TECHNICAL REPORT

THE EFFECTS OF THE *TOO GOOD FOR VIOLENCE* PREVENTION PROGRAM ON STUDENT BEHAVIORS AND PROTECTIVE FACTORS

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Submitted by:

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Research Summary

Effects of the Too Good for Violence Prevention Program

This study examined the effectiveness of the *Too Good for Violence* (TGFV) Prevention Program in impacting children's behaviors and skill development in protective factors associated with resistance to violence. The study examined the following questions. First, do students participating in the *TGFV* prevention program in comparison to students in the control group indicate: 1) higher levels of emotional competency skills, 2) higher levels of social and conflict resolution skills, 3) higher levels of communication skills, and 4) more positive perceptions of interactions with other students? Second, do teachers' observations of students participating in the *TGFV* prevention program in comparison to observations of students in the control group indicate: 1) higher levels of social skills, 2) higher rates of prosocial behaviors, and 3) lower rates of inappropriate social behaviors? Third, are *TGFV* program effects similar for students across gender, ethnic background, and socioeconomic status?

Method

Ten elementary schools from a large Florida school district were randomly selected and recruited for participation in this study. Nine hundred and ninety-nine (999) third grade students and 46 teachers participated in the study. The student sample was 48% female, approximately 44% White, 12.5% African American, 36% Hispanic, 5% Multiracial, 2% Asian, and 0.5% American Indian. Fifty-four percent of the students were categorized as economically challenged by receipt of reduced or free lunch services, 20% received exceptional education services, and 17% received limited English proficiency services.

Students in five of the elementary schools participated in the prevention program during the first quarter of the school year, and students in the other five schools served as the control sample for the study. Students in the treatment and control sample were administered a pretest survey questionnaire at the beginning of the year prior to delivery of the *TGFV* prevention program. A posttest student questionnaire was administered following the delivery of the prevention curriculum and again 20-weeks after the treatment delivery. Concurrently, classroom teachers completed student observation questionnaires before program delivery, following program delivery, and 20-weeks after program delivery. Trained *TGFV* instructors delivered the prevention program to students in the treatment schools in 40-50 minute lessons once a week over a seven-week period.

Results

Prevention research has identified certain risk factors that increase the likelihood of children and youth engaging in aggressive behaviors and certain protective factors that decrease the impact of risk factors. The *TGFV* program incorporates curricula and instructional activities aimed at reducing risk factors and building protective factors. The following risk and protective factors were examined in the study: Emotional Competency Skills; Social and Conflict Resistance Skills; Communication Skills; and Social Interactions with Others.

1. Students in the treatment and the control group responded to a survey questionnaire before, immediately following and 20-weeks after program delivery.

Student responses to protective survey items at the end of program and again at the 20-week follow-up suggest the following:

- (a) Students participating in the *TGFV* program had statistically significant higher scores or higher levels of emotional competency skills in comparison to students in the control group. A sample of item content that represents skills in this category includes: 1) I know many different words to describe what I feel inside, 2) It is easy for me to talk about my feelings, 3) I can calm myself down when I am upset, and 4) I stop and think before I act when I am mad or upset.
- (b) Students participating in the *TGFV* program had statistically significant higher scores or higher levels of **social and conflict resolution skills** in comparison to students in the control group. A sample of item content that represents skills in this category includes: 1) If a student was bothering me, I would walk away, 2) If a student teased me, I might make a joke out of it, 3) If I have a conflict, I ask to hear the other student's side of the story, and 4) I use peaceful ways to work out conflicts with other students.
- (c) Students participating in the *TGFV* program had statistically significant higher scores or higher levels of **communication skills** in comparison to students in the control group. A sample of item content that represents skills in this category includes: 1) I can tell how students feel by listening to their tone of voice, 2) I listen to other students even when I disagree, 3) I use "I feel messages" to share my feelings with other students, and 4) I tell other students how I feel when they do something I like.
- (d) Students in both the treatment and the control group had very positive perceptions of their interactions with other students (pretest, 9-week, and 20-week testing). The average scores across groups ranged from 4.17 to 4.29 on a 5.00-point scale, suggesting a ceiling on the potential effects of program treatment. Considering the students in this sample were served in general education settings, the vast majority of third graders were not likely to be engaging in socially inappropriate behaviors such as name calling, yelling, and pushing other students.
- 2. In an effort to triangulate data, teacher judgment concerning student behavior was also examined. Classroom teachers were asked to rate each student's behavior related to social skills, prosocial interactions, and antisocial interactions across the three testing periods. If teacher responses are consistent with student responses, the study's findings could be interpreted with greater confidence.

Teachers' observations of students at the end of program and again at the 20-week follow-up suggest the following:

- (a) Based on teachers' judgments, students participating in the *TGFV* program had statistically significant higher scores or higher levels of **social skills** in comparison to students in the control group. A sample of item content that represents skills in this category includes: 1) treats other students with respect, 2) uses a variety of verbal labels for emotions, 3) stops and thinks before acting, and 4) uses or suggests more than one way to solve a social problem.
- (b) Based on teachers' judgments, students participating in the *TGFV* program had statistically significant higher scores or higher levels of **prosocial behaviors** in comparison to students in the control group. A sample of item content that represents skills in this category includes: 1) helps other students, 2) asks other students to play if they don't have someone to play with, 3) takes turns, plays fair, and follows rules of the game, and 4) resolves problems with other students on his or her own.
- (c) Teachers rated students in both the treatment and the control group as engaging in very few **socially inappropriate behaviors** (pretest, 9-week, and 20-week testing). The average scores across groups ranged from 4.35 to 4.44 on a 5.00-point scale (scores coded in reverse). This finding supports students' perceptions of limited antisocial behaviors in the school setting as indicated above (2.d).
- 3. Treatment effects were examined for students participating in the *TGFV* program across gender, ethnic background, and socioeconomic status (free/reduced lunch). These results offer evidence of the *TGFV* program's utility in serving and meeting the needs of diverse student populations.

Treatment student responses to protective survey items at the end of program and again at the 20-week follow-up suggest the following:

- (a) The *TGFV* program was equally effective for participating students **regardless of ethnic background.** In other words, White, African American, and Hispanic students experienced similar increases in Emotional Competency Skills, Social and Conflict Resolution Skills, and Communication Skills. Students maintained similarly positive perceptions of interactions with other students.
- (b) The *TGFV* program was equally effective for participating students **regardless of gender.**
- (c) The *TGFV* program was equally effective for participating students regardless of socioeconomic status.

