AN ASSESSMENT OF RECENT TRENDS IN GIRLS' VIOLENCE USING DIVERSE LONGITUDINAL SOURCES: IS THE GENDER GAP CLOSING?

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Applying Dickey-Fuller time series techniques in tandem with intuitive plot-displays, we examine recent trends in girls' violence and the gender gap as reported in four major sources of longitudinal data on youth violence. These sources are arrest statistics of the Uniform Crime Reports, victimization data of the National Crime Victimization Survey (where the victim identifies sex of offender) and self-reported violent behavior of Monitoring the Future and National Youth Risk Behavior Survey. We find that the rise in girls' violence over the past one to two decades as counted in police arrest data from the Uniform Crime Reports is not borne out in unofficial longitudinal sources. Several net-widening policy shifts have apparently escalated girls' arrest-proneness: first, stretching definitions of violence to include more minor incidents that girls in relative terms are more likely to commit; second, increased policing of violence between intimates and in private settings (for example, home, school) where girls' violence is more widespread; and, third, less tolerant family and societal attitudes toward juvenile females. These developments reflect both a growing intolerance

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of violence in the law and among the citizenry and an expanded application of preventive punishment and risk management strategies that emphasize early identification and enhanced formal control of problem individuals or groups, particularly problem youth.

The belief that girls' criminal violence is rising and the gender gap shrinking is espoused widely in both the popular and the scientific press (Fox and Levin, 2000; Morse, 2002; Ness, 2004, Schaffner, 1999), although some analysts have advised that this assessment may be premature (for example, Chesney-Lind, 2002, 2004; DeKersedy, 2000; Steffensmeier, 1993; Steffensmeier and Schwartz, 2002). Current understanding of national trends in girls' and boys' violence comes primarily from media accounts of high-profile incidents of girls' violence (for example, Hall, 2004; Ihejirika, 2004) or from arrest statistics compiled by the Federal Bureau of Investigation (2001) in its annual Uniform Crime Reports (UCR). The data show girls making substantial gains on boys over the past one to two decades in arrests for several key markers of violent crime: simple assault, aggravated assault, and the Violent Crime Index. For example, the female proportion of simple assault arrests increased from 21 percent in 1980 to 33 percent in 2000, of aggravated assault arrests from 15 to 24 percent, and of arrests for the Violent Crime Index (sum of homicide, forcible rape, robbery and aggravated assault arrests) from 10 to 19 percent between 1980 and 2000.

What explains this rise in girls' violence in arrest reports? One possibility is that girls' lives and experiences are changing dramatically and in ways (for example, greater freedom, more stressful lives) that are leading to profound shifts in their propensities or opportunities to commit violent crimes. If so, the narrowing gender gap in arrests documents real changes in underlying behaviors of girls-that is, girls are committing more violent crimes and there really is a "plague of teen violence by girls" (Leslie and Biddle, 1993: 44; Hall, 2004). Another possibility is that girls' arrest gains are artifactual, a product of recent changes in public sentiment and enforcement policies for dealing with youth crime and violence that have elevated the visibility and reporting of girls' violence. Or, perhaps girls who break the law are being sanctioned in a more even-handed fashion than in the past. Thus, girls may falsely appear to be "moving into the world of violence that once belonged to males" (Ford, 1998: 13) when instead arrest policies are more gender-neutral today or the policies are targeting "violent" behaviors more typical of girls than those typical of boys.

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GENDER, INTERPERSONAL VIOLENCE AND MULTIPLE SOURCES OF EVIDENCE

It is the gendered nature of interpersonal violence and its variability across types of measurement that makes the hypothesis that policy changes rather than changes in underlying behavior are driving girls' arrest trends plausible. While serious, injury-producing violence is largely confined to young males, adolescent females commit minor acts of violence nearly as often (Archer, 2000; Felson, 2002; Giordano, Cernkovich and Rudolph, 2002; Heimer, 2000). Therefore, the more elastic or encompassing the definition of violence, the smaller the gender gap in violence will be. Second, girls' violence is typically perpetrated within or near the home or school and among family and other primary groups; male youth are much more likely to commit serious or injuryproducing violent acts within or near street or commercial settings and among acquaintances, strangers or other secondary groups (Campbell, 1993; Kruttschnitt, Gartner and Ferraro, 2002; Steffensmeier and Allan, 1996). Thus, to the extent that aggression within private settings and against intimates is targeted by police or other control agents, female violence will seem more frequent and the gender gap will appear to be narrower.

This axiom, that the gender gap is smaller for less serious violence-for example, minor injury, less offender culpability (bystander, accomplice, self-defense)—and violence observed in private settings and against intimates, can have far-reaching implications for understanding recent trends in girls' arrests for violent crime. The less serious and less visible nature of female violence allows considerable leeway for recent shifts in public sentiment and enforcement policies to have a disproportionate impact on citizen and police responses to adolescent girls who commit violent crimes. Because, in particular, "girls have always been more violent than their stereotype as weak and passive 'good girls' would suggest" (Chesney-Lind, 2004: 4), it may be that female arrest gains for violence are largely a by-product of net-widening enforcement policies, like broader definitions of youth violence and greater surveillance of girls, that have escalated the arrest-proneness of adolescent girls today relative to girls in prior decades and relative to boys. Moreover, girls' arrest trends for aggravated or simple assault may be especially prone to artifactual effects of policy changes since these are broad offense categories that encompass a heterogeneous collection of violent acts or threats of varying degrees of seriousness and culpability.

To provide a more in-depth assessment of girls' violence trends, it is essential that alternative sources of data be brought to bear on the issue most notably, data on trends in girls' violence and the gender gap that are independent of criminal justice selection biases. Thus, in addition to the

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UCR arrest data, we analyze sex-specific violent offending data derived from victimization and self-report surveys in which representative samples from the general youth population are asked, respectively, to identify the offender's sex in cases of personal victimization or report their involvement in violent incidents as an offender. The victimization data are from the National Crime Victimization Survey (NCVS) and the juvenile self-report data are from the Monitoring The Future survey (MTF) and the National Youth Risk Behavior Survey (NYRBS). Unlike the UCR, these data are not limited to cases that come to the attention of the police or result in arrests.

Our focus is mainly on assault crimes since these have received the most attention in the literature but we also examine trends in the Violent Crime Index because trends in this popular marker of crime levels are widely cited by the media and advocacy groups. Our analysis covers the 1980 to 2003 period and employs advanced time series techniques (that is, the Augmented Dickey Fuller test) in tandem with more intuitive plotdisplays of trends in girls' violence and the gender gap to assess whether explanations regarding changes in girls' violence as opposed to changes in girls' arrest-proneness are supported by multiple longitudinal data sources. Without such a comparison, meaningful conclusions about girls' violence trends are impossible to draw. Also, because these sources represent the best (and in some ways the only) longitudinal statistical data on sexdisaggregated violence trends among juveniles, our approach generates a meaningful and succinct summary of the available evidence.

Besides the empirical assessment of girls' violence trends, another major goal is to link this issue with broader concerns within criminology, namely by connecting it to normative versus constructionist theories of crime and law and by identifying recent broad-based developments in penal philosophy that apparently have brought about major changes in arrest policies toward youth and especially adolescent girls. Normative versus constructionist theories of crime and law represent differing lens for how social scientists and many ordinary citizens interpret and manage the empirical evidence pertaining to criminological phenomena (see the review in D'Allessio and Stolzenberg, 2003). Though concerns about the reliability of arrest data are widely shared among criminologists, normative theorists tend to view criminal laws as being enforced largely (or only) in reaction to criminal acts as compared to constructionists who probe for policy shifts that create crime waves or social problems epidemics and also often involve influential stakeholders (Best, 1999; LaFree and Drass, 2002; Young, 2002). Normative theories of crime and punishment lean toward a differential behavior interpretation of girls' violence trends while constructionist or conflict-oriented approaches favor a differential arrest hypothesis. In this article, we first provide an overview

of the implications of normative and constructionist frameworks for alternative interpretations of girls' arrest trends in violent crime, and for expectations about the likely pattern of trends across the varied longitudinal data sources. We also review an emerging empirical literature that appears to confirm the gender-specific effects on juvenile arrest statistics of recent developments in public sentiment and enforcement practices. We then describe our longitudinal data sources, measures of violence and analytical procedures—including the application of advanced time-series techniques—for evaluating female-to-male violence trends. After presenting the findings, we summarize the results and their implications for future research.

