Family moderators of relation between community disadvantage and adolescent adjustment problems

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Family moderators of relation between community disadvantage and adolescent adjustment problems

by

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A dissertation submitted to the graduate faculty in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

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ABSTRACT

The study of vulnerability and resilience in children and adolescents has become one of the most promising fields of developmental research. Growing up in adverse communities appears to place adolescents at high-risk for socioemotional problems while the existence of appropriate parenting behavior and good parent-child relationships promotes adolescent competence despite risky situations. Using a sample of high-risk adolescents in rural Midwestern communities, the present study examined (1) the impact of disadvantaged community structure on adolescent emotional and behavioral adjustments and (2) the effects of parental control as well as parental warmth/support in mitigating the community effect on adolescent outcomes.

Results showed that community disadvantage had a direct impact on adolescent psychological distress, but not on adolescent conduct problems. Appropriate parental control moderated the community effect on adolescent conduct problems. However, the interaction of parental warmth/support with community disadvantage was not significant in predicting adolescent psychological distress. Additional findings included evidence of a restraining effect of good parenting behavior in highly disadvantaged communities on conduct problems. Parental control reduced the probability of adolescent conduct problems when community disadvantage was minimal, but its effect dissipated when community disadvantage was severe. Implications of the findings for future research and public policy are discussed.
CHAPTER ONE
INTRODUCTION

One of the major problems facing American society today is that large segments of young people are growing up in circumstances of limited resources and pervasive adversity. For many of them, their health, their development, indeed their lives as a whole, are severely jeopardized. Children's poverty dramatically increased during the recession of the early 1980s, and has remained high since that time. Of 28 million adolescents ages 13-18 in the United States, about 20% lived in families below the poverty line (U. S. Bureau of the Census 1992).

The increased percent of children living in single-mother families (around 25%) appears to be a major reason for children's poverty. About 40% of single mothers earned salaries below the poverty level, and their limited educational and coping resources provided a highly problematic environment for growing up (Dryfoos 1990; Mechanic 1991). Further, these poor children are likely to live in isolated poor communities and neighborhoods that are usually characterized by a high concentration of low-income people, scarce institutional supports for families and children, and abundant threats to growth and development of children (Wilson 1987; Klebanov, Brooks-Gunn, and Duncan 1994). Thus the experience of growing up in adverse communities and stressful family environment places children at high-risk for emotional and/or behavioral problems (Safyer 1994; Brooks-Gunn, Duncan, Klebanov, and Sealand 1993).
However, there is a common awareness that while the impact of living in an economically impoverished environment can have profound consequences, many adolescents who seem to be at high risk progress normally and do not experience adjustment problems. Although it is possible that those who make it might not be actually exposed to or experiencing the risk factors, a more likely answer was that they were indeed at risk, but they also encountered protective factors that moderated, buffered, or mitigated the impact of risk on their development (Jessor 1991).

One of the most promising fields of developmental research is the focus on "resilient youth," who function competently in the face of extremely stressful events or circumstances. Studies of risk and resilience can be traced back to the 1970s when Norman Garmezy and other pioneering psychopathologists recognized the need for a developmental perspective of studying adaptation in children who were at risk for pathological conditions (Garmezy 1970). During the past decade, studies of adaptation were expanded beyond competence to include individual differences in adaptation under adverse conditions such as low socioeconomic status, family discord, and community disadvantage. These studies focused on the search for risk and protective factors for competence in childhood and adolescents in spite of highly disadvantageous circumstances, and answered questions such as what factors either within teens or their environments differentiate those individuals who are able to negotiate successfully key developmental tasks from those who are not.

The present study is to extend the research on resilience to negative developmental adjustment among high-risk adolescents. Studies of resilience focused on a variety of populations in a variety of locations: this study employs a group of adolescents who lived in
rural communities in Midwest. These adolescents constituted a high-risk group because they were from single-mother families and resided in rural Iowa communities which were characterized by economic decline, high poverty rate, and the aftermath of agricultural crisis in the 1980s. They were in “double jeopardy”: not only were risk factors intense and prevalent, but protective factors were less available.

This study extends the discussion of resilience by looking at two different aspects of development over the adolescent life span: behavioral and emotional adjustments. These are important aspects of adjustment because they can not only compromise adolescent development and jeopardize the life chances of youth (Jessor 1991) but also pose a threat to the broader society (Huston, McLoyd, and Coll 1994).

This study examines risk and protective factors existing within two social contexts, community and family. The study choose community because risk factors stemming from exposure to and interaction with disadvantageous community environments were found to be powerful predictors of adolescent antisocial behavior and psychological distress (Brooks-Gunn et al. 1993; Wilson 1991b; Simons, Johnson, Beaman, Conger, and Whitbeck 1996). Because parenting behavior and parent-adolescent relationships play a key role in predicting adolescent adjustment (Rolf, Masten, Cicchetti, Nuechterlein, and Weintraub 1990) and because there is a strong connection between community structure and family process (Sampson and Laub 1994), this study expects to observe a linkage between the two microsystems: the community-family interaction.

Two independent approaches will be used in the study. The first is a main effects approach that originates in the clinical-epidemiology tradition. This approach focuses on the
identification of risk factors that predict adolescent outcomes. In this study, community
disadvantage was identified as a risk factor in the community domain and its impact on
adolescent socioemotional functioning was tested.

The second is an interaction effects approach that is rooted in the social psychology
tradition. This approach concentrates on identifying protective factors that buffer the effect
of risk factors on adolescent outcomes. Using parental control and parental warmth/support
as family protective factors, the study predicts that parental control buffers the community
effect on adolescent behavioral functioning and that parental warmth/support buffers the
community effect on adolescent emotional well-being.

In sum, this study extends prior studies in three ways. First, a group of high-risk
adolescents living in rural communities are examined. Second, both internalizing and
externalizing problems are tested for the same sample. And third, specific aspects of family
protective factors are identified for different dimensions of adolescent adjustment.
Community Disadvantage and Adolescent Development

It is a commonly held belief that communities and neighborhoods influence behavior, attitudes, values, and opportunities of individuals. Most Americans assume that children who grow up in affluent neighborhoods tend to work hard in school, stay out of trouble, go to college, and get a good job when they become adults, whereas children who live in poor neighborhoods are likely to drop school, get into trouble with law, have illegitimate children, and continue the line of poverty. Given the fact that up to 20% of children living in poverty are likely to concentrate in communities of low socioeconomic status, a growing number of research has examined the impact of these communities on developmental outcomes of children and adolescents. Disadvantaged communities in the United States have long been realized to reflect class as well as racial and ethnic cleavages.

The residential segregation of social classes and race is a historical phenomenon in the United States. The analysis of residential segregation by social class can be traced back to 1950s, when Dudley and Beverly Duncan (1957) published findings from Chicago. They defined class in terms of broad occupational categories and their study demonstrated that residential patterns reflected patterns of occupational status. Those with prestigious jobs lived in costly areas; men with the lowest ranking jobs could only afford the bottom of the housing market.
Racial residential segregation emerged early in this century primarily because whites desired to exclude blacks from their neighborhoods (DuBois 1899). By 1940 a system of racial residential segregation had developed in large cities as blacks moved to cities in large numbers. As the consequence of black-white competition for urban space and legalized racial segregation in all areas of public life, blacks, like many immigrant groups, concentrated in low-income areas (Farley 1991).

Erbe (1975) was among the earliest to analyze residential segregation of social classes within racial groups. In her study of blacks in Chicago, she found a large difference in social class segregation among blacks and whites. Because the black and white socioeconomic status differed greatly, and middle-class blacks had proportionally fewer middle-class peers than did middle-class whites, prosperous blacks were more likely live in a neighborhood with many impoverished blacks and were more apt to be exposed to an urban community where poverty was not rare. Wilson (1987) also pointed out that unlike white communities, black neighborhoods featured a vertical integration of different income groups from the 1940s to 1960s because persistent residential segregation made affluent blacks less able to separate themselves from the poor than the privileged of other groups (Massey and Eggers 1990).

Since 1970, the industrial transformation and geographic changes in the urban economy has exerted a great impact on inner-city neighborhoods, and racial as well as class residential segregation were rigidly enforced. People with low income became increasingly likely to live in neighborhoods with a high concentration of low-income people (Jargowsky and Bane 1990; Jencks and Peterson 1991). In The Truly Disadvantaged, Wilson (1987) argued that the shift from manufacturing to service-producing industries, the polarization of
wage sectors in the labor market, innovations in technology, the relocation of factories in suburbs, and periodic recessions dramatically increased the rate of black joblessness, which in turn helped trigger an increase in the concentration of poor people, a growing number of poor single-parent families, and a rise in welfare dependency in inner-cities. In the meantime, inner-city neighborhoods experienced an outmigration of working- and middle-class families, which not only reinforced the concentration of poverty in these neighborhoods, but also removed an important social buffer that once minimized the effects of unemployment caused by uneven economic growth and periodic recessions.

According to Wilson, social isolation has deprived these neighborhoods not only of economic and social resources invested by affluent blacks, but also of conventional role models that once reinforced societal norms and values, and provided young people with the information and opportunities they needed to be socially mobile. In an important advance, Wilson (1991a, 1991b) proposed the "concentration effects" hypothesis to capture the effects of living in an impoverished environment on people's behavior. He argued that living in such a poor neighborhood, an individual's behavior, belief, orientation, and social perception were influenced by those of other disadvantaged persons disproportionately concentrated in the neighborhood. This community effect was found to have a greater impact on adolescents than other groups (Brooks-Gunn et al. 1993).

In the past decade, research has addressed the issue of community effects. The focus of the early research was on testing the concentration-effects hypothesis in inner-city neighborhoods and on major problems among adolescents such as childbearing and dropping out of school. A consistent finding in numerous studies showed that neighborhood influence
on teenage childbearing and dropping out of school was substantial in impoverished neighborhoods (Anderson 1991; Crane 1991a, 1991b; Mayer 1991; Duncan and Hoffman 1991), which suggests that neighborhood effects are much larger in areas of extreme poverty than elsewhere (Crane 1991b).

In recent years, the topic on neighborhood effects has drawn more interest and attention from researchers. The research was no longer limited to inner-city neighborhoods, but was extended to study communities and neighborhoods among economic and racial groups at various levels of neighborhood quality. In addition, the focus was expanded to include such socioemotional outcomes as social adjustment, depression, social competence, and externalizing behavior. These topics reflect a concern with the overall development of children and adolescents living in poverty and economically disadvantaged environment (Huston et al. 1994).

