

Research Proposal: Evaluation of Campo del Sol

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Problem to be investigated

Increasing youth violence has become a national concern. Between 1984 and 1993, arrests of juveniles for violent offenses rose by nearly 68 percent (FBI Uniform Crime Reports, 1994). The most alarming statistic is the dramatic increase in the adolescent homicide rate which has more than doubled since 1988. The National Crime Victimization survey shows an increasing involvement of younger and younger perpetrators especially in lethal crimes. The National Youth Survey data reveals that the onset of serious violent careers begins to increase at age 12, doubles between ages 13 and 14, continues to increase to a peak at ages 16 to 17, and drops 50% by age 18. More than half of all violent offenders initiate violent behaviors between ages 14 and 17. According to self-report data, at ages 16-17, 20-25% of males and 4-10% of females report participating in one or more serious violent acts (Elliott, 1994). Clearly the need for effective violence and crime prevention programs especially targeting early adolescent youth has never been greater.

Over the past 10 years, a wide array of violence prevention programs have been created and implemented in response to the rising rates of adolescent violence. Although there is a substantial body of research on the causes of crime, few programs are actually formally evaluated to show whether they are effective in deterring crime and violence (Tolan and Guerra, 1998). Most of the resources committed to prevention and control of youth violence have been invested in untested programs based on questionable

assumptions and delivered with little consistency or quality control. Since the majority of these programs are not being evaluated, there is no way to judge whether they are actually effective. In addition, studies have demonstrated that some of the popular prevention programs may actually have a harmful effect on participants (Tolan and Guerra, 1998).

Experts in the field of delinquency prevention believe the key to making real progress in preventing adolescent violence depends upon the development of a solid empirical base of effective programs. In a recent report to congress titled “Preventing Crime: What Works, What Doesn’t, What’s Promising” (National Institute of Justice, 1998) the primary recommendation was to invest a greater amount of funds in the rigorous testing of innovative prevention programs. This report reveals that funds available for data collection have been grossly inadequate in relation to the scientific standards necessary for the measurement of program impact. Whether or not congress allocates funds for program evaluation, continued program activity without documented outcomes could have major political costs for the field of delinquency prevention. Allegations of large expenditures without proven effect can be used as evidence that investment in prevention programs is a waste of taxpayer’s money and can seriously undermine the public’s confidence in crime prevention efforts. Progress in our ability to effectively prevent and control adolescent violence requires evaluation.

Purpose of Research

In light of the critical need for program evaluation, I propose to evaluate the effectiveness of an afterschool program in reducing and preventing delinquent behavior among program participants. The Office of Juvenile Justice Delinquency Prevention

(OJJDP) recommends that maximum impact on future delinquent conduct can be achieved by seeking to identify and involve youth at greatest risk for delinquent behavior in community based prevention programs (Howell, 1995). Campo del Sol is a community based afterschool program targeting at-risk adolescent and pre-adolescent youth in the Gulfton community of Southwest Houston. It was created and funded through an innovative collaborative partnership between federal, state, local, and private foundations. Campo del Sol Afterschool, which began in February 1998, is designed to stop the downward spiral of delinquency by providing youth with consistent long-term exposure to positive relationships and healthy activities. I hypothesize that the more time youth spend in the program, the less likely they will be to engage in risky or delinquent behavior.

Theoretical Bases of Research

Delinquency Theory

Effective violence prevention programs are based on scientific research regarding the causes of youth violence. Risk-focused prevention has been the leading delinquency theory. It asserts that to prevent violence it is critical to identify the risk factors that increase the risk of that problem developing, and find ways to reduce those identified risks. Extensive research has identified specific risk factors for crime, violence, and substance abuse (Tolan and Guerra, 1994; Reiss and Roth, 1993; Dryfoos, 1990; Hawkins, Catalano, and Miller, 1992). Exposure to a greater number of risk factors increases risk of crime, violence, and substance abuse. The risk factor model by Hawkins and Catalano identifies 19 risk factors that exist within several domains including: community, family, school, peer group and within the individual. Consistent findings

show that peer delinquency is a major risk factor and predictor of serious anti-social behavior (Agnew, 1990).

