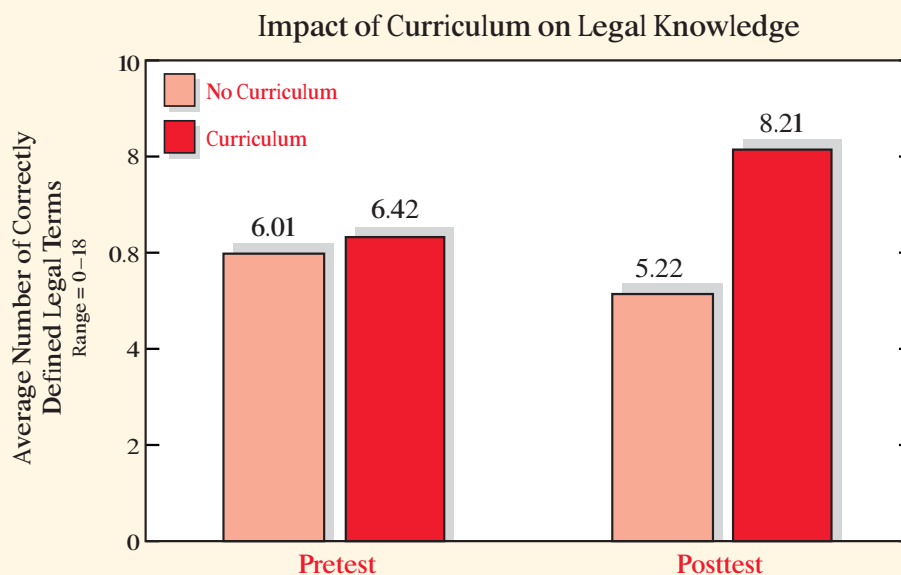
## Results

To test the impact of the *Choices and Consequences* curriculum, we conducted analyses on four outcomes: 1) legal knowledge, 2) perspective-taking and empathy skills, 3) perceptions of risk, and 4) antisocial behavior. For each of these outcome measures, scales or combined scores were created from individual student responses to the questionnaire. These scale scores, in turn, were averaged for each classroom. We then calculated change over time from the pretest to the posttest using these classroom averages. The mean changes for the experimental group were then compared to the mean changes for the control group in a series of statistical analyses. We predicted that the experimental classrooms would, on average, change in a more prosocial direction when compared to the control classrooms on all of the outcome measures.

### Legal Knowledge

Students could receive a total score of 18 on the test involving legal terms. On the pretest, the average number of correct responses for the control classrooms was 6 legal terms. The curriculum classrooms' average score was also 6 terms on the pretest. In other words, the groups started out at equal levels on legal knowledge.

After exposure to the curriculum, students' scores in the experimental group rose to an average of slightly over 8 terms. In contrast, students who did not receive the curriculum showed no change in legal knowledge over time, instead showing a slight decay in their scores (see chart below). The difference between the two groups is statistically significant.<sup>21</sup>



We can conclude that *Choices and Consequences* had a clear impact on adolescents' acquisition of legal terms. Students who participated in the lesson plans increased their knowledge about the American court system. Looking at the posttest only, we found that students in the curriculum group had learned 10% more legal terms than students in the control group.

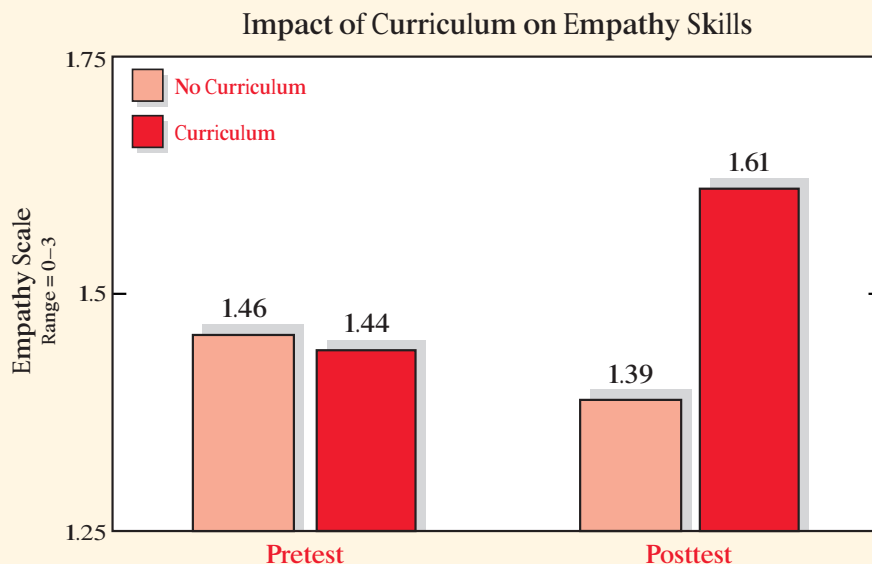
## Perspective-Taking and Empathy Skills