A large body of research has suggested that neighborhood context plays an important role in shaping the fertility-related behaviors of adolescents. For example, Brewster (1994) found that race differences in adolescent sexual activity are a function of racially segregated neighborhood environments. Neighborhood socioeconomic status and female experiences in labor market were important determinants of the race difference in the timing of first intercourse, contraceptive use at first intercourse, and nonmarital childbearing. Further, Brewster concluded that adolescents of both races respond similarly when exposed to environmental constraints and opportunities.

Brewster's argument was extended when Billy, Brewster and Grady (1994) studied the effects of community context on adolescent sexual behavior of both races. Their findings
showed that community characteristics such as social disorganization, socioeconomic status, religiosity, female labor force participation, population composition, and the availability of family planning services all affected at least some aspects of white and black teens’ sexual behavior.

Through a multilevel analysis, Ku, Sonenstein and Pleck (1993) explored the effects of neighborhood, family, and individual characteristics on premarital sexual behaviors of adolescent males. They found that more limited economic opportunities at the community level in terms of higher neighborhood unemployment rates were independently associated with greater risk of impregnation and paternity.

Sexual behavior is one instance of adolescent maladjustment; some other socioemotional outcomes are also likely to reflect the structural constraints on adolescent cognitive, behavioral, and psychological development. A study by Crane (1991b) showed that for both blacks and whites, dropping out of high school was very likely to occur in neighborhoods where fewer than 5% of the adults had professional or managerial job. Brooks-Gunn et al. (1993) found powerful neighborhood effects on adolescent developmental outcomes, even after adjustments for family socioeconomic status. For both black and white children and adolescents, residence in low-income neighborhoods with a high rate of female-headed households, male joblessness, racial composition, and welfare dependence affected cognitive and social/emotional development such as childhood IQ, teenage births, and leaving school. Children with affluent neighbors were found to have higher IQs, whereas those with low-income neighbors had more externalizing problems (Duncan, Brooks-Gunn and Klebanov 1994).
A similar pattern was found in Simons et al.'s (1996) study of the effect of community structure on adolescent problem behavior in rural Midwestern communities. Their findings showed that proportion of single-parent households had a direct effect on girls' conduct problems after controlling for family characteristics.

People find more serious crimes in poor neighborhoods than in affluent ones, and one major reason people move out of poor neighborhoods is to escape crime (Jencks and Mayer 1990). Living in a poor neighborhood increases an individual’s chances of being the victim of a crime because in such a neighborhood values of decency and law-abidingness are more easily compromised (Anderson 1991).

There has been little research on neighborhoods’ impact on teenage serious crime. However, the association between serious crime and neighborhood environment was found in Johnstone's early study (1978) of adolescents in the Chicago area. The results of the study showed that teenagers in low-SES neighborhoods committed more serious crimes than those in middle-SES and high-SES neighborhoods. In addition, low economic status in communities has long been a major ecological correlate of crime and delinquency (Kornhauser 1978; Bursik 1984), and macro-level family disruption was found to have large direct effects on rates of juvenile crime by both whites and blacks (Sampson 1987). In a recent study on inner-city neighborhood effects, Wilson (1991b) argued that a social context that includes poor schools, inadequate job information networks, and a lack of legitimate employment opportunities not only gives rise to weak labor-force attachment, but also increases the likelihood that individuals will seek income from illegal activities.
As argued by Wilson (1991b), long-term unemployment status may produce feelings of low perceived self-efficacy, and this inability to influence significant life events and conditions can, in turn, lead to feelings of despondency, anxiety, and low self-esteem (Bandura 1982; Wiltfang and Scarbecz 1990). In a community characterized by widespread unemployment and poverty, low collective efficacy is formed as an individual's feelings of low self-efficacy are strengthened by the similar feelings and beliefs of others who are in a similar situation.

Consistent with Wilson's social psychological model in which an impoverished community and a social environment characterized by apathy and fatalism engender psychological distress in its residents, some research found that children who live in neighborhoods characterized by poverty, violence, and family distress are likely to manifest distress symptoms, such as sleep disturbances and aggressive behavior (Bell 1991; Osofsky, Wewers, Hann, and Fick 1991). Using the sample from small, rural communities in Midwest, Simons et al. (1996) found that community disadvantages such as high rates of poverty, unemployment, receipt of government assistance, and high school dropouts had a negative effect on the psychological well-being of adolescent boys.

The theoretical perspective in the study of community effects is grounded in ecological theories of developmental psychology, which view individuals in the context of environments such as family, peer group, neighborhood, and community. The basic assumption of ecological models is that since development occurs within contexts, individuals cannot be studied without considering ecological systems in which they operate (Bronfenbrenner 1989). To understand the nature of community effects, research has gone
Researchers have proposed three different mechanisms by which neighborhoods influence individuals (Jencks and Mayer 1990; Crane 1991b; Wilson 1987, 1991a, 1991b). They are contagion theory, collective socialization theory, and institutional theory. Contagion theory focuses on the power of peer influence as the mechanism of neighborhood effects. In a test of a contagion theory on adolescent problem behavior, Crane (1991b) found that social problems are contagious and are spread through peer influence. Some communities experienced epidemics of social problems among adolescents because the incidence of certain characteristics reaches a high level that may increase the susceptibility to peer pressure.

Steinberg (1987) found compared with adolescents from two-parent families, those from single-parent families were more influenced by peers to engage in antisocial behavior. A consistent finding among researchers showed that poor urban young people often develop strong peer subcultures that generated social problems (Liebow 1967; Fischer et al. 1977; MacLeod 1987). Brooks-Gunn et al. (1993) concluded that poor neighborhoods characterized by substantial numbers of deviant peers impact adolescents more than preschoolers because adolescents have more contact with peers than do preschoolers, and thus experience stronger contagion effects.

Collective socialization theory considers role models of adults and informal social controls as important ways in which neighborhoods influence behavior. As argued by Brooks-Gunn et al. (1993), the economic character of neighborhoods affects adolescents through informal job networks, neighborhood-level monitoring of teenage behavior, and
positive role models. In good neighborhoods, the resources and role models of traditional success provided by affluent neighbors play an important role in adolescent socialization (Wilson 1991a, 1991b). With cohesiveness and network density in these neighborhoods, supervision becomes a neighborhood affair (Furstenberg 1990).

Unlike good neighborhoods, disadvantaged communities are likely to have fewer adults whose behaviors associate with conventional models of economic and social success (Wilson 1987). Furthermore, a high proportion of single-parent households in these communities decreases informal social control at the community level (Sampson 1987), and increases the inability of the neighborhood to monitor teenage behavior (Brooks-Gunn et al. 1993).

The importance of family structure in community social control was well demonstrated by Cohen and Felson's (1979) argument that two-parent households provide close supervision and guardianship not only for their own children and property, but also for general activities in the community. Therefore, some researchers came to the conclusion that if there were a lot of role models for traditional success (Crane 1991a), and a network of collective family control and supervision of peer groups in the poor neighborhoods (Thrasher 1963; Reiss 1986), young people would have more incentive to stay in school and avoid having children.

Institutional theory emphasizes the role that community institutions such as schools, business, and social service agencies play in the community. One of the deleterious consequences of changes in socioeconomic composition in poor communities is deteriorating services and institutions that serve the community (Wilson 1987). A study by Billy et al.
(1994) showed that communities with low socioeconomic status influenced individuals through both normative and opportunity mechanisms.

The inability of the community to provide its teenage residents with good schools, training programs, and recreational activities gives rise to a prevailing normative environment which encourages departure from conventional life-course trajectories, weakens the system of normative control by delimiting the boundaries of acceptable behaviors, and thus increases the likelihood of adolescent antisocial behavior (Brewster 1994). The community economic structure characterized by the "blocked opportunities" and a paucity of community resources influences adolescents' expectations and may jeopardized their future occupational attainment (Geronimus 1987). In a community where the unemployment rate is high, adolescents may consider the negative consequences of deviant behavior to entail little lost in terms of future attainment and thus be unimportant relative to its immediate benefit such as affirmation of adulthood (Brewster 1994), and peer acceptance.

In sum, these three theories build upon Shaw and McKay's (1942) social-disorganization model, which depicts community disadvantage such as low economic status and residential mobility as structural barriers that impede development of the formal and informal ties to maintain effective social controls over youth. The model suggests that low-socioeconomic-status communities suffer from a weaker organizational base than higher-status communities. The effects of socioeconomic status thus affects crime and delinquency rates primarily through formal and informal controls as reflected in organizational participation and community supervision of local youth (Sampson and Groves 1989).
Family Environment and Adolescent Resilience

Despite the fact that disadvantaged communities affect the socioemotional development of adolescents, and that adolescents at high-risk for emotional or behavior problems are much likely to come from impoverished and deteriorating neighborhoods, a large number of adolescents growing up in adverse environments progress normally, successfully negotiate major developmental tasks, and demonstrate positive developmental outcomes (Mechanic 1991; Safyer 1994; Simons, Whitbeck, and Wu 1994). For example, research has shown that many African American children do well in school and are well adjusted to the risk conditions even though the majority of their families must contend with poverty and other stressors (Luster and McAdoo 1994; Barbarin 1993). Other research has also indicated that among children who are identified as being at-risk for problem outcomes such as delinquency, 50 percent of them do not go on to lives of delinquency and crime (Robins 1978; Rutter and Giller 1983; Werner and Smith 1982; West 1982).

Researchers in the field of child psychopathology have defined these youngsters as resilient in that they maintain adaptive functioning in the face of serious risk hazards (Rutter 1990), and described them as competent in that they maintain effective functioning in important tasks such as school adjustment, peer acceptance, and positive family relationships (Garmezy 1983). In exploring the roots of resiliency, researchers have focused on protective factors and mechanisms that moderate, buffer or mitigate the impact of risk factors and bring about changes in life trajectories from risk to adaptation (Rutter 1987; Brook, Brook, Gordon, Whiteman, and Cohen 1990). The concept of “protective factors” has become firmly established in the field of psychiatric risk research (Garmezy 1985; Masten and
In a summary of the literature, Garmezy (1985) identified three sets of factors that differentiate competent and incompetent children who face highly stressful environments: individual characteristics such as autonomy, self-esteem, and a positive social orientation; parent-child relationships in terms of cohesion, warm and an absence of discord, and social environments that encourage and reinforce a child's coping efforts. Jessor (1991) summarized protective factors in terms of four conceptual domains. The social environment domain includes a cohesive family, a neighborhood with informal resources, and a caring adult; the perceived environment domain is characterized by peer models for conventional behavior, and strict social controls; the personality domain reflects the importance of high value on academic achievement and high intolerance of deviance; the behavior domain captures such factors as involvement in conventional behavior such as church attendance and participation in school activities.