Unfortunately knowledge of risk factors does not indicate how to reduce risk. Research has identified protective factors that appear to insulate youth against the effects of risk exposure. The Social Development Strategy is a model developed by Hawkins and Catalano that describes how protective factors work together to buffer youth from risk (Catalano and Hawkins, 1995). When parents, schools, and communities set clear standards for children's behavior that are widely and consistently supported with swift and immediate consequences for not following the standards, youth are more likely to follow the standards. Motivation to follow these standards comes from strong attachments with those who hold these healthy beliefs and clear standards. Youth who are bonded to those who hold the healthy beliefs do not want to threaten the bond by behaving in ways that would jeopardize the relationships. The Social Development Strategy explains that there are three conditions necessary for bonding to develop in youth: opportunities to make meaningful contributions to the unit, skills to effectively contribute, and recognition for that contribution (Catalano and Hawkins, 1995). This model provides insight into the components essential for development of successful prevention programs.

However, recent research has taken risk-based prevention a step further and developed an ecological life course developmental model in response to violence. Longitudinal data regarding the development of violent behavior shows that the onset, continuity, and types of violence vary by age and are influenced by the settings in which violence occurs (Williams, Guerra, and Elliott, 1997). These findings have led

researchers to link the causes of violence with the unmet developmental needs of adolescence. By integrating the risk-based prevention model into the developmental needs model, risk factors are considered barriers to successful development and protective factors are developmental supports. Violence prevention programs must be compatible with the developmental needs and tasks for the population served. In addition, local sites must determine the characteristics of their own violence problem and develop prevention strategies based on that information. The same prevention program may not be successful in every setting (Williams, Guerra, and Elliott, 1997).

Since Campo del Sol targets youth in early adolescence it is critical to understand the developmental needs of youth in that age range. The following is a list of the developmental needs for this age group based on the ecological model: (1) Acquisition of specific academic skills and knowledge (2) Learning to regulate and control emotions, develop social skills, and build friendships (3) Involvement with prosocial peers and engagement in activities that promote prosocial norms (4) Embeddedness in a family system that promotes emotional closeness and provides positive reinforcement (5) Strengthening of family systems and parental involvement in children's education (Williams, Guerra, and Elliott, 1997). The Center for Early Adolescence at the University of North Carolina at Chapel Hill (Dorman, 1985) has identified the following seven needs as the most critical for healthy adolescent development: (1) The need for physical activity (2) The need for competence and achievement (3) The need for self-definition (4) The need for creative expression (5) The need for positive social interactions with peers and adults (6) The need for structure and limits (7) The need for meaningful participation. Many of the needs overlap with the protective factors

promoted in the social development model. Clearly it is important for prevention programs to integrate this knowledge into the structure of their curriculum.

Evaluation Recommendations

In the report to congress (1998), “Preventing Crime: What Works, What Doesn’t, What’s Promising,” it was strongly recommended that prevention programs implement clearly established scientific standards for program evaluation. The report states that many of the so-called evaluations of prevention and intervention programs were merely descriptions of the implementation process or monitoring of funding expenditures. The scientific standards for inferring causation have been clearly established in the literature on research design and methods (Cook and Campbell, 1979). At minimum they include: (1) the ability to measure the dosage, timing and content of the program (2) the ability to gather baseline data prior to the start of the project (3) the ability to gather comparable data from both the program group and appropriate comparison groups where the program is not operating. However, the report recommends raising the scientific standard by eliminating or controlling for most known rival hypotheses that could account for the same results, and the ability to select program and comparison groups in advance of the program by use of probability formulas. The proposed evaluation of Campo del Sol meets the criteria promoted by these recommendations.

Review and Synthesis of Existing Literature Regarding Afterschool Programs

The Carnegie Commission's Report, *A Matter of Time: Risk and Opportunity in the Non-School Hours* (1992), indicates that youth in the United States have a lot of discretionary time. Unfortunately, the report also shows that “Much of [this time] is unstructured, unsupervised, and unproductive for the young person. Only 60 percent of

an adolescents' waking hours are committed to such essentials as school, homework, eating, chores, or paid employment, while fully 40 percent are discretionary" (p. 10). Further research has demonstrated that the hours between 3:00 p.m. and 6:00 p.m. are the peak hours for violent juvenile crime (Justice Dept. Fight Crime: Invest in Kids, National Center for Juvenile Justice). In many communities, appropriate adult supervision does not exist to help guide the constructive use of the available discretionary time, and young adolescents typically have not developed the interests or skills that would enable them to make positive use of the available time. Consequently, youth are spending time on the streets or home-alone which can lead to involvement in a variety of problem behaviors such as: school dropout, teen pregnancy, drug and alcohol abuse, gang involvement, and involvement with the juvenile justice system (Carnegie Corporation of New York, 1992).