To assess perspective-taking and empathy skills, students were asked to read and evaluate three emotion-laden stories in the pretest and three additional stories in the posttest. Perspective taking refers to the degree to which students could correctly identify the main emotion experienced by the protagonist in each story. Empathy refers to the degree to which students' own reported emotions in response to the story actually matched those of the protagonist. Scales for perspective taking and empathy were computed by adding the students' answers across the three stories at each time period. Students could receive a total scale score as low as 0 or as high as 3 on each of the scales.<sup>22</sup>

**PERSPECTIVE-TAKING SKILLS.** Our analyses show no difference between the experimental group and the control group on perspective-taking skills. At first glance, this appears to suggest that the curriculum was not effective in increasing students' ability to identify the feelings of others. However, we are reluctant to conclude this because of the data. A closer look at student scores on the perspective-taking scale reveals that students, on average, did very well on this measure. In fact, 85% of the students scored either a 2 or a 3 on the scale (ranging from a possible 0 to 3) on the pretest. These high scores may be indicative of a "ceiling effect" for this measure. In other words, because students were already very accurate at identifying emotions displayed by characters in the stories, there was little room for improvement as a result of the curriculum.

We can make no firm conclusion about the effect of the *Choices and Consequences* curriculum on perspective-taking because our measurement of this skill was flawed in that it did not capture the full range of possible student responses.

**EMPATHY SKILLS.** At the time of the pretest, the experimental and control groups achieved nearly identical average scores on the empathy scale. Our analyses show that the curriculum had a significant effect on empathy. After participation in the three-week curriculum, students in the experimental classrooms scored appreciably higher on the empathy scale. In contrast, empathy scores for students who did not receive the curriculum remained substantively unchanged, and even decreased slightly (see chart below). This difference is statistically significant.<sup>23</sup>



We can conclude that the *Choices and Consequences* curriculum was successful in increasing students' ability to empathize with fellow teens across a variety of emotionally-charged situations. In the posttest, we found that the curriculum group scored 8% higher on empathy than the control group.

## Perceptions of Risk

To measure perceptions of risk, students were presented with hypothetical scenarios that often confront teens. After reading the scenarios, students were asked to consider several potentially dangerous outcomes that might arise as a result of the situation. For each of these potential outcomes, students were asked to indicate how “likely” it was that this outcome would occur and how much “harm” it would cause. Students were asked to consider four scenarios in the pretest and four scenarios in the posttest. A “perceived likelihood of risk” scale and a “perceived harmfulness of risk” scale were constructed for each student across the four scenarios.

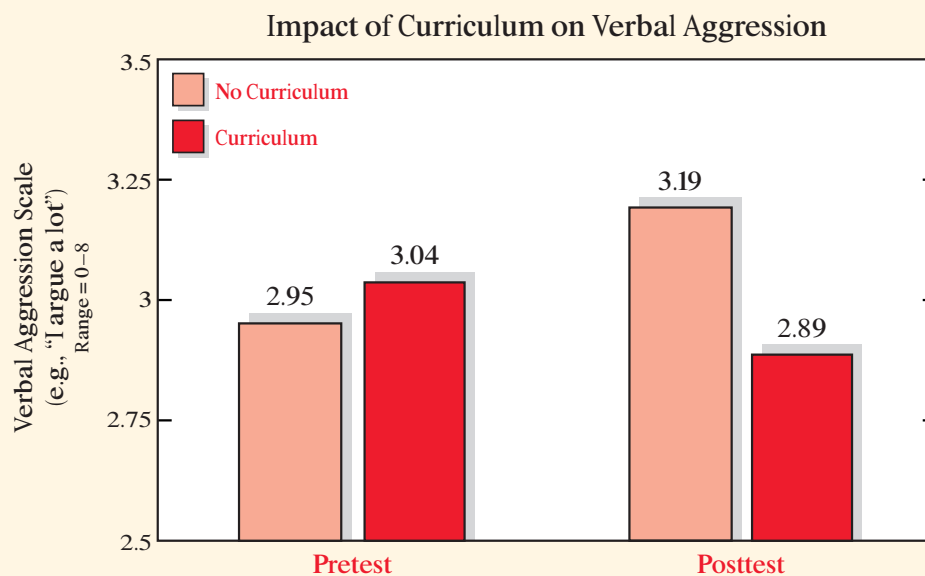
Our analyses show no statistically significant difference between the experimental and the control groups on either the perceived likelihood or the perceived harmfulness of risk measures. As with the perspective-taking measure, however, we may have had difficulty finding an effect because of the nature of the measure used. An examination of students’ scores on the likelihood and harm scales revealed that students were very sensitive to the risky nature of the outcomes we presented to them. The vast majority of students in both control and experimental groups indicated in the pretest that scenarios such as playing with a gun and reckless driving were extremely dangerous. Because most students scored so highly on these scales, there was little room for improvement by the curriculum.