Bronfenbrenner's (1979) ecological model proposed that the family, peer group, school, and neighborhood are the primary social settings that impact adolescents' development, and risk factors in one microsystem can be mitigated by protective factors in another (Brook, Nomura and Cohen 1989). Findings in resilience research repeatedly showed that families provide the most important influences to promote resilience among adolescents, and parent-child relationships have emerged as a key factor in predicting adolescent adjustment to a major stress (Rolf et al.1990).
It is commonly believed that adolescence is a time when youth test their autonomy and independence. However, "the family is not at risk for turmoil or disorganization during the adolescent years" (Hauser and Bowlds 1990, p. 203). Adolescents depend substantially on the security of home and parents, and better adjusted adolescents experience greater closeness with their parents (Mechanic 1991; Steinberg 1990). It was found that parent-adolescent relationships are especially important for adjustment and personality development (Schwarz 1979). Family, as an important socializing agent, not only provides love, security, and acceptance, but also develops motivation, skills, and coping capacities for adolescents (Machenic 1991).

For more than one decade, researchers have given enormous attention to the role of family in the achievement and maintenance of competence despite various risk situations in family, peer group and community. In examining a large sample of urban youth who were at high family-based risk for delinquency and drug use, Smith et al. (1995) found that the attachment to at least one parent, and parenting factors such as establishing rules and expectations for conforming behavior functioned as important protective factors over the adolescent life span. Chandy, Harris, Blum, and Resnick (1993) studied school children of alcohol abusing parents and tried to understand the impact of parental alcohol misuse on these children's school performance. They found that the family influence such as high parental expectations of the children was the most powerful protective factor that differentiated the resilient group from those at risk for school dropout. In a study of family illness by Rutter (1978), it was found that the presence of a good parent-child relationship served to reduce the psychiatric risk associated with family discord.
In a test of family interaction theory, Brook et al. (1990) studied a group of college students and found that parent-child attachment as measured by socialization and control techniques could offset risk factors (e.g., peer drug use), and led to less adolescent marijuana use. In a related vein, Brook, Whiteman, Gordon, and Cohen (1986) found that protective factors in the parent-adolescent relationship can mitigate risk factors stemming from the peer group, thereby leading to less alcohol use by the adolescent. Rubenstsein, Heeren, Housma, Rubin, and Stechler (1989) examined risk and protective factors in suicidal public high school students. With life stress and depression as risk factors, family cohesion was found to mitigate the effect of stress. Thus in the face of risk situation, adolescents are less likely to be suicidal if they perceive their families to be more cohesive and adaptable.

Safer (1994) conducted a study of adolescents in urban, low-income communities, who were exposed to chronic violence and deprived of necessary resources. She found that among other resources, emotional support from at least one parent can mitigate the effects of inner-city stress, and thus protect these adolescents from experiencing developmental arrest and impairment (Garbarino, Dubrow, Kostelny, and Pardo 1992). Wills, Vaccaro, and McNamara (1992) studied a multiethnic sample of urban adolescents and found that emotional and instrumental support from parents played an important role in enhancing adolescents’ ability to cope with various life stressors and thus buffering the effect of stressful life events on substance use of the adolescents. In 1955, a team of social scientists did a longitudinal study of children in the Hawaiian island of Kauai, who were born into poverty and lived in a adverse family environment. Among five clusters of protective factors confirmed by the study, caregiving styles of the parents, positive parent-child interactions,
and emotional support of parents were shown to reflect competence and foster resiliency in the children, which in turn buffered chronic adversity and helped the successful transition into adulthood (Werner 1992). Similarly, Elder's (1974) study of children who grew up during the Great Depression found that if they received emotional support from their families, they were able to develop unusually satisfying socioemotional ties despite the circumstances of economic deprivation.

Rutter (1987) argued that to help vulnerable youngsters, risk researchers need to shift their focus from identifying protective factors to understanding protective mechanisms or processes by which risk negotiation occurs. Two possible mechanisms of protection against disadvantageous community environment were emphasized by empirical findings in resilience literature. They are reduction of risk impact on the individual and establishment and maintenance of self-esteem and self-efficacy.

The first mechanism features the alteration in exposure to the risk situation or involvement in its risky aspects. The implication of this mechanism is that physically removing or distancing from a risk environment is important in reducing its impact on the individual (Rutter 1985). People believe that the bad community often impacts adolescents through influences of deviant peers because relationships with peers usually didn't involve affective bonds but shared antisocial behavior such as shoplifting, vandalism, or drug use (Hetherington 1993). It is evident that parenting involvement and emotional support may lead to less exposure to or involvement in peer activities, which in turn attenuate the risk effect of the community.
Wilson (1974, 1980) found that strict parental supervision and regulation of adolescents' involvement with peer group activities reduced their risk for delinquency in a high-risk environment. The findings of Patterson and Stouthamer-Loeber (1984) also showed that given the fact that most urban neighborhoods are risky, effective parental monitoring of children's activities outside the home increased the chance that young people were kept away from risk for antisocial peer group activities.

It is well established that family and peers are two important socialization agents for adolescents. On the one hand, adolescents depend substantially on parents for love and acceptance as well as instrumental assistance necessary to develop motivation, skills, and coping capacities for their normal development (Mechanic 1991). On the other hand, they are apt to be involved in antisocial peer activities which can be instrumental in gaining peer acceptance and respect; in establishing autonomy from parents; in coping with anxiety, frustration, and failure; or in affirming maturity and status of adulthood (Jessor 1991). However, during adolescence, peer groups pressures compete seriously with family influences (Mechanic 1991). For example, Bronfenbrenner (1974) argued that adolescents would turn to peers for the companionship and emotional support they felt they couldn't receive from their parents. Similarly, adolescents who lack good child-parent relationship are eager to escape unpleasant homes and very likely to spend more time in unsupervised contexts where delinquent behavior is most likely to occur (Feldman and Weinberger 1994).

The second mechanism focuses on maintenance and establishment of positive self-concepts in terms of self-esteem and self-efficacy. Despite the fact that controlled exposure to the risk environment can help adolescents' successful adaptation in their socioemotional
development, it is natural that one's life involves unavoidable encounters of stressors and adversities, and thus, as argued by Rutter (1990), it is not realistic to suppose that children can be so sheltered that they can avoid these negative encounters. In fact, a growing body of research has shown that protection may lie in individual qualities such as self-esteem (Harter 1983) and self-efficacy (Baudura 1977).

According to Rutter (1990), the nature of protective mechanism is the promotion of adolescents' self-esteem and self-efficacy. In the face of high-risk community environment, it is protective to have well-established feelings of one's own worth and ability to cope successfully with life challenges and to control what happens to him/her.

It is commonly believed that good intimate relationships in family increase an individual's self-esteem and self-efficacy, while the absence of such relationship leads to alteration in their self-concept. Family attachment and support exercise its protective function through its effects on enhancing self-esteem and self-efficacy. Numerous studies have shown that secure attachment to parents and supportive parent-child relationship enable children to grow up with a feeling of high self-esteem and self-efficacy, which provides a degree of protection against later risk situations (Main, Kaplan, and Cassidy 1985; Ricks 1985; Rutter 1987, 1989). There is evidence in other research suggesting the positive relationship between self-concept and social competence, such as conventional attitudes, beliefs and problem-solving skills. Research has shown that conventional attitudes and beliefs make adolescents more resistant to temptation or pressure for deviant behavior (Jessar and Jessar 1977) and thus encouraged more adaptive and persistent coping in risk situations (Thoits 1986). In addition, adolescents with positive self-concept and social competence may
have better relationships with mainstream peers and get more assistance from adults for problems (Dishion, Reid and Patterson 1988).

In sum, the first mechanism refers to the process by which community risk factors such as affiliation with deviant peers can be attenuated by protective factors in family environment. The second mechanism denotes what Brook et al. (1990) called “a synergistic interaction,” which means the presence of the protective factor in parent-child relationship enhances other protective factors such as self-esteem and self-efficacy in adolescents, and as a consequence this process increases the buffing effect of protective factors on the risk environment.
CHAPTER THREE

HYPOTHESES

The general conceptual framework for the present study is developmental psychopathology, which focuses on the relationship between psychopathology and major changes occurring across the life cycle (Achenbach 1990) or the processes underlying adaptation and maladaptation (Cicchetti 1990). Research on resilient adolescents has shown the significance of the environmental resources and social context in buffering the impact of risk factors on high-risk adolescents (Eggert, Thompson, Herting, and Nicholas 1994). Using Bronfenbrenner’s (1979) ecological model as a guide to adolescent development, we conceptualize the family and community as segments of the adolescent’s ecological environment, one interacting with the other to influence adolescents’ socioemotional development.

Community Effects

The first hypothesis is that community disadvantage will be positively associated with adolescent conduct problems and psychological distress. The community effect on adolescent outcomes has been a major concern of research in sociology, psychology, and criminology (e.g., Wilson 1987; Bronfenbrenner 1989; Sampson 1989). Numerous studies have found the association between socioeconomic characteristics of communities and important developmental outcomes of adolescents. Current research on community effects is multidisciplinary, using a broad range of frameworks and methods from various fields, and
involving multiple levels of analysis, both cross-sectional and longitudinal. The outcomes studied were expanded beyond intellectual development to socioemotional functioning (Huston et al. 1994).

Even though researchers are increasingly aware of the variations in community effects that are associated with specific groups such as race, gender, and ethnicity, virtually almost all of the research has focused on children living in large urban areas (Simons et al. 1996), while ignoring children residing in poor rural communities. There is evidence that the rate of childhood poverty is as high or even higher in American rural areas (Huston et al. 1994). For example, studies of the rural Midwest showed that the 1980s witnessed the most dramatic economic decline in the area, with thousands of farmers and small businesses going bankrupt, and the poverty rate increased beyond that in metropolitan areas (Davidson 1990; Friedberger 1989). Given this fact, researchers started to address the neglect and found that continuing disadvantage in these communities was associated with problems in adolescent adjustment (Simons et al. 1996).

This study will continue the line to test the community impact on adolescents in rural communities. Research suggested that adolescent boys are apt to be exposed to the adverse community environment and thus have a high level of vulnerability to emotional disturbance and at-risk behavior (Rutter 1990). Therefore boys in single-mother families will be the focus of the study. We will look at two important domains of adolescent development - behavioral problems and emotional well-being. Research showed that adolescence is a time period that is characterized by a rapid escalation in delinquent behaviors (Feldman and Weinberger 1994) and vulnerability to psychological dysfunction (Hauser and Bowlds 1990).
As the consequence of growing up in communities that are plagued by poverty and in families that fail to provide emotional support and guidance, the maladjustment was prevalent especially among economically and socially disadvantaged youth (Dryfoos 1990).