NORMATIVE POSITION: ARREST GAINS DUE TO INCREASES IN VIOLENCE

Although little systematic theorizing has been done, commentators have proposed a variety of reasons for what they see as real increases in girls' violence as inferred from the arrest trends. An underlying theme of these diverse accounts is that the lives of adolescent girls have been undergoing major changes in ways that contribute to greater involvement in physical aggression and violence. Girls today face greater struggles in maintaining a sense of self and they confront a much more complex, multidimensional and often contradictory set of behavioral scripts that specify what is appropriate, acceptable or possible for girls and young women to do (Harris, 1977; Pipher, 1994; see review in Berger, 1989). The effects of these contradictions may be intensified by greater exposure of young women to stressful economic circumstances apparently brought about by recent changes in community social organization and family structure. Examples of popular speculations for the rise in girls' violence are presented below. For parsimony and economy of space, we refer collectively to these speculations as the role strain-violence explanation.

One popular view attributes girls' arrest gains to changing gender-role expectations toward greater female freedom and assertiveness that have masculinized female behavior and engendered in them an "imitative male machismo competitiveness" (Adler, 1975: 12; Fox and Levin, 2000). In past generations, it was more or less expected that boys would be aggressive and girls passive. This apparently is no longer the case. Some link the increases to today's entertainment media, to greater exposure to messages portraying or condoning women and girls as violent. This greater exposure is exemplified by video games such as Tomb Raider, in which women wreak violence with the gusto of male action heroes and by movies like *Charlie's Angels* and *Kill Bill* that tend to celebrate gender-equal violence (see review in Hall, 2004). Still others attribute the rise to

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increased access of girls to violent-prone juvenile gangs and their involvement in gang-related violence both as primary perpetrators and as accomplices to violence carried out by male members (Taylor, 1993).

Other commentators believe that the same breakdowns in family, church, community and school that have long been held responsible for violence among boys are finally catching up to girls. Indeed, the recent shifts in community social organization toward father absence and female-headed families can be seen as affecting female violence more than male violence because girls' psychic and economic well-being depends more on the domestic sphere (Popenoe, 1996) and because family and kin networks act as buffers against victimization and other conditions that lead to involvement in violence (Almgren, Guess, Immerwahr and Spittel, 1998; Brown and Gilligan, 1992). According to Phil Leaf, director of the Center for the Prevention of Youth Violence at Johns Hopkins, "society should not have been caught by surprise by the surge in girls' violence.... Today, there is a dearth of effective female role models, as the mothers who used to be there are forced back into the job market or get rendered ineffective through abuse of drugs and alcohol" (quoted in Hall, 2004: A8).

Last, the view is also widely espoused that, although these conditions affect girls in general, their effects are likely to be most strongly felt by marginalized populations of young females, especially minorities and low-income girls living in depressed urban areas (Campbell, 1984; Danner, 1995; Heimer, 2000). Violent offending by girls and young women in these sorts of disadvantaged surroundings may be used with increasing frequency as a coping strategy for dealing with abusive homes and street lives or for confronting interpersonal conflicts with authority figures such as parents or teachers and with peers (Anderson, 1998). The latter may involve conflicts or fights with males in a dating context but also fights with other girls over ownership of males and defense of one's sexual reputation, scenarios that are fairly common in female-on-female violence (Anderson, 1999; Campbell, 1993; Ness, 2004).

Taken together, recent changes in normative expectations and community organization suggest a growing abundance of contradictions and tensions in contemporary gender roles of adolescent girls—both in general but perhaps particularly among disadvantaged or minority girls. Their heightened role strain is exemplified in Pipher's popular work, *Reviving Ophelia* (1994) where, in passages like this, she writes:

Many of the pressures girls have always faced are intensified in the 1990s... more divorced families, chemical addictions, casual sex and violence against women.... Now girls are more vulnerable and fearful, more likely to have been traumatized and less free to roam about alone. This combination of old stresses and new is poison for our young women (27–28).

These speculations may have special appeal for many criminologists because their general contours are so congruent with normative theories of crime such as differential association/social learning, anomie/strain and social control/social disorganization. For example, the expectation that recent changes in the lives of girls toward greater assertiveness or independence will cause the character of girls' crime to shift toward more traditionally masculine forms of lawbreaking, including violence, is traceable to early criminologists (for example, Parmelee, 1918). The expectation is also reflected in Sutherland's oft-repeated dictum that as the sexes become more similar in their social roles, life experiences and pressures and cultural traditions, they also become more similar in the types and levels of crime they commit (1947: 100). Similarly, the view that greater female economic and familial insecurity and greater risk of victimization may lead to higher levels of female aggression and violence is compatible with anomie or strain theories, which link violence either to relative deprivation and heightened role strain using Durkheim's (1952) and Merton's (1949) approaches at the structural level, or to status frustration and stressful life-events theories using Cohen's (1950) and Agnew's (see Broidy and Agnew, 1997) approaches at the individual level. Moreover, social control theories are in line with views proposing that family breakdown and ineffective mothering of young girls has hampered their development in ways that lessen their capacities (for example, poor supervision, low self-control) to avoid or better cope with interpersonal conflicts and stressful events.

The role strain-violence explanation (and the normative perspective generally) provides theoretical grounding for the differential behavior hypothesis that would predict increases in female violence and declines in the gender gap across all the data sources-that is, not only in the arrest data but also in the self-report and victimization data that do not confound the behavior of the criminal justice system with the behavior of offenders. Nevertheless, there is leeway for skepticism about the role strain argument and the other speculations that seek to explain the rise in girls' violence play. First, accepting at face value the assumption that girls' lives are much more stressful today, their greater strain may not necessarily translate into more violence on grounds that females tend to internalize stress and would-be aggression and males tend to externalize it (Aneshensel and Gore, 1991; Hagan and Foster, 2003; Heimer and DeCostner, 1999). Second, social change is seldom, if ever, so abrupt and robust as to bring about such a dramatic shift in behavior as characterizes the female-to-male trend in arrests for violence over the past decade or so (for example, the jump in the female percentage of assault arrests from 22 percent to 31 percent since 1990). Third, some research and theory raises caution about the accuracy of girls' arrest trends, as we discuss next.

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CONSTRUCTIONIST VIEW: ARREST GAINS AN ARTIFACT OF POLICY CHANGES

Social constructionist and conflict perspectives propose that crime waves are usually socially constructed, that dramatic upward or downward trends in crime inferred from official measures are due typically to changes in criminal justice policy and prevailing punishment philosophies, and that these policy changes typically involve influential stakeholders (Best, 1999; Young, 2002). We draw on these constructionist tenets to frame the differential arrest hypothesis that the rise in juvenile female arrests for violence is a collateral consequence of net-widening effects of recent shifts in enforcement practices toward greater mobilization of law and stricter policing tactics rather than to changes in girls' behavior. The policy changes are better understood when placed in a larger historical context of broader social and political forces that have produced what some writers label the "new culture and politics of crime control" (Garland, 2001: 3). The label designates a profound cultural shift in penal philosophy and criminal justice policy emergent over the past two to three decades toward the use of preventive punishment and risk management strategies that emphasize early identification and enhanced formal control of problem individuals or groups, particularly problem youth, combined with a growing intolerance of violence both in the law and in the citizenry at large (Garland, 2001; see also Blumstein, 2000; Males, 1996; Simon, 1997; Steffensmeier and Harer, 1999; Young, 2002). According to some observers, the primary target of this new culture of crime control centers on the protection and regulation of youth in general and perhaps girlhood in particular (Chesney-Lind, 2004; Males, 1996).

NET-WIDENING EFFECTS OF RECENT DEVELOPMENTS IN PENAL PHILOSOPHY AND POLITICS

Deciphering the forces that underlie and sustain the shift toward greater mobilization of law is a complex matter. But, drawing from recent writings on the sociology of punishment (Beckett, 1997; Garland, 2001; Simon, 1997; Young, 2002), recent changes in law enforcement practices are a product of separate but overlapping developments in policing and penal philosophy, in the expanding research-prevention sector centered on delinquency and youth development, and in feminism and the victim's movement. From a social constructionist perspective, furthermore, these developments point to fundamental ironies between some otherwise constructive social changes and collateral consequences that appear largely negative in their effects. We limit our discussion here to significant aspects of these movements as they appear to bear on girls' arrest trends.