We can make no firm conclusion about the effect of the *Choices and Consequences* curriculum on perceptions of risk because our measurement of this skill was flawed in that it did not capture the full range of possible student responses.

## Antisocial Behavior

We measured two forms of antisocial behavior—self-reported verbal aggression and physical aggression.

**VERBAL AGGRESSION.** For verbal aggression, students were asked to indicate whether the following statements were “not true,” “sometimes true” or “often true” of them: “I am mean to others,” “I swear or use dirty language,” “I tease others a lot,” and “I argue a lot.” A combined verbal aggression scale was created from these items. Students could receive a total score on this scale that ranged from a low of 0 to a high of 8.

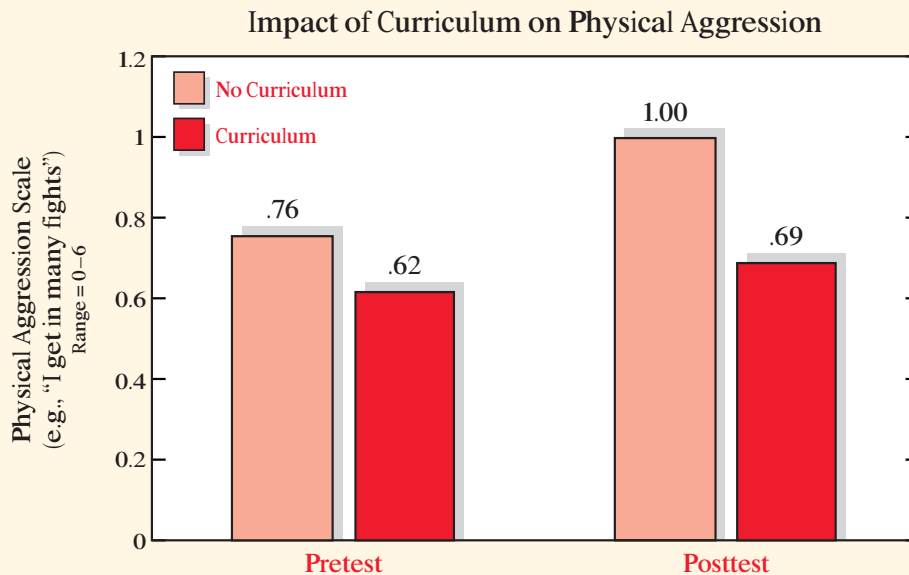


The verbal aggression scores for the control and experimental classrooms averaged around 3 on the pretest, indicating that both groups participated in a moderate amount of verbal aggression at the onset of the study (see chart on page 15). After participation in the curriculum, the verbal aggression score actually decreased for the experimental group. However, the average score for the control group during this same period actually increased slightly. Our analyses show that this difference between the two groups is statistically significant.<sup>24</sup>

We can conclude that the *Choices and Consequences* curriculum was effective in reducing adolescents' verbal aggression. The three-week intervention successfully reduced teens' tendency to tease, swear at, and argue with others. Looking at the posttest only, there was a 4% difference between the curriculum and control groups in their self-reports of verbal aggression.

**PHYSICAL AGGRESSION.** To measure physical aggression, students were asked to indicate whether each of the following statements was “not true,” “sometimes true” or “often true” of them: “I threaten to hurt people,” “I get in many fights,” and “I physically attack people.” Students could receive a total score on this scale that ranged from a low of 0 to a high of 6.

At the time of the pretest, the average physical aggression score for the control group was .76.<sup>25</sup> Similarly, the average score for the classrooms in the experimental group was .62 (see chart below). These scores show that students in both groups participated in a relatively small amount of physical aggression at the beginning of the study.



