



JANUARY 2009



# Girls Study Group

*Understanding and Responding to Girls' Delinquency*

J. Robert Flores, Administrator

## Resilient Girls—Factors That Protect Against Delinquency

By Stephanie R. Hawkins, Phillip W. Graham, Jason Williams,  
and Margaret A. Zahn

*According to data from the Federal Bureau of Investigation, from 1991 to 2000, arrests of girls increased more (or decreased less) than arrests of boys for most types of offenses. By 2004, girls accounted for 30 percent of all juvenile arrests. However, questions remain about whether these trends reflect an actual increase in girls' delinquency or changes in societal responses to girls' behavior. To find answers to these questions, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) convened the Girls Study Group to establish a theoretical and empirical foundation to guide the development, testing, and dissemination of strategies to reduce or prevent girls' involvement in delinquency and violence.*

*The Girls Study Group Series, of which this Bulletin is a part, presents the Group's findings. The series examines issues such as patterns of offending among adolescents and how they differ for girls and boys; risk and protective factors associated with delinquency, including gender differences; and the causes and correlates of girls' delinquency.*

**R**esilience, the psychological ability to successfully cope with severe stress and negative events, is a widely studied concept that has important implications for the development of delinquency prevention and intervention programs.

Despite the popularity of this concept in research, scientists still cannot completely explain why some children are resilient to the negative events and influences in their life while others are not. Furthermore, factors associated with resilience may not be the same for both genders.

■ ■ ■  
Access OJJDP

publications online at

[www.ojp.usdoj.gov/ojjdp](http://www.ojp.usdoj.gov/ojjdp)



Drawing on data from the National Longitudinal Study of Adolescent Health, this Bulletin examines a select number of factors that research suggests may “protect” girls who are at risk for becoming delinquent.

### Defining Resilience

Differences in conceptualizing resilience have led to confusion about what resilience really means (Luthar, Cicchetti, and Becker, 2000; Luthar and Zelazo, 2003; Olsson, Bond, and Burns, 2003). Resilience is often defined as a person’s ability to positively adapt or achieve success despite having faced situations—being abused or neglected, witnessing violence, or living in poverty—that could lead to negative outcomes such as delinquency (Kaplan, 2005).

### Background

#### Developing the Study

Much of the research on resilience has focused on the risk factors that contribute to problem behaviors rather than on the factors that promote positive development (Smokowski, 1998). Although information on risk is important from a theoretical perspective, developing interventions focused on changing the risks for delinquent girls may not be the most effective approach. The knowledge that a girl is at risk for delinquency because she lives in a disadvantaged neighborhood or has a history of abuse is insufficient information for researchers and practitioners to develop an effective intervention program because these risk factors are not easily amenable to change in intervention programs (McKnight and Loper, 2002).

In view of the limitations of risk-focused intervention strategies,

research on resilience turned toward protective factors—aspects of individuals and their environments that buffer or moderate the effect of risk (U.S. Department of Health and Human Services [DHHS], 2001; Fraser, Kirby, and Smokowski, 2004; Wright and Masten, 2005). The protective factors discussed in this Bulletin offer an explanation for why children and adolescents who face similar risk factors may or may not have a propensity toward negative outcomes like delinquency (DHHS, 2001).

The study described in this Bulletin was inspired in part by efforts to research factors that may protect against delinquency and to understand more clearly the unique needs and experiences of girls. Although many of the factors that place boys and girls at risk for delinquency are the same, current literature suggests that each sex may respond differently to protective factors (Resnick, Ireland, and Borowsky, 2004; Fraser, Kirby, and Smokowski, 2004). Research conducted by Resnick and colleagues found that grade point average (GPA) was the most salient protective factor against violence perpetration for both boys and girls, but family connectedness, school connectedness, and religiosity also provided significant protection against violence perpetration for girls only.

Reflecting these findings, this Bulletin explores four processes hypothesized to operate as protective factors in the lives of girls at risk for delinquency—support from or presence of a caring adult, school connectedness, school success, and religiosity.

**Presence of a caring adult.** Researchers have found that support from a caring adult can serve as a protective factor for adolescents, decreasing the likelihood that they will engage

## Girls Study Group Members

**Dr. Margaret A. Zahn**, Principal Investigator, Girls Study Group (2004–March 2008) Senior Research Scientist, RTI International; Professor, North Carolina State University

**Dr. Stephanie R. Hawkins**, Principal Investigator, Girls Study Group (April 2008–Present) Research Clinical Psychologist, RTI International

**Dr. Robert Agnew, Professor**, Department of Sociology, Emory University

**Dr. Elizabeth Cauffman**, Assistant Professor, Department of Psychology and Social Behavior, University of California–Irvine

**Dr. Meda Chesney-Lind**, Professor, Women’s Studies Program, University of Hawaii–Manoa

**Dr. Gayle Dakof**, Associate Research Professor, Department of Epidemiology and Public Health, University of Miami

**Dr. Del Elliott**, Director, Center for the Study and Prevention of Violence, University of Colorado

**Dr. Barry Feld**, Professor, School of Law, University of Minnesota

**Dr. Diana Fishbein**, Director, Transdisciplinary Behavioral Science Program, RTI International

**Dr. Peggy Giordano**, Professor of Sociology, Center for Family and Demographic Research, Bowling Green State University

**Dr. Candace Kruttschnitt**, Professor, Department of Sociology, University of Toronto

**Dr. Jody Miller**, Associate Professor, Department of Criminology and Criminal Justice, University of Missouri–St. Louis

**Dr. Merry Morash**, Professor, School of Criminal Justice, Michigan State University

**Dr. Darrell Steffensmeier**, Professor, Department of Sociology, Pennsylvania State University

**Ms. Giovanna Taormina**, Executive Director, Girls Circle Association

**Dr. Donna-Marie Winn**, Senior Research Scientist, Center for Social Demography and Ethnography, Duke University

in delinquent behaviors (Dishion and Kavanagh, 2003; Romer, 2003; Benson, 1990; Hawley and DeHaan, 1996; Werner and Smith, 1982, 1992). Adolescents are less likely to engage in delinquent behaviors if they have adults in their lives who are aware of their daily activities and associations (Luthar, 2006; Luthar and Zelazo, 2003; Dishion and Kavanagh, 2003). Benson (1990) also found that such support can come from adults outside a child's family. Caring adults from outside a child's family may provide support for youth who have experienced unsatisfactory relationships within their families (Olds et al., 1997; Hawley and DeHaan, 1996; Werner and Smith, 1982, 1992).