Family Moderating Effects

A majority of adolescent theorists maintain that the parenting behavior and parent-adolescent relationship are critical for several areas of adolescent development (Conger and Petersen 1984; Youniss 1983). Given a highly stressful environment, the existence of appropriate parenting behavior and a supportive family relationship decreases the likelihood that an adolescent will be socially maladjusted (Zelkowitz 1978). The point was well demonstrated in Elder’s (1974) study of children who grew up during the Great depression and Werner’s (1992) research on children of Kauai who were born into poverty. Thus we expect to see that appropriate parenting behavior and good mother-adolescent relationships mitigate the effect of community disadvantages on adolescent behavioral and emotional development.

The review of literature has shown that past research has only focused on the family buffering effect on community disadvantage for a single developmental outcome, but failed to identify the different family protective factors for different outcomes. Given the fact that community disadvantage affects several aspects of adolescent development, family protective factors may vary by types of problems.

The second hypothesis is that parental control will buffer the effect of community disadvantage on adolescent conduct problems. There is strong evidence that direct parental
controls are associated with adolescent antisocial behavior. Patterson (1980, p.88-89) argued that "parents who can not or will not employ family management skills are the prime determining variables.... parents of stealers do not track; they do not punish; and they do not care." Patterson, DeBrayshe, and Ramsey (1989) found that measures of parenting practices and family interactions accounted for 30%-40% of the variance in antisocial behavior. Lack of involvement, low levels of monitoring, and inconsistent parenting were found to be the most powerful predictors of delinquency and other conduct problems (Loeber and Stouthamer-Loeber 1986). In disadvantaged communities characterized by rampant social problems and susceptibility to influences of deviant peers, parental control appears to be especially important in preventing adolescents from exposure to and involvement in antisocial activities (Patterson and Stouthamer-Loeber 1984).

The third hypothesis is that parental warmth/support will buffer the effect of community disadvantage on adolescent psychological distress. Parental warmth/support is often cited as a critical dimension of parenting in theories of child development (Brook et al. 1990). Research has suggested that a supportive parent-adolescent relationship plays an important role in reducing psychological distress and enhancing emotional well-being of adolescents (Rutter 1978). Studies of adolescent mental patients found a positive association between psychological health and family support, and a negative association between psychiatric distress and family warmth (Tyerman and Humphrey 1983; Niedermeier et al. 1995).

The significance of parental warmth/support in disadvantaged communities lies in its "neutralizing" effects. Study by Quinton and Rutter (1988) suggested that there may be
many sources of emotional well-being and that a lack in one domain may be compensated for by the presence of relevant experiences in another domain. In a disadvantaged community where its apathy and fatalism engender psychological distress in adolescents, parental warmth and supportive parent-child relationship appear to be the most important compensatory source of emotional well-being. The three hypotheses to be tested are shown in the conceptual model in Figure 1.
Figure 1. Conceptual Model of Family Moderators of Relation between Community Disadvantage and Adolescent Adjustment Problems
CHAPTER FOUR

METHODS

Sample

The study used data from Wave 1 of the Iowa Single Parent Project (ISPP), a panel study designed to assess the effect of the Midwest agricultural crisis on rural Iowa families in general and the impact of family disruption on adult and adolescent adjustment in specific. The first wave of data was collected in 1991 from 207 white, female-headed households with target adolescents of 8th- and 9th-graders. These households were selected from approximately two thirds of all counties in Iowa. Consistent with the rural context of the study, university communities (e.g., Ames and Iowa City) and the larger metropolitan areas (e.g., Des Moines) were excluded from the sampling frame. Families recruited for the study were identified through lists of students provided by schools. The name of each student's parent was identified on the lists which suggested the individual was female. Families were contacted through telephone explaining the project and inviting them to participate. The present study focused on 99 adolescent boys in single-mother families.

The major focus of the ISPP is to address various theoretical concerns and questions by examining the manner and process in which adolescents cope with parental divorce. To meet with this goal, families were screened according to the criteria that the mothers were permanently separated from their husbands, that the separation had occurred within the past 2 years, that the divorced husband was the biological father of the target child, and that there is a sibling in the household within 3 years of age of the target child. Among the families that
were telephoned, only 15% met all these requirements. Of the eligible families, 99% agreed to participate. The high response rate appeared to reflect two major concerns of the family: the need for the $175 subject compensation fee, and the desire to facilitate research concerned with the difficulties experienced by single-parent mothers.

The families spread in 104 communities, with most of the communities containing only one or two study families. Median family income, including child support and government payment, was $21,521. Of all the households 25.4% were below the poverty line, a higher rate than 21.8% at the nation's level in 1991 (U. S. Bureau of the Census 1992). Mean level of education for the mother was 13 years. Only 4% had not completed high school, 42% had some post high school training, and 16% had a college degree. This distribution for education was comparable to that for the state as a whole. For the total sample, 80% of the mothers were employed by others, either part time or full time. Mothers' occupation included 32% professionals including teachers, 38% clerks and secretaries, 10% technicians and skilled workers, 18% service and households workers. Mean ages for the mothers and target children were 38.5 and 14.3 years, respectively.

**Procedures**

Each family was visited twice for interviews at their home, and each interview took approximately 2 hours. During the first visit, the project interviewer asked each of the three family members to complete independently a set of questionnaires focusing upon individual family member characteristics, family relationships, family economic condition, and mental as well as physical health status. After the first visit, the family was left with a set of
questionnaires concerning topics such as beliefs about parenting, work situation, and plans for the future. Each family member was asked to complete the set of questionnaires before the second visit, and submit them to the interviewer at the time of the second visit.

During the second visit that usually occurred within 2 weeks after the first, the family members were asked to complete additional questionnaires asking about significant life events and personal characteristics. The families were also videotaped without the presence of the interviewer as they engaged in three different structured interaction tasks. In each task, family members were given a set of cards with questions that provoked discussions among them. The tasks involved various topics such as family relationships, solution to problems and disagreement, and family interaction. The tasks took from 15 to 30 minutes.

The videotapes were coded by project observers using the Iowa Family Interaction Rating Scales (Melby et al. 1990). These scales focus on the quality of behavior exchanges between family members (e.g., hostility, warm/support, and communication). The project observers had received 2 months of training on rating family interactions and had passed several tests in the coding task they specialized in.

Measures

The multiple measure is one of the characteristics of the study. As demonstrated by the conceptual model in Figure 1, the study was based on five theoretically interesting concepts, namely, community disadvantage, parental control, parental warmth/support, psychological distress, and conduct problems. Each of these concepts represented a complex, multi-facet phenomenon that cannot be operationalized by a single measure. Therefore, a
group of valid and reliable individual measures were combined to indicate more general characteristic of the concept and thus capture the "full" meaning of the theoretical construct. Furthermore, the measures used in the study were constructed with multiple sources to avoid the problem of shared method variance (Bank, Dishion, Skinner, Patterson 1989; Lorenz, Conger, Simons, Whitbeck, and Elder 1991).

Data from U.S. Census reports for Iowa were used to generate measures for the community structure. The concept of "community disadvantage" has become well established in research of community effects. Parameters such as rate of poverty, unemployment, high school dropouts, and single-parent households are most commonly used indicators for the disadvantaged community (e.g., Simons et al. 1996; Wilson 1991a; Brooks-Gunn et al. 1993). and have been found to have a strong influence on adolescents’ socioemotional development (e.g., Brewster 1994; Ku et al. 1993; Bandura 1982).

Self-report data were employed to form measures of the two adolescent outcomes. Given the fact that discrepancies occurred between self-reports and parent-reports (Gjerde, Block, and Block 1988) and between self-reports and observer-reports (Weissman, Klerman, and Paykel 1971), adolescents themselves appear to be the best reporters of their own problems, especially deviant behaviors (Simons and Associates 1996).

Quality of parent-adolescent relationship was assessed through target reports. Because parenting is a complex interaction process rather than personal attributes, targets’ perception of the parenting behavior may be more reliable and valid measures of parent-adolescent relationships (Olson 1977). By the same token, because there are large
discrepancies between parent reports of their parental interest and their children’s perceptions of their parents’ interest (Mechanic 1991), boys’ reports may be more valid measures of the depth of parental involvement.

**Community Disadvantage**

Community disadvantage scale was formed by summing four variables: the proportion of family income below poverty level, the proportion of adult males unemployed or working part-time (i.e., underemployed), the proportion of adults with less than a high school education, and the proportion of female-headed households with children under 18 years. These measures have been found to be good indicators of the socioeconomic disadvantage in urban communities. Given the fact that the rural communities have experienced dramatic economic decline and the severe economic hardships, these same measures were used in the present study to test the effect of disadvantageous community on adolescent adjustment problems in rural settings.

The proportions for these variables ranged from 2-28% with an average of 11% for poverty, from 11-42% with an average of 26% for unemployment and underemployment, from 13-44% with an average of 23% for adults with less than a high school education, and from 0-20% with an average of 9% of single-parent households. Coefficient alpha was .62 for the 4-item index of community disadvantage. As shown in Table 1, except the moderate relationship between high-school dropouts and single-parent households, all measures are highly correlated. For example, poverty was significantly positively correlated with single-
parent households ($r = .51, p < .001$), high-school dropouts ($r = .30, p < .001$) and underemployment ($r = .47, p < .001$), and high-school dropouts were significantly positively correlated with unemployment and underemployment ($r = .43, p < .001$). Single-parent households were also positively correlated with unemployment and underemployment ($r = .14, p < .05$).

Table 1. Correlation Matrix of Measures for Constructs

<table>
<thead>
<tr>
<th>Community Disadvantage</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Single-parent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Less than high school</td>
<td>-.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Poverty</td>
<td>.51**</td>
<td>.30**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Underemployed</td>
<td>.14*</td>
<td>.43**</td>
<td>.47**</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Parental Control</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Consistence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Induction</td>
<td>.29**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Monitoring</td>
<td>.39**</td>
<td>.50**</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parental Warmth/support</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Relationship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Warmth</td>
<td>.70**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Closeness</td>
<td>.70**</td>
<td>.67**</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Conduct Problems</th>
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<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Delinquent behavior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Drug use</td>
<td>.69**</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Psychological Distress</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Depression</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Hostility</td>
<td>.61**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Positive affect</td>
<td>-.56**</td>
<td>-.51**</td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$
** $p < .001$
Parental Control

Parental control involves both family management skills and parenting practices. Based on parenting scales developed by Thornberry (1988), past research has indicated that parental monitoring, consistent discipline, and inductive reasoning are powerful predictors of adolescent delinquency and other conduct problems. Pretest analysis for the ISPP also showed these scales to be internally consistent measures of parental control and correlated with adolescent problem behavior.