Past researcher has demonstrated that youth who participate in after-school programs watched less television and spent more time in academic activities and enrichment lessons (Posner and Vandell, 1994). These factors are associated with improved academic and conduct grades, peer relations, and emotional adjustment. The provision of safe, positive environments has been a major goal of many after-school programs. Other program goals include efforts to reduce the problem behaviors exhibited by participants by exposing them to positive role models, and teaching the skills necessary to interact with peers in a positive and appropriate manner. Some programs also contain an academic learning component that helps children complete homework assignments, and provides opportunities for children to be involved in academic-oriented learning opportunities (Witt & Crompton, 1996).

Recreation-based activities and the provision of caring adult leaders are critical program elements (Pizor, 1992). Recreation activities provide an important “hook” that attracts children to become involved. Presenting activities in a recreational mode helps distinguish the after-school program from just more structured classroom learning added onto the end of the school day. Research shows that a personal one-on-one relationship with a caring adult is an effective buffer against risk factors and contributes to positive learning experiences for children (Jessor, 1992). After-school programs can make an important contribution by offering program elements (protective factors) that help mediate between risks that are inherent in the child's environment (Werner & Smith, 1992).

Evaluation Design

The evaluation of Campo del Sol Afterschool is based on an experimental design with random assignment. The evaluation will also include a process evaluation to measure whether the program was implemented as designed. In order to limit bias and the potential for favoritism by the program staff, a third party evaluator will supervise the evaluation process (Jackson, Williams, and Elliott 1996).

Outcome Evaluation Questions:

- Did Campo del Sol youth show a reduction in risk factors and an increase in protective factors after 1 – 2 - 3 years into the program?
- Is there a relationship between the level of participation in Campo del Sol Afterschool and school performance, self-esteem, and delinquent behavior?
- How long are the program effects sustained after youth leave the program?

Community Description:

Gulfton is a 3.4 square mile apartment community located in Southwest Houston. With 19,000 apartment units, it is home to at least 60,000 people of whom approximately 15,000 are children, making Gulfton the most densely populated community in Houston. It is difficult to calculate the true population of the neighborhood because many of the Gulfton residents are undocumented immigrants. In fact, it is estimated that over 75% of the population are refugees and immigrants from around the world, including Mexico, Central America, Bosnia, Rwanda, and Cambodia. The ethnicity of Gulfton's schools gives the most reliable picture of its cultural make-up. In 1997-98, Hispanic students led the enrollment at 72.6%, African American 11.4%, White 10.4%, and Asian at 5.6%. Gulfton's unique multicultural character is also coupled with extreme poverty. In 1997, 94% of all elementary school children in Gulfton were eligible for free or reduced lunch (Gulfton Community Plan, 1999).

The Gulfton neighborhood has been mobilizing since 1988 in response to extremely high rates of juvenile violence. In 1995, it was ranked as one of 11 Zip codes in the state of Texas with the highest rates of juvenile crime. Consequently, the Texas Legislator secured 1.4 million dollars for community-based prevention services aimed at reducing juvenile crime in the Gulfton community. The literature on youth violence suggests that community neighborhood programs that are holistic, integrated and utilize community based organizations are most effective at reducing juvenile delinquency (Dryfoos, 1998).

The vision for Campo del Sol developed as a result of several needs assessments and careful community planning that identified the need for afterschool programs and

positive activities for middle school youth. The program was created to meet the unique needs of the community. For example, a large portion of the budget is spent on transportation. A bus picks up the youth every day from school and takes them to the location of the program and then takes them home each evening. Our need's assessment demonstrated that youth would not be allowed to participate in the program if safe transportation was not provided.

The Gulfton community is also part of several larger initiatives including the Comprehensive Strategy funded by OJJDP and Weed and Seed funded by the Department of Justice. Further evaluation needs to evaluate the impact of all these initiatives on the population of the neighborhood. Also, in the future a cost-benefit analysis of these programs individually and collectively would be a valuable tool to support funding of prevention and intervention programs.