After participation in the curriculum, the average score for the experimental group remained relatively constant. At the same time, the average score for the control group rose significantly. In other words, the *Choices and Consequences* curriculum had the effect of curbing the physical aggression of adolescents who, without such intervention, showed an increase in such behaviors during this time. Our analyses reveal that this difference between the two groups is statistically significant.<sup>26</sup>

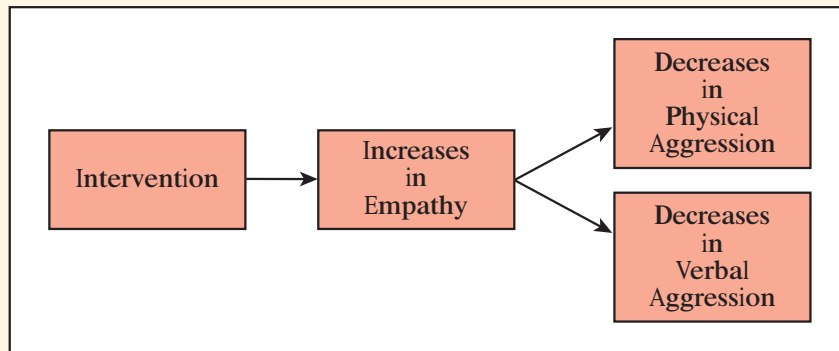
We can conclude that the *Choices and Consequences* curriculum had the effect of holding constant, and more importantly, preventing increases in physical aggression among young adolescents. The intervention curbed a tendency for students in these schools to become more aggressive—threaten, fight, and attack others—during a given school year. Looking at the posttest only, there was a 4% difference between the curriculum group and control group in their self-reports of physical aggression.

## Summary and Implications

The *Choices and Consequences* evaluation has demonstrated that a relatively short-term violence prevention intervention can have a significant impact on young people's antisocial behavior. We found that the curriculum decreased adolescents' verbal aggression and curbed their physical aggression. Exposure to the curriculum also increased adolescents' empathic skills and increased their knowledge of the legal system.

These promising findings add to the growing body of research that suggests a relationship between empathy and aggression. In our study, we found that exposure to the curriculum caused an increase in empathy which, in turn, led to beneficial changes in attitudes toward verbal and physical aggression. Helping adolescents appreciate emotional states experienced by victims of violence and their families reduced their antisocial tendencies. These results suggest a useful model that can contribute to the design of future violence prevention efforts, summarized in figure the diagram below.

Violence Prevention Model



We are extraordinarily confident in our findings because of the special strengths of the study's design. The study involved students across 21 classrooms in 3 different schools representing diverse racial and socioeconomic groups. The classrooms were randomly assigned to experimental and control conditions. Further, seven different teachers administered the curriculum, and each teacher had classes that received the curriculum and classes that did not, allowing us to reduce the effect of individual differences in teaching style. Thus we are assured that the results we found are due to the *Choices and Consequences* curriculum, and are not based on the respective racial, social or economic backgrounds of the students participating in the evaluation, or variations in the quality of the teachers and schools involved.

There are several aspects of the curriculum itself that deserve attention and presumably contributed to its effectiveness. The curriculum features the use of videotapes showing real teenagers appearing in court in trouble with the law, emphasizing the serious and lifelong consequences of violent and other antisocial behavior for its perpetrators and victims. The use of actual courtroom footage of young people likely increased the potential for students to empathize with the people and situations featured in the curriculum. Participating teachers reported to us that one of the reasons they found the curriculum so useful is that their students were fascinated by the videotapes and became emotionally involved in the subject matter as a result. This emotional involvement with the depicted victims of violence likely contributed to the positive changes in student's empathy found in this study. The curriculum thus provides an outstanding example of how television can be used as an educational tool to promote prosocial behavior.

### TEACHER REACTIONS TO *CHOICES AND CONSEQUENCES*

“By showing different perspectives and opinions before presenting the final consequences, the curriculum encouraged the students to think. The students learned that seemingly innocent actions and pranks can have very serious results.”

—Deborah Lofton, *Social Studies Teacher*  
Blackstock Junior High School

“The videotapes of real-life court cases hooked students into the lessons. The fact that the curriculum is rooted in reality gives it its power. It even drew in those students who are not usually interested in academics. . . . I saw a change in the behavior of my students. They seem more aware of their actions and eager to discuss current events that parallel those of the curriculum. I would highly recommend the curriculum to other teachers.”