The first scale focused on inductive reasoning. The respondent was asked how often (1=never; 5=always) his mother 1) gave him reasons for her decisions, 2) asked what he thought before making a decision about him, 3) explained the reason when he had to follow her rule, and 4) disciplined him by reasoning, explaining, or talking. These four items were summed in the direction of high level of induction.

For parental monitoring, the respondent was asked how often (1=never; 5=always) his mother 1) knew where he was, 2) knew who he was with outside home, 3) talked with him about what was going on in his life, 4) gave him a set time to be home or in bed on weekend nights, 5) knew if he came home or were in bed by the set time, and 6) was available to do things with him. These six items were summed in the direction that high scores indicated good parental monitoring.

For parental consistent discipline, the respondent was asked how often (1=always; 5=never) his mother 1) gave up when he did not do right away what she asked him to do, 2) ignored him when she asked him to stop doing something and he did not, 3) let him go when he did something wrong and she decided on a punishment, 4) punished him for something at
one time, and did not at other time, 5) punished him because of her bad mood, 6) grounded
him when he did something wrong, and 7) disagreed with his dad about how and when to
punish him. These seven items were summed in the direction with high scores predicting
consistent discipline. Table 1 shows that these three scales were highly correlated. For
example, inductive reasoning was significantly positively correlated with consistent
discipline (r = .29, p < .001) and parental monitoring (r = .50, p < .001), and consistent
discipline was positively correlated with parental monitoring (r = .39, p < .001). The three
scales were standardized and summed to create the measure of perceived parental control.
Coefficient alpha was .77 for this measure.

**Parental Warmth/Support**

Parental warmth/support is concerned with the extent to which parents serve as a
source of support for their children. Derived directly from the Technical Report for the ISPP,
three measures were used to form a scale that reflected parent-adolescent attachment. The
closeness to mother, as a cognitive dimension, focused on the boys' perceived association
and emotional bond to the mother. The warmth of mother, as a behavioral component,
emphasized the mother's loving and accepting of the child. As the Gluecks (1950) observed,
parent-child attachment is a "two way street" - parent to child and child to parent. Thus the
measure of relationship quality with mother provided information of the boys' acting toward
and evaluation of the relationship with their mothers.

For closeness to mother, the respondent was asked how often (1=often; 4=never) his
mother 1) made too many demands on him, 2) made him feel tense while he was around her,
3) made him feel she was never there for him when he really needed her, 4) never kept her promises to him, 5) didn’t understand the way he felt about things, 6) made him feel he shouldn’t tell her about things because she might be upset, 7) acted as if she was the only important person in the family, 8) seldom showed concern for his feelings and problems, 9) insisted on having her own way, and 10) expected more from him than she was willing to give. These ten items were summed in the way that high scores showed strong closeness to mother.

For relationship quality with mother, the respondent was asked the extent (1=low; 4=high) to which 1) he talked to his mother about things that he didn’t want others to know, 2) he was satisfied with his relationship with his mother, and 3) he was happy with the way things were between him and his mother. The three items were summed in the direction of high relationship quality with mother.

For warmth of mother, the respondent was asked how often (1=never; 7=always) his mother 1) asked him for his opinion about an important matter, 2) listened carefully to his point of view, 3) let him know she really cared about him, 4) acted loving and affectionately toward him, 5) let him know that she appreciated him, his ideas or the things he did, and 6) helped him do something that was important to him. These six items were summed with high scores indicating warmth of mother. As shown in Table 1, these three scales were highly correlated. For example, warmth of mother was significantly positively correlated with closeness to mother ($r = .67, p < .001$) and relationship with mother ($r = .70, p < .001$), and closeness to mother was positively correlated with relationship with mother ($r = .70,$
p < .001). The three scales were standardized and summed to form perceived parental warmth/support. Coefficient was .93 for this measure.

Conduct Problems

Past research has shown that delinquent behavior and drug use are most commonly used measures of adolescent conduct problems. Whereas substance use is associated with self-abuse, escape, and internalizing problems, delinquency is considered to be externalizing behavior that usually involves damage to others. Based on the National Survey of Delinquency and Drug Use (Elliott, Huizinga, and Ageton 1985; Elliott, Huizinga, and Menard 1989), the present study employed 17 items indicative of the full range of acts from minor offenses to serious behavior for which juveniles can be arrested, and 13 items representative of the full array of tobacco, alcohol and drug commonly used by adolescents.

For delinquent behavior, the respondent was asked how often (0=never; 5=6 or more times) in the past year he had run away from home, taken something less or more than $25 worth, driven a car when drunk, skipped school, taken a car just to drive around without the owner’s permission, beat up someone, gone to court, been placed on probation or in jail, snatched someone’s purse, been drunk in a public place, damaged property on purpose, broken into a building for fun, thrown objects at people, attacked someone with a weapon, and sold illegal drugs. These items were summed in the direction of high level of deviant behavior.

For drug use, the respondent was asked how often in the past year he had used substance such as beer, wine, marijuana, PCP, amphetamines, cocaine, and other prescription
drugs without a doctor's prescription. The responses ranged from 1 (never) to 5 (6 or more times). These items were summed in the way that high scores indicated high frequency of substance use. Table 1 indicates that delinquent behavior was significantly positively correlated with drug use ($r = .69$, $p < .001$). The two scales were standardized and summed to create the measure of conduct problems, with an alpha of .91 for the measure.

**Psychological Distress**

Depression and hostility have been considered as the major components of people's psychological distress, and past research has established the reliability and validity of the instrument (Derogatis 1983). As different expressions of distress, depression shows internalization of distress while hostility indicates externalization of disorder. Consonant with the emphasis on the nature of adolescent emotional well-being in the study, the positive affect measure was added to show adolescent view in life.

The depression scale included 12 items, with a response scale ranging from 1 (not at all) to 5 (extremely). The respondent was asked to rate depressive symptoms during the past week. These symptoms included feeling hopeless about the future, poor appetite, feeling everything is an effort, feelings of worthlessness, feeling low in energy, thoughts about ending life, feelings of being trapped or caught, blaming self for things, feeling lonely, feeling blue, worrying too much about things, and feeling no interest in things. All items were summed in the direction of a high degree of depression.

The hostility scale consisted of 6 items. Using a response scale ranging from 1 (not at all) to 5 (extremely), the respondent was asked how much he had been distressed or bothered
by 1) feeling easily annoyed or irritated, 2) uncontrollable temper outbursts, 3) urges to beat, injure, or harm someone, 4) urges to break or smash things, 5) getting into frequent arguments, and 6) shouting or throwing things. These items were summed with high scores indicative of a high level of hostility.

The positive affect scale included six items from the Positive Affect Subscale of the Mental Health Inventory (Veit and Ware 1983). The respondent was asked the extent (1=none of the time; 6=all of the time) to which he 1) enjoyed the things he did, 2) felt that the future looked hopeful and promising, 3) felt that daily life had been full of interesting things, 4) felt relaxed and free of tension, 5) was a happy person, and 6) felt that living had been a wonderful adventure. These items were summed with high scores showing positive view in life. The three scales, as shown in Table 1, were highly correlated. For example, depression was significantly positively correlated with hostility (r = .61, p < .001) and negatively correlated with positive affect (r = -.56, p < .001), and hostility was negatively correlated with positive affect (r = -.51, p < .001). The three scales were standardized and summed to form the measure of psychological distress, with an alpha of .92 for the measure.
CHAPTER FIVE
RESULTS

The results are based on data from 99 adolescent boys in single-mother families living in rural Iowa communities. Ordinary Least Squares multiple linear regression was used to test the hypotheses regarding community disadvantage as a risk factor and appropriate parenting behavior and good parental-adolescent relationships as protective factors for adolescent adjustment. The analysis is presented in four parts: statistical descriptives of the variables in the study, bivariate links between measures, estimates for both main effect models and interaction effect models, and interpretation of interaction terms.

Descriptive Statistics

The descriptive statistics displayed in Table 2 show several notable features of the variables in relation to the study sample. The community disadvantage measure, as the central concept in the analysis, showed the characteristics of the communities where the boys lived. Among four components of community disadvantage, proportion of adult males who were unemployed or underemployed had the highest mean, with 25% of male adults being jobless or working part-time. This suggested that the agricultural crisis in the 1980s had chronic effects on the economic structure, especially job opportunities in rural communities. The low level of educational attainment of adults was another striking feature of the communities. On average, 23% of adults did not have a high school education. In a society where education is the crucial determinant for job opportunities, the high proportion of low
Table 2. Means and Standard Deviations of the Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Disadvantage*</td>
<td>-7</td>
<td>2.73</td>
<td>-5.78</td>
<td>8.36</td>
<td>97</td>
</tr>
<tr>
<td>% Poverty</td>
<td>11</td>
<td>4</td>
<td>5</td>
<td>28</td>
<td>97</td>
</tr>
<tr>
<td>% Underemployed</td>
<td>25</td>
<td>5</td>
<td>11</td>
<td>37</td>
<td>97</td>
</tr>
<tr>
<td>% Less than high school</td>
<td>23</td>
<td>5</td>
<td>13</td>
<td>42</td>
<td>97</td>
</tr>
<tr>
<td>% Single-parent</td>
<td>8</td>
<td>4</td>
<td>0</td>
<td>20</td>
<td>97</td>
</tr>
<tr>
<td>Parental Control*</td>
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<td>2.27</td>
<td>-6.04</td>
<td>5.18</td>
<td>99</td>
</tr>
<tr>
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<td>2.57</td>
<td>-7.45</td>
<td>4.83</td>
<td>99</td>
</tr>
<tr>
<td>Conduct Problems*</td>
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<td>2.15</td>
<td>-1.25</td>
<td>10.74</td>
<td>99</td>
</tr>
<tr>
<td>Psychological Distress*</td>
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<td>2.55</td>
<td>-3.67</td>
<td>11.20</td>
<td>97</td>
</tr>
</tbody>
</table>

* Measures formed by standardized scales.

education may account for the high rate of unemployment in the communities. Poverty and single-parent households were also important dimensions of community disadvantage. Based on the mean level of the sample, 11% of households had family income below the poverty line, and 8% of families were headed by a single parent.

In sum, although there were considerable variations in the variables, the boys in the study were considered "at risk" because they lived in communities of low socioeconomic status. Because the mean proportion of unemployment and low education was much higher than that of single-parent households, the community economic structure may have had greater impact on the boys' adjustment than family structure.
Parental control and parental warm/support constituted two protective factors. The summed standardized measures did not provide meaningful information on means for the sample. However, these measures varied widely along the range of responses. Parental control ranged from -6.04 to 5.18, and parental warmth/support ranged from -7.45 to 4.83. This variation indicated that despite the difficulties experienced by single-parent mothers, the quality of parenting and parent-adolescent relationship differed greatly from one family to another.