The major development in policing over the past one to two decades has been the movement toward situational crime prevention and the targeting of minor forms of crime as a strategy for controlling serious criminality. Most noteworthy has been the shift away from reactive strategies towards more proactive policing of disorder, incivilities and minor forms of law violation (Garland, 2001; Kelling and Coles, 1996). The trend has been to lower the threshold of law enforcement, in effect to arrest or charge up and be less tolerant of low-level crime and misdemeanors, and to be more inclined to respond to them with maximum penalties. This shift has been especially marked in the area of violence, particularly among youth, where heightened citizen concern about personal safety has generated both more proactive reporting and proarrest policies by police and other authorities.

A coinciding trend both within academia and the prevention-security sector has been the movement, aimed primarily at children and youth, toward early and proactive intervention as a primary strategy for preventing escalation into more troublesome antisocial behavior, including chronic delinquency and perhaps adult criminal careers (see reviews in Beck, 1992; Beckett, 1997; Best, 1999; Garland, 2001). Spurred in particular by the increasing prominence of developmental perspectives in the social sciences and the growth in psychological criminology, the epistemologies shaping these strategies center around beliefs that less serious disruptive and delinquent behavior forewarn more serious delinquency, and that early recognition and proactive intervention are needed to prevent more serious delinquent or violent activity (Farrington and West, 1993; McCallum, 2001; Wasserman et al., 2003; see also Jenkins' 1998 analysis of of the emerging "child [all youth up to about age 18] protection movement"). The shift toward an interventionist ideology also corresponds to a sharp decline in the prominence of labeling theory within criminology and its attendant emphasis on judicious nonintervention as a viable prevention or treatment strategy (Lemert and Winter, 2000).

The new ways of thinking about crime and delinquency, what Garland calls "new criminologies" (2001), are also important because they tend to blur distinctions between delinquency and antisocial behavior more generally, lump together differing forms of physical aggression and verbal intimidation as manifesting interpersonal violence, and elevate interpersonal violence (defined broadly) as a high-profile social problem (particularly among youth). These beliefs also have become core elements of popular thinking (for example, among mass media, school officials, community leaders, the activist middle-class citizenry, medical and helping professions) about crime and violence.

Women's groups and feminism have also come to play an important role in the new culture and politics of crime control (Young, 2002). These

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influences include the victim's movement and campaigns for protection from domestic or relational violence, as well as heightened intolerance for violence and harassment wherever it occurs (that is, whether in the home, the workplace, the school or public arena).¹ Resulting changes in law and policing have altered greatly the response to domestic and relational violence from a private, family matter to a public, criminal one. Police are no longer ignoring or discouraged from making arrests in domestic disputes. Despite the policy agenda to protect girls and women from male violence, the reality of mandatory or proarrest policies has always been more complicated. Notable consequences include the practice of arresting both parties in a family or partner violence incident if the primary aggressor is not clear (Chesney-Lind, 2002). A second influence is the feminist critique that female delinquency has been historically ignored, trivialized or denied. The critique has increased public awareness of female delinquency and raised concern for "forgotten girls." But its effects also incline toward, first, seeing girls' delinquency and violence as more frequent or threatening than may be justified and, second, fostering less societal tolerance and monitoring of girls' antisocial behavior.² A third key influence has been the push for more gender-neutral laws and legal practices. This trend overlaps the shift toward a more bureaucratic approach in policing, which has also contributed to more even-handed enforcement practices and priorities.

All of these developments, moreover, combine with and perhaps are co-opted by law and order themes in the politics of crime control dating

Young (2002) credits feminism, particularly second wave feminism, with having a
massive impact on the culture of crime control policies. That impact includes "a
growing intolerance of violence and harassment wherever it occurs, a defining up of
deviance, in particular, a much greater intolerance, an awareness of the importance
of the control of incivilies as well as crime, and most vitally the discovery of a wide
range of hidden crime coupled with intense contest as to the definition of crime.
Rape, sexual violence, the battering of women, child sex abuse ... the microviolence
of harassment in the neighborhood streets—all are highlighted and revealed
Feminism reveals the normality of 'risks' within the redoubts of the family,
workplace, and community and aims not to manoeuvre but eliminate the risks"
(235).

^{2.} It is important to point out that many feminist writers (for example, Chesney-Lind and Shelden, 2004; Heimer, 2000; Price and Sokoloff, 2003) strongly disagree or shy away from this critique if, as popularized in the media and some criminological circles, the critique is meant to imply that girls are really much more criminally prone than traditionally believed and that granting them more independence will increase their crime proneness. They argue, instead, that female delinquency should be addressed in its own right irrespective of arrest trends because girls make-up at least half of the youth population and because studying girls' delinquency will enhance our understanding not only of their delinquency but of boys' delinquency as well.

back to the late 1960s. The themes endorse stiffened criminal justice policies as, one, primary response to unacceptably high crime rates and, two, effective electoral strategy through campaigns to crack down on crime by doing away with lenient justice-system practices (Feld, 1998; Simon, 1997). Apparently, the effects of these political and policy changes toward greater punitiveness, while affecting all constituencies, have been greatest on children and youth (Males, 1996). At a heightened pace, the past two decades have witnessed a rising level of authority on youth in American educational and criminal justice systems. Greater accountability and zero tolerance approaches have become the guiding supposition in public schools and juvenile courts and in daily discourse.

GENDER-SPECIFIC IMPACT OF POLICY SHIFTS

These developments are the context for understanding the expanding interest in girls' violence and the policy forces behind the large increases in girls' arrests. Anecdotal evidence, including the observations of crimetrend analysts, and some empirical studies suggest three policy shifts that are particularly at work.

> First, the criminalization or charging up of less serious or minor forms of violence, a net-widening that will escalate female arrests since their violent offending is less serious and less chronic.

Researchers who study crime trends generally agree that recent policy shifts have lowered the tolerance of law enforcement toward low-level crime and misdemeanors, which tends to yield disproportionately more arrests of less serious offenders (Blumstein and Wallman, 2000; Garland, 2001; Steffensmeier and Harer, 1999; Zimring, 1998). This net-widening has been particularly robust in broad offense categories like simple or aggravated assault. To distinguish one type of assault from the other and from less serious offenses requires subjective judgment in attributing intent and assessing the degree of bodily injury intended. Clearly, the standards of police departments and of police officers within a department can easily differ in these judgments. Not only that, but more expansive definitions of what constitutes violence or an assault have emerged in recent years (Blumstein and Wallman, 2000: 31; Steffensmeier, 1993; Zimring, 1998). The practice today is to categorize disorderly conducts, harassments, resisting arrest and so forth as simple assaults and what were simple assaults as aggravated assault. Charging up and more expansive definitions have led to enhanced sanctioning among youth overall (Blumstein and Wallman, 2000; Fuentes, 1998) but even more so among girls, who tend to commit the milder or less serious forms of physical attacks or threats (Chesney-Lind, 2002; Steffensmeier and Schwartz,

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2002). The observations of veteran juvenile justice officials who generally express doubts about the perceived rise in girls' violence but instead see it as an artifact of shrinking permissiveness are also relevant (see Fuentes, 1998; Rimer, 2004; Schaffner, 1999; Steffensmeier and Schwartz, 2002). Clampdowns on street fighting and girl fighting have apparently also elevated the incidence of assaults by girls, particularly in low-income areas. In the past these forms of violence were significantly underestimated in official statistics (Chesney-Lind, 2004; Ness, 2004).

Second, the criminalization of violence occurring between intimates and in private settings such as at home or school, contexts in which female violence levels more closely approximate male levels (as compared to much high male levels for violence occurring between strangers or taking place in public or street settings).

Several recent studies of girls' violence further establish the impact of these policy shifts, while also documenting that the overlapping trend of treating domestic (and school) violence as a criminal matter has been to sharply increase girls' arrests for assault. A review of girls' cases referred to Maryland's juvenile justice system for person-to-person offenses revealed that virtually all of the arrests involved assault, the majority of which were family centered and involved such activities as a girl hitting her mother or throwing an object at her and the mother subsequently pressing charges (Mayer, 1994, as cited in Chesney-Lind, 2002). Another study of nearly 1,000 girls' files from four California counties concludes: "a close reading of the case files of girls charged with assault revealed that most of these charges were the result of nonserious, mutual combat situations with parents" (Acoca, 1999:7-8; see also Artz, 1998; Schaffner, 1999). Case descriptions of girls arrested ranged from "father lunged at daughter while she was calling the police about a domestic dispute [when] daughter hit him" (self-defense) to "throwing cookies at her mother" (trivial argument).