Program Description and Goals:

Effective programs are constructed on a solid theoretical foundation. In addition the information generated by the program can be used to further support or in some cases reshape the broader theories if the theory is intricately linked into the program goals and objectives (Jackson, Williams, Elliott, 1996). The theoretical framework guiding Campo del Sol is based on risk and protective factors and the developmental needs of adolescence discussed in the previous section. Campo del Sol goals are designed to put delinquency theory into action. Specific objectives relating to each goal will be developed prior to program implementation. However, the description of program activities provides some information about how the following goals will be implemented.

Campo del Sol Program Goals:

1. To bond youth with people and institutions that promote healthy beliefs and clear standards.
2. To provide youth with meaningful, challenging opportunities to contribute to their families, schools, peers, and communities.
3. To teach youth the educational and social skills they need to take advantage of the opportunities they receive.
4. To provide recognition for the efforts made by youth.
5. To provide youth with individualized attention by a caring adult.
6. To develop a cohesive group of youth leaders that serve as positive role models to a large number of youth in the Gulfton community.
7. To teach youth how to interact effectively with each other in a recreational group setting.
8. To provide early intervention to program participants exhibiting acute psychosocial problems i.e.; stress, physical and sexual abuse, social isolation, parental addiction, and negative peer pressure.
9. To utilize other area youth service providers as community based resources to assist identified youth and their families.

Program Activities:

Campo del Sol is a 3-year afterschool program that runs from September to May, five days per week (Monday-Friday) from 3:30 p.m. to 6:30 p.m. at Burnett Bayland Park. Participants engage in a comprehensive curriculum that includes daily educational tutorials, anti-drug/anti-violence presentations, community service learning projects, cultural art projects, dance, music, science, sports and educational field trips. Participants are rewarded for regular attendance, school success, and good behavior by earning the privilege to attend field trips and participate in special events.

Staff:

The program staff consists of 8 part-time mentors with a ratio of one mentor for every 10 youth. All attempts are made to match participants with the same mentor for the

entire duration of the program. The mentors are high school and college students from the Gulfton neighborhood that are recommended by their principals, counselors, professors and / or community leaders because they are positive role models. In addition, a full-time program manager is responsible for the overall implementation of the program.

Program eligibility and selection:

The target population for Campo del Sol Afterschool is youth ages 11 to 14 that are exhibiting risky behaviors. Program eligibility will be determined based on a two-prong approach. First, all 6th and 7th grade youth (approximately 1800 students) attending Jane Long Middle School will complete a self-reported survey assessing their level of delinquency. The mean scores will be calculated and the first screening of program eligibility will include 250 students approximately 1.5 standard deviations from the mean. Second, school counselors and teachers will select 250 at-risk youth based on poor school performance including grades, school discipline reports, and standardized test scores. To be eligible for the program youth must be identified by a teacher or counselor *and* meet the criteria on the self-report survey. All youth meeting both the program criteria will receive an application to participate in Campo del Sol.

I selected this method of program eligibility to prevent the population of the program from becoming the most delinquent youth in the school. Research has shown that peer group interventions with delinquent peers can have a negative effect on participants—they actually become more delinquent after the intervention (Gottfredson & Gottfredson, 1992). However, mixing pro-social peers with at-risk youth has shown more promising results (Feldman, 1992). Although I expect that the youth eligible for the

program will be struggling in many aspects of their lives, they will not be the most delinquent youth in the school.

Experimental comparison:

A minimum of 75 of the youth that return their application will be randomly selected to the experimental group and another 75 will be randomly assigned to the control group. This number actually depends upon how many students meet both criteria and return their permission slips. If there are not at least 175 students meeting both criteria, it will be necessary to move out another standard deviation (or less) from the mean score on the self-report survey until we reach the minimum number required for the sample. A third group of those who are eligible for participation, but do not return their permission slips will also be tracked throughout the entire evaluation process. This will enable us to identify a self-selection bias in those who submitted permission slips.