—Emmanuelle Lipsky, *Social Science Teacher*  
Colina Middle School

“All the students exposed to the curriculum yearned for the next case. There was high interest and positive response across the board.”

—Jacquie Meir, *Social Studies Teacher*  
Los Cerritos Middle School

This study has potentially broad social implications. If this curriculum were to be disseminated nationally, it could help to beneficially change the attitudes of the average American adolescent toward violence and therefore contribute to the reduction of violence among this vulnerable age group.

Though the *Choices and Consequences* curriculum and this evaluation have focused primarily on addressing the level of aggression and violence in the average adolescent, it is appropriate here to comment on the direct implications of this study for the prevention of extreme violent incidents exemplified by the recent rash of shootings at American high schools and middle schools. For example, it has been widely reported that some of the students involved in these incidents were subjected to years of verbal aggression—in the form of mocking and taunting—as well as continuing threats and minor acts of physical aggression. Interventions such as *Choices and Consequences*, which increase the development of adolescents’ empathic skills, might contribute to a social environment within schools that reflects an increased acceptance of individuals that differ from the norm, thereby decreasing verbal abuse and physical threats against non-conforming individuals.

The findings of this study, though important, need to be replicated. In addition, more research is needed to determine whether increasing the length and/or number of the curriculum units will serve to magnify the effectiveness of the intervention. More research would also be helpful in ascertaining the longer-term impact of the curriculum. Finally, this evaluation found that the *Choices and Consequences* curriculum had no impact on adolescent decision-making or risk assessment skills. This suggests that the curriculum would benefit from a greater emphasis on exercises that contribute to the development of decision-making and risk assessment skills among adolescents.

In conclusion, *Choices and Consequences* has been shown to be highly effective at achieving short-term changes in adolescents’ aggression in a relatively brief intervention time period of just three weeks. The curriculum deserves wide dissemination and recognition as a potentially important component of the national effort to prevent violence among adolescents.