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Introduction

This study was conducted to examine the effects of the *Too Good for Violence* (C. E. Mendez Foundation, Inc., 2000) school-based violence prevention program on third grade students' social behaviors and protective factors. For the reader who may be unfamiliar with the *Too Good for Violence* (TGFV) prevention program, a brief description of the K-8 curriculum is provided first, followed by a summary of the theoretical framework for the program's development. The remainder of the paper is presented using the following research sections: purpose of the study, method, design and procedures, results, and conclusions.

Program Description

The *Too Good for Violence Prevention Program* (TGFV) is a K-8 multifaceted, interactive social influence intervention using a universal education strategy. The *Too Good for Violence* prevention curriculum and its companion programs *Too Good for Drugs* and *Too Good for Drugs and Violence High School* are currently used in more than 2,500 school districts across 48 states. A trained classroom teacher or instructor shares the *TGFV* curriculum in 7-lesson units averaging 45 minutes for grades K-5 and 9-lesson units averaging 30 minutes for Grades 6-8. Lesson content focuses on promoting respect for oneself and others through community-building activities, and developing effective communication skills, social and conflict resolution skills, emotional competency skills, and anger management strategies. The program is designed to benefit everyone in the school by providing needed education in social and emotional competencies and by reducing risk factors and building protective factors that affect most, if not all students in this age group. Instructional strategies strongly emphasize cooperative learning activities, role play situations, and skills-building methods including modeling, practicing, reinforcing, providing feedback, and promoting generalization of skills to other contexts. The program is a long-term intervention, which builds skills sequentially with the intention of preventing antisocial, aggressive and violent behavior, and promoting healthy decision-making and positive, healthy child development. The program includes strategies for infusing prevention concepts and skills in the classroom with "Looking for More" suggestions for additional activities, recommended readings, and videotapes.

Theoretical Background

Too Good for Violence is a multifaceted prevention program based on a number of theoretical constructs, which have been strongly supported by research in the field. Elements of Social Learning Theory (Bandura, 1977); Problem Behavior Theory (Jessor and Jessor, 1977; Jessor, 1982; Perry and Jessor, 1983); and Social Development Theory (Hawkins & Weis, 1985; Hawkins, Lishner, Catalano & Howard, 1986) contribute to the theoretical basis for Too Good for Violence. In addition to these theories, *TGFV* uses strategies based on the Developmental Assets (Search Institute, 1996) approach to healthy youth development.

According to Social Learning Theory, aggression and violence are socially learned, purposeful behaviors, which are shaped primarily through modeling, or observing behaviors and reinforcement, or experiencing positive consequences for behaviors. Modeling contributes to the acquisition of both prosocial and antisocial behaviors. This theory is based on a self-efficacy paradigm in which behavior change and maintenance depend on (a) expectations about the outcomes of engaging in the behavior, and (b) a sense of self-efficacy, or expectations about one's ability to engage in the behavior. From this perspective, aggression and violence result from the interplay of socio-environmental influences and personal perceptions. *TGFV* utilizes Social Learning Theory by addressing social influences such as peers, advertising and media, and correcting misperceptions of social norms; persuading students of the value of pro-social behaviors; emphasizing the development of social and personal skills to resist social and environmental pressures to engage in risk behaviors; modeling pro-social skills, offering opportunities to perform the skills and providing rewards and recognition for using them.

From the perspective of Problem Behavior Theory, violence, drug use and other highly correlated behaviors form a syndrome of purposive behaviors that are psychologically functional for many adolescents. Problem Behavior Theory posits that efforts to change behavior may focus on any or all of the following levels: behavior, personality and environment. An extension of this theory, Health Behavior Theory (Perry and Jessor, 1983), proposes that strategies be used to introduce or strengthen health-enhancing behaviors and simultaneously weaken or eliminate health-compromising behaviors. This theoretical approach suggests that (a) prevention efforts should pay more attention to the larger environment, including social norms and social supports regulating the occurrence of behaviors, and (b) interventions should focus on multiple behavioral targets.

Social Development also contributes to the theoretical assumptions on which *TGFV* is based. The Social Development Model is an integration of Social Control and Social Learning Theory. The Social Development Model emphasizes the importance of protective factors: (a) bonding to prosocial family, school, peers and community, and (b) clear standards or norms of behavior. According to this model, positive socialization is achieved when youths have the opportunity to be involved in conforming activities, when they develop skills necessary to be successfully involved, and when those with whom they interact consistently reward desired

behaviors. These conditions should increase attachment to others, commitment to conforming behavior, and belief in the conventional order.

TGFV is based on the Social Development Model, in that it builds protective factors, including bonding and norms. *TGFV* teaches skills and provides opportunities and recognition for participation. It emphasizes prosocial norms, providing activities and information to counter students' misperceptions regarding actual levels of violence, and strongly supporting healthy normative beliefs and clear standards.

In addition, the Developmental Assets Framework suggests positive, healthy youth development depends on the presence of developmental assets, 40 building blocks that all children and adolescents need to grow up healthy, competent and caring. These assets are internal (i.e., educational commitment, values, social competencies and positive identity) and external (i.e., support, empowerment, boundaries and expectations, time). Their effect is cumulative; the more assets young people have, the more resilient they will be, and the more engaged in positive behaviors. The fewer assets they have, the more likely they are to become involved with drugs, violence and other antisocial behaviors.

TGFV is based on many assumptions consistent with the Developmental Assets Framework, including a proactive, positive focus and a commitment to long-term building of internal and external assets for all students, regardless of their level of risk. The goal of Too Good for Violence is not only to prevent problem behaviors, but also to promote positive, healthy youth development.

Purpose of the Study

The purpose of the study was to examine the effectiveness of the *Too Good for Violence --Elementary School* prevention program in impacting children's behaviors and skill development in protective factors associated with resistance to violence. The study examined the following questions. First, do teachers' observations of students participating in the TGFV prevention program in comparison to observations of students in the control group indicate: 1) more frequent use of personal and social skills, 2) more frequent engagement in prosocial behaviors, and 3) less frequent engagement in inappropriate social behaviors? Second, do students participating in the TGFV prevention program in comparison to students in the control group indicate: 1) higher levels of emotional competency skills, 2) higher levels of social and resistance skills, 3) higher levels of communication skills, and 4) more positive perceptions of their interactions with other students? Third, are TGFV program effects similar for students across gender, ethnic background, and socioeconomic status?

Method

Participants

Nine hundred and ninety-nine (999) third grade students and 46 teachers participated in the study. The student sample was 48% female, approximately 44% White, 12.5% African American, 36% Hispanic, 5% Multiracial, 2% Asian, and 0.5% American Indian. Fifty-four percent of the students were categorized as economically challenged by receipt of reduced or free lunch services, 20% received exceptional education services, and 17% received limited English proficiency services.