Measurement Variables:

Campo del Sol Afterschool seeks to decrease the following risk factors in program participants: academic failure beginning in late elementary school, lack of commitment to school, rebelliousness, friends who engage in problem behaviors, and favorable attitudes toward the problem behavior, and early initiation of problem behavior. In addition, the program seeks to increase the following protective factors in program participants: the presence of interested and caring adults, sense of acceptance and belonging, controls against deviant behavior, role models for conventional behavior, positive attitude towards the future, value on achievement, ability to work with others, ability to work out conflicts, and perceived confidence in ability. Based on delinquency

theory, it is believed that a decrease in risk factors and an increase in protective factors will result in a reduction of delinquent behavior for program participants.

In addition to risk and protective factors, the program evaluation will measure self-esteem, life-events, school performance, program attendance, and delinquent behavior.

Data Sources:

Both survey data and official records will be utilized to measure changes in the above listed variables. Data will be collected from participants, parents, teachers, program staff, school records, and police records. The following demographic data will be collected on participants and youth in the control groups: gender, ethnicity, free lunch program status, age, and grade level.

Survey Data:

One survey will be utilized throughout the entire evaluation process for the program participants and control groups. This survey will first be administered at school as a means to select potential program participants and control groups. The results of the school-wide survey will serve as the baseline data for the experimental and the control groups. The decision to use a self report survey as one measure of delinquency is based on research that shows a great deal of delinquency occurs which is not reported or detected by official police or school records (Menard, 1987). In fact, only 1 out of 10 crimes committed actually results in an arrest (Elliott, 1999). The survey will be designed to measure risk and protective factors, life events, self-esteem, and self-reported delinquent behavior. There are many excellent surveys that are reliable and valid already in existence including the Denver Youth Survey that we could adapt for use or modify for

the purposes of this evaluation. However, careful attention will be paid to ensuring the survey instrument is culturally appropriate. Ideally the survey will be implemented during the school day by a team of bilingual trained interviewers. Written informed consent will be obtained from participants and their parents prior to survey implementation. Participants will be told that all their answers will be kept strictly confidential, no one outside the research staff will see their answers, and all reports will only contain group data. No information will be given to parents, schools, police, or courts without the written consent of the informant. Completed surveys will be given an identification number, stored in a locked file, and destroyed when the study is finished.

A similar version of the above listed survey will be developed for parents, teachers, and camp staff to rate the behavior of program participants. Parents and teachers will also be asked to rate the behavior of youth in the control groups. This survey will be available in English and Spanish and a structured interview will be provided for those parents who are not literate. This will provide an evaluation of the participant's behavior in three ecological settings: home (as viewed by the parents), in the program (as viewed by the camp staff) and at school (as viewed by the teacher).

Official Records:

Official records will also be collected as a source of data for the experimental and control groups. The following records will be collected on an annual basis: police and court records (date of contact, charges, and case outcomes), standardized test scores, student grades, school attendance and tardiness (beginning the year before program), school discipline (suspensions and detentions beginning the year prior to program), and participant attendance and discipline in the afterschool program.

Process Evaluation:

In order to understand what kind of outcomes are occurring and why, it is crucial to have solid information that the services are actually being delivered in the manner that is intended and that the targeted population is being adequately served. The process evaluation will consist of a monthly visit to the program by the evaluator to check attendance records and verify service delivery. This step is critical because the program manager can easily become so overwhelmed with the day-to-day requirements of running the program that vital evaluation data is never collected. The program staff is required to compile weekly activity reports, daily attendance rates, and camp discipline reports. On a quarterly basis, participants and program staff will complete a quality rating scale on the program. This is important because the program's success depends on the participants and staff regularly attending for the entire three-year duration of the program. If the program is disorganized and the activities unappealing, the attrition rate for staff and participants is likely to be high. If problems are identified early on they can be addressed before the program is doomed to failure.

Data Collection:

Baseline data will be collected in August for the experimental and control groups prior to the start of the program through the survey and official records. Official records will be collected from the previous school year. Data collection will take place each June for three consecutive years following the school year the program has taken place. In order to determine the long-term effect of the program, data will be collected for youth in the experimental and control groups each June for two additional years after the program has ended.

Data Analysis

The first step in the data analysis will be to code the survey data for each scale. Next it will be entered into a statistical software program such as SPSS for each case. The database will be set-up so that each item on the survey instrument and the official records is a separate variable. Participants will be coded according to whether they are in the experimental group, matched control group, or the group eligible for the program but never returned a permission slip. A three-digit number will be assigned to each person. Surveys that are completed by parents and teachers will contain the number assigned to the person in the experimental or control group, and the data will be entered under that case number.

