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The Social and Behavioral Ecology of Youth Violence in West Jackson

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Overview

This edition of *The MURC Digest* provides an overview and discussion of the broad context about the Mississippi Urban Research Center's (MURC) *Research Report Series 05-02* (Washington and Searcy, 2005) that examines the effects of violence exposure on youth in Jackson, Mississippi. As Jackson has a violent crime rate that exceeds the national average, an understanding of the causal factors driving youth violence may provide useful insights into strategies, policy-oriented or otherwise, that would curb violent crime and enhance the quality of life for all of Jackson's residents.

Conventional wisdom views violent crime as a problem that can be solved by more policing and other law enforcement interventions. The seriousness of this perspective was demonstrated in the recent city of Jackson mayoral primaries. However, the validity of this perspective is suspect, and it is not clear if more policing and other law enforcement interventions can ultimately reduce violent crime to levels deemed acceptable by society at large. Evidence that more policing and law enforcement interventions have limits in reducing crime is provided by Donohue and Levitt (2002), who find that collectively, the increasing use of

incarceration, growth in the number of police, and improved police crime strategies can explain at most 50 percent of the drop in crime the United States experienced in the 1990s.

Of course, social and behavioral scientists have long understood that the violent behavior that drives crime is more nuanced, and is engendered by a complex set of factors above and beyond the quantity and quality of policing and law enforcement. The motivation, framework and results of Research Report Series 05-02 represent what in our view is a social/behavioral ecological approach to the violent behaviors that drive violent crime.² In a social/ behavioral ecological approach, behavior is causally driven by interactions between the individual and the environment through a feedback process. An understanding of this process can provide a more nuanced understanding of what ultimately causes violent crime in urban settings, and the respective roles of race, class, inequality and peer or neighborhood effects. For urban neighborhoods like the West Jackson Community, which are predominantly black and disadvantaged, it is our view that there should be a public policy imperative to press social science research into service, and identify all of the causal factors that enhance the quality of life for all urban residents in Mississippi. It is our belief that the findings of Research Report Series 05-02 will help achieve such a goal if taken seriously.

Violence and Aggression among Youth

Identifying the causal factors of violence and aggression among children in the United States has been an important policy-relevant research topic for educators, social workers, and behavioral scientists. Even before a child is born, violence can have a profound effect upon its life (Prothrow-Stith & Quaday, 1995). Research by the National Institute of Mental Health (2004) has shown that there is a link between violence involving pregnant women and low birth weight babies.

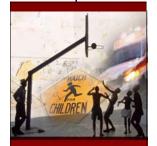
Shore (1997) states that early brain development and the way parents, families and other caregivers relate and respond to their young children directly affect the formation of neural pathways. In addition, the ways that these individuals mediate their children's contact with the environment conversely affect behavior. Adams and East (1999) found that maltreated adolescents were more likely to be involved in delinquent behavior, use alcohol and tobacco and have feelings of depression about not having a father in the home. According to the Children's Defense Fund (1997), every day 10

children are murdered, 16 die from gun accidents, 316 are arrested for crimes of violence, and over 8,000 are reported abused or neglected. These data show that annually over three million children are victims of urban environmentalism which refers to the hazards or high-risk factors that today's youth face in the United States. With the increase in the number of violent crimes, it is difficult to establish ways to make the environment safer for today's youth. Violent children usually come from violent homes (Page et al., 1992). The home is an environment in which parents model violence as a

means of resolving conflict and handling stress (1992). Mortality rates for adolescents are related to the high-risk behaviors they practice. The probability of males dying is greater than that of females, and black Americans have a greater chance of dying than white Americans.

The number one cause of death for adolescents is motor vehicle accidents. Thirty-three percent of adolescents die as a result of vehicle accidents. Homicide, the second leading cause, has an 18 percent mortality rate among adolescents. Motor vehicle accidents are the third leading cause of death for black American males. The fourth leading cause of mortality is unintentional injuries. Delinquent behaviors such as carrying a weapon, engaging in a physical fight, dating violence, school-related violence, forced sexual intercourse, and suicide are increasingly high-risk behaviors that adolescents practice (Hamilton Fish Institute, 2004). These high levels of exposure to violent and aggressive behavior often characterize youth in elementary and middle schools.