Design

Ten elementary schools from a large Florida school district were randomly selected and recruited for participation in the study. The district's elementary schools were stratified on school ratings based on state criteria of academic performance, learning environment and student

characteristics. Consideration was given to school location--urban, rural and suburban. Five levels of stratification were identified and two schools for each matched level were randomly assigned to either the treatment or control condition. Students in five of the elementary schools participated in the prevention program during the first quarter of the school year, and students in the other five schools served as the control sample for the study

Procedure

Teachers in the treatment and control group completed checklists assessing student behaviors prior to delivery of the *TGFV* prevention program, following program delivery, and 20-weeks after program delivery. Students in the treatment and control group completed a survey questionnaire prior to delivery of the *TGFV* prevention program, following program delivery, and 20-weeks later. School administrators and teachers located at control sites were requested to refrain from delivering any major prevention curricula or programs in the classroom until the fourth quarter of the year. Teachers received detailed instructions for completing the *Teacher Checklist of Student Behaviors*. The average time to complete a checklist for a student ranged from 1.5 to 2.5 minutes. Scripted directions for administering the *Student Protective Factor Survey Questionnaire* were provided to classroom teachers.

Prevention Program

The *TGFV* third grade curriculum (C. E. Mendez Inc., 2000) used in this study included seven lesson units delivered to students participating in the treatment condition by trained program instructors. The third grade curriculum is designed to develop: (a) conflict resolution skills, (b) anger management skills, (c) respect for self and others, and (d) effective communication skills. Instructional strategies emphasize cooperative learning activities, role-play situations, and skills building methods such as modeling, practicing, reinforcing, providing

feedback, and promoting generalization of skills to other contexts. Students are provided many opportunities to be active participants and receive recognition for their contributions and involvement. Teaching methods model and encourage bonding with prosocial others.

Assessment of Program Fidelity

Classroom teachers of students participating in the *Too Good for Violence* program were asked to complete the *Teacher Evaluation of Program Implementation Survey Questionnaire* to gauge treatment fidelity and quality of implementation. Teachers responded to questions about the number of *TGFV* lessons offered and the time committed to lesson delivery. Teachers were also asked to respond to 13 Likert items ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) to rate program instructors' preparation, presentation, and interaction with and among students during the delivery of the program treatment. To assess potential confounding influences, teachers in both the treatment and control group maintained *Prevention Lesson and Activities Logs* to record any events, lessons or activities their students participated in at the school and classroom level throughout the year.

Instrumentation

The *Teacher Checklist of Student Behaviors* and the *Student Protective Factor Survey Questionnaire* were developed based on research findings and contributions from a variety of alcohol, tobacco and other drug (ATOD) prevention agencies and investigators. They focus on key risk and protective factors associated with children's ability to resist pressures to engage in risk behaviors and make healthy lifestyle choices (e.g., Center for Substance Abuse Prevention, 1998; National Center for the Advancement of Prevention, 1997; and Hawkins, Catalano, & Miller, 1992). Items on the teacher checklist were piloted in studies using the *Too Good for Violence--Elementary School* prevention program and the *Too Good for Drugs--Elementary* *School* prevention program (Bacon, 2003). Items on the student survey were piloted in studies using the *Too Good for Violence-Middle School* and *Too Good for Violence and Violence-High School* prevention programs (Bacon, 2001; and Bacon, 2000). Teacher responses to checklist items as well as student responses to questionnaire items were examined using a series of item analysis techniques (survey items in Appendix).

Teacher Checklist of Student Behaviors. Teachers responded to 21 behavioral items using a 5-point scale ranging from 1 (*Never*) to 5 (*Almost Always*). Teacher responses to items were grouped into three protective subscales associated with students' social adaptability. Items indicating less socially acceptable behaviors (e.g., yells at other students, pushes or shoves other students) were recoded such that higher scores (maximum score 5.00) indicated positive levels of those behaviors. An estimate of reliability using Cronbach's alpha coefficient for the Teacher Checklist Behavior Scale was $r_{\alpha} = .96$, and an estimate of stability using the responses from the control group was $r_{tt} = .80$. Protective factors were computed using the mean of the item scores for each subscale consisting of: Personal and Social Skills ($r_{\alpha} = .91$); Positive Social Behaviors ($r_{\alpha} = .93$); and Inappropriate Social Behaviors ($r_{\alpha} = .94$).

Student Survey Questionnaire. Students responded to 32 Likert scale items ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Student responses were grouped into four protective subscales associated with impacting children's resiliency to social challenges. Item responses were recoded as needed such that higher scores indicate positive levels of attitudes, perceptions or skills. An estimate of reliability using Cronbach's alpha coefficient for the Protective Survey Scale was $r_{\alpha} = .94$, and an estimate of stability using the responses from the control group was $r_{tt} = .62$. Protective factors were computed using the mean of the item scores for each subscale consisting of: Emotional Competency Skills ($r_{\alpha} = .80$); Social and Resistance Skills ($r_{\alpha} = .83$); Communication Skills ($r_{\alpha} = .82$); and Perceptions of Interactions with Others ($r_{\alpha} = .79$).

Results

The study results are presented in the following order. First, an examination of the data related to fidelity of program implementation. Second, an examination of the checklist and survey results using the school and classroom as the unit of analysis. Third, teacher responses and outcomes based on the checklist of student behaviors. Fourth, student responses and outcomes based on the survey questionnaire. Finally, prevention effects were examined for students by gender, socioeconomic status, and ethnic background.

Program Implementation

Twenty-one school-based teachers rated the intensity and quality of program delivery for the *TGFV* instructors across the treatment schools. All treatment teachers indicated all seven lessons were delivered to the students in their classrooms. Each lesson unit was delivered in forty to fifty minutes. Classroom teachers' responses to the Likert items on the Evaluation of Program Implementation survey suggest that program instructors modeled desirable instructional behaviors such as being well prepared for lesson presentations; providing clear directions; defining complex terms and concepts; responding to students' questions; applying appropriate classroom management strategies; modeling positive conflict resolution strategies and choices; providing students opportunities to participate and practice skills; and recognizing and reinforcing students' participation (score range 4.86 to 5.00). Teacher responses suggest that *TGFV* instructors were successful in developing a bond or rapport with students (4.95), and treated students in a respectful and non-prejudicial manner (5.00). Classroom teachers felt the *TGFV* program had a positive impact on their students' behaviors or choices (4.86), and that students had commented they enjoyed participating in the program (4.95). Teachers' written comments offered additional support for their positive responses to the items on the survey questionnaire.