#### **School connectedness and success.**

Schools can play a significant role in protecting adolescents at risk for delinquency. The protective factors in schools include school connectedness (a positive perception of the school environment and positive interactions with people at school) and school success (measured by grade point average). School settings have the potential to provide an important and positive developmental context where students can excel socially and academically. School connectedness appears especially important to adolescents who experience adversity in their homes (Perkins and Jones, 2004) because school may be one of few contexts where such adolescents' achievements are recognized and celebrated (DHHS, 2001).

Success in school can also be a protective factor against delinquency. As noted above, Resnick and colleagues (2004) identified a good grade point average as the most salient protective factor distinguishing youth who do not engage in violence from those who do. Similarly, in a study of academic risk among inner-city

adolescents, Ripple and Luthar (2000) found that success early in a student's academic career protected against negative outcomes such as delinquency later in adolescence.

**Religiosity.** The National Study of Youth and Religion found religious faith was important in the lives of many teens in the United States (Smith, 2005). Recent literature documents that religiosity, or how important religion is to someone, protects against many types of negative outcomes for adolescents, including delinquency (Ball, Armistead, and Austin, 2003; Bridges and Moore, 2002; Clark, 1995). However, some literature points to the limiting protective effect of religion, suggesting that religion only protects against minor offenses (Benda and Toombs, 2000; Burkett, 1993; Evans et al., 1995). Despite the lack of consensus in the field regarding the impact of religiosity on different types of delinquent behaviors, research has established that religion does, in fact, have some influence on some delinquent behaviors (Baier and Wright, 2001; Regnerus, 2003; Benda and Toombs, 2003; Evans et al., 1995).

#### **Developmental Perspective**

Protective factors may operate at different points during a child's development (Masten, Best, and Garmezy, 1990; Wright and Masten, 1997). When exploring the issue of resilience in youth, researchers must acknowledge that risk and protection occur within a normative developmental context (Spencer et al., 2006). An example of this sort of normative development is that the presence of a caring adult may protect a younger child from engaging in delinquent behaviors more than it would an older adolescent, the latter of whom is

more developmentally influenced by peers than adults. Researchers should examine the protective factors that exist in a child's life and at what stage of a child's development they take effect. As children develop, their relationships with adults, the schools they attend, and the neighborhoods they live in increasingly affect their well-being and expose them to factors that protect them and to other factors that put them at risk for outcomes such as delinquency (Wright and Masten, 2005). Developmental transitions are important periods for observing resilience and the role of protective factors. Researchers lack information about how protective factors affect adolescent girls at varying levels of risk for delinquency and at different points in their development.

### **The Current Study**

The study described in this Bulletin used data from the National Longitudinal Study of Adolescent Health (Add Health), to answer the following questions:

1. Do the presence of a caring adult, connection with and success in school, and religiosity protect girls from involvement in delinquent behaviors?
2. Do these protective factors operate differently for girls exposed to known risks for delinquency?

Although adolescent girls are exposed to myriad experiences that have the potential to increase their risk for delinquent behaviors, this Bulletin focuses on risks from personal victimization (physical abuse, sexual assault, and neglect) and structural barriers (neighborhood disadvantage). The largest proportion of delinquency cases involving girls occurred at age 15 (Snyder and Sickmund,

2006), when many of the negative experiences from childhood personal victimization and living in disadvantaged neighborhoods are already entrenched in their lives. To counteract these negative influences and develop interventions, researchers must examine the protective factors that can buffer girls from involvement in delinquency and determine which protective factors have the strength to overcome the impact of negative experiences childhood.

## Data Source

The National Longitudinal Study of Adolescent Health used self-reported survey data to examine health-related behaviors in adolescence and subsequent outcomes in young adulthood (Udry, 2003). In two survey waves (1995 and 1996), Add Health researchers collected individual, family, school, and community-level information from a sample of approximately 19,000 students in grades 7–12 at 132 schools. In a third wave (2000–2001), approximately 15,000 of the original participants were resurveyed as young adults ages 18–26.

The analyses in this Bulletin are based on Add Health data for girls—9,641 in wave 1; 6,962 in wave 2; and 5,736 in wave 3. The benefit of

using the Add Health survey data is that it can reveal which factors may protect the "average" adolescent girl, or a girl with known risk factors, from engaging in delinquent behavior. This is because longitudinal studies can identify typical patterns of development and reveal experiences or behaviors that impact a person's developmental trajectory. (For detailed information on the Add Health study, visit [www.cpc.unc.edu/projects/addhealth](http://www.cpc.unc.edu/projects/addhealth).)

## Analyzing the Survey Data

Using data from the Add Health study, the authors created measures of risk and protective factors and delinquent/criminal outcomes.

**Risk factors.** The four risk indicators analyzed were physical assault by a parent or caregiver, sexual assault, neglect by a parent or caregiver, and neighborhood disadvantage.