The data analysis will examine the relationship between the length of time in the program and the level of risk factors, protective factors, and delinquent behavior. I will also look for differences in the program effects based on gender and ethnicity as the predictor. These results will be analyzed by comparing: (1) the experimental group at different points in time (after each data collection period) by using a paired t-test (2) the experimental group to the control groups at different points in time by using a grouped t-test when the variables are bivariate. However, when I am using controls and more than one predictor, I will use multiple regression analysis (once I learn how) to determine whether the relationship is statistically and substantively significant. The statistical tests will also control for life events when analyzing the data to determine if extreme life events cancel or impact the program effects. Tables will be created for presentation purposes that compare the control and experimental groups on all the above listed variables.

The evaluation results may be influenced by the exposure of the control group to other programs and to the exposure of peers attending Campo del Sol. As I mentioned in the description of the Gulfton neighborhood, there are many programs operating in the community that could impact the lives of the Gulfton youth. In order to control for this factor, the self-report survey will ask information about other program influences. Since most of these programs are likely to be less intensive than Campo del Sol, I don't expect this influence to be as strong. Also, many of these programs are of limited duration and several operate at school making it likely that the experimental group and control groups will be exposed to these same influences. In addition, one of the goals of Campo del Sol is to develop the leadership skills of the participants. If the program successfully achieves this goal, youth from the program are likely to influence the lives of their peers outside the program. It is possible that some of their friends will be in one of the control groups. Since peer influence is a very strong predictor of delinquent behavior, the influence of the experimental youth on their friends may impact the attitudes and behaviors of the control group. I expect that if this is the case, the differences in attitudes and behavior between the experimental and control groups may be less, but the youth leaders from Campo del Sol will still score higher in the positive categories. The self-report survey will also include questions regarding whether those in the control groups have friends from Campo del Sol.

Sample Attrition

Every effort will be made to keep youth in the program and in the control groups for the entire three years and two years after the program is over. However, this is going to be difficult due to the transient nature of the Gulfton population. Careful records will

be kept regarding the reasons for program abandonment, and these records will be analyzed for possible trends and patterns. There will be no replacements to the sample if youth drop out of the program or move away. It is possible that the sample attrition could invalidate comparisons between the control and experimental groups if those who leave are systematically different from those who stay. However, any participant in the experimental group who has spent at least 6 months in the program will remain in the sample.

Anticipated Findings and Theoretical and Applied Significance

I expect that after one year in the program there will be evidence of a positive program influence on the experimental group. At this point, changes are likely to be attitudinal rather than behavioral and will be evident in a reduction of risk factors and an increase in protective factors. The program is three years in length because it typically takes a longer period of time for positive behavioral changes to occur. If a reduction in risk factors and an increase in protective factors precede or mirror long-term behavioral changes, the evaluation results will further support the conclusions of this aspect of delinquency theory. However, I believe if the program funding is cut or the program is not implemented as designed, the results are likely to be significantly lower.

Since very few afterschool programs have been scientifically evaluated, the evaluation of Campo del Sol will contribute to the knowledge base of what actually works or doesn't in the field of youth crime prevention and intervention. If the results are positive, it will validate the importance of afterschool programs in the lives of adolescent youth. It is possible that the city of Houston will be interested in replicating the program

in other city parks. Also, positive evaluation results are likely to impact the continuation (or possibly increase) of funding for Campo del Sol.