Lesson logs completed by teachers in both the treatment and control group suggest there were two district-wide initiatives in place during the year. First, Red Ribbon Week, a schoolwide drug awareness and prevention series of events and instruction occurred in the month of February. Second, state legislation requires elementary schools provide *Character Education* instruction that emphasizes core ethical values such as citizenship, attitudes, manners, responsibility, leadership, problem solving, courage, fairness, and respect for self and others. The delivery style of Character Education instruction varied across the study sites. Examples of implementation ranged from monthly lessons provided by the guidance counselor, morning show broadcast lessons, to lessons provided by classroom teachers. Since Red Ribbon Week and Character Education were implemented in all sites, it is assumed that any positive influences were relatively equally distributed among the treatment and control groups. In addition, most of the study sites had a sample of guest speakers or counselors who provided brief presentations (30-45 minutes) on topics such as firearm safety, personal safety, child abuse, sexual harassment, bullying, stealing, and discrimination

Overall, the findings from the Teacher Evaluation of Program Implementation survey suggest the *TGFV* program was delivered to students as designed, covering seven lessons averaging 45 minutes with quality instruction, and positive adult-student and student-student interaction. Confounding influences of alternative violence prevention programs across the treatment and control schools were not observed.

Unit of Analysis

School as Unit. Since treatment and control groups were assigned to sites, the school is the statistical unit of analysis. With only ten schools, the researcher wanted to investigate whether the study data could be explored beyond the school and classroom level. A lenient alpha level of .10 was selected to improve statistical power due to the limited sample size of 5 subjects (schools) per group (Stevens, 1996). Pretest score equivalence and the effects of posttest and 20-week follow-up scores for both instruments were examined by the treatment condition.

No significant differences were observed between the treatment and the control group using mean school pretest scores on the *Teacher Checklist* of Student Behaviors (F = 2.87, p =.13), or the *Student Protective Factor Survey Questionnaire* (F = 0.34, p = .57). The findings suggest that behaviors, attitudes and perceptions were similar for both the treatment and control schools prior to the delivery of the prevention program on both instruments.

Teachers' total scores on the *Teacher Checklist of Student Behaviors* were examined for the posttest and the 20-week follow-up. A significant between groups effect was observed for checklist posttest scores (F = 6.90, p = .03). The mean posttest score for treatment schools was 4.18 (SD = .15), and 3.87 (SD = .21) for the control schools (d = 1.43). An estimate of the variance associated with the checklist posttest scores and the treatment condition was $\eta^2 = .46$ ($SS_B = .230$, $SS_T = .497$). A significant between groups effect was also observed for the 20-week follow-up checklist scores (F = 6.70, p = .03). The mean 20-week score for treatment schools was 4.17 (SD = .05), and 3.86 (SD = .26) for the control schools (d = 1.19). An estimate of the variance associated with the checklist 20-week scores and the treatment condition was $\eta^2 = .46$ ($SS_B = .242$, $SS_T = .530$). Students' total scores on the *Survey Questionnaire* were examined for the posttest and the 20-week follow-up. A significant between groups effect was observed for survey posttest scores (F = 3.40, p = .10). The mean posttest score for treatment schools was 4.04 (SD = .19), and 3.82 (SD = .19) for the control schools (d = 1.16). An estimate of the variance associated with the posttest and the treatment condition was $\eta^2 = .30$ ($SS_B = .119, SS_T = .399$). A significant between groups effect was observed for the survey 20-week follow-up scores (F = 4.77, p = .06). The mean follow-up score for treatment schools was 3.89 (SD = .14), and 3.70 (SD = .13) for the control schools (d = 1.46). An estimate of the variance associated with the survey 20-week scores and the treatment condition was $\eta^2 = .37$ ($SS_B = .088, SS_T = .235$).

<u>Class as Unit</u>. No significant differences were observed between the treatment and the control group using mean classroom pretest scores on the *Teacher Checklist of Student Behaviors* (F = 2.93, p = .09), or the *Student Protective Factor Survey Questionnaire* (F = 0.26, p = .61). The findings suggest that behaviors, attitudes and perceptions were similar for both the treatment and control classrooms prior to the delivery of the prevention program.

Teachers' scores on the *Teacher Checklist of Student Behaviors* were examined using a one-way Multivariate Analysis of Variance (MANOVA) with the classroom posttest and the 20-week follow-up as the dependent variables, and the treatment condition as the independent variable. A significant multivariate main effect was observed for the treatment condition ($\Lambda = .837, df = 2, 43, F = 4.20, p = .02, \eta^2 = .16$). Follow-up Univariate Analysis of Variances (ANOVAs) were computed for the mean classroom checklist scores by time. A significant between groups effect was observed for checklist posttest scores (F = 7.98, p = .007). The mean posttest score for treatment classes was 4.19 (SD = .34), and 3.89 (SD = .36) for the control schools (d = .83). An estimate of the variance associated with the checklist posttest scores and

the treatment condition was $\eta^2 = .15$ ($SS_B = .972$, $SS_T = 6.326$). A significant between groups effect was observed for the 20-week follow-up checklist scores (F = 7.61, p = .008). The mean 20-week score for treatment classes was 4.19 (SD = .39), and 3.88 (SD = .36) for the control classes (d = .86). An estimate of the variance associated with the checklist 20-week scores and the treatment condition was $\eta^2 = .15$ ($SS_B = 1.076$, $SS_T = 7.294$).

Students' scores on the *Survey Questionnaire* were examined using a one-way MANOVA with the classroom posttest and the 20-week follow-up as the dependent variables, and the treatment condition as the independent variable. A significant multivariate main effect was observed for the treatment condition (A = .803, df = 2, 43, F = 5.29, p = .009, $\eta^2 = .20$). Follow-up ANOVAs were computed for the mean classroom survey scores by time. A significant between groups effect was observed for survey posttest scores (F = 8.34, p = .006). The mean posttest score for treatment classes was 4.07 (SD = .28), and 3.83 (SD = .27) for the control schools (d = .89). An estimate of the variance associated with the survey posttest scores and the treatment condition was $\eta^2 = .16$ ($SS_B = .617$, $SS_T = 3.874$). A significant between groups effect was observed for survey scores (F = 10.18, p = .003). The mean 20-week score for treatment classes was 3.91 (SD = .23), and 3.71 (SD = .19) for the control classes (d = 1.05). An estimate of the variance associated with the checklist 20-week scores and the treatment condition was $\eta^2 = .19$ ($SS_B = .437$, $SS_T = 2.323$).

The findings for school and class-level data provide confidence in exploring the results at the student level. Comparisons between schools and classes prior to program delivery suggest similar levels of protective factors for both groups. Following the delivery of the *TGFV* prevention program and the 20-weeks later, the treatment group evidenced significantly higher

scores on the behavior checklist and student survey in comparison to schools and classes in the control group.