- **Physical assault:** Being slapped, hit, or kicked more than 10 times by a parent/caregiver before the sixth grade (asked retrospectively in wave 3).
- **Sexual assault:** Forced sexual intercourse by any perpetrator during the previous 12 months

(asked in wave 1); or any forced sexual contact, including intercourse or touching, with a parent or caregiver before the sixth grade (asked retrospectively in wave 3).

- **Neglect:** Being left alone when an adult should have been present more than 10 times before the sixth grade, or ever not having basic needs (such as food and clothing) met by the parent or caregiver before the sixth grade (asked retrospectively in wave 3).
- **Neighborhood disadvantage:** An index developed during wave 1, based on the percent of families living below poverty, percent of adults without a high school diploma or its equivalent, percent of female-headed households, and unemployment rate.

**Protective factors.** The four protective indicators were the presence of a caring adult, school connectedness, school success, and religiosity. The indicators were based on responses to questions in wave 1.

- **Caring adult:** Three questions about the degree to which respondents felt their parents, teachers, or other adults cared about them.
- **School connectedness:** Seven questions about respondents' perceptions of school and their interactions with peers and teachers.
- **School success:** GPA in math, science, social studies, language arts, and English.
- **Religiosity:** Three questions—frequency of praying and attending religious events and perceived importance of religion.

For the first three indicators, responses were averaged to create

## Research on Risk Factors for Delinquency

For girls, the key risk factors for delinquency and incarceration are family dysfunction, trauma and sexual abuse, mental health and substance abuse problems, high-risk sexual behaviors, school problems, and affiliation with deviant peers (Hubbard and Pratt, 2002; Lederman et al., 2004). Physical abuse and sexual abuse contribute to male and female involvement in delinquency (Dembo, Williams, and Schmeidler, 1993; Siegel and Senna, 2000), but female delinquents are more likely than their male counterparts to have been abused (Dembo, Williams, and Schmeidler, 1993). Researchers have also examined how conditions such as poverty and other forms of social and economic disadvantage can affect delinquent behaviors (Felner, 2005).

an overall measure. For religiosity, responses were standardized to a single response scale and averaged.

**Delinquent and criminal outcomes.**

Delinquent and criminal outcomes were based on activities engaged in during adolescence (measured in wave 2) and/or late adolescence and young adulthood (measured in wave 3). These activities included status offenses (unexcused absence from school, unruliness in a public place); gang membership; selling drugs; committing a serious property offense (stealing something worth more than \$50 or breaking and entering to steal something); and engaging in violence—simple assault (carrying

a weapon or fighting with someone) or aggravated assault (using a weapon or seriously injuring someone).

**Findings**

Table 1 shows the sample's racial and ethnic composition and summarizes risk factors and indicators of delinquent and criminal behavior. The majority of the female respondents were white (68 percent), followed by black respondents (16 percent) and Hispanic respondents (12 percent). During wave 1, nearly 6 percent of respondents reported being physically assaulted by their parent or caregiver more than 10 times before

sixth grade, 10 percent reported being sexually assaulted, and nearly 9 percent reported being neglected by their parent or caregiver.

**Protective factors and female delinquency.** This analysis showed that—when controlling for general risk factor categories—the extent to which adolescent girls believed an adult cared about them served as a protective factor against several forms of delinquency (see table 2). During wave 1, girls who reported having more adults in their lives who cared about them were less likely to report committing status offenses, property offenses, selling drugs, gang membership, simple assault, and aggravated assault during adolescence (wave 2) and less likely to report committing simple assault as young adults (wave 3).

Contrary to the findings of previous research, school connectedness did not serve as a protective factor in this study. In fact, girls who reported higher levels of school connectedness in wave 1 were more likely to report being involved in aggravated assault by young adulthood.

School success was a significant protective factor during adolescence (wave 2) and young adulthood (wave 3) for some forms of delinquent behaviors. Adolescent girls who reported greater school success during the initial data collection were less likely to report status offenses and gang membership 1 year later (wave 2) and less likely to report simple assault and aggravated assault during late adolescence and young adulthood (wave 3). However, girls who were successful in school were more likely to commit a property offense during late adolescence and young adulthood.

**Table 1.** Study Participants

	Unweighted Percent (Number) of Respondents		
	Wave 1 (N=9,641)	Wave 2 (N=6,963)	Wave 3 (N=5,736)
<b>Race/ethnicity</b>			
White	68 (6,556)	69 (4,804)	69 (3,958)
Black	16 (1,543)	15 (1,044)	15 (860)
Hispanic	12 (1,157)	12 (836)	11 (631)
Asian	2 (193)	2 (139)	3 (173)
American Indian	1 (96)	1 (70)	1 (57)
Other	1 (96)	1 (70)	1 (57)
<b>Risk factors*</b>			
Physical assault	5.5 (294)	—	—
Sexual assault	10.5 (518)	—	—
Neglect	8.9 (476)	—	—
<b>Outcomes</b>			
Serious property offense	—	5 (326)	6 (296)
Status offense	—	55 (3,309)	—
Simple assault	—	17 (1,036)	4 (209)
Aggravated assault	—	6 (410)	3 (189)
Gang membership	—	3 (194)	—
Selling drugs	—	4 (274)	—

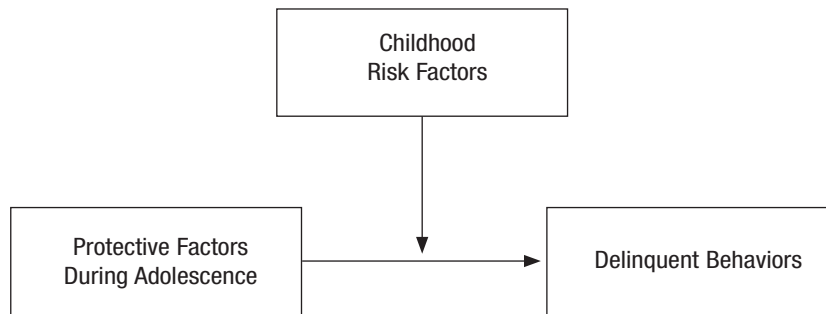
\* A fourth risk factor—disadvantaged neighborhood—was measured with four census-level socioeconomic indicators in wave 1 as a standardized score with mean of 0 and standard deviation of 0.866.