REFERENCES

- Agnew, R. 1990. Adolescent Resources and Delinquency. *Criminology*. Volume 28:535-566.
- Babbie, Earl. 1995. *The Practice of Social Research*. California: Wadsworth Publishing Company.
- Carnegie Corporation of New York. 1992. *A matter of time: Risks and opportunities in the nonschool hours*. New York: Carnegie Corporation of New York.
- Catalano, R.F., and Hawkins, J.D. 1995. "The Social Development Model: A Theory of Antisocial Behavior." J.D. Hawkins (ed.), *Some Current Theories of Delinquency*. New York, NY: Cambridge University Press.
- Cook, T. and Campbell, D. 1979. *Quasi-Experimentation*. Chicago, Illinois. Rand McNally.
- Denver Youth Survey. 1991. University of Colorado, Institute of Behavioral Science. Boulder, Colorado
- Dorman, G. 1985. *From 3:00 to 6:00 p.m.: Planning Programs for Young Adolescents*. Center for Early Adolescence. University of North Carolina at Chapel Hill. Carrboro, North Carolina.
- Dryfoos, J.G. 1998. *Safe Passage: Making It Through Adolescence in a Risky Society*. New York Oxford Press.
- Dryfoos, J.G. 1990. *Adolescents at Risk: Prevalence and Prevention*. New York, NY. Oxford University Press.
- Elliott, Delbert. 1994. "Youth Violence an Overview." Paper presented at the Aspen Institute's Children's Policy Forum "Children and Violence Conference." February 18-21, 1994. Queenstown, MD.
- Federal Bureau of Investigation. 1994. *Uniform Crime Reports 1993*. Washington D.C.: U.S. Department of Justice, Federal Bureau of Investigation.
- Feldman, R.A. 1992. "The St. Louis experiment: Effective Treatment of antisocial youths in prosocial peer groups." In J. McCord & R. Tremblay (Eds.) *Preventing anti-social behavior: Interventions from birth through adolescence: 233-252*. New York, NY: Guilford Press.
- Gottfredson, D.C.& Gottfredson, G.D. 1992. "Theory-guided investigation: Three field experiments." In J. McCord & R. Tremblay (Eds.), *Preventing Antisocial Behavior: Interventions from Birth to Adolescence: 311-329*. New York, NY: Guilford Press.
- Guerra, Nancy and Williams, Kirk. 1996. *A Program Planning Guide for Youth Violence Prevention: A Risk-Focused Approach*. Institute of Behavioral Sciences, Regents of the University of Colorado.
- Gulfton Community Five Year Plan*. 1999. Houston Texas

Hawkins, J.D., Catalano, R.F., and Miller, J.Y. 1992. "Risk and Protective Factors for Alcohol and Other Drug Problems in Adolescence and Early Adulthood: Implications for Substance Abuse Prevention." *Psychological Bulletin* 112:64-105.

Howell, James. 1995. *Guide for Implementing the Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders*. U.S. Department of Justice.

Jackson, K., Williams, K., and Elliott, D. 1996. *Program Evaluation Overview*. Institute of Behavioral Science, Regents of the University of Colorado.

Jessor, R. 1992. "Risk behavior in adolescence: A psychosocial framework for understanding and action." In D. E. Rogers & E. Ginzberg (Eds.), *Adolescents at Risk: Medical and Social Perspectives*. Boulder: Westview Press.

Justice Department. 1996. *Fight Crime: Invest in Kids*.

Menard, Scott. 1987. "Short-term Trends in Crime and Delinquency: A Comparison of UCR, NCS, and Self-report Data." *Justice Quarterly*. Volume 4, Number 3.

National Institute of Justice. 1998. "Preventing Crime: What Works, What Doesn't, What's Promising" Report to the United States Congress.

Pizor, A. G. 1992. *Preventing delinquency: An assessment of park and recreation actions*. Arlington, VA: National Recreation and Park Association.

Posner, J. K., & Vandell, D. L. 1994. "Low-income children's after-school care: Are there beneficial effects of after-school programs?" *Child Development*. Volume 65: 440-456.

Reiss, A.J. and Roth, J.A. 1993. *Understanding and Preventing Violence*. Washington, D.C.: National Academy Press.

Tolan, Patrick and Nancy Guerra. 1998. *What Works in Reducing Adolescent Violence: An Empirical Review of the Field*. Institute of Behavioral Science, Regents of the University of Colorado.

U.S. Bureau of the Census. 1994. *Who's minding the kids?*. Statistical brief. Washington, DC.

Werner, E. E., & Smith, R. S. 1992. *Overcoming the odds: High-risk children from birth to adulthood*. Ithaca: Cornell University Press.

Williams, Kirk, Nancy Guerra, and Delbert Elliott. 1997. *Human Development and Violence Prevention: A focus on Youth*. Institute of Behavioral Science, Regents of the University of Colorado.

Witt, P. A., & Crompton, J. L. 1996. *Recreation programs that work for at-risk youth: The challenge of shaping the future*. State College, PA: Venture Publishing