Teacher Checklist of Student Behaviors

Impact of Attrition on Checklist Scores

Attrition rates are an ongoing challenge and concern for any study gathering information over time, and the potential bias of missing responses on experimental results is a threat to the generalization of the findings (Mohai, 1991; Botvin et al., 1990). In this study, attrition rates for the Teacher Checklist did not vary substantially across the treatment or control condition, with a seven percent loss (29 out of 442) of responses for the treatment group, and a 10% loss (58 out of 499) of responses for the control group. Due to coding errors and student reassignment to other teachers or schools, approximately 9% (87) of the study sample could not be matched to pretest (Time 1) and 20-week follow-up (Time 3) scores. When the student characteristics of the treatment and control condition were examined between the original sample and the study sample, no substantial differences were present (see Table 1).

| | Pret | Pretest | | Veeks |
|------------------|--------------|---------|------------|------------|
| | <u>n = 9</u> | 999 | <u>n</u> = | <u>912</u> |
| <u>Variable</u> | Treatment | Control | Treatment | Control |
| Female | 49% | 48% | 49% | 50% |
| White | 45% | 43% | 45% | 43% |
| African American | 15% | 11% | 14% | 10% |
| Hispanic | 32% | 38% | 33% | 39% |
| Multiracial | 6% | 4% | 6% | 4% |
| Asian | 1% | 3% | 1% | 3% |
| American Indian | >1% | >1% | >1% | >1% |
| Free/Reduced | 56% | 53% | 56% | 54% |

Table 1

Student Characteristics of Groups for the Teacher Checklist Pretest and 20-Week Follow-up

To examine whether the study results may have been biased relative to attrition--students with and without 20-week follow-up checklist scores--a two-way MANOVA was conducted using the posttest behavior scale scores (Time 2) as the dependent variable, and the treatment condition and attrition as independent variables. Mean behavior scales for the treatment and attrition conditions are shown in Table 2. No significant main effects for attrition or interaction effect for treatment x attrition were observed. The results suggest there was no trend or bias evident between teachers' scores of student behaviors between respondents with or without 20-week follow-up scores (attrition). In addition, no differential patterns or change in slopes between the attrition and the treatment condition was evident.

A positive main effect for the treatment condition ($\Lambda = .962$, df = 3, 993, F = 12.98, p < .0001) was observed with students participating in the prevention program having higher scores than students in the control group. Follow-up ANOVA's were computed to determine which

posttest behavior subscales were contributing to the difference between the treatment conditions. The findings suggest teachers' perceptions of students using Personal and Social Skills (F = 24.20, p < .0001), and students engaging in Prosocial Behaviors (F = 32.39, p < .0001) were significantly more positive for students in the treatment group in comparison to students in the control group. No significant difference was observed between treatment and control teachers' perceptions of students' rate of engagement in Inappropriate Social Behaviors.

Table 2

MANOVA Results of Teacher Checklist Posttest Scores (Time 2) by Attrition

| Checklist Attrition by Treat | <u>nent Condition</u> | | | | | |
|---|-----------------------|----------------|----------------------|-------------------|----------------|--|
| | Wilks' | (| df | F | р | |
| Multivariate Between Effects | | | | | | |
| Treatment | .962 | 3, 9 | 993 | 12.98** | .0001 | |
| Attrition | .995 | 3, 9 | 993 | 1.73 | .1602 | |
| Treatment x Attrition | .994 | 3, 9 | 993 | 1.86 | .1355 | |
| <u>Univariate <i>F</i> tests for Treatn</u> | <u>nent</u> | | | | | |
| Posttest (Time 2) | | | | | | |
| Personal & Soc | 1 | , 998 | 24.20** | .0001 | | |
| Prosocial Behav | viors | 1 | , 998 | 32.39** | .0001 | |
| Inappropriate S | ocial Behaviors | 1 | , 998 | 4.71 ^a | .0302 | |
| Posttest Mean Scores | Study | Sample | mple Attrition Group | | | |
| | <u>n = </u> | <u>n = 912</u> | | | (9%) | |
| | Treatment | <u>Control</u> | Trea | tment | <u>Control</u> | |
| Personal & Social Skills | 4.05 | 3.67 | 2 | 4.01 | 3.44 | |
| Prosocial Behaviors | 4.10 | 3.70 | 2 | 4.06 | 3.31 | |
| Inappropriate Behaviors | 4.45 | 4.42 | 2 | 4.53 | 4.15 | |

Note. Scores were coded in reverse with a score of 5.00 indicating the most positive response.

 $p^{**} > 01$. ^a = exceeds Bonferroni adjustment for Type I error.

Checklist Pretest Score Equivalence

Although schools were stratified and randomly assigned to the treatment or control group, the researchers wanted to assess whether teachers held similar perceptions of student behaviors prior to the delivery of the program. Teacher responses to the *Teacher Checklist of Student Behaviors* were examined using a one-way MANOVA procedure with the treatment condition as the independent variable, and scores on the behavioral subscales as the dependent variables.

A significant between groups effect was observed between pretest scores for the treatment and control group (A = .956, df = 3, 908, F = 13.97, p < .0001). Follow-up ANOVAs were computed to determine which behavior subscales were contributing to the differences between the treatment and control group. The findings suggest that teachers in the treatment group held significantly more positive perceptions of students using Personal and Social Skills in comparison to teachers in the control group (F = 16.00, p < .0001). Teachers in the treatment group also held significantly more positive perceptions of students engaging in Prosocial Behaviors in comparison to teachers in the control group (F = 18.17, p < .0001). No significant differences were observed between teachers' perceptions in the treatment and control condition for students engaging in Inappropriate Social Behaviors.

The findings suggest teachers in the treatment group tended to score student behaviors at higher levels than teachers in the control group prior to the delivery of the prevention program. Since pre-program scores were not equal between groups, pretest scores were used as a covariate for any further analyses to adjust for differences between groups and reduce error within groups.

Impact on Checklist Protective Behaviors

The mean scores for each of the three behavior subscales were examined using a Multivariate Analysis of Covariance (MANCOVA) repeated measures design. Posttest and the 20-week follow-up scores were adjusted using pretest scores as the covariate. Observed and adjusted behavior scores by treatment condition and time of checklist administration are provided in Table 3. A significant multivariate effect was observed for the treatment condition (A = .829, df = 6, 904, F = 31.14, p < .0001).