**Table 2.** Effects of Protective Factors on Delinquent or Criminal Behavior

Protective Factor (wave 1)	Behaviors								
	Status Offense (wave 2)	Gang Membership (wave 2)	Selling Drugs (wave 2)	Property Offense (wave 2)	Property Offense (wave 3)	Simple Assault (wave 2)	Simple Assault (wave 3)	Aggravated Assault (wave 2)	Aggravated Assault (wave 3)
<b>School Success</b>	Protective 0.76 (0.67, 0.85)	Protective 0.47 (0.33, 0.67)	NS	Protective 0.62 (0.45, 0.85)	Risk Enhancing 1.25 (1.03, 1.51)	Protective 0.54 (0.47, 0.63)	Protective 0.58 (0.45, 0.75)	Protective 0.57 (0.47, 0.70)	Protective 0.58 (0.40, 0.83)
<b>Caring Adult</b>	Protective (0.55 (0.46, 0.65)	Protective 0.66 (0.45, 0.98)	Protective 0.61 (0.45, 0.81)	Protective 0.63 (0.48, 0.82)	NS	Protective 0.71 (0.59, 0.86)	Protective 0.58 (0.41, 0.80)	Protective 0.64 (0.48, 0.85)	NS
<b>School Connectedness</b>	NS	NS	NS	NS	NS	NS	NS	NS	Risk Enhancing 1.98 (1.11, 3.54)
<b>Religiosity</b>	NS	NS	Protective 0.76 (0.63, 0.92)	NS	NS	NS	NS	NS	NS

Note: The table shows the results of logistic regression analysis. Protective = A statistically significant protective effect against the behavior. The extent of the effect is indicated by the numbers in the table (odds ratios); odds ratios greater than 1 indicate greater likelihood of the criminal/delinquent behavior, odds ratios less than 1 indicate the behavior is less likely. The confidence interval for the odds ratios (a measure of their precision) is 95 percent. NS = The protective effect was not statistically significant, or there was no protective effect.

**Figure 1.** Interaction of Childhood Risk Factors and Protective Factors in Adolescence



During adolescence, some girls have protective experiences in their lives that assist them in being resilient from engaging in delinquent and criminal behaviors. However, some protective factors may not be strong enough to mitigate the influence of risk factors that may have endured since childhood. The interaction between these risk and protective factors can decrease, attenuate, or increase a girl's propensity towards delinquent behavior.



Religiosity did not serve as a protective factor against delinquent behaviors, with one exception: girls reporting higher levels of religiosity in wave 1 reported lower incidents of selling drugs in wave 2.

**Interactions of risk and protective factors.** Table 2 does not take into account the girls' specific likelihood of risk for delinquency as measured by the risk factors listed in table 1. To better understand the nature of resilience, the authors explored the effects of childhood risk factors on the interaction between the protective factors girls experienced during early adolescence and their subsequent delinquent or criminal behaviors in mid-adolescence and late adolescence/early adulthood. This model is depicted in figure 1. Table 3 (pg. 7) shows the results of this analysis.

A risk factor can modify the effects of protective factors in three ways:

1. By enhancing the protective effect (i.e., the benefits of the

**Table 3:** How Childhood Risk Factors and Protective Factors in Adolescence<sup>1</sup> Interact to Produce or Prevent Delinquent Behavior

Risk Factor	Delinquent Behavior					
	Status offense	Gang Membership	Selling Drugs	Property Offense	Simple Assault	Aggravated Assault
If a girl was physically assaulted as a child ...				...the presence of a caring adult reduced the likelihood that she would become involved in property crime in adolescence. <sup>2</sup>	...school connectedness reduced the likelihood that she would commit simple assault in young adulthood. <sup>2</sup>	...the presence of a caring adult reduced the likelihood that she would commit aggravated assault in adolescence. <sup>2</sup>  ...religiosity and the presence of a caring adult increased the likelihood that she would commit aggravated assault in young adulthood. <sup>3</sup>
If a girl was sexually assaulted as a child...					...school success reduced the likelihood that she would commit simple assault in adolescence. <sup>2</sup>	...religiosity reduced the likelihood that she would commit aggravated assault in young adulthood. <sup>2</sup>
If a girl spent her childhood in a disadvantaged neighborhood...			...the presence of a caring adult minimally reduced the likelihood that she would sell drugs in adolescence. <sup>2</sup>		...religiosity reduced the likelihood that she would commit simple assault in young adulthood. <sup>2</sup>	...school success minimally reduced the likelihood that she would commit aggravated assault in adolescence. <sup>2</sup>
If a girl was neglected as a child...		...religiosity and the presence of a caring adult increased the likelihood that she would join a gang in adolescence. <sup>3</sup>				

<sup>1</sup> All protective factors—a caring adult, school connectedness, school success, and religiosity—occurred during a girl's adolescence.

<sup>2</sup> The protective factor had a greater effect for girls who had not been exposed to this risk factor. In some circumstances, protective factors stabilized the risk of delinquent behavior, making it equivalent to that of girls who had not experienced a risk factor, rather than protecting risk-exposed girls more than their counterparts.

<sup>3</sup> These factors protected girls who had not been exposed to this risk factor.

- protective effect keep a problem behavior from occurring).
- By attenuating the protective effect (i.e., weakening the beneficial effect).
  - By negating the beneficial effect or by changing the direction of the effect (i.e., the protective effect in the general population is not protective in the at-risk population or is associated with increased negative behavior).
- Results showed that risk factors modified the effects of protective factors in the following ways:
- Although the presence of a caring adult reduced the likelihood that girls would sell drugs whether or

not they lived in a disadvantaged neighborhood, this protective effect was weakened in severely disadvantaged neighborhoods.