While the nation has experienced a drop in violent crimes during the past few years, criminal activity among adolescents has increased. Adolescent violence has become an interwoven segment of America's fabric (Glaze, 2000). According to Hamburg (1997), approximately one million youth between the ages of 12 and 19 suffer injury, loss or death each year, and these criminal acts are due to levels of exposure to violence (The National Association for the Education of Young Children, 2003). The National Center for Injury and Control (2004) found that in the year 2002, there were approximately 877,700 injured youth between the ages of 10 and 24 as a result of crime. In the United States, nearly 16 million adolescents including 70 percent to 95 percent of children in suburban areas of cities have witnessed some form of violent assault. These include robbery, stabbing, shooting, murder or domestic abuse (Kachur, et al., 1998 & Ayne, Pynoos and Cardenas,



in press). This violence is then internalized by children in the United States at an astonishing rate.

There are many definitions of violence and aggression, but all describe an action or exposure. Additionally, these two terms are interconnected, but different. Wood and Johnson (2002) state that youth violence occurs in variant forms, ranging from aggressive verbal offense to physical injury and even death. Mawson (1999) describes physical violence as injuries linked to the use of force and extensively involves assault, homicide, self-inflicted injury and suicide. Bailey (2002) delineates violence as the strong infliction of physical injury and aggression as injurious, intimidating or antipathetic behavior. Journal of the American Academy of Child & Adolescent Psychiatry (1999) summarizes all definitions by stating that violence is a sequence of aggression. Perry (2004) reports that aggression is not defined as violence. Further, he theorizes that "aggression is a behavior characterized by verbal or physical attack, yet it may be appropriate and selfprotective or destructive and violent." Kotulak (1997) subscribes various forms of aggression among children to brain damage which is linked to bad experiences in the environment. He found that this damage, brought on by stresses such as violence, family dysfunction, neglect and poverty, can increase the risk of developing problems of aggression and violence in children. Murphy (2001) states that continuous exposure to environmental violence can affect a child psychologically causing more impulsiveness and aggression.

Socialization Patterns of Youth

The study and role of social dynamics as the base and sustenance of violence and aggression in youth may enhance the prevention of these behaviors. According to the Report of the Surgeon General (2003), the dynamics of youth violence change over the life course due to developmental perspectives. In the early-onset trajectory, problem behavior that starts in early childhood gradually increases to more violent behavior before adolescence. Talbott et. al. (2002) in a study of middle and high school students concluded that most violent episodes at school began with minor episodes that were escalated. Many fights were linked to group affiliation and to adolescents who were physically aggressive, or with aggressive tendencies and who were likely to belong to similar peer groups.

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The Mississippi State Department of Health (1999) reports that the price of family violence is costly. Keegan (2002) finds that low-income families frequently live in disadvantaged neighborhoods with similar traits as those mentioned in the latter. In general, children exposed to violence in these disadvantaged communities developed a threatened and disordered perception of their community which leads to anxiety and depression. This includes impaired peer relations, low selfesteem and antisocial behavior. Bennett and Fraser (2000) studied indicators such as poverty, unemployment and other factors that exert both a direct and indirect effect on children and youth. They contend that chaotic home environments are frequently the result of the lack of resources often associated with With the increasing incidence of poverty. single-parent homes, parents are responsible for the dual burden of childcare and economic support. With increased responsibility, they are less likely to contribute to the social and emotional support of the child (2000). There are scholars who support the theory that lack of emotional support can contribute to the high incidence of violence among African-American children and youth. Gorski and Pilotto (1993) found that children from single-parent homes exhibited higher levels of aggressive and antisocial behavior than those living with both parents. The analysis of Woods (1999) suggests children and youth who are exposed to violence in a family may or may not be violent, but their means for resolving conflicts are violent or aggressive. Some youth are users of drugs and alcohol, while others are victims of family abuse, thus acting out their frustrations.

Fryxell (2000) examined anger among elementary students and concluded that cumulative and negative experiences at home, in school and with peers affect the frequency and intensity of anger experienced at school. School factors, according to Fryxell, were as important as family factors in contributing to anger. Additionally, the study concluded that children who experience stress and anxiety at school tend to be angry.