Table 3

Observed and Adjusted Teacher Checklist Behavior Scores by Treatment and Time

| | | Treatment | | | | Control | | | | |
|-----------------------------|----------|-------------|------|---------------|------|------------|-------|--------------|------|--|
| | | <u>Obse</u> | rved | <u>Adjust</u> | ted | <u>Obs</u> | erved | <u>Adjus</u> | sted | |
| Behavior Scales | Time | М | SD | М | SE | M | SD | М | SE | |
| Personal & Social Skills | Posttest | 4.05 | .810 | 3.99 | .029 | 3.67 | .791 | 3.72 | .026 | |
| | 20-week | 4.07 | .922 | 4.01 | .033 | 3.65 | .782 | 3.69 | .030 | |
| Prosocial Behaviors | Posttest | 4.10 | .847 | 4.04 | .031 | 3.70 | .831 | 3.75 | .028 | |
| | 20-week | 4.11 | .913 | 4.06 | .033 | 3.66 | .797 | 3.70 | .030 | |
| Inappropriate Behaviors | Posttest | 4.46 | .796 | 4.39 | .030 | 4.42 | .786 | 4.46 | .028 | |
| Dellaviois | 20-week | 4.34 | .835 | 4.29 | .032 | 4.37 | .789 | 4.42 | .030 | |

Shown in Table 4 are the results of the Follow-up Univariate Analysis of Covariance (ANCOVA) conducted to identify which of the three behavior subscales were contributing to differences between the treatment and control group as well as differences between conditions over time (posttest and 20-week follow-up).

The results of the post hoc analyses suggest teachers' perceptions in the treatment group in comparison to teachers' perceptions in the control group were significantly higher in two of the three behavior scales. Students participating in the *TGFV* program evidenced: (a) more frequent use of personal and social skills, and (b) more frequent engagement in prosocial behaviors. No significant difference was observed between teachers' perceptions of students engaging in inappropriate social behaviors in the classroom. The benefits of the *TGFV* program for students continued to be evidenced at the 20-week follow-up for two of the behavior scales-personal and social skills, and prosocial behaviors.

The average scores across groups associated with engagement in inappropriate social behaviors ranged from 4.35 to 4.50 on a 5.00-point scale (scores coded in reverse), suggesting a ceiling on the potential effects of program treatment. Considering the students in this sample were served in general education settings, the vast majority of third graders were not likely to engage in frequent socially inappropriate behaviors such as name calling, yelling, and pushing other students.

Table 4

<u>Multivariate Analysis of Covariance and Univariate Analysis of Covariance on the Teacher</u> <u>Checklist Behavior Scales by Treatment and Time</u>

| | <u>Wilks'</u> | df | F | р |
|---------------------------------|------------------|--------------|-------------------|-------|
| Multivariate Between Effects | | | | |
| Treatment Condition | .829 | 6, 904 | 31.14** | .0001 |
| | | | | |
| Univariate F tests Adjusted for | · Pretest Scores | for Treatmen | t by Time | |
| Posttest (Time 2) | | | | |
| Personal & Social | Skills | 1, 911 | 47.70** | .0001 |
| Prosocial Behavio | ors | 1, 911 | 49.23** | .0001 |
| Inappropriate Soc | ial Behaviors | 1, 911 | 2.83 ^a | .0931 |
| <u>20-Week</u> (Time 3) | | | | |
| Personal & Social | Skills | 1, 911 | 52.41** | .0001 |
| Prosocial Behavio | ors | 1, 911 | 61.23** | .0001 |
| Inappropriate Soc | ial Behaviors | 1, 911 | 7.67 ^a | .0057 |
| | | | | |

**p < .01. ^a = exceeds Bonferroni adjustment for Type I error.

Student Survey

Impact of Attrition on Posttest Survey Scores

The initial survey sample contained 935 students with matching pretest and posttest scores. The survey sample contained 64 (6%) fewer respondents than the teacher checklist sample. The difference in sample size for the student survey is attributed to absences on one or more of the three survey administration dates. Teachers on the other hand could complete checklists regardless of whether students were present in the classroom.

At the time of the 20-week follow-up, attrition rates did not vary across the treatment or control condition, with a 10% (39 out of 406) loss of respondents for the treatment group, and an 11% (57 out of 529) loss of respondents for the control group (see Table 5). A two-way MANOVA was computed using the treatment and attrition conditions as independent variables, and students' posttest scores on the protective factors as dependent variables. As shown in Table 6, no significant main effect for attrition or interaction or interaction effect for treatment x attrition were observed. The findings for attrition offers some confidence that the loss of student data at the 20-week follow-up was not biased relative to students' posttest scores (Time 2) on the protective factors. No differential patterns or change in slopes between the attrition and the treatment condition was evident. The loss of student respondents for the third testing period may be attributed primarily to random miscoding errors, mobility across classrooms or schools, and absenteeism during the 20-week survey administration.

A positive main effect for the treatment condition ($\Lambda = .978$, df = 4, 928, F = 5.30, p = .0003) was observed with students participating in the prevention program having higher posttest survey scores than students in the control group. Follow-up ANOVA's were computed to determine which protective factor subscales were contributing to the difference between the treatment conditions for students with and without 20-week follow-up scores. The findings suggest students' perceptions of Emotional Competency Skills (F = 14.06, p = .0002), Social and Resistance Skills (F = 6.45, p = .0113), and Communication Skills (F = 17.12, $p \le .0001$) were significantly more positive for the treatment group in comparison to the control group. No significant difference was observed between treatment and control students' perceptions of Interactions with Others.

Table 5

| | Pretest | | 20-V | Veeks |
|------------------|--------------|------------|------------|------------|
| | <u>n = 9</u> | <u>935</u> | <u>n =</u> | <u>839</u> |
| Variable | Treatment | Control | Treatment | Control |
| Female | 48% | 49% | 48% | 50% |
| White | 45% | 43% | 45% | 45% |
| African American | 17% | 11% | 16% | 10% |
| Hispanic | 31% | 38% | 32% | 38% |
| Multiracial | 6% | 5% | 6% | 4% |
| Asian | 1% | 3% | 1% | 3% |
| American Indian | | | >1% | >1% |
| Free/Reduced | 56% | 53% | 56% | 54% |

Student Survey Pretest Score Equivalence

Student responses to the survey were examined using a one-way MANOVA procedure with the treatment condition as the independent variable, and pretest scores on the protective factors as dependent variables. No significant difference was observed between pretest scores for the treatment and control group ($\Lambda = .999$, df = 4, 834, F = 0.26, p = .9044).