In a similar vein, heightened public concern in recent years about school safety has escalated the vulnerability of girls being arrested for assault offenses as a result of pro-arrest policies for physical confrontations or threats occurring in or near school grounds. Many schools, especially in the large urban centers, have adopted zero tolerance policies toward violence, use metal detectors and video cameras, and hire full-time school police (Murphy, 2003, 2004; Rimer, 2004; Scherser and Pinderhughes, 2002). Both male and female youth are being arrested in substantial numbers for behavior that, before these preventive measures, would have likely been handled as a school disciplinary matter (Hagan, Hirschfield and Sheed, 2002; Rimer, 2004). The available evidence also suggests, however, that this net-widening in school arrest policies has

disproportionately escalated girls' arrests for violent crimes, particularly for assaults involving minor physical confrontations or verbal threats most frequently with another girl-that in the past would have been ignored or responded to less formally (Artz, 1998; Hall, 2004; Lockwood, 1997; Rimer, 2004).

> Third, less tolerant family and societal attitudes toward juvenile females.

Other evidence suggests that girls' arrest proneness has been escalated by the gradual spread of due process considerations for girls into the juvenile justice system and curtailment of discretion, accompanied by an element of the traditional double-standard approach of seeing girls (but not boys) as needing protection from themselves or immoral influences. One major focus of research has been the impact of legal reforms that make it more difficult to detain or lock-up "wayward" or "at risk" girls for status offenses. One consistent finding is the increasingly common practice in some jurisdictions to re-label or "boost up" behaviors traditionally categorized as status offenses-sexual misbehavior, running away from home, truancy, in need of supervision, incorrigibility, disorderly conduct and instead to arrest the girls for assault or some other felony offense as grounds for detention or placement in an appropriate program or facility (Chesney-Lind and Paramore, 2001; Schaffner, 1999).

Thus, stretching definitions of violence to include more minor incidents that girls are more likely to commit, increased policing of domestic or relational disputes in private settings (for example, home, school) where female violence is more widespread, and heightened official attention to adolescent females (including girlfighting) have all served to escalate the arrest-proneness of females. The constructionist argument, that higher female arrest rates are a by-product of policy changes rather than true changes in the aggressive tendencies of girls, would predict disagreement across official and unofficial sources of data, with arrest data showing noticeably larger female gains in violence than self-report or victimization data. In contrast, normative theories would predict general agreement across these data sources.

DATA SOURCES AND ANALYTIC PROCEDURES

At present three major sources of longitudinal, national data on youth violence broken out by gender cover the period from the late 1970s and beyond: arrest statistics from the FBI's Uniform Crime Reports (UCR), victimization reports from the National Crime Victimization Survey (NCVS), and adolescent self-reports from the Monitoring The Future survey (MTF). There is also a fourth source that covers the period since 1991-self-reports from the National Youth Risk Behavior Survey

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(NYRBS). The comparison of arrest data provided by local law enforcement agencies across the United States to nationally representative survey samples collected independently of the criminal justice system may be used to assess whether juvenile female rates of violence are increasing relative to girls in the past and to male juveniles.

We include the most recent data available from each reporting program, and focus on assaults and, to a lesser extent, on the Violent Crime Index as our measures of violence because female-to-male arrest trends in these markers are routinely cited as evidence of gender convergence in juvenile violence. The UCR arrest data include information for two types of assault, aggravated assault and simple assault, and for the Violent Crime Index. Aggravated assault typically involves severe or aggravated bodily injury and or the use of a weapon. Attempts to inflict serious injury are also included. Simple assault (including attempts) does not involve a weapon or aggravated bodily injury. The Violent Crime Index is the sum of four Index or Type I violent offenses: homicide, forcible rape, armed robbery and aggravated assault. The NCVS also gathers information for both types of assault (aggravated and simple) and for the Violent Crime Index (minus homicide) based on the victim identifying the offender's sex and age. The NVCS assault and violent crime indices are comparable to the UCR indices (Blumstein and Wallman, 2000; Lynch, 2002). Indeed, the Bureau of Justice Statistics, which sponsors the NCVS, uses FBI guidelines to determine assault and other crime types.

The MTF collects sex-specific self-reported data from 8th, 10th and 12th graders on several violence items such as engaging in a fight, inflicting injury, and hitting an instructor or supervisor. Both yearly prevalence ("have you during the last 12 months") and frequency (for example, 3+ or 5+ times) measures are obtainable. Last, since 1991 (and biennially thereafter), the National Center for Disease Control (2004) has administered the NYRBS, which asks a representative sample of female and male 9th through 12th graders to self-report on school violence items.³ For economy of space and parsimony, comparisons across data sources use an assault index combining counts of all assaultive behaviors (rather than assaults broken out by seriousness or degree of injury). We do this for two reasons. First, the findings from the UCR arrest data are similar for aggravated assault and simple assaults (see presentation of findings below) and across youth age groups (results available from authors). Second, the self-report items do not clearly distinguish between aggravated and simple assault. A fuller treatment of key features of the data sets and the

^{3.} Note: The response format or frequency breakdown for MTF [0, 1, 2–3–4, 5+ times] differs slightly from NYRBS [0, 1, 2–3, 4–5, 6–7 12+ times]

strategies we employed to ensure comparability over time and across sources in estimates of girls' violence and the gender gap is available from the authors.

Drawing on the enumerated sex-by-age breakdowns available in the UCR, for purposes of comparability we calculate sex-by-age arrest rates (and the female-to-male percentage of arrests) that correspond closely to the ages represented in the NCVS (12–17), MTF (12–18), and NYRBS (12–18).⁴ We also include the 17- to 18-year-old arrest rate to make comparisons with the MTF 12th grade self-reporting rate because the 12th grade data series is available from the mid-1970s forward, whereas the 8th and 10th grade series begins only in 1991. The formula for female (or male) arrest rates per 100,000 is:

(U.S. population/UCR covered population) x number of females arrested x 100,000 Number of juvenile females in U.S. population

The rates adjust for the sex and age composition of the population and a correction factor is applied to account for variable coverage across jurisdictions in the UCR over the 1980–2003 period (see O'Brien, 1999; Steffensmeier and Harer, 1999). Similar procedures are used to derive rates for the NCVS (see Lynch, 2002).⁵ All survey-based data (including the MTF and NYRBS) are weighted to adjust for oversampling and year-to-year changes in the demographic make-up of survey respondents (and nonrespondents) to ensure that the rates reflect the demographic

^{4.} There are some small differences across data sets in the availability of ages considered juvenile. Available in the UCR are sex-by-age breakdowns for ages 12 and under, 13–14, the individual ages of 15–18. The NCVS includes age categories for 12–14 and 15–17, but the MTF and NYRBS also include some 18-year-old seniors. We ran the UCR analyses using both the 12–17 and 12–18 year old groupings, since both are available. Findings and substantive conclusions did not diverge across these two measures. We also examined whether juvenile trends differed significantly by age (13–14, 15–16, 17–18) both by inspection of data plots and through more rigorous statistical analyses (that is, Dickey-Fuller tests). No significant differences by age or grade emerged. These results are available from the authors. For parsimony, we use 12–17 to signify juveniles.

^{5.} To produce more comparable and accurate offender estimates over time, these rates are adjusted for the 1992 survey redesign that aimed to include a wider range of violent offenses, namely those that are less serious and/or perpetrated against relatives and acquaintances (Kinderman, Lynch and Cantor, 1997; Lynch, 2002; Mosher et al., 2002; Taylor and Rand, 1995)—net-widening changes that tend to identify more female offenders. Because of considerable year-to-year random fluctuations in the data, the smaller-than-typical sample size due to the split design during the 1992 implementation, and the methodological "noise" in survey administration that occurred during the transition year, we use three years of data surrounding the transition to calibrate upwards pre-redesign surveys to account for the expanded range of behaviors measured by the revised survey. See Figure 2 for the formula.

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composition of youth in the national population for the 1980 to 2003 period.