Another theory linking high levels of youth violence/aggression to at-risk behavior involves chronic behavior patterns. These patterns are defined as the continuous shaping of the conduct of juveniles by environmental or familial factors. Youth whose violence starts before puberty are likely to become chronic violent offenders. The Rochester survey revealed self-report and arrest studies by Tolan & Gorman-Smith (1998) and Tracy & Kempf-Leonard (1996) found few of serious violent youth are accountable for the majority of serious violent crime. Chronic offenders, while representing less than 20 percent of all serious violent offenders, accounted for 75-80 percent of self-reported violent crimes (Huzinga et al., 1995). According to the Hamilton Fish Institute (2004), most violence among youth, particularly in schools, is committed by a small group of chronic offenders who are also involved in the criminal justice system.

Research Design and Methodology

The research design for Research Report Series 05-02 was developed to determine if there is a prevalence of risky and violent behaviors among middle and elementary school students in the West Jackson Community and if such behaviors are correlated with increased exposure to violence and aggression. The sample was composed of elementary and middle school aged students from the West Jackson Community. A total of 562 African-American students from four schools were selected. The sample included 300 males and 262 females. The West Jackson Community was chosen specifically due to the high incidence of crime and low socio-economic status of children and families in this area.³ The four schools represented in the sample include Morrison Academic Advancement Center, Brinkley Middle School, Powell Middle School and Walton Elementary School. Data from the Mississippi Department of Education (2004) reveal that only Walton Elementary scored at a Level 4-Exemplary Achievement. Both Powell Middle School and Brinkley Middle School reported levels 2-Under-Performing status, while Morrison Academic Advancement Center reported a level 1-Low-Performing status, for two consecutive years. The questionnaires were obtained through the Mayor's Youth Initiative, which is a local governmental program that specializes in services to youth in the city of Jackson.

Data from the Violence Risk Assessment Inventory (VRAI) and Bazargan Index of Anger Exposure and Response (BIAER) were collected and analyzed to ascertain basic demographic characteristics of the population, including frequencies, mean, median and standard deviation. Pearson's Correlation Coefficients are estimated to determine the possibly causal relationship between at-risk behaviors (i.e., drug and alcohol abuse, fighting, carrying weapons), exposure to violence and aggression. The VRAI was developed by the Family Community Violence Program at Central State University in Ohio. This scale measures responses from a time period ranging from three months to six months. The VRAI scale included 23 items used to measure youth's involvement in physical fights, drugs, alcohol, anger, theft, and exposure/possession of weapons. Responses were derived from a Likert-type scale ranging from "N-No" to "4-four or more times." The BIAER was developed by Dr. Shahrzad Bazargan at Charles R. Drew University in California. The BIAER scale included 17 items measuring responses of youth exposed to various levels of anger, either directly or indirectly.

Violent Behavior among Youth and Neighborhood Effects

With respect to self-reported risky behavioral characteristics, the sample revealed: 13.7 percent of the students in the sample had fought with a group of friends against another group of people at least once; 24.6 percent

reported having physically fought someone they knew; almost 20 percent of the sample reported having carried a weapon to school or on the streets at least once; approximately 15 percent stated that they had associated with someone selling drugs at least four or more times; 11.4 percent said that they had drank alcohol or been drunk, while 14.1 percent stated that they had drank alcohol or been drunk at least four or more times; 15.1 percent reported that they had taken something that did not belong to them without paying for it at least once; approximately 9 percent reported that they had damaged or destroyed school property; 15.5 percent said that they had been away from home without permission; 26 percent had witnessed a family member in a physical fight four or more times; 19.8 percent said they had seen family members settle an argument with physical violence four or more times; 18.9 percent reported having held a real gun at least four or more times; 44.3 percent reported having held a real gun in their hands; approximately 33.5 percent reported being mad enough to fight at least four or more times; 24.6 percent felt the intensity of their anger would cause them to lose control; and 17.8 percent said that they were so mad, they acted without thinking at least four or more times.