Table 6

MANOVA Results of Student Survey Posttest (Time 2) Scores by Treatment and Attrition

| Attrition by Treatment Cond | <u>lition</u> | | | |
|---|------------------------------|---------|-------------------|---------|
| | Wilks' | df | F | р |
| Multivariate Between Effects | | | | |
| Treatment | .978 | 4, 928 | 5.30** | .0003 |
| Attrition | .993 | 4, 928 | 1.73 | .1416 |
| Treatment x Attrition | .993 | 4, 928 | 1.67 | .1545 |
| <u>Univariate <i>F</i> tests for Treatr</u> | nent | | | |
| Posttest (Time 2) | | | | |
| Emotional Com | Emotional Competency Skills | | | .0002 |
| Social and Resi | Social and Resistance Skills | | | .0113 |
| Communication | ns Skills | 1, 934 | 17.12** | .0001 |
| Interactions with | h Others | 1, 934 | 5.12 ^a | .0236 |
| Posttest Mean Scores | Study | Sample | Attrition | Group |
| | <u>n =</u> | = 839 | <u>n = 96</u> | (10%) |
| | Treatment | Control | Treatment | Control |
| Emotional Competence | 4.03 | 3.78 | 4.04 | 3.68 |
| Social and Resistance | 3.93 | 3.99 | 3.42 | 3.79 |
| Communication Skills | 3.99 | 3.70 | 4.03 | 3.63 |

Note. Scores were reverse coded with a score of 5.00 indicating the most positive response. ${}^{*}p < .05$. ${}^{**}p < .01$. a = exceeds Bonferroni adjustment for Type I error.

4.29

4.24

4.34

4.04

Interactions with Others

Impact on Survey Protective Factors

The mean scores for each of the four protective subscales were examined using a MANCOVA repeated measures design. Posttest and the 20-week follow-up scores were adjusted using pretest scores as the covariate. Observed and adjusted protective factor scores by treatment condition and time of survey administration are provided in Table 7. A significant multivariate effect was observed for the treatment condition ($\Lambda = .924$, df = 3, 829, F = 8.53, p < .0001).

Follow-up ANCOVA's were conducted to identify which of the four protective subscales were contributing to differences between the treatment and control group (see Table 8). The results of the post hoc analyses suggest students in the treatment group evidenced, in comparison to students in the control group, significantly higher scores in three of the four protective areas. Students participating in the *TGFV* program evidenced more positive scores in their perceptions of: (a) emotional competency skills; (b) social and resistance skills; and (c) communication skills. The benefits of the *TGFV* program continued to be observed for students in the treatment group at the 20-week follow-up in the areas of Emotional Competency, Social and Resistance and Communication Skills.

No significant difference was observed between students in the treatment and control group for Interactions with Others. Third graders in both groups had very high scores (4.17-4.28) before and after program delivery regarding their perceptions of interactions with other students. This finding is similar to the results noted above for teachers' observations of students' infrequent engagement in Inappropriate Social Behaviors.

Table 7

Observed and Adjusted Student Protective Scores by Treatment and Time

| | | Treatment | | | | Con | trol | | |
|---------------------------------|----------|--------------|------|--------------|------|------------|-------|-------------|-------|
| | | <u>Obser</u> | ved | <u>Adjus</u> | ted | <u>Obs</u> | erved | <u>Adju</u> | isted |
| Protective Scales | Time | М | SD | М | SE | М | SD | M | SE |
| Emotional Competency Skills | Posttest | 4.03 | .722 | 4.02 | .032 | 3.78 | .732 | 3.78 | .028 |
| | 20-week | 3.85 | .732 | 3.85 | .034 | 3.62 | .698 | 3.62 | .030 |
| Social and Resistance Skills | Posttest | 3.93 | .799 | 3.93 | .034 | 3.70 | .775 | 3.71 | .030 |
| | 20-week | 3.78 | .751 | 3.78 | .034 | 3.56 | .738 | 3.56 | .030 |
| Communication Skills | Posttest | 3.99 | .764 | 3.98 | .034 | 3.70 | .757 | 3.70 | .030 |
| | 20-week | 3.74 | .734 | 3.73 | .034 | 3.50 | .751 | 3.51 | .031 |
| Interactions with Others | Posttest | 4.29 | .769 | 4.29 | .030 | 4.24 | .702 | 4.24 | .027 |
| | 20-week | 4.23 | .610 | 4.23 | .030 | 4.17 | .699 | 4.17 | .027 |

Table 8

<u>Multivariate Analysis of Covariance and Univariate Analysis of Covariance on the Student</u> <u>Survey Protective Scores by Treatment Condition</u>

| | Wilks' | df | F | р | |
|------------------------------|--------|--------|--------|-------|--|
| Multivariate Between Effects | | | | | |
| Treatment | .924 | 9, 829 | 8.53** | .0001 | |

Univariate F tests Adjusted for Pretest Scores for Treatment Effects by Time

| Posttest (Time 2) | | | |
|----------------------------|--------|---------|-------|
| Emotional Competence | 1, 838 | 31.88** | .0001 |
| Social & Resistance | 1, 838 | 24.04** | .0001 |
| Communication Skills | 1, 838 | 39.01** | .0001 |
| Interactions with Others | 1, 838 | 1.13 | .2876 |
| 20-Week Follow-up (Time 3) | | | |
| Emotional Competence | 1, 838 | 26.39** | .0001 |
| Social & Resistance | 1, 838 | 21.76** | .0001 |
| Communication Skills | 1, 838 | 23.64** | .0001 |
| Interactions with Others | 1, 838 | 1.84 | .1747 |
| | | | |

 $p^{**} < .01.$

Treatment Effects by Student Characteristics

To examine whether the *TGFV* prevention program was effective across student characteristics, correlated *t*-tests were computed using students' pretest and posttest scores on the Student Protective Factor Survey.

The findings suggest that both girls and boys had significantly higher scores on the posttest in comparison to the pretest ($p \le .0015$). Economically disadvantaged and non-

economically disadvantaged students had significantly higher scores on the Protective Factor Survey ($p \le .0043$). White, African American, and Hispanic students also experienced higher scores on the posttest ($p \le .0142$). Limited sample sizes for other ethnic backgrounds prohibited further comparisons. Overall, the *TGFV* prevention program had a positive impact of students' skills and perceptions regardless of gender, socioeconomic status, or ethnic background.

Conclusions

Prevention research shows a direct relationship between the efficacy of program implementation and the program's potential to impact participants (Botvin, et al., 1990; and Botvin, Dusenbury, James-Ortiz, Kerner, 1989). In this study, classroom teachers' responses to items on a survey questionnaire suggest the *TGFV* program was implemented as planned with a high degree of quality and fidelity to curriculum content and learning activities.

Prevention research has identified certain risk factors that increase the likelihood of children and youth engaging in risk-taking behaviors and certain protective factors that decrease the impact of risk factors (Benson, 1997; and Hawkins, Catalano, and Miller, 1992). The *TGFV* program incorporates curricula and instructional activities aimed at reducing risk factors and building protective factors. The following risk and protective factors were examined in the study: Socially Appropriate and Inappropriate Behaviors; Emotional Competency Skills; Social and Conflict Resistance Skills; Communication Skills; and Interactions with Others.