For the MTF and NYRBS, we calculate prevalence rates per 100 female or male students (that is, the percent of students reporting involvement in one or more violent incidents over the course of one year) and "high frequency" rates per 100 female or male students (for example, the percent of students reporting involvement in five or more violent incidents over the course of one year). Some analysts conclude that the most significant comparison between official and self-report statistics involves those reporting over five offenses (Elliott and Ageton, 1980). Highfrequency or chronic offenders are more likely to be arrested and thus are more typical of the youth population represented in arrest statistics.⁶ To derive the overall assault index for the prevalence measure, we used yearly weighted counts of females and males who engaged in at least one of the assault items in the past year. The high-frequency assault index gauging involvement in more serious violence that may be more comparable to UCR arrests, includes juveniles who engage in five or more incidents (for NYRBS, four or more) in response to any of the assault items (for example, "hit instructor/supervisor" 5+ times or "hurt someone badly" 5+ times, places one in the high-frequency assault index category).

We use the female-to-male percentage of violent offending to describe the gender gap (for example, in graphs), calculated as female rate/(male rate + female rate) x 100. This measure indicates the female share of assault, or other measures of violence, after adjusting for the sex composition of the target population (O'Brien, 1999; Steffensmeier, 1993). Note that a narrowing gender gap does not necessarily imply that female rates of violence are rising. The female share of violence may increase because male rates are declining at a faster pace or because female rates might be steady despite male declines.

AUGMENTED DICKEY-FULLER TEST

In addition to traditional descriptive analyses (for example, plots, histograms), we use advanced time-series techniques—Augmented Dickey-Fuller methods—designed to more clearly ascertain whether there is a statistically reliable pattern in female-to-male trends in violence over time (see O'Brien 1999 for a similar approach). The frequent practice of picking two or a few time points to examine is arbitrary and ignores a large amount of available data, given the length of the currently available data

^{6.} Because the definition of "chronic" offending is highly subjective, for the MTF we engaged in sensitivity testing where we used three or more violent incidents as the cut off for "serious" offenders. Regardless of how high frequency serious offending was operationalized, the substantive results were similar.

series these sources provide. The Augmented Dickey-Fuller test (ADF) is an econometric time-series method exceptionally well-suited to establish statistically reliable patterns in the gender gap in juvenile violence over the 1980–2003 period. Such patterns include: first, whether there are systematic year-to-year changes in the share of female offending after taking into account random fluctuations in the data, isolated shocks that cause rates to fluctuate and the aftermath of those shocks, and auto correlated residuals; and, second, the direction of systematic trends in the gender gap, that is, convergence or divergence. In applying ADF tests, we use the log of the ratio of female-to-male rates, a symmetrical measure of the gender gap (see Table 1 for formula; for fuller treatments of Dickey-Fuller and ADF methods, see Britt, 2001; Hamilton, 1994; Hannan, 1979; LaFree and Drass, 2002; O'Brien, 1999).

To establish a stationary data series alleviated of random aspects of the data (fluctuations and shocks, for example) on which to assess directionality of violence trends, we examined unit root tests that indicate whether the female-to-male ratio for assault over the 1980–2003 period wanders from a mean level with no tendency to return to it. Based on these tests, we first differenced each UCR assault series, the NCVS aggravated assault series, and the MTF high frequency series for 17- and 18-year-olds, resulting in a stationary series. For the remainder of the victimization and self-report series, unit root tests indicated that the data were already stationary and thus did not need to be differenced to assure conformity to assumptions of time series analysis—a constant mean and variance, for example. The high frequency MTF series and the two NYRBS series each required one lagged component to eliminate autocorrelation. The remaining series required zero lagged differences, indicating autocorrelation was not a concern.

At this point, we were able to estimate the presence or absence of a significant upward or downward trend in the gender gap in juvenile violence. A significant positive intercept indicates convergence in the gender gap, a significant negative intercept indicates divergence, and an insignificant coefficient means there is no trend. A fourth possibility—indicated by the presence of a stationary gender gap, that is, the absence of a unit root—is that female and male rates are moving in tandem with each other such that the gender gap remains very stable over time. Cointegration is established if further sex-disaggregated ADF analyses indicate that female and male trends are subject to the same fluctuations and shocks over time—that is, each series requires the same number of differences to induce a stationary time series.

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DATA CAVEATS

The strengths and weaknesses of these longitudinal data sources are reviewed elsewhere (Blumstein, 2000; Hindelang, Hirschi and Weiss, 1981; Mosher, Miethe and Philips, 2002; Steffensmeier and Harer, 1999), though we highlight the most relevant critiques. Notably, official UCR statistics can be criticized for being contaminated by changes in enforcement policy (see earlier review), the survey data (NCVS, MTF and NYRBS) for sampling deficiencies. For example, because the MTF and the NYRBS do not sample individuals who leave school, the findings are generalizable only to young people attending school, about 80 to 90 percent of all the age cohorts depending on which grade is considered. Although dropouts tend to have higher rates of delinquency, including violent offending, their relatively small proportion of the population reduces the potential for bias in our trend estimates (Bachman, Wadsworth, O'Malley, Johnston and Schulenberg, 1997; Osgood, McMorris and Potenza, 2002).⁷ Moreover, bias will occur only if the sex-specific trend patterns are different for dropouts than for those in attendance, and we have no reasons to suspect this is so.⁸ Similarly, although the NCVS data are derived from a sample intended to be representative of the general population, those most at risk for victimization (for example, the transient) are less accessible to interviewing. The precision of NCVS rates is further confounded because the sample size is relatively small for low-base-rate crimes such as aggravated assault.

The more pressing issue in using the survey data, perhaps, is the possible effect of changing expectations about girls' aggression or violent behavior on survey responses—that is, in the case of the victimization data, on the propensity of victims of assault to more readily identify juvenile females as perpetrators and, in the case of the self-report data, on the willingness of adolescent females to self-report their violent offending. It seems highly plausible that recent media and popular representations would encourage adolescent females to see their violence, or their peers', as more commonplace and hence as less shaming or more acceptable behavior (for example, less of a violation of femininity). Thus, if any change in reporting propensities has occurred, its direction should be

^{7.} Bachman and associates (1997:154) offer the judgment—correctly so, we think that the MTF sample "is not *entirely* [italics in original] representative but that it is *broadly* [italics in original] representative." Although the MTF undoubtedly underrepresents those who are deeply involved in illicit activities and are more likely to be chronic violent offenders, it does include a great many who have physically assaulted or threatened someone and often on more than one occasion.

^{8.} Note: Statistics from the U.S. Department of Education show the gender gap in cumulative dropout rates holding steady since 1980; see Kaufman, Alt and Chapman, 2001.

toward a greater readiness for girls in recent cohorts to perceive, admit and self-report violent offending relative to earlier cohorts. In a similar vein, we should expect victims to be more inclined in recent years to report girls as violent offenders, in particular, by labeling gray areas of aggressive behavior as assaultive that in the past would have been ignored or defined in milder terms. Thus, we might expect girls' violence levels to show at least some increase over the past one to two decades and also to reveal some narrowing of the gender gap, regardless of data source. However, we would expect police-derived official statistics to show greater increases in female violence than victim-based and self-report sources, if the constructionist argument is supported.

FINDINGS

Our analysis proceeds as follows. We first present female-to-male arrest trends in violent crime from the Uniform Crime Reports, after which we examine, in order, the trends from the NCVS, the MTF and the NYRBS— both separately and in comparison to the UCR. Besides the application of time-series methods, we contextualize the technical analyses with plots and histograms displaying female and male levels of violent offending and the female share of violence. These figures provide a robust visual representation of trends and also help tease out whether significant trends in the gender gap are due to increases in female violent crime or declining male rates.

UNIFORM CRIME REPORTS ARREST TRENDS

Table 1 presents the results from the Augmented Dickey-Fuller tests, where the intercept (alpha) represents the direction and magnitude of the (linear) time trend. A statistically significant coefficient indicates that there are systematic year-to-year mean decreases (or increases) in the gender gap (Hamilton, 1994). Recall also that a positive coefficient indicates that the gender gap in assault is narrowing (that is, converging). A trendless or a stable gender gap is also expressed in the table.⁹

Examining column 1 in panel A of Table 1, both aggravated and simple assault series trend positively, indicating convergence in the assault arrest rates of juvenile girls and boys. The trends for simple and aggravated assault are both statistically significant, indicating that the gender gap in arrests for assaultive violence has indeed narrowed, particularly for simple assault, which exhibits the largest convergence in the gender gap; that is,

^{9.} Note: We do not display results from the first step of the Dickey-Fuller test where we specify the correct model on which to estimate trends. Results are available from the authors.