Respondents in the sample also revealed the extent to which the West Jackson neighborhood has a social/behavioral ecology that could potentially generate a behavioral feedback process from the environment to the individual. Twenty-nine percent said they had been with someone selling drugs, 37.7 percent reported having been offered drugs; 41.5 percent reported having been with someone who smoked marijuana; 31.5 percent reported having consumed alcohol or being intoxicated in the past; 51.6 percent reported that someone in their family had been in physical fights; and 48.4 percent report having seen family members settle arguments by fighting. Such proportions suggest that youth in West Jackson are exposed to behaviors that make neighborhood effects possible. If youth are exposed significantly to unlawful behavior among peers and violent behavior among family members, a social/behavioral ecology can form whereby youth violent/unlawful behavior is engendered by peer neighborhood effects.

To what extent does exposure to unlawful and violent behavior in a neighborhood condition violent behaviors and tendencies among youth? This is a fundamental question when trying to identify the effects of neighborhoods on individual behavior. Suggestive insights into this question can be seen by considering the Pearson's Correlation Coefficient between violent tendencies and atrisk behaviors. While a correlation does not imply causation, it is suggestive of causation, and at least provides impetus for further research that would seriously attempt to identify specific causal mechanisms. Some of the more interesting results in Research Report 05-02 show correlations between having fought physically with someone known and: smoking marijuana, having been with a peer who sold

drugs, drinking alcohol, having previously damaged property, having seen family members settle arguments by fighting, having a previous experience with holding a gun, and having carried a gun to school or other public place. These correlations suggest that violent tendencies are at least associated with, if not caused by, various risky behaviors linked to substance abuse, peer effects, exposure to family violence, and possession of weapons. The average value of the correlations between having fought physically and those variables that can be interpreted as neighborhood variables (e.g., being with someone who sells or uses drugs, being in a household where family members resolve arguments by fighting) is approximately .43—which exceeds that of all the other variables under consideration as correlates, suggesting that neighborhood effects explain violent behavior among youth in West Jackson.

The correlation between physical violence and previous gun possession is particularly troublesome. In 2004, West Jackson accounted for a disproportionate amount of gun-related homicides in the city of Jackson. Unpublished analysis of crime data gathered by MURC reveals that of the 52 homicides that occurred in Jackson in 2004, 19 or approximately 36 percent of all homicides occurred in West Jackson.⁴ Given the partial correlations that gun possession has with other risky behaviors, a picture emerges in which crime in West Jackson has a complex behavioralenvironmental ecology. While guns may or may not cause violent crime, gun possession is correlated with other risky behaviors—that are also correlated with violent behaviors. To the extent that environmental factors such as exposure to violence in the household also engender risky and violent behavior, the causal nexus between individual behavior, guns, and the environment probably represents a complex feedback process. Deterring such behavior requires breaking whatever feedback process exists that links violent behavior to the inputs utilized to engage the behavior-guns for example—and the environment. In this context, the mere interdiction of illegal guns by law enforcement authorities may not ameliorate gun-related homicides, as violent behavior is not necessarily driven by the availability of guns, but by an ecology of behavior conditioned by the neighborhood.

Conclusions and Policy Implications

The findings reported in *Research Report 05-02* provide suggestive evidence that violence in West Jackson is explained by a social/behavior ecology that starts in the adolescent school years. Correlations between violent tendencies and risky behavior suggest that there is a feedback process from the collective behavioral environment to individual behavior that ultimately engenders violence and crime. This social/behavioral ecology is clearly complex, and simple correlations may mask many observed factors driving violent behavior, but the existence of correlations between physical violence and several types of risky behaviors suggest that the causal nexus implied by the

correlations is approximately true. In general, the findings of *Research Report 05-02* suggest that the disproportionate amount of violent crime observed in West Jackson can be attributed to behavioral dynamics emanating from the community environment or what are increasingly being referred to as "neighborhood's social/behavioral characteristics on human behavior.

In a broad context, the findings of Research Report 05-02 suggest that there are indeed neighborhood effects in the West Jackson Community that engender violent behavior. It should be a goal of future research to identify the specific causal pathways.6 Whatever the specific causal pathways are, the existence of neighborhood effects has implications for crime and social welfare policy in Jackson. If the social/behavioral ecology of a community matters, merely increasing the number of police may not be an effective way to reduce crime in neighborhoods similar to the West Jackson Community. Results from the Moving to Opportunity (MTO) randomized housing voucher experiment sponsored by the U.S. Department of Housing and Urban Development (HUD) show that merely changing the neighborhood environment from high poverty to low poverty, holding all other factors constant (e.g., household income), has favorable effects on a variety of risky behaviors (e.g., marijuana use, and violent/property crime arrests) for young minority females.⁷ This suggests that West Jackson, in particular, and Jackson in general may be able to achieve reductions in the crime rate through policies that improve neighborhood social/behavioral ecologies in high poverty neighborhoods.