- For property offenses, gang membership, and aggravated assault, the risk factor of physical assault enhanced the protective effect provided by a caring adult. The rates of these behaviors among girls who reported having caring adults in their lives decreased more sharply from wave 2 to wave 3 for girls who had been physically assaulted than for those who had not.
- Not every finding supports the premise that a caring adult was protective against engaging in delinquent behavior when a girl is exposed to risk situations. For example, girls who had been physically assaulted were more likely to report engaging in aggravated assault during late adolescence or early adulthood (wave 3) if they had a caring adult in their lives. Similarly, girls who reported being neglected were more likely to join a gang during adolescence if they also reported having caring adults in their lives.
- School success protected against involvement in aggravated assault among girls from disadvantaged neighborhoods, but the protection decreased as the level of neighborhood disadvantage increased. Although school success protected adolescent girls from simple assault in the general population, sexually assaulted girls were more likely to engage in simple assault during adolescence if they were successful in school. The protective effect of school connectedness against involvement in simple assault during late adolescence or early adulthood (wave 3) was

greater among girls who had been physically assaulted.

- Religiosity protected girls in late adolescence or early adulthood from involvement in:
  - Simple assault—if they came from disadvantaged neighborhoods.
  - Aggravated assault—if they had been sexually assaulted.

However, religiosity was associated with increased likelihood of:

- Aggravated assault during late adolescence or early adulthood—if the girls had been physically assaulted.
- Gang membership during adolescence—if the girls had been neglected.

### Study Limitations

The potential inaccuracy of retrospective self-reported data in assessing delinquent behaviors is a limitation in this investigation. Schroeder and colleagues (2003) found that people tend to overreport situations that they view as significant, even if these events do not occur frequently. However, people may forget or underreport events that they view as minor or insignificant even if these events occur frequently. This suggests that youth participating in the Add Health study who engaged in delinquent behaviors over an extended period of time or who had been physically or sexually abused or neglected may have given less accurate self-reports, depending on the duration and perceived importance of the events they were reporting.

The Add Health questions that focused on abuse and neglect required youth to recall the number

of times particular events occurred and interpret whether or not certain behaviors were acceptable. However, such youth may have difficulty judging when they are being abused or neglected. Hardt and Rutter (2004) found that youth often have difficulty recalling experiences that rely primarily on this type of judgment, which suggests that the prevalence of these behaviors may be underrepresented.

The desire to avoid shame and embarrassment by conforming to perceived social norms (i.e., social desirability) is another limitation in the accuracy of self-report assessments. Although the Add Health study design attempted to reduce this type of inaccuracy by asking sensitive questions via Audio Computer-Assisted Self Interviewing (ACASI), this may not have eliminated social desirability effects.

Another limitation is that Add Health findings cannot be generalized to girls who are deeply involved in the juvenile justice system. Because Add Health surveyed a nationally representative sample of adolescents, these data can reveal which factors protect the average adolescent girl from engaging in delinquent behaviors but do not provide an accurate view of risk and protective factors in the lives of girls with extensive delinquent histories.

The final limitations include using grade point average as the sole measure of school success and the fact that all of the questions used to measure risk factors in this study provided data on childhood risks (occurring either before sixth grade or at a time before the first data collection), and did not account for risks encountered later in life. This limited the possibility of exploring how protective factors affected girls who



may have only encountered risks after childhood.

## Implications

The most consistent protective effect assessed in this study was the extent to which a girl felt she had caring adults in her life. The presence of caring adults reduced the likelihood that girls would engage in several forms of delinquent behaviors; however, this protective effect was not consistent for girls at high risk for delinquency. Physically assaulted girls were protected when they believed they had a caring adult in their lives during mid-adolescence but not in young adulthood. They were less likely to report property offenses and engage in aggravated assault as adolescents than girls who had not been physically assaulted, but reported engaging in more aggravated assault as they moved into young adulthood.

These findings are contrary to previous findings and to the general expectation that caring adults provide a form of protection (Dishion and Kavanagh, 2003; Romer, 2003; Benson, 1990; Hawley and DeHaan, 1996; Werner and Smith, 1982, 1992). Research conducted by Perkins and Jones (2004) on the risk behaviors among physically abused adolescents concluded that adolescents who seek adults outside of their family for support may do so because of the perceived inability to obtain the support they need from their parents. The girls in this investigation who were physically assaulted and have moved into early adulthood may have decided that the adults in their lives have failed them. Moreover, they may have found support from other adults who

were not good role models for prosocial behavior.

School connectedness protected physically assaulted girls from engaging in delinquent behaviors. When physically assaulted girls felt connected to their schools, they were less likely to report committing simple assault than girls who had not been assaulted. School, for physically assaulted girls, may provide a refuge from an unsafe home environment. Because the majority of a youth's day is spent at school, becoming connected with this institution and the resources available therein seems to serve as a protection against delinquency for physically assaulted girls.

School success, as measured by having a high grade point average, did not protect physically assaulted girls from delinquency. School success served as a significant protection against several forms of delinquency for girls in the general population and helped girls in disadvantaged neighborhoods refrain from delinquent behavior. During early adolescence, having a higher GPA made it

less likely that girls would engage in delinquency (status offenses, property crimes, gang membership, simple assault, and aggravated assault) with the exception of selling drugs, which was not significant. During early adulthood, a high GPA no longer protected against engaging in property crimes, and in fact, was associated with an increased likelihood of engaging in this behavior.