Both behavioral and emotional aspects were examined as important developmental outcomes for the boys. With means of .20 for conduct problems and -.19 for psychological distress, the boys were shown to have a higher rate of conduct problems than psychological distress. A large body of research on adolescent pathology showed that compared to girls, adolescent boys have higher rates of disruptive oppositional behavior than emotional distress (e.g., Maccoby and Jacklin 1980; Canter 1982; Lex 1991). Consistent with the findings, the boys in the study demonstrated more externalizing problems than internalizing problems.

Table 3 presents the frequency and percentages for items from the delinquent behavior scale. The table shows, for example, that 34% of the boys reported beating up someone out of anger, and damaging property on purpose, whereas only 2% of the boys showed involvement in drunk driving and selling illegal drugs. Item analysis suggested that in communities characterized by a high rate of unemployment and school dropouts the boys were more likely to be engaged in delinquent behavior of violent nature than rule violation and profit related activities.
Table 3. Frequency and Percentage for Items of Delinquency (N=99)

<table>
<thead>
<tr>
<th>Items</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run away from home</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Take something less than $25</td>
<td>34</td>
<td>34.3</td>
</tr>
<tr>
<td>Take something more than $25</td>
<td>10</td>
<td>10.1</td>
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<tr>
<td>Drunk driving</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cut classes</td>
<td>20</td>
<td>20.3</td>
</tr>
<tr>
<td>Take a car for joy riding</td>
<td>9</td>
<td>9.1</td>
</tr>
<tr>
<td>Beat up someone for anger</td>
<td>34</td>
<td>34.3</td>
</tr>
<tr>
<td>Go to court or on probation</td>
<td>11</td>
<td>11.1</td>
</tr>
<tr>
<td>Placed in detention or jail</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Snatch someone’s purse</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Drunk in a public place</td>
<td>11</td>
<td>11.1</td>
</tr>
<tr>
<td>Damage property on purpose</td>
<td>34</td>
<td>34.4</td>
</tr>
<tr>
<td>Break into a building for fun</td>
<td>13</td>
<td>13.2</td>
</tr>
<tr>
<td>Break into a building to steal</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Throw objects at people</td>
<td>15</td>
<td>15.1</td>
</tr>
<tr>
<td>Attack someone with a weapon</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Sell illegal drugs</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Correlational Analyses

Bivariate correlations among the variables in the study are presented in Table 4. Most of the correlations among the variables were moderate to high in magnitude, and the signs of the coefficients were in the expected direction. Examining the relationship between community risk factor and adolescent outcome variables, we found that community disadvantage was significantly associated with adolescent psychological distress \( r = .23, \)
p < .01). This suggested that living in disadvantaged communities was associated with psychological distress, and deteriorating community socioeconomic environment was related to increased psychological distress. However, no significant relationship was found between community disadvantage and conduct problems, which may suggest the necessity of taking other factors into account in the study of the relationship between community disadvantage and conduct problems.

Table 4. Correlation Matrix of the Study Variables (N=97)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Community Disadvantage</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Parental Control</td>
<td>.01</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Parental Warmth/Support</td>
<td>-.05</td>
<td>.46*</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Conduct Problems</td>
<td>.14</td>
<td>-.18*</td>
<td>-.19*</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5. Psychological Distress</td>
<td>.23*</td>
<td>-.42*</td>
<td>-.29*</td>
<td>.36*</td>
<td>-</td>
</tr>
</tbody>
</table>

* p < .05.

As expected, there were significant and negative relationships between parental control and conduct problems (r = -.18, p < .05) and between parental warmth/support and psychological distress (r = -.29, p < .01). This indicated that as the level of parental control increased, the likelihood of engaging in antisocial behavior decreased. By the same token, more parental warmth/support was related to lower level of psychological distress. It should be noted that significant and negative associations were also found between parental control
and psychological distress ($r = -.42, p < .001$), and between parental warmth/support and conduct problems ($r = -.19, p < .05$). These consistent patterns found in the relationship between parental variables and adolescent outcome variables indicated that the good parent-adolescent relationship as a whole was significantly associated with a low level of adolescent maladjustment.

**Regression Analyses**

Two sets of multiple regression analyses were run to determine the effects of the risk factor (community disadvantage) and the protective factors (parental control and parental warmth/support) on adolescent developmental outcomes. Each of the sets consisted of two equations (hypothesized and alternative) with conduct problems or psychological distress as dependent variables. Each equation contained two hierarchical regression models: the main effect model and the interaction effect model. The results of these analyses are presented in Table 5.

In the main-effect model for conduct problems, community disadvantage did not show a direct effect on conduct problems. However, both parental control and parental warmth/support had significant effects on conduct problems, with $\beta = -.17$ for parental control, and $\beta = -.18$ for parental warmth/support. Moderating effects were tested by adding the cross-product of a parental measure and community disadvantage score to both hypothesized Equation 1 and alternative Equation 2. As shown in the interaction effect
Table 5. Standardized Betas and T-Values of Main Effect and Interaction Effect

<table>
<thead>
<tr>
<th>Response/Explanatory Variables</th>
<th>Main Effect Model</th>
<th>Interaction Effect Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>T-Value</td>
</tr>
<tr>
<td>Conduct Problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation 1: (n=96)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community disadvantage</td>
<td>.14</td>
<td>1.40</td>
</tr>
<tr>
<td>Parental control</td>
<td>-.17</td>
<td>-1.70*</td>
</tr>
<tr>
<td>Disadvantage * control</td>
<td>.18</td>
<td>1.76*</td>
</tr>
<tr>
<td>R²</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Equation 2: (n=96)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community disadvantage</td>
<td>.13</td>
<td>1.30</td>
</tr>
<tr>
<td>Parental warmth/support</td>
<td>-.18</td>
<td>-1.78*</td>
</tr>
<tr>
<td>Disadvantage * warmth/support</td>
<td>.14</td>
<td>1.39</td>
</tr>
<tr>
<td>R²</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Psychological Distress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation 1: (n=94)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community disadvantage</td>
<td>.23</td>
<td>2.53*</td>
</tr>
<tr>
<td>Parental control</td>
<td>-.41</td>
<td>-4.52*</td>
</tr>
<tr>
<td>Disadvantage * control</td>
<td>.05</td>
<td>.48</td>
</tr>
<tr>
<td>R²</td>
<td>.23</td>
<td></td>
</tr>
<tr>
<td>Equation 2: (n=94)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community disadvantage</td>
<td>.21</td>
<td>2.21*</td>
</tr>
<tr>
<td>Parental warmth/support</td>
<td>-.28</td>
<td>-2.86*</td>
</tr>
<tr>
<td>Disadvantage * warmth/support</td>
<td>-.01</td>
<td>-.07</td>
</tr>
<tr>
<td>R²</td>
<td>.13</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05 (one-tail test).
model for Equation 1, the Parental Control - Community Disadvantage interaction was significant ($\beta = .18$). With controls for the main effects of community disadvantage and parental control, the interaction of the two variables predicted adolescent conduct problems. Examination of the alternative parental measure in Equation 2 showed that although parental warmth/support was a significant and independent predictor of conduct problems, it did not have a buffering effect on the relationship between community disadvantage and conduct problems.

The second set of analyses was based on psychological distress as the outcome variable. The results from the main-effect model for both Equation 1 and Equation 2 indicated that community disadvantage had significant effects on psychological distress, with $\beta = .23$ and $.21$, respectively. After adjustment for the effect of parental measures, which were significant ($\beta = -.41$ for parental control; $\beta = -.28$ for parental warmth/support), disadvantageous community environment continued to have an impact on adolescent emotional well-being. Buffering effects were also tested by introducing the cross-product of a parental measure and the community disadvantage score in both hypothesized Equation 2 and alternative Equation 1. The results showed that despite the significant main effects for both parental measures and the community disadvantage variable, no interaction occurred between the two constructs.

Summarizing the findings from the regression analyses, both parental control and parental warmth/support reduced the probability of adolescent conduct problems. Further, high parental control served to reduce the risk that a disadvantaged community would foster adolescent conduct problems. The results indicated that both community disadvantage and
parental behavior influenced the chances of adolescent psychological distress. There was no evidence, however, that parental behavior served to protect the adolescent from the distressing effects of community disadvantage.

Past research showed that family socioeconomic status (SES) as measured by family income and mother's education is a powerful predictor of adolescent developmental outcomes, and that there is a positive association between family SES and its neighborhood (Brooks-Gunn et al. 1993). Further, an association was found between community structure and child adjustment after controlling for family SES (e.g., Brewster 1994; Jencks and Mayer 1990; Duncan et al. 1994). The present study first employed family SES as a control in the multiple regression analyses. However, the results showed that family SES did not contribute to either of the outcome variables in either the main-effect or interaction-effect models, and thus it was excluded from the final analyses.

Interaction Analyses

As the last step of the analyses, the significant interaction term was plotted in order to better understand its meaning. To obtain subgroups high and low on parental control, the boys were divided into two groups of the lowest third and the highest third based on scores on the parental control measure. Ordinary Least Squares linear regression was run separately for the two groups. Figure 2 graphs the regression estimates for the impact of community disadvantage on conduct problems for the boys high and low on parental control. The most notable feature is that the interaction term differed from classic buffering arguments. At low levels of community disadvantage, boys with a high level of parental control show a lower
level of conduct problems than those with a low level of parental control. However, as community disadvantage increases the difference between boys with low and high parental control disappears. This suggests that parental control reduces conduct problems when community disadvantage is minimal, but its effect dissipates when the condition is severe.

To confirm this conclusion, we plotted the interaction term again, using subgroups high and low on community disadvantage scores. As shown in Figure 2a, there is a significant negative pattern between parental control and conduct problems for boys living in
less disadvantaged communities, but there is no relationship between parental control and conduct problems for boys who live in communities with a high degree of socioeconomic disadvantage. Again parental control was shown to moderate the relationship from community disadvantage to conduct problems in communities with moderate disadvantage, whereas its effect on the relationship was restrained in communities with severe disadvantaged condition.

Table 6 shows the differences of the low and high parental control groups in community disadvantage and conduct problems. First, compared with the low control group,
the group with high parental control had a higher mean score on community disadvantage. The mean score for the high control group was .45, compared with .01 for the low control group. Second, the low control group were more likely than their high control counterparts to report conduct problems. The mean scores were .73 and -.07, respectively. The differences suggested that the two groups did not appear to be equivalent in the analysis.