Public policies that induce a favorable change in the social/behavioral ecology are simply those that directly or indirectly alter the feedback processes between environment and individual behavior. For example, the "broken windows" theory (Wilson and Kelling, 1982) posits that unlawful and violent behavior can be causally conditioned by neighborhood physical characteristics such as graffiti, garbage and vacant/dilapidated housing.⁸ The idea is that certain neighborhood physical characteristics serve as visual cues that residents do not care about the neighborhood, and that unlawful and violent behavior are likely to be tolerated if not expected, or if engaged in, the probability of such behavior being punished is low. Research in progress at MURC finds evidence suggesting that in Jackson, violent crime is indeed causally conditioned on the stock of vacant/dilapidated housing as the stock of vacant/dilapidated housing increases so does the number of crimes. This suggests that a policy that ameliorates vacant/dilapidated housing in neighborhoods would also favorably impact the social/ behavioral ecology of youth violent behavior and crime. In this context, any Jackson housing policy interventions that eradicate and replace vacant/dilapidated housing could go a long way toward favorably reducing the violent and risky behaviors among youth reported on in Research Report Series 05-02.

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ENDNOTES

¹ See: Rodney Washington and Ruth Searcy, "An Analysis of Violence Exposure and Response among Youth in the West Jackson Community as a Correlate of At-Risk Behavior," MURC Research Report Series 05-02, May 2005.

² A good description of the social/behavioral ecology framework is provided by Borgerhoff (1991). A social/behavioral ecology framework attempts to explain how environmental and social factors affect behavioral variability within and between populations. In one sense, its hypotheses are viewed as an alternative to the more traditional anthropological belief in an unspecified force of cultural determination. In another sense, behavioral ecological anthropology can be seen as adding the study of function to investigations of causation, development and historical constraints that were already well established in the social sciences.

³ Census 2000 Data reveal that based on the median value across census tracts in the West Jackson Community, approximately 33.7 percent of households have income at or below the federal poverty level. For the city of Jackson, Mississippi as a whole, approximately 22.7 percent of households were at or below the federal poverty level.

⁴ Census 2000 data report that Jackson, Mississippi has a population of 184,256 of which 36,826 or approximately 20 percent, reside in the West Jackson Community

⁵ The evidence on whether the availability of guns or guns per se, cause crime is mixed. For example, while Cook and Ludwig (2004) report evidence that guns have an impact on homicide rates, a recent analysis by Moody and Marvell (2005) find that handgun ownership has a negligible effect on crime, and it is not clear if there exists a causal linkage.

A good review of the neighborhood effects literature is provided by Jencks and Mayer (1990). They identify five causal mechanism models by which the social/behavioral ecology of neighborhoods can affect the behavior of residents: 1). Epidemic models which postulate that behaviors are spread through peer effects; 2) Collective socialization models which postulate that adults in a community influence the behavior of adolescents; 3) Institutional models which postulate that adults who reside outside of, but work in a community influence the behavior of adolescents; 4) Competition models which postulate that behaviors emerge out of the competition by residents for scarce resources; and 5) Relative deprivation models which postulate that behaviors emerge from perceptions of relative hierarchical standing in a community.

⁷ MTO is a demonstration program, with a scheduled 10-year follow-up, funded and started by HUD in 1994. It has sites in five cities: Baltimore, Boston, Chicago, Los Angeles and New York. MTO is essentially an experiment whereby some families from high poverty census tracts are chosen by lottery to receive a voucher that allows them to move to an apartment in a low-poverty census tract of their choice. A control group received either relocation assistance exclusively or no assistance. Results on how the behavior of adolescents in the treated group were affected can be found in Ludwig, Hirschfield, and Duncan (2001), Kling and Liebman (2004), Sanbonmatsu et al (2004), and Kling, Ludwig, and Katz (2005).

Empirical evidence for and against the broken windows hypothesis can be found in Corman and Mocan (2002) and Sampson and Raudenbush (2004), respectively.



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