 Students in the treatment and the control group responded to a survey questionnaire before, following, and 20-weeks after program delivery. Student responses to protective survey items at the end of program and again at the 20-week follow-up suggest the following:

- (a) Students participating in the *TGFV* program had statistically significant higher scores or higher levels of emotional competency skills in comparison to students in the control group. A sample of item content that represents skills in this category includes: 1) I know many different words to describe what I feel inside,
 2) It is easy for me to talk about my feelings, 3) I can calm myself down when I am upset, and 4) I stop and think before I act when I am mad or upset.
- (b) Students participating in the *TGFV* program had statistically significant higher scores or higher levels of social and conflict resolution skills in comparison to students in the control group. A sample of item content that represents skills in this category includes: 1) If a student was bothering me, I would walk away, 2) If a student teased me, I might make a joke out of it, 3) If I have a conflict, I ask to hear the other student's side of the story, and 4) I use peaceful ways to work out conflicts with other students.
- (c) Students participating in the *TGFV* program had statistically significant higher scores or higher levels of communication skills in comparison to students in the control group. A sample of item content that represents skills in this category includes: 1) I can tell how students feel by listening to their tone of voice, 2) I listen to other students even when I disagree, 3) I use "I feel messages" to share my feelings with other students, and 4) I tell other students how I feel when they do something I like.
- (d) Students in both the treatment and the control group had very positive perceptions of their interactions with other students. The average scores across groups ranged from 4.17 to 4.29 on a 5.00-point scale, suggesting a ceiling on the potential

effects of program treatment. Considering the students in this sample were served in general education settings, the vast majority of third graders were not likely to be engaging in socially inappropriate behaviors such as name calling, yelling, and pushing other students.

- 2. In an effort to triangulate data, teacher judgment concerning student behavior was also examined. Classroom teachers were asked to rate each student's behavior related to social skills, prosocial interactions, and antisocial interactions across the three testing periods. If teacher responses are consistent with student responses, the study's findings could be interpreted with greater confidence. Teachers' observations of students at the end of program and again at the 20-week follow-up suggest the following:
 - (a) Based on teachers' judgments, students participating in the *TGFV* program had statistically significant higher scores or higher levels of social skills in comparison to students in the control group. A sample of item content that represents skills in this category includes: 1) treats other students with respect, 2) uses a variety of verbal labels for emotions, 3) stops and thinks before acting, and 4) uses or suggests more than one way to solve a social problem.
 - (b) Based on teachers' judgments, students participating in the *TGFV* program had statistically significant higher scores or higher levels of prosocial behaviors in comparison to students in the control group. A sample of item content that represents skills in this category includes: 1) helps other students, 2) asks other students to play if they don't have someone to play with, 3) takes turns, plays fair, and follows rules of the game, and 4) resolves problems with other students on his or her own.

- (c) Teachers rated students in both the treatment and the control group as engaging in very few socially inappropriate behaviors (pretest, 9-week, and 20-week testing). The average scores across groups ranged from 4.35 to 4.44 on a 5.00-point scale (scores coded in reverse). This finding supports students' perceptions of limited antisocial behaviors in the school setting as indicated above (2.d).
- 3. Treatment effects were examined for students participating in the *TGFV* program across gender, ethnic background, and socioeconomic status. These results offer evidence of the *TGFV* program's utility in serving and meeting the needs of diverse student populations. Treatment student responses to protective survey items at the end of program and again at the 20-week follow-up suggest the following:
 - (a) The *TGFV* program was equally effective for participating students regardless of ethnic background. In other words, White, African American, and Hispanic students experienced similar increases in Emotional Competency Skills, Social and Conflict Resistance Skills, and Communication Skills. Students maintained similarly positive perceptions of interactions with other students.
 - (b) The *TGFV* program was equally effective for participating students regardless of gender.
 - (c) The *TGFV* program was equally effective for participating students regardless of socioeconomic status.

Appendix: Survey Items

I. Teacher Survey Items

Personal and Social Skills

- 1. treats other students with respect.
- 2. listens to other students' feelings and points of view.
- 3. uses "I feel messages" to share his/her feelings.
- 4. uses a variety of verbal labels for emotions.
- 5. stops and thinks before acting.
- 6. uses peaceful ways to work out conflicts with other students (e.g., avoid, ignore, walk away, humor, compromise).
- 7. Uses or suggests more than one way to solve a social problem.

Prosocial Behavior

- 8. helps other students.
- 9. comforts other students when they feel bad/sad.
- 10. says "I'm sorry" when appropriate.
- 11. says nice things to other students.
- 12. asks other students to play if they don't have someone to play with.
- 13. takes turns, plays fair, and follows rules of the game.
- 14. resolves problems with other students on his/her own.

Inappropriate Social Behavior

- 15. yells at other students.
- 16. pushes or shoves students.
- 17. hits or kicks students.
- 18. teases or makes fun of other students.
- 19. disrupts instruction and/or procedures.
- 20. gets into a lot of fights at school.
- 21. argues a lot with other students.

II. Student Survey Items

- 1. I treat other students with respect.
- 2. I use "I feel messages" to share my feelings with other students.
- 3. It is easy for me to talk about my feelings.
- 4. If I have an argument, I try to work it out with the other student.
- 5. I yell at other students when I am mad.
- 6. I look at students' faces and body language to understand how they feel.
- 7. I know many different words to describe what I feel inside.
- 8. If a student bothered me, I would walk away.
- 9. If a kid feels bad, I try to make them feel better.
- 10. I can calm myself down when I am upset.
- 11. I walk away, use humor, or "I feel messages" to keep my self-control.
- 12. I am responsible for what I feel.
- 13. I push or shove students who make me mad.

- 14. If a student teased me, I might make a joke out of it.
- 15. I can tell how students feel by listening to their tone of voice.
- 16. If I have a conflict, I ask to hear the other student's side of the story.
- 17. I use peaceful ways to work out conflicts with other students.
- 18. I try to understand how other students feel.
- 19. I ask other students what they feel if I am not sure.
- 20. I say "I feel _____," and use a feeling word, when I want to tell others how I feel.
- 21. I call other students names when I am mad.
- 22. I make good decisions because I take the time to think about what might happen.
- 23. I can disagree with other students without yelling.
- 24. I try to think of many different ways to solve a problem.
- 25. I stop and think before I act when I am mad or upset.
- 26. I will ask a student to play if they don't have someone to play with.
- 27. I listen to other students even when I disagree.
- 28. I get into a lot of fights at school.
- 29. I try to understand the other side of the story in a conflict.
- 30. I talk with other students to come up with many ideas to solve a problem.
- 31. I tell other students how I feel when they do something I like.
- 32. I tell other students how I feel when they do something I don't like.

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