Table 6. Comparison of the Low and High Parental Control Groups on Community Disadvantage and Conduct Problems

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low Parental Control</th>
<th>High Parental Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Community Disadvantage</td>
<td>.01</td>
<td>2.93</td>
</tr>
<tr>
<td>Conduct Problems</td>
<td>.73</td>
<td>2.95</td>
</tr>
</tbody>
</table>
Despite the fact that they have been largely ignored in past research, thousands of adolescents who live in small towns and rural areas are exposed to chronic poverty and deprived of necessary resources for their growth and development. These teens confront demands and expectations as well as risks and developmental barriers that are as numerous and complex as those experienced by their urban counterparts.

Summary and Discussion of the Findings

The present study examined the direct effect that rural community structure exerts on adolescent socioemotional development and the potential moderating effect of parental behavior on the relationship. The findings from the study showed both main and interaction effects. The disadvantaged community environment had a significant direct impact on adolescent psychological distress, and appropriate parental control buffered the effect of adverse community structure on adolescent conduct problems in moderately disadvantaged communities.

The finding on the relationship between community disadvantage and adolescent psychological distress is consistent with much previous research on urban communities. In communities characterized by widespread unemployment and poverty, individuals are more likely to develop feelings of low self-efficacy and low self-esteem, which in turn may lead to feelings of despondency and anxiety (Wilson 1991b; Baudura 1982; Wiltfang and Scarbecz
A social psychological model proposed by Wilson (1991b) also showed that an impoverished community characterized by apathy and fatalism engender psychological distress in its residents.

In addition, the boys' exposure to the community environment and concern about their future job prospects may also place them at risk for psychological distress. Research suggests that adolescent boys have more direct and intense interactions with institutions and individuals in the community than do girls, and so are likely to be affected by the adverse community environment (Rutter 1990). Given the high mean proportion of economic indicators in measures of community disadvantage, the disadvantageous economic structure in the community appeared to impact the boys' emotional well-being more than other aspects.

In a society where distinct gender roles are emphasized, boys are said to be concerned greatly about their job opportunities and occupational career. Living in a community where unemployment and school-dropouts are a common phenomena can be very stressful to the boys as they feel their educational attainment is compromised and then future occupational prospects jeopardized. This idea is consistent with previous research which showed a significant relationship between perceived lack of job opportunity and suicide ideation among adolescent boys (Simons and Murphy 1985).

The results did not show a direct effect from community disadvantage to boys' conduct problems. However, the result was not very surprising. The review of literature showed that most of the past research found that disadvantageous community structure exerted direct effect mainly on such adolescent outcomes as school performance, childbearing and school-dropout (e.g., Anderson 1991; Crane 1991a; Mayer 1991; Duncan
and Hoffman 1991; Ku et al. 1993), and numerous studies showed that community effects on adolescent conduct problems occurred through a variety of mediating mechanisms (e.g., Crane 1991b; Steinberg 1987; Sampson 1989; Simons et al. 1996). For example, contagion theory focused on the power of peer influence as the mechanism of neighborhood effects, collective socialization theory considered informal social control as important ways through which neighborhoods influenced adolescent behavior, and institutional theory emphasized the role that community institutions played in the community. Therefore, to understand the nature of community effects on adolescent conduct problems, we should examine the processes by which these effects occur, and take into account factors such as peer influence and normative environment.

The test of interaction effect of community risk factor and protective factor in family was one instance of the mechanism. As expected, the interaction of community disadvantage and parental control was significant in predicting adolescent conduct problems. The explanation can be drawn from both empirical findings and theoretical aspects. The prevalence of delinquency and other antisocial activities in disadvantaged communities has long been deemed as the consequence of strong peer influence (e.g., Crane 1991b; Hetherington 1993). It is evident that family functioning involving strict parental supervision, regulation, and effective monitoring of adolescent activities is most powerful to keep adolescents physically removing and distancing from deviant peers (Wilson 1974, 1980; Patterson and Southamer-Loeber 1984). This idea is consonant with "coercion theory" as proposed by Patterson (1982). Although grounded in social control theory, the coercion model emphasizes direct parental control in terms of discipline, monitoring, and punishment
as the effective mechanism in reducing adolescent exposure to or involvement in antisocial activities.

Although the results of the study showed the significant positive relationship from community disadvantage to adolescent psychological distress, parental warmth/support failed to show any buffering effect on this relationship. Based on the statistical description of community disadvantage measures, we reconsidered Quinton and Rutter's (1988) idea of "neutralizing" effects of supportive parent-adolescent relationship on the stressful community context. It appeared that it was the high rate of unemployment and school-dropout in specific and disadvantageous socioeconomic environment in general that posed a threat to boys' emotional well-being rather than the lack of emotional support or social rejection that placed boys at risk for psychological distress. Therefore, parental warmth and supportive parent-adolescent relationship may not be a good compensatory source of boys' emotional well-being in the face of stress engendered by apathy and fatalism in the community. Rather, the direct, adequate parent-adolescent interaction and good parental supervising and teaching skills may be more important for boys' competence and coping skills, and thus more effective in protecting boys from stress and in fostering their independence.

In addition to the results in relation to the hypotheses, two other findings in the study were striking. First, the findings showed that both parental control and parental warmth/support were significant predictors of adolescent psychological distress and conduct problems. The significant negative association between parent-adolescent relationship and adolescent adjustment problems can be explained by Hirschi's (1969) control theory. The general principle of control theory is that the probability of deviance increases when ties that
bind an individual to key societal institutions (e.g., family, school, work) are loosened or broken. With regard to the role of parenting, the theory emphasizes indirect controls in the form of the child’s attachment to parents.

Returning to our results, it seemed that as measures of the quality of parent-adolescent relationship, parental control and parental warmth/support reflected the bond between parents and adolescents. Research showed that direct parental controls are likely to be positively related to relational, indirect controls (Larzelere and Patterson 1990), and effective parenting includes monitoring adolescent behavior and punishing their misdeeds in a consistent and loving manner (Gottfredson and Hirschi 1990). Therefore, it was family processes such as monitoring, discipline, warmth and support that enhanced adolescent attachment to parents, which in turn reduced the probability of adolescent emotional disturbances and behavioral problems.

The second notable finding is that parental control reduced adolescent conduct problems when community disadvantage was low or moderate in degree, but the effect dissipated when the disadvantageous community condition was severe. The similar pattern was found in previous research (Windle 1992), which showed that high perceived support from friends appeared to buffer depressive symptomatology for boys with low or moderate levels of stressful life events, but not for boys with a high level of stress. Although the conditions are not yet well-understood statistically, some explanations may be drawn from empirical and theoretical findings.

To begin with, interaction between risk and buffering factors is not static but changes over time depending on individual characteristics, family relationships, and social context.
(Hetherington 1993). This proposition implies that in a community characterized by a high rate of poverty, unemployment, school-dropout, and single-parent households, the buffering effect of parental control on adolescent conduct problems in less disadvantaged communities may be weakened to a large degree. The diminishing functioning of family protective factors may be due to contagion effect of social problems.

The epidemic theory implies that community quality affects particular social problems in a nonlinear fashion. As community quality declines, social problems increase, and at some point near the bottom of the distribution of community quality, there is a jump in the rate of increase. This is because the incidence of social problems reaches a high level that may increase the susceptibility to peer pressure (Crane 1991b). Thus, according to epidemic theory, parental control lost its buffering effect in communities where prevalence of delinquent activities was much higher and social problems were boosted by strong peer influence.

Policy Implications

With the farm crisis beginning in the 1980s and continuing into the 1990s, the problems of rural America have become increasingly the major concern in the national political agenda. Given the fact that a large number of children and adolescents have suffered from serious emotional disturbances (National Advisory Mental Health Council 1990), the focus has been on mental health services for rural children and adolescents. Although such services as direct treatment and family caregiving are shown to be effective in dealing with adolescent mental health problems, the findings of the present study implied that
preventive intervention programs may also contribute to the security, health, and welfare of adolescents, their families and communities.

The preventive measure is based on the social-stress approach (Mechanic 1969), which puts an emphasis on the idea that mental illness is environmentally caused. According to social-stress perspective, mental illness is the consequence of the cumulation of stress in people's lives. If social stress is so severe that it can overcome people's coping abilities (Langer et al. 1963), individuals and community agencies can help alleviate the stress by enforcing the individual's coping efforts. Thus increasing adolescent coping capacities may be just as significant as decreasing negative effect of social stress.

The present study suggested that the failure of adolescent psychological adjustment to adverse social surroundings may result from the lack of certain social skills or a sense of alienation, hopelessness, and inferiority. Improving community socioeconomic condition is clearly one direct way of intervening in risk for psychological distress, but it is not in itself sufficient. It is important that persons develop skills and resources by facing difficulties and overcoming them, and develop strengths through experience and practice (Mechanic 1969). Therefore, it is essential that institutions such as school, family, and mental health agency provide activities that offer experiences of self-efficacy to promote a sense of competency, self-esteem, and positive self-image. Task-oriented coping programs are also important to enhance adolescent motivation, responsibility as well as problems-solving skills and a sense of control over their future.

Analysis of the dramatic change in the child poverty rate during the 1980s suggests that most of the increase is explained by changes in family structure, i.e., increase in single-
parent households (Lewit 1993). It is observed that the dramatic increase in female-headed households and their corresponding poverty decreased the socioemotional well-being of children and generated additional problems such as delinquency and violence (Popenoe 1996). Despite the enforcement of the government programs such as the Aid to Families with Dependent Children (AFDC) aimed at reducing welfare dependency and preventing further family decline, the findings from the current study added a sense of urgency to establish education programs for single parent mothers.

It is generally believed that because of multiple role demands and stressors, the ability of many single parent mothers to effectively support, control, monitor, and discipline their children declined. In addition, single mothers of adolescent boys reported the greatest child-rearing stress. For example, the relationship characterized by conflict, poor communication, and inept problems solving was frequently found in divorced mothers and sons (Hetherington, Cox, and Cox 1978; Hetherington 1993). Thus the primary government programs designed to help children in poor single-parent families should place their stress on socializing adults to foster their positive parenting attitudes, beliefs and practices. Such educational programs should focus on improving parent communication skills, perception of their children and parent-child interactions, and dealing with unique needs of single-parent mothers in their parental routines.

According to theory of community development, any strategic thinking and new program in community development require resources particularly in money and manpower to be successful. However, in community practice there are never sufficient amounts of
either one of the resources to meet the demand (Cox, Erlich, Rothman, and Tropman 1987). Thus community planners and practitioners must apply available resources as effectively as possible. The allocation of scarce resources are usually based on need identification and need assessment of communities.

The present study showed two types of communities: communities that have undergone severe socioeconomic disadvantages and communities that are at risk for the incidence of social problems. Considering different levels of needs and demands in particular types of communities, the best approach for policy intervention is to concentrate resources to effectively reduce the incidence of social problems rather than to spread resources equally.