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Table 1. Trends in the Juvenile Gender Gap^a for Violence: Augmented Dickey-Fuller Time-Series Results, 1980[1991]–2003

Violence Indicator	Estimated	Trend in the
	Value (α) ^b	Gender Gap
A. Uniform Crime Report (All Juveniles)		
Aggravated Assault	$.0155^{*}$	Convergence
Simple Assault	.0262****	Convergence
Assault Index ^c	.0219**	Convergence
Violent Crime Index ^d	.0226**	Convergence
B. National Crime Victimization Survey (All J	uveniles)	-
Aggravated Assault	.0209	Trendless
Simple Assault	—	Stable
Assault Index ^c	_	Stable
Violent Crime Index ^d	_	Stable
C. Monitoring the Future (17–18 year olds) ^c		
Prevalence (1 or more incidents)	_	Stable
High Frequency (5 or more incidents)	0318	Trendless
D. Monitoring the Future Survey (All Juvenile	s) ^{c,e}	
Prevalence (1 or more incidents)	_	Stable
High Frequency (5 or more incidents)	_	Stable
E. National Youth Risk Behavior Survey (All.	Iuveniles) ^{c, e}	
Prevalence (1 or more incidents)	0233***	Divergence
High Frequency (4 or more incidents)	0571**	Divergence

p < .10 p < .05 p < .01 (two-tailed tests)

Notes:

Trendless = random movements without a clear upward or downward trend

Stable = cointegration (female and male rates adjust to one another to remain in equilibrium) a. The gender gap is measured as: $\log(\text{female rate}) - \log(\text{male rate})$. The Augmented

Dickey-Fuller first differenced equation is based on the following specification: yt-yt- $1=\alpha+\delta1(yt-1-yt-2)+\delta2(yt-2-yt-3)+...+\mu t$

b. One lagged difference is required for the MTF high frequency assault index and for both NYRBS series. For all other series, the number of lagged differences is zero.

c. UCR and NCVS assault indices include aggravated and simple assaults. Items in the MTF assault index (12th grade) include: (1) hit instructor/supervisor; (2) fight at school/work; (3) hurt someone badly in a fight. Items in the MTF assault index (all juveniles) include: (1) fight at school/work; (2) hurt someone badly in a fight. The NYRBS item asks about involvement in a physical fight.

d. The UCR Violent Crime Index includes: homicide, robbery, rape and aggravated assault. The NCVS Violent Crime Index includes: robbery, rape, and aggravated assault. The gender gaps for homicide (.0078), robbery (.0122), and rape (.0201) are trendless in the UCR, and the Violent Crime Index without aggravated assault figures is also trendless (.0104). The gender gap for NCVS robbery (.0791) is trendless, too.

e. The MTF (all juveniles) and the NYRBS series begin in 1991.

simple assault has the highest average value for year-to-year differences in the logged ratio of female-to-male arrest rates. The overall trend for the juvenile gender gap in the assault index, which is heavily weighted by the larger simple assault figures, is also statistically significant in the direction

of convergence. And there is a significant narrowing of the gender gap in arrests for the Violent Crime Index, a popular benchmark of violent behavior. Of note, the gender gap in UCR arrests for homicide, robbery and rape has been essentially trendless over the past two decades (see note d in Table 1).¹⁰ Thus, the narrowing gender gap in the Violent Index is due essentially to the swamping effects of the rise in female arrests for aggravated assault during the 1990s. The lack of gender convergence for homicide and robbery in the arrest data further highlights the extent to which girls' arrest gains are largely confined to aggravated assault and especially simple assault. This offers indirect support for the constructionist hypotheses because criminal assault (physical assault or attempt or threat) is more ambiguously defined than homicide and robbery and therefore more subject to elastic definitions.

To better contextualize what a narrowing of the gender gap in juvenile assaultive violence means, we plot in Figure 1 female and male arrest trends for aggravated assault, for simple assault, a composite index of both assaults, and the Violent Crime Index. Each portion of the figure presents the sex-specific arrest rates and the female percentage of arrests for ages 12 through 17. On the gender gap issue, Figure 1 visually confirms the findings from the Dickey-Fuller time-series method and what has been widely publicized-the female percentage of juvenile arrests for assault crimes has risen substantially over the past two decades. For simple assault, the female share of arrests rises slowly in the 1980s (from 21 percent in 1980 to 25 percent in 1990) and then rises at an accelerated pace in the 1990s (to about 34 percent in 2003). For aggravated assault, the female percentage during the 1980s remains unchanged (15.5 percent in 1980 versus 15.8 percent in 1990), after which the female percentage rises sharply throughout the 1990s (to about 25 percent in 2003). In turn, the female percentage for the assault index (heavily weighted by simple assault arrests) shows a steady rise over the past two decades, slowly in the 1980s and then at an accelerating pace in the 1990s. Finally, the gender gap in the Violent Crime Index holds steady over the 1980s followed by a fairly steep rise in the female share of violence during the 1990s. The Index gender-gap trend essentially matches the pattern for aggravated assault, whose large arrest volumes are swamping the effects of arrest trends in the other index violent crimes. Indeed, the gender gap trend is no longer significant in Dickey Fuller tests when aggravated assault arrests are omitted from the Violent Crime Index (see note d in Table 1).

^{10.} ADF coefficients for robbery and rape offending based on the *NCVS* series are also provided in note d of Table 1. They show that the gender gap for robbery (and rape) has held steady in the NCVS. For obvious reasons, trends in homicide cannot be tracked across victimization surveys, and basically only males commit rape.



Figure 1. Trends in Juvenile Female and Male Arrest Rates^a and Female Percentage of Arrests^b for Violent Offending: *Uniform Crime Reports*, 1980–2003









Figure 1. Trends in Juvenile Female and Male Arrest Rates^a and Female Percentage of Arrests^b for Violent Offending: *Uniform Crime Reports*, 1980–2003

D. Violent Crime Index^d



c. The Assault Index combines aggravated and simple assaults.

d. The Violent Crime Index combines homicide, aggravated assault, rape, and robbery.

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Of note, the movement in assault rates is generally similar for both sexes fairly rapidly rising rates for both aggravated and simple assault over much of the past two decades, particularly during the 1986–1994 period, but with rates leveling off in the late 1990s. Note, however, that while male rates were actually declining by the late 1990s, female arrest rates had merely stabilized or continued to inch upward. Notably, these patterns in assault arrest rates are similar across youth-age groups, which are not shown but are available from authors. Therefore, the narrowing gender gap for assault arrests is at least partly a function of the recent downward movement in male-youth violence. We return to this point later. The results in Figure 1 also document that male assault rates are much higher than female rates and that substantial sex differences in juvenile violence persist, particularly for aggravated or felony assault and the violence index.

TRENDS IN VICTIM'S REPORTING OF GIRLS' VIOLENCE

As with the UCR arrest data, our analysis of NCVS data, based on victims identifying the offender's sex and age, examines trends in simple assault, in aggravated assault, and in the Violent Crime Index among adolescent girls and boys, ages 12 through 17. The findings from the Dickey-Fuller tests are shown in panel B of Table 1. The results reveal that the relative assault rates of adolescent males and females have changed very little from 1980 to 2003. The intercept (alpha) for aggravated assault is not significant, indicating a trendless outcome. The simple assault series, as well as the Assault Index and the Violent Crime Index, are cointegrated-meaning that female and male rates are tracking one another in a systematic fashion so that the gender gap remains (almost) perfectly stable across the 1980-2003 period. Thus, according to victim reports, there has not been a meaningful or systematic change in the gender gap in juvenile violent offending. These findings contrast sharply with official statistics, in which the gender gap has narrowed significantly for both assault categories.

Further spelling out these findings, Figure 2 displays NCVS rates of violence for juvenile males and females, along with the relevant female percentages. Like the UCR, the NCVS show that female juvenile violence levels (for example, assault) are much lower than male levels. Both sources also show female and male juvenile assault rates rising during the late 1980s through the early 1990s and then tapering off, but the rise is smaller and the decline is greater in the NCVS trends. Whereas only boys' arrest rates for assault have been declining, both female and male rates of assault have dropped considerably in recent years in the NCVS series. Overall, and this is evident in comparing Figure 2 with Figure 1, the two

sources differ sharply in their representation of gender gap trends in youth violence—in contrast to the UCR, the NCVS reveals very little change or a lack of convergence in the gender gap for assault crimes and the Violent Crime Index over the past one to two decades.