## Endnotes

- <sup>1</sup> American Psychological Association, *"Violence and youth: Psychology's response,"* 1993, Washington, D.C.: American Psychological Association.
- <sup>2</sup> James Fox and Glenn Pierce, *American Killers are Getting Younger," USA Today,* January, 1994.
- <sup>3</sup> James Fox, *Trends in Juvenile Justice: A Report to the United States Attorney General on Current and Future Rates of Juvenile Offending.* Washington, DC.: Bureau of Justice Statistics, US Department of Justice, March 1996.
- <sup>4</sup> Patrick Tolan & Nancy Guerra, "What works in reducing adolescent violence: An empirical review of the field," 1994, Unpublished manuscript.
- <sup>5</sup> Ibid.
- <sup>6</sup> D.C. Gottfredson, G.D. Gottfredson, & L.G. Hybl, "Managing adolescent behavior: A multiyear, multischool study," *American Educational Research Journal*, volume 30, 1993, pp. 179-215.
- <sup>7</sup> Patrick Tolan & Nancy Guerra, "What works in reducing adolescent violence: An empirical review of the field," 1994, Unpublished manuscript.
- <sup>8</sup> D.C. Gottfredson (1987), "An evaluation of an organization development approach to reducing school disorder," *Evaluation Review*, volume 11, 1987, pp.739-763; Patrick Tolan & Nancy Guerra, "What works in reducing adolescent violence: An empirical review of the field," 1994, Unpublished manuscript.
- <sup>9</sup> D.C. Gottfredson, "School-based crime prevention," 1999, Unpublished manuscript; Patrick Tolan & Nancy Guerra, "What works in reducing adolescent violence: An empirical review of the field," 1994, Unpublished manuscript.
- <sup>10</sup> D.C. Gottfredson, "School-based crime prevention," 1999, Unpublished manuscript
- <sup>11</sup> M.J. Chandler, "Egocentrism and antisocial behavior: The assessment and training of social perspective-taking skills," *Developmental Psychology*, volume 9, 1973, pp. 326-332; M.T. Greenberg, C.A. Kusche, E.T. Cook, & J.P. Quamma, "Promoting emotional competence in school-aged children: The effects of the PATHS curriculum," *Development and Psychopathology*, volume 7, 1995, pp. 117-136; D.C. Grossman, H.J. Neckerman, T.D. Koepsell, P. Liu, K.N. Asher, K. Beland, K. Frey, & F.P. Rivara, "Effectiveness of a violence prevention curriculum among children in elementary school," *Journal of the American Medical Association*, volume 277, 1997, pp. 1605-1611; A.E. Kasdin, D. Bass, T. Seigel, & C. Thomas. "Cognitive-behavioral therapy and relationship therapy in the treatment of children referred for antisocial behavior," *Journal of Consulting and Clinical Psychology*, volume 57, 1989, pp. 522-535.
- <sup>12</sup> A.E. Kasdin, D. Bass, T. Seigel, & C. Thomas. "Cognitive-behavioral therapy and relationship therapy in the treatment of children referred for antisocial behavior," *Journal of Consulting and Clinical Psychology*, volume 57, 1989, pp. 522-535.
- <sup>13</sup> A. Bandura, D. Ross, & S.A. Ross, "Transmission of aggression through imitation of aggressive models," *Journal of Abnormal and Social Psychology*, volume 63, 1961, pp. 575-582; A. Bandura, D. Ross, & S.A. Ross, "Vicarious reinforcement and imitative learning," *Journal of Abnormal and Social Psychology*, volume 67, 1963, pp. 601-607.
- <sup>14</sup> A total of six different emotion stories were used in the study, three for the pretest and three for the posttest. To ensure that the stories were comparable in emotion and intensity, the stories were pretested on a separate sample of undergraduate students prior to this study.
- <sup>15</sup> A total of eight risky situations were used in the study, four for the pretest and four for the posttest. To ensure that the situations were comparable in levels of risk and possible harm, they were pretested with a separate sample of undergraduate students prior to this study.
- <sup>16</sup> T. Achenbach, *Manual for the Youth Self-Report and 1991 Profile.* 1991, Burlington Vermont: University of Vermont Department of Psychiatry.
- <sup>17</sup> Cass Dykeman, Wanda Daehlin, Stacey Doyle, & Heather Flamer, "Psychological Predictors of School-Based Violence: Implications for School Counselors," *The School Counselor*, Volume 44, 1996, pp. 35-47. M. A. Luengo, M. T. Carrillo-de-la-Pena, J.M. Otero, & E. Romero, "A Short Term Longitudinal Study of Impulsivity and Antisocial Behavior," *Journal of Personality and Social Psychology*, Volume 66, 1994, pp. 542-548.
- <sup>18</sup> S. B. G. Eysenck, G. Easting, & P. R. Pearson. "Age norms for impulsiveness, venturesomeness, and empathy in children," *Personality & Individual Differences*, Volume 5, 1984, pp. 315-321.
- <sup>19</sup> Deborah Richardson et al. "Empathy as a Cognitive Inhibitor of Interpersonal Aggression," *Aggressive Behavior*, Volume 20, pp. 275-289. Douglas Cohen & Janet Strayer, "Empathy in Conduct-disordered and Comparison Youth," *Developmental Psychology*, Volume 32, pp. 988-998.
- <sup>20</sup> Mark Davis, "A Multidimensional Approach to Individual Differences in Empathy," *JSAS Catalog of Selected Documents in Psychology*, Volume 10, 1980, pp. 85-105.
- <sup>21</sup> For legal knowledge, a one-tailed t-test on the change scores revealed a statistically significant difference between the curriculum and control classrooms,  $t(19) = 3.61, p < .001$ .
- <sup>22</sup> Scores on the perspective-taking and empathy scales were statistically adjusted or controlled for by students' trait-level empathy, as measured during the pretest by the Davis Interpersonal Reactivity Index. These adjusted means were then compared in a one-tailed t-test.
- <sup>23</sup> For empathy, the control group showed a mean decrease of .07, whereas the experimental group displayed a mean increase of .17. A one-tailed t-test on the change scores revealed a statistically significant difference between the curriculum and control classrooms,  $t(19) = 1.71, p < .05$ .
- <sup>24</sup> For verbal aggression, the control group showed a mean increase from pretest to posttest of .24. The intervention group showed a mean decrease of .16. A one-tailed t-test on these change scores was statistically significant,  $t(19) = 1.61, p < .06$ .
- <sup>25</sup> Scores on the physical aggression scale were statistically adjusted or controlled for by students' trait-level empathy as well as trait impulsivity, as measured by the Davis Interpersonal Reactivity Index and the Eysenck Impulsivity Scale respectively. These adjusted means were then compared in a one-tailed t-test.
- <sup>26</sup> For physical aggression, the control classrooms showed a mean increase of .23. The curriculum classrooms, on the other hand, showed no change over time. The t-test revealed a statistically significant difference between the two groups,  $t(19) = 1.84, p < .04$ .

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