The result of the analysis in the study indicated that although parental control appeared to be stronger in highly disadvantaged communities, it did not buffer the community effect on adolescent behavior. This suggested that the effectiveness of parental control in these communities depends largely on the improvement of community socioeconomic environment. Thus the communities with a high degree of socioeconomic disadvantage should be helped first until they reach low levels of social problems. Once attained, delinquent activities would be relatively inexpensive and easy to control because other forces such as parental informal control would function to moderate the impact of disadvantageous community environment on adolescent conduct problems.
Strength and Limitations

The present study demonstrates important advances in our understanding of impact of social contexts on adolescent developmental adjustments. With a focus on how and why a social structure affects the individual, the current study found that the community setting influences adolescent behavioral problems through its relation to and interaction with the other powerful setting, namely, family in the study. Thus the findings support Bronfenbrenner’s (1979) proposition that knowledge of the interrelations among social settings are decisive for a full comprehension of human development.

Moving beyond urban spatial or physical characteristics to an examination of patterns of human interaction within such spatial domains as community and family in rural areas, the data provide information for understanding both the developmental consequences of living in poverty and chronic economic hardships in rural communities and the kinds of resilient factors that enable many of the adolescents in these areas to conquer the challenges and become well-functioning individuals. Thus the study represents a unique contribution to arenas of risk and resilient research that has so far focused on children and adolescents in urban areas.

Although research on risk factor in criminology is well-developed, very little research considers protective factors that buffer the risk effect and enhance adolescent resilience to delinquency and drug use (Smith et al. 1995). The present study added knowledge for criminologists to understand the development of delinquent and non-delinquent trajectories and for policymakers and practitioners to identify specific arenas of intervention to protect adolescents who are at risk for delinquency and drug use.
There are mainly two limitations to the study that should be noted. First, the data used in the study were obtained from a sample of predominantly European American farm families in rural Midwestern areas. Because potential risk and resiliency may be relevant only in a particular population group (Felner, Silverman, and Adix 1991), the results in the study may not be generally applied to populations with different characteristics (e.g., families from ethnically diverse rural communities). By the same token, all the boys in the study were from single-parent families, which suggests that the study may yield different results when focusing on two-parent families. For example, two-parent families, with more adequate educational and coping resources, may provide better resiliency that buffer the impact of community disadvantage on adolescent adjustment problems (Simons et al. 1996).

Second, past research on risk and resilience suggested that protective factors are usually conceptualized as factors that come into play at later developmental stages and moderate the effect of earlier risk factors (Rutter 1987). Thus, being a protective factor in the study, the parent-adolescent relationship should counteract early community-based risk factors. However, the cross-sectional data employed in the study failed to distinguish between early community risk impact and later family protective effect.

Suggestions for Future Research

The findings of this study suggest directions for future research on risk and resilience. First, efforts should be made to compare urban and rural adolescent samples. Huston et al. (1994) argued that urban-rural differences in family structure, spatial characteristics of communities, and structural characteristics of kin networks give rise to questions about the
wisdom of applying to rural settings what has drawn from urban locations. For example, in a comparison of urban and rural communities that were similar in terms of SES, Rutter (1981) found that behavioral problems were much more prevalent in the urban sample because families in the urban settings experienced more stressors than their rural counterparts. Research also showed that in small rural communities where social ties are strong, the school has greater educational effectiveness than in urban communities (Peshkin 1978).

Second, efforts should be made to understand the joint impact of community disadvantage and other risk factors (e.g., drug peer exposure, family discord). In most instances, behavioral problems are the result of a complex set of risk factors associated with social environment (Felner et al. 1991). To be “at high risk” means that adolescents are exposed to multiple risk factors in multiple domains (Jessor 1991). From developmental perspective, a sing risk factor is rarely determinative of later outcomes because individuals are exposed to a certain stress more frequently than other stresses at certain time of the life course. Therefore, it is the cumulative effects of multiple stressors that produce more consistently negative outcomes (Rutter 1987; Luthar 1993; Sameroff and Seifer 1990).

Third, efforts should be made to estimate the combined effect of protective parental factors with adolescent and other individuals’ factors. Adolescent period is characterized by both normative changes and non-normative life events. Normative changes include rapid pubertal changes and reactions, a shift to a new educational system, and strong peer influence (Petersen 1987). Therefore, a developmental framework should take account of such different individual characteristics as age, gender, and temperament. In addition, adolescent interactions with other members of the extended family, peer, and teachers are obvious areas
for investigation to understand the pathways through which community disadvantage affects adolescent developmental outcomes.
APPENDIX

MEASURES OF ISPP IN THE STUDY

Parental Control (target report, 3 scales, 17 items)

Inductive reasoning (4 items)

How often do each of the following things happen?

1 - always
2 - almost always
3 - about half the time
4 - almost never
5 - never

Your mom gives you reasons for her decisions.
Your mom asks you what you think before making a decision about you.
When you do not understand why your mom makes a rule for you to follow, she explains the reason.
Your mom disciplines you by reasoning, explaining, or talking to you.

Parental monitoring (6 items)

How often do each of the following things happen?

1 - always
2 - almost always
3 - about half the time
4 - almost never
5 - never

In the course of a day, your mom knows where you are.
Your mom knows who you are with when you are away from home.
Your mom talks with you about what is going on in your life.
Your mom gives you a set time to be home or in bed on weekend nights.
Your mom knows if you come home or are in bed by the set time.
Your mom is too busy or unavailable to do things with you.
Consistent discipline (7 items)

How often do each of the following things happen?

1 - always
2 - almost always
3 - about half the time
4 - almost never
5 - never

When your mom asks you to do something and you do not do it right away, she gives up.
When your mom tells you to stop doing something and you do not stop, she punishes you.
When you do something wrong and your mom decides on a punishment, you can get out of it.
Your mom punishes you for something at one time, and then at other times does not punish you for the same thing.
When your mom is punishing you, the kind of punishment you get depends on her mood.
When you do something wrong, your mom grounds you.
Your mom disagrees with your dad about how or when to punish you.

Parental Warmth/Support (target report, 3 scales, 19 items)

Closeness to mom (10 items)

How often does your mom do each of the following things?

1 - often
2 - sometimes
3 - rarely
4 - never

Makes too many demands on you.
Makes you feel tense while you are around her.
Makes you feel she is there for you when you really need her.
Keeps her promises to you.
Understands the way you feel about things.
Makes you feel you should not tell her about things because she might be upset.
Acts as if she is the only important person in the family.
Shows concern for your feelings and problems.
Insists on having her own way.
Expects more from you than she is willing to give.
Relationship with mom (3 items)

How satisfied are you with your relationship with your mom?

1 - very satisfied
2 - fairly satisfied
3 - fairly unsatisfied
4 - very unsatisfied

How happy are you with the way things are between you and your mom?

1 - very happy
2 - fairly happy
3 - fairly unhappy
4 - very unhappy

How much do you talk to your mom about things that you do not want others to know?

1 - a lot
2 - some
3 - a little
4 - not at all

Warmth of mom (6 items)

During the past month, when you and your mom have spent time talking or doing things together, how often did your mom

1 - always
2 - almost always
3 - fairly often
4 - about half the time
5 - not too often
6 - almost never
7 - never

Ask you for your opinion about an important matter.
Listen carefully to your point of view.
Let you know she really cares about you.
Act loving and affectionately toward you.
Let you know that she appreciates you, your ideas or the things you do.
Help you do something that was important to you.
Conduct Problems (target report, 2 scales, 30 items)

Delinquent behavior (17 items)

How often in the last year?

1 - never
2 - once
3 - 2-3 times
4 - 4-5 times
5 - 6 or more times

Run away from home.
Taken something worth less than $25 that did not belong to you.
Taken something worth $25 or more that did not belong to you.
Driven a car when drunk.
Cut classes, or stayed away from school without permission.
Taken a car or other vehicle without the owner’s permission, just to drive around.
Beat up on someone or fought someone physically because they made you angry.
Gone to court or been placed on probation for something you did.
Been placed in juvenile detention or jail.
Snatched someone’s purse or wallet without hurting them.
Been drunk in a public place.
Purposely damaged or destroyed property that did not belong to you.
Broken into or tried to break into a building just for fun or to look around.
Broken into or tried to break into a building to steal or damage something.
Thrown objects such as rocks or bottles at people to hurt or scare them.
Attacked someone with a weapon, trying to seriously hurt them.
Sold illegal drugs such as pot, grass, hash, LSD, cocaine, or other drugs.

Drug use (13 items)

How often in the last year?

1 - never
2 - once
3 - 2-3 times
4 - 4-5 times
5 - 6 or more times

Smoked cigarettes, cigars, or a pipe.
Used smokeless tobacco, snuff, chewing tobacco.
Drunk beer.
Drunk wine or wine coolers.
Drunk hard liquor, such as bourbon, whiskey, vodka, or gin.
Used nonprescription drugs for fun or to get “high,” such as Vivarin, No Doz, diet aids, etc.
Used marijuana, hashish, pot, grass, weed, etc.
Used gasoline, glue, or other inhalants to get high.
Used hallucinogens (LSD, mescaline, PCP, peyote, “mushrooms, acid, etc.).
Used barbiturates (downers, quaaludes, sopers, reds, etc.).
Used amphetamines (speed, black cadillacs, white cross, crystal).
Used cocaine, “ice,” crack, etc.
Used prescription drugs for fun or to get “high” without a doctor’s prescription.

Psychological Distress (target report, 3 scales, 24 items)

Depression (12 items)

During the past week, how much were you distressed or bothered by

1 - not at all
2 - a little bit
3 - a moderate amount
4 - quite a bit
5 - extremely

Feeling low in energy or slowed down.
Thoughts of ending your life.
Poor appetite.
Feelings of being trapped or caught.
Blaming yourself for things.
Feeling lonely.
Feeling blue.
Worrying too much about things.
Feeling no interest in things.
Feeling hopeless about the future.
Feeling everything is an effort.
Feelings of worthlessness.

Hostility (6 items)

During the past week, how much were you distressed or bothered by

1 - not at all
2 - a little bit
3 - a moderate amount
4 - quite a bit
5 - extremely

Feeling easily annoyed or irritated.
Temper outbursts that you could not control.
Having urges to beat, injure, or harm someone.
Having urges to break or smash things.
Getting into frequent arguments.
Shouting or throwing things.

Positive affect (6 items)

During the past month, how much of the time

1 - all of the time
2 - most of the time
3 - a good bit of the time
4 - some of the time
5 - a little of the time
6- none of the time

Have you generally enjoyed the things you do?
Have you felt that the future looks hopeful and promising?
Has your daily life been full of things that were interesting to you?
Did you feel relaxed and free of tension?
Were you a happy person?
Has living been a wonderful adventure for you?
REFERENCES


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