School success was less protective for girls who had been sexually or physically abused or lived in disadvantaged neighborhoods. Girls who had been sexually abused and had high GPAs were more likely to engage in simple assault in mid-adolescence. Although having a high GPA served as a protective factor against aggravated assault, this protection weakened with increased neighborhood disadvantage. Other studies have also demonstrated that academic competence may not have positive consequences for economically disadvantaged adolescents living



in high-risk environments (Luthar, 1999; Luthar, Cicchetti, and Becker, 2000; Luthar, Doernberger, and Zigler, 1993). As neighborhood disadvantage increases, girls may encounter situations that make violence a more useful coping behavior in the short term than focusing on school success, whose benefit is not revealed immediately. Additionally, girls from disadvantaged neighborhoods likely attend disadvantaged schools. School success may not lead to the same beneficial outcomes as that experienced by girls in more advantaged schools and neighborhoods.

According to Steinman (2005), youth at different risk levels for delinquency may sell drugs. Religiosity helped protect girls who were not at high risk for delinquency from selling drugs during early adolescence.

Muller and Ellison (2001) found that religion can have different effects for girls at differing levels of risk for delinquency. In this study, religiosity helped protect girls who were not a high risk for delinquency against nonviolent delinquent behaviors. Religiosity also helped protect girls at high risk for delinquency from violent behavior.

The types of risk encountered during childhood influence whether religiosity will have a protective effect on girls' delinquent behavior. Girls from disadvantaged neighborhoods and those who had been sexually abused were less likely to engage in violent forms of delinquency when they were religious. However, girls who had been neglected or physically assaulted were more likely to engage in aggravated assault when they were religious.

The work of Brody and colleagues (1996) provides some explanation for this finding. Their work found

religiosity "gives rise to a belief system that produces norms that are directly and indirectly linked to youth competence." The finding suggests that when girls are neglected and experience repeated physical assault early in life, their belief systems may become skewed to support the idea that violence is an acceptable and normal behavior. Additionally, if girls who are physically abused live in homes where religious beliefs are promoted, religion could function as a belief system that supports violence.

### Conclusion

Abuse, neglect, poverty, and violence threaten the development and behavior of many youth, yet some remain resilient. The factors underlying female resilience are still being discovered. Participation in delinquent acts is not limited to girls whose circumstances place them at high risk for delinquency. The results of this study suggest that the presence of a caring adult, school success, school connectedness, and religiosity may protect against some forms of delinquent behavior for girls, but this protective effect is subject to complex interactions with risk factors and age. Understanding the role these protective factors play in the lives of girls has important implications for creating programs to prevent delinquency.

A concerted attention to context is needed when developing interventions designed to promote resilience (Luthar, 2006). Although some of the factors examined in this study protected girls from engaging in delinquent behaviors, many of these protective factors had a differential effect in girls who faced severe adversity—including physical and sexual assault, neglect, and

neighborhood disadvantage. These findings highlight the importance of considering the life histories and stressors that are present when developing interventions for girls at high risk for delinquency. Interventions that help adolescent girls learn how to manage their risk (e.g., effectively dealing with the trauma of childhood physical and sexual assault) would be an important contribution to the delinquency prevention field (Ruffolo, Sarri, and Goodkind, 2004). Additionally, interventions should focus on the protective factors that mitigate risk (Luthar, 2006). According to researcher Ann Masten, the ability to match the tasks and activities of a particular intervention program to those factors that protect program participants from negative outcomes may be the single most important contribution resilience research can make to delinquency program development (Masten, 1994).

For some girls exposed to childhood risks, caring adults, school connectedness, school success, and religiosity helped to prevent certain forms of delinquency during early adolescence, but in other cases, these protective factors were not strong enough to mitigate the impact of the risks. This underscores the notion that one delinquency prevention program cannot be tailored to the needs of all girls who are at risk for delinquency.

As a first step, researchers must understand how protective factors operate in girls' lives and when these protective factors are most relevant to girls' development. Secondly, researchers should understand the risks confronting adolescent girls and consider which protective factors are strong enough to mitigate particular risks. Future empirically-based effectiveness studies on delinquency

prevention may provide the field with more evidence of factors that protect girls from delinquent behavior.