Several overlapping findings from Figure 2 (combined with Figure 1) help clarify the differing patterns for these two sources of national violence data. First, if the NCVS findings are partitioned into two decades and an average gender gap is calculated for each, the average female percentage for the assault index is about 20 percent in both the 1980s and the 1990s, and the gender gap in the Violent Crime Index hovers close to 10 percent. These decade comparisons underscore the conclusion drawn using Dickey-Fuller methods-that female rates of violence typically rise when male rates rise and decline when male rates decline (that is, male and female rates move in tandem), yielding a stable gender gap in overall violence. Second, the gender gap in violence is fairly comparable between the NCVS and UCR in earlier years, but the two sources diverge in more recent years (as we would expect based on constructionist hypotheses). For example, the female percentage for the assault index in the early 1980s was about 18 to 20 percent in both the NCVS and the UCR (essentially no difference), whereas by the late 1990s the percentage in the NCVS persists at about 20 percent but jumps to roughly 30 percent in the UCR.

Last, Figures 1 and 2 together reveal sizable declines in NCVS assault rates in recent years that considerably outpace the much smaller declines in UCR assault arrest rates, particularly on the part of adolescent girls. To the extent that the NCVS series provide reliable estimates (as many criminologists believe), these discrepancies highlight the extent to which, firss\t, real declines in assaultive crimes among both female and male youth since the mid-1990s have been offset by the greater proneness of police to arrest youth for assault—in effect sustaining high arrest levels of youth for assault crimes; and, second, the greater proneness to arrest is particularly salient for female youth whose arrest figures have continued to rise (simple assault) or barely leveled off (that is, felony assault) in sharp contrast to victimization data that depict fairly sizable declines in girls' assaults since at least the mid-1990s.

TRENDS IN SELF-REPORTED VIOLENT OFFENDING

We turn now to self-report sources of data on adolescent violence to further document the direction of trends in girls' violence as reflected in data collected independently of police or criminal justice agents.





B. Simple Assault



Note: Data are adjusted to take into account effects of the survey redesign in 1992. The multiplier is offense- and sex- specific and is calculated based only on juvenile data. The formula is: Multiplier = $(n_{92} + n_{93} + n_{94})/(n_{90} + n_{91} + n_{92})$.



Figure 2. Trends in Juvenile Female and Male Violence Rates and Female Percentage of Violent Offending: *National Crime Victimization* Survey, 1980–2003

D. Violent Crime Index^b



a. The assault index includes aggravated and simple assaults.b. The violent crime index includes aggravated robbery, assault and rape.

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MONITORING THE FUTURE

Monitoring the Future (MTF), the only national youth survey from which long-term trends in self-reported violent offending can be gleaned, asks a nationally representative sample of high school seniors and, since 1991, 8th and 10th graders, about violent behavior across all community settings. We calculate prevalence and high frequency estimates for an assault index comprised of three assault items for 12th graders and two overlapping assault items also asked of 8th and 10th graders.¹¹ Because the trend patterns both overall and by gender are remarkably consistent across the assault items, our discussion targets the results for the assault index. (More detailed results broken out by item and grade are available from the authors on request.) We focus first on the results for 12th graders covering the 1980 to 2003 period (as compared to UCR arrests of 17- and 18-year-olds), and then present the findings based on all three grades combined (8th, 10th, 12th) for 1991–2003 period corresponding to the UCR's overall measure of juvenile arrests for assault.

HIGH SCHOOL SENIORS, 1980–2003

Revisiting Table 1 (see panel C), results are displayed for the Dickey-Fuller method testing for statistically significant trends in the gender gap among 17- and 18-year-olds for prevalence (one or more) as well as high frequency (five or more) measures for the 1980–2003 time frame. Recall that a (significant) positive coefficient establishes a narrowing of the gender gap in adolescent violence. Trends in the juvenile gender gap are stable according to the prevalence measure or, for the high frequency measure, not statistically significant, indicating no systematic change in the adolescent gender gap in self-reported violence over the past twenty years. The top panel of Figure 3 gives a visual representation of the lack of

^{11.} Though the MTF also includes an item asking 8th, 10th and 12th graders about involvement in a "fight where a group of your friends were against another group," we exclude this item from the assault index because it qualitatively differs from the other three assault items. First, this question is vague, whereas the other questions ask about specific acts that were clearly violent in nature (for example, "hurt someone badly enough to need bandages or a doctor"). The "group fight" item could be anything from a snowball fight among friends to gang activity. Second, since there was fairly widespread involvement on the part of both females and males in this event, it likely includes mostly minor incidents that are unlikely to lead to arrest. Third, it is unclear who the perpetrator in this incident would be— was the respondent the aggressor or the victim? Given the ambiguity of this item, we only use the items that refer to specific, individual culpability. Note, nonetheless, that the results for the "group fight" item parallel those for the other items—that is, essentially no change in the gender gap over the 1980–2003 period.

change or constancy in the female percentage of self-reported violent offending across both the prevalence and high frequency measures for the composite assault indices. The graphs document either nearly perfect stability (equilibrium) in the gender gap (panel A) or random (trendless) fluctuations (panel B) rather than any consistent upward or downward trend. These figures also vividly demonstrate the gendered nature of interpersonal violence: first, female assault levels are consistently lower than male levels across both prevalence and high frequency measures, and, second, the gender gap in repeat (high frequency) violence is quite largethe female percentage averages only around 15 percent, as compared to about 35 percent for less frequent or minor involvement in violence. These findings are consistent with our earlier discussion and with prior delinquency research which shows that as the delinquent behaviors or the violent offenses become more serious or chronic, the gender gap systematically widens (Hindelang et al., 1981; Steffensmeier and Allan, 1996).

ALL AGES, 1991–2003

A more inclusive age-range, but a shorter time-series (1991 to 2003) is available for two of the assault items (school fight and injured someone) asked of 8th, 10th and 12th graders. However, this most recent decade is arguably the most important since this is when female arrests for assault began to climb noticeably. Aggregated grades may be considered a robust estimation of the juvenile population ages captured in official and victimization sources.

Dickey-Fuller results (Table 1, panel D) indicate marked stability in the gender gap in assault over the most recent decade, regardless of whether prevalence or high frequency measures are used.¹² These statistical patterns are underscored by the plots displayed in Figure 3. Panel C illustrates the marked constancy in the gender gap over the past decade as well as minimal declines in the prevalence of assault for both female and male juveniles. Panel D also visually demonstrates the stability of the

^{12.} A caveat of the Dickey-Fuller time series method is that it detects less well, or has weaker statistical power, the presence of a significant time trend for the shorter 1991–2003 data series. Thus, we also assessed the direction of sex-disaggregated trends in youth violence by running logistic regression models for females and males that include a continuous time component predicting the likelihood of a student self-reporting an act of violence in the past year (see also Brener et al., 1999). To assess changes in the gender gap, we calculated z-values to test for statistically significant differences between female and male time trend coefficients (Clogg, Petkova and Haritou, 1995; Paternoster et al., 1998). The logistic results and z-tests conform to those derived from the ADF tests, that is, an unchanging gender gap.





A. Prevalence of Assaults (17-18 Year Olds)



a. Assault Index for 17–18 years old includes: during the last 12 months, how often have you 1) gotten into a serious fight in school or at work, 2) hurt someone badly enough to need bandages or a doctor, and 3) hit an instructor or supervisor. Assault Index for all juveniles includes: during the last 12 months, how often have you 1) gotten into a serious fight in school or at work and 2) hurt someone badly enough to need bandages or a doctor.





D. High Frequency of Assault (All Juveniles)



a. Assault Index for 17–18 years old includes: during the last 12 months, how often have you 1) gotten into a serious fight in school or at work, 2) hurt someone badly enough to need bandages or a doctor, and 3) hit an instructor or supervisor. Assault Index for all juveniles includes: during the last 12 months, how often have you 1) gotten into a serious fight in school or at work and 2) hurt someone badly enough to need bandages or a doctor.