## References

- Acoca, L. 1999. Investing in girls: A 21<sup>st</sup> century strategy. *Juvenile Justice* 6: 2–21.
- Baier, C., and Wright, B.R.E. 2001. "If you love me, keep my commandments": A meta-analysis of the effect of religion on crime. *Journal of Research on Crime and Delinquency* 38(1):3–21.
- Ball, J., Armistead, L., and Austin, B. 2003. The relationship between religiosity and adjustment among African American, female, urban adolescents. *Journal of Adolescence* 26:431–446.
- Benda, B.B., and Toombs, N.J. 2000. Religiosity and violence—Are they related after considering the strongest predictors? *Journal of Criminal Justice* 28:483–496.
- Benson, P.L. 1990. *The Troubled Journey: A Portrait of 6th–12th Grade Youth*. Minneapolis, MN: Search Institute.
- Bridges, L.J., and Moore, K.A. 2002. Religious involvement and children's well-being: What research tells us (and what it doesn't). Child Trends Research Brief. Washington, DC: Child Trends.
- Brody, G.H., Stoneman, Z., and Flor, D. 1996. Parental religiosity, family processes, and youth competence in rural, two-parent African American families. *Developmental Psychology* 32:696–706.
- Burkett, S.R. 1993. Perceived parents' religiosity, friends' drinking, and hellfire: A panel study of adolescent drinking. *Review of Religious Research* 35:136–154.
- Clark, P. 1995. *Risk and resilience in adolescence: The current status of research on gender differences (Equity Issues, No. 1)*. Columbus, OH: The Ohio State University, Department of Home Economics Education.
- Dembo, R., Williams, L., and Schmeidler, J. 1993. Gender differences in mental health service needs among youths entering a juvenile detention center. *Journal of Prison and Jail Health* 12:73–101.
- Dishion, T.J., and Kavanagh, K. 2003. *Intervening in Adolescent Problem Behavior: A Family-Centered Approach*. New York: Guilford Press.
- Doll, B., and Lyon, M.A. 1998. Risk and resilience: Implications for the delivery of educational and mental health services in schools. *School Psychology Review* 27:348–363.
- Evans, D.T., Cullen, F.T., Dunaway, R.G., and Burton, V.S. 1995. Religion and crime reexamined: The impact of religion, secular controls, and social ecology on adult criminality. *Criminology* 33:195–217.
- Felner, R. 2005. Poverty in childhood and adolescence. In *Handbook of Resilience in Children*, edited by S. Goldstein and R. Brooks. Kluwer Academic/Plenum Publishers: New York.
- Fraser, M., Kirby, L.D., and Smokowski, P.R. 2004. Risk and resilience in childhood. In *Risk and Resilience in Childhood: An Ecological Perspective*, 2nd ed., edited by M. Fraser. Washington, DC: NASW Press.
- Hardt, J., and Rutter, M. 2004. Validity of adult retrospective reports of adverse childhood experiences: Review of the evidence. *Journal of Child Psychology and Psychiatry* 45(2):260–273.
- Hawley, D.R., and DeHaan, L. 1996. Toward a definition of family resilience: Integrating life-span and family perspectives. *Family Process* 35:283–298.
- Herrenkohl, T.I., Tajima, E.A., Whitney, S.D., and Huang, B. 2005. Protection against antisocial behavior in children exposed to physically abusive discipline. *Journal of Adolescent Health* 36:457–465.
- Hubbard, D.J., and Pratt, T.C. 2002. A meta-analysis of the predictors of delinquency among girls. *Journal of Offender Rehabilitation* 34:1–13.
- Kaplan, H.B. 2005. Understanding the concept of resilience. In *Handbook of Resilience in Children*, edited by S. Goldstein and R. Brooks. New York, NY: Kluwer Academic/Plenum Publishers, pp. 39–47.
- Lederman, C.S., Dakof, G.A., Larrea, M.A., and Li, H. 2004. Characteristics of adolescent females in juvenile detention. *International Journal of Law and Psychiatry* 27:321–337.
- Luthar, S.S. 1999. *Poverty and Children's Adjustment*. Thousand Oaks, CA: Sage Publications, Inc.
- Luthar, S.S. 2006. Resilience in development: A synthesis of research across five decades. In *Developmental Psychopathology, Vol. 3: Risk, Disorder, and Adaptation* (2nd ed.), edited by S.D. Cicchetti and D.J. Cohen. Hoboken, NJ: John Wiley and Sons, Inc., pp. 739–795.
- Luthar, S.S., Cicchetti, D., and Becker, B. 2000. The construct of resilience: A critical evaluation and guidelines for future work. *Child Development* 71:543–562.

- Luthar, S.S., Doernberger, C.H., and Zigler, E. 1993. Resilience is not a unidimensional construct: Insights from a prospective study of inner-city adolescents. *Development and Psychopathology* 5:703–717. (Special Issue: Milestones in the development of resilience).
- Luthar, S.S., and Zelazo, L.B. 2003. Research on resilience: An integrative review. In *Resilience and Vulnerability: Adaptation in the Context of Childhood Adversities*, edited by S.S. Luthar. New York: Cambridge, pp. 510–549.
- Masten, A. 1994. Resilience in individual development: Successful adaptation despite risk and adversity. In *Risk and Resilience in Inner City America: Challenges and Prospects*, edited by M. Wang and E. Gordon. Hillsdale, NJ: Erlbaum, pp. 3–25.
- Masten, A.S., Best, K.M., and Garmezy, N. 1990. Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology* 2:425–444.
- McKnight, L.R., and Loper, A.B. 2002. The effect of risk and resilience factors on the prediction of delinquency in adolescent girls. *School Psychology International* 23(2):186–198.
- Muller, C., and Ellison, C. 2001. Religious involvement, social capital, and adolescents' academic progress: Evidence from the National Education Longitudinal Study of 1988. *Sociological Focus* 34(2):155–183.
- Olds, D., Kitzman, H., Cole, R., and Robinson, J. 1997. Theoretical foundations of a program of home visitation for pregnant women and parents of young children. *Journal of Community Psychology* 25:9–25.
- Olsson, C.A., Bond, L., and Burns, J.M. 2003. Adolescent resilience: A concept analysis. *Journal of Adolescence* 26(1):1–11.
- Perkins, D.F., and Jones, K.R. 2004. Risk behaviors and resiliency within physically abused adolescents. *Child Abuse and Neglect* 28:547–563.
- Regnerus, M.D. 2003. Linked lives, faith, and behavior: Intergenerational religious influence on adolescent delinquency. *Journal for the Scientific Study of Religion* 42(2):189–203.
- Resnick, M.D., Bearman, P.S., and Blum, R.W., et al. 1997. Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *Journal of the American Medical Association*, 278(10):823–832.
- Resnick, M.S., Ireland, M., and Borowsky, I. 2004. Youth violence perpetration: What protects? What predicts? Findings from the National Longitudinal Study of Adolescent Health. *Journal of Adolescent Health* 35(5):424e1–424e10.
- Ripple, C.H., and Luthar, S. 2000. Academic risk among inner-city adolescents: The role of personal attributes. *Journal of School Psychology* 38(3):277–298.
- Romer, D. 2003. *Reducing Adolescent Risk: Toward an Integrated Approach*. Thousand Oaks, CA: Sage Publications, Inc.
- Ruffolo, M.C., Sarri, R., and Goodkind, S. 2004. Study of delinquent, diverted, and high-risk adolescent girls: Implications for mental health intervention. *Social Work Research* 28(4):237–245.
- Schroeder, K.E., Carey, M.P., and Vanable, P.A. 2003. Methodological challenges in research on sexual risk behavior, II: Accuracy of self-reports. *Annals of Behavioral Medicine* 26(2): 104–123.
- Siegel, L.J., and Senna, J.J. 2000. *Juvenile Delinquency: Theory, Practice, and Law* (7th ed.). Belmont, CA: Wadsworth.
- Smith, C. 2005. *Soul Searching: The Religious and Spiritual Lives of American Teenagers*. New York, NY: Oxford University Press.
- Smith, C., Faris, R., Denton, M.L., Regnerus, M. 2003. Mapping American adolescent subjective religiosity and attitudes of alienation toward religion: A research report. *Sociology of Religion* 64:111–133.
- Smokowski, P.R. 1998. Prevention and intervention strategies for promoting resilience in disadvantaged children. *Social Service Review* 72(3):337–364.
- Snyder, H.N., and Sickmund, M. 2006. *Juvenile Offenders and Victims: 2006 National Report*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Spencer, M.B., Harpalani, V., Cassidy, E., Jacobs, C.Y., Donde, S., Goss, T.N., Munoz-Miller, M., Charles, N., and Wilson, S. 2006. Understanding vulnerability and resilience from a normative developmental perspective: Implications for racially and ethnically diverse youth. In *Developmental Psychopathology—Volume 1: Theory and Method*, edited by D. Cicchetti and D.J. Cohen. New Jersey: John Wiley and Sons.

Steinman, K.J. 2005. Drug selling among high school students: Related risk behaviors and psychosocial characteristics. *Journal of Adolescent Health* 36:71e1–71e8.

Udry, J.R. 2003. The National Longitudinal Study of Adolescent Health. Paper presented at the annual meeting of the American Sociological Association, Atlanta, GA, August 16.

U.S. Department of Health and Human Services. 2001. *Youth Violence: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; Substance Abuse and Mental Health Services Administration, Center for Mental Health Services; and National Institutes of Health, National Institute of Mental Health.

Werner, E. 2005. What can we learn about resilience from large-scale longitudinal studies? In *Handbook of Resilience in Children*, edited by S. Goldstein and R. Brooks. New York, NY: Kluwer Academic/Plenum Publishers, pp. 91–105.

Werner, E., and Smith, R. 1982. *Vulnerable, not Invincible: A Longitudinal Study of Resilient Children and Youth*. New York: McGraw–Hill.

Werner, E., and Smith, R. 1992. *Overcoming the Odds: High Risk Children From Birth to Adulthood*. Ithaca, NY: Cornell University.

Wright, M.O., and Masten, A.S. 1997. Vulnerability and resilience in young children. In *Handbook of Child and Adolescent Psychiatry: Vol. 1, Infancy and Preschoolers: Development and Syndromes*, edited by J.D. Noshpitz, S. Greenspan, S. Wieder, and J. Osofsky. New York: Wiley, pp. 202–224.

Wright, M.O., and Masten, A.S. 2005. Resilience process in development. In *Handbook of Resilience in Children*, edited by S. Goldstein and R. Brooks. New York: Kluwer Academic pp. 17–37.

Yates, T., Egeland, B., and Sroufe, L. 2003. Rethinking resilience: A developmental process perspective. In *Resilience and Vulnerability: Adaptation in the Context of Childhood Adversities*, edited by S.S. Luthar. New York: Cambridge, pp. 243–266.



## Acknowledgments

Stephanie R. Hawkins, Ph.D., is a Research Clinical Psychologist in the Crime, Violence, and Justice Research Program at RTI International.

Phillip W. Graham, DrPH, is a Senior Public Health Researcher in the Crime, Violence, and Justice Research Program at RTI International.

Jason Williams, Ph.D., is a Research Psychologist in the Risk Behavior and Family Research Program at RTI International.

Margaret A. Zahn, Ph.D., was a Principal Scientist at RTI International and a professor at North Carolina State University during her Girls Study Group directorship, and is currently Acting Deputy Director of Research and Evaluation at the National Institute of Justice.

This Bulletin was prepared under cooperative agreement number #2004-JF-FX-K001 from the Office of Juvenile Justice and Delinquency Prevention (OJJDP), U.S. Department of Justice.

Points of view or opinions expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of OJJDP or the U.S. Department of Justice.

*The Office of Juvenile Justice and Delinquency Prevention is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance; the Bureau of Justice Statistics; the Community Capacity Development Office; the National Institute of Justice; the Office for Victims of Crime; and the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking (SMART).*



# Why Wait for the News?

## Sign Up for OJJDP's Online Subscriptions

Find out fast what you need to know by subscribing to one or both of OJJDP's free electronic services.

### ► *Do you want it now?*

**JUVJUST** e-mails information three to five times per week from OJJDP and the field about new publications, funding opportunities, and upcoming conferences.

### ► *Do you want it soon, and in a little more detail?*

The **OJJDP News @ a Glance** bimonthly electronic newsletter covers many of the same topics as JUVJUST—plus recent OJJDP activities—but in more depth.

**It's easy:** go to OJJDP's home page ([www.ojp.usdoj.gov/ojjdp](http://www.ojp.usdoj.gov/ojjdp)) and click on the "Subscribe" links to JUVJUST and/or *OJJDP News @ a Glance*.

Submit questions to <http://askjj.ncjrs.gov>.

**U.S. Department of Justice**  
Office of Justice Programs  
*Office of Juvenile Justice and Delinquency Prevention*

*Washington, DC 20531*

Official Business  
Penalty for Private Use \$300

PRESORTED STANDARD  
POSTAGE & FEES PAID  
DOJ/OJJDP  
PERMIT NO. G-91