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gender gap over the 1991–2003 period for all juveniles. These findings contrast sharply with UCR arrest figures showing substantial gains in the female share of juvenile violence, particularly over the course of the 1990s. Instead, the MTF self-report data covering the 1990s show that levels of assault for juvenile females and males have been fairly constant over the past decade, regardless of whether prevalence or high frequency measures are used, and female involvement in violence has not increased relative to male violence.

NATIONAL YOUTH RISK BEHAVIOR SURVEY

Last, we present findings on self-reported physical fighting among 9th through 12th graders from the National Youth Risk Behavior Survey (NYRBS), covering the period from 1991 to 2003.¹³ The last panel of Table 1 presents Dickey-Fuller results that demonstrate the gender gap in violence (as measured by fighting) is diverging across both prevalence and high frequency measures.¹⁴ That is, relative to males, females engage in fighting less often now than in the past. The diverging gender gap is visually depicted in Figure 4 (panel D) as part of a series of figures summarizing our findings across data sources in comparison to official arrest trends. Descriptive results, not shown but available from authors, indicate that fighting has lessened among both sexes, with female declines moderately outpacing male declines. Prevalence of fighting has declined from 35 percent to 25 percent for females and from 50 percent to 40 percent for males, while high frequency fighting has also declined from 7 percent to 5 percent among females and from 13 percent to 11 percent among males. These figures indicate that, relative to adolescent females in the past, girls today are less violent. For our purposes, the main finding is that the NYRBS trends in girls' violence and the gender gap are opposite those depicted by UCR arrest statistics: females self-report less violence over time and in comparison to males.

^{13.} The question reads: "During the past 12 months, how many times were you in a physical fight?" Two other items that might be construed as violent: "weapons carrying" and "damaging property" also showed declines in both genders but slightly greater declines in female levels.

^{14.} As noted earlier, NYRBS is bi-annual data series that, by the year 2003, provides only seven data points. Thus we interpolated rates between biannual years increasing the number of data points to thirteen. We also used logistic regression techniques (described briefly in note 9) using only the seven data points to verify the conclusions based on ADF time series and plot methods. The latter results also show significant declines in fighting across measures of involvement and significant z-tests corroborate the conclusion that the declines are somewhat greater among girls, resulting in a widened gender gap.

DISCUSSION

This report began by emphasizing the importance of examining multiple sources of data when generalizing about recent trends in girls' violence since arrest data, the most commonly cited longitudinal source, are prone to criminal justice selection processes. The key results from the diverse data sets are summarized in Figure 4, comparing the gender gap based on UCR arrest trends to victimization and self-report trends. First, the graphs confirm what we have seen in all of the data sources used in our analysis-the existence of a fairly small gender gap for minor kinds of violence (prevalence and misdemeanor assault, for example) as compared to a very large gender gap for more serious forms (for example, highfrequency and aggravated assault). These findings substantiate the axiom noted earlier about the gendered nature of interpersonal violence and its variation depending on behavioral item. Second, in contrast to conclusions about rises in girls' violence based on arrest statistics, the results from sources independent of the criminal justice system (NCVS, MTF and NYRBS) all show very little overall change both in girls' assault levels and in the Violent Crime Index and, most notably, essentially no change in the gender gap or female-to-male percentage of violent offending.15

The glaring differences between the official and unofficial sources in their portrayals of girls' violence trends are contrary to the theoretical arguments of the differential behavior hypothesis that draws from normative theories of crime and punishment. Instead, they are strongly consistent with the tenets of the differential arrest hypothesis and the constructionist perspective. Recent changes in law enforcement practices and the juvenile justice system have apparently escalated the arrest proneness of adolescent females. The rise in girls' arrests for violent crime and the narrowing gender gap have less to do with underlying behavior and more to do, first, with net-widening changes in law and policing toward

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^{15.} Although it does not strictly qualify as a longitudinal survey, self-report trend data from the National Youth Survey (NYS) also show constancy in the juvenile gender gap for violent crime. Specifically, the 1967–1972 samples and 1977–1980 samples revealed similar gender gaps for minor assaults and felony assaults (see Cantor 1982); and a matched sample of "high risk" youth (aged 13-17) surveyed in the 1977 NYS and the more recent 1989 Denver Youth Survey revealed constancy in the gender gap for minor assaults and felony assaults (Huizinga, 1977). Also, Cantor's (1982) analysis revealed a sizable difference for aggravated assault in 1980 between the male-to-female self-reported ratio (about 3.5:1) and the arrest ratio for self-reported aggravated assault (5.6:1). The arrest ratio in 2000 has narrowed to about 3.56:1, essentially identical to the 1980 self-reported ratio. These numbers provide additional evidence for a closing of the gap between what girls have always done (and reported, when asked anonymously) and arrest statistics rather than a course change in girls' participation in serious violence (see review in Chesney-Lind and Shelden, 2004: 53).

Figure 4. Summary of Trends in Juvenile Gender Gap for Assault in Arrest Data Compared to Victimization and Self-Report Sources: Uniform Crime Reports, National Crime Victimization Survey, Monitoring the Future, and National Youth Risk Behavior Survey, 1980[1991]–2003



A. Assault Index (All Juveniles): UCR and NCVS, 1980-2003



Figure 4. Summary of Trends in Juvenile Gender Gap for Assault in Arrest Data Compared to Victimization and Self-Report Sources: Uniform Crime Reports, National Crime Victimization Survey, Monitoring the Future, and National Youth Risk Behavior Survey, 1980[1991]-2003



C. Assault Index (All Juveniles): UCR and MTF, 1991-2003

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toward prosecuting less serious forms of violence, especially those occurring in private settings and where there is less culpability, and, second, with less biased or more efficient responses to girls' physical or verbal aggression on the part of law enforcement, parents, teachers, and social workers. The evidence from the survey sources indicating no change in girls' violence is even more remarkable in light of caveats that a change in perceptions and expectations about girls' violence in the society-at-large might itself have self-fulfilling effects leading to higher reported levels of girls' assaults in survey responses. All else equal, just as police have become more prone to arrest girls for violent misconduct, it also seems likely that victims have become more prone to identify female assailants in NCVS interviews and that adolescent females have become more prone to self-report their involvement in violent behavior.

IMAGES VERSUS REALITY OF GIRLS' VIOLENCE TRENDS

How can it be that girls do not appear to be more violent today, and the gender gap in juvenile violence does not appear to be narrowing, when many individuals who write about delinquency and the juvenile justice system assume precisely the opposite?

One explanation rests on the high visibility of the FBI arrest statistics and their ease of use, combined with a lack of awareness of alternative sources of data. This is unfortunate in light of Sellin's (1931, 346) wellknown dictum that "the value of a crime for index purposes decreases as the distance from the crime itself in terms of procedure increases" and the skepticism of many criminologists about the accuracy of arrest data for assessing crime trends. (Note: This skepticism typically prevails whether a normative or a constructionist-conflict explanation is favored.) Arguably, self-report and especially victimization sources will provide a better index of violent crime than arrests. This advantage, moreover, apparently holds for estimating the volume of violent crime and the relative amount of violent crime committed by males and females and changes in the relative amount over time (O'Brien, 1999).

Second, there is no shortage of intuitively appealing speculations for explaining the apparent rise in girls' violence as reflected in the arrest data. Besides the assertion that adolescent girls are experiencing far greater stress and role strain than young females a decade or two ago, commentators have pointed to the possible spillover effects of increases in girls' drug use or dependency bringing them into greater contact with the male underworld and situations in which violence is likely (OJJDP, 2001). They also point to the growth in juvenile gangs and the resulting involvement of girls in gang-related violence both as primary perpetrators and accomplices to violence carried out by male members (Taylor, 1993);

and the effects of increased exposure to and mimicking of media messages portraying girls and women as role models who use and condone violence (Ford, 1998; OJJDP, 2001).

Third, there may be an element of candor to constructionist concerns about the role of claimmakers or stakeholders in the formulation of social problems (in this case, the violent girl claim) who use official data as advocacy statistics to advance professional and economic interests (for example, publications, grants, jobs, media share) and as proof of the correctness of their own action as well as group or agency agenda. Yearto-year fluctuations in rates and the female percentage of violence also allow stakeholders considerable leeway to arbitrarily select the years or time points that best document their claims about trends in girls' violence (in contrast to our time-series analysis which uses all of the trend data). The possibility of under- or overestimating girls' violence is far from a trivial matter. Resource allocation and public concern are largely stirred by reports of the magnitude of the problem, as are public policies that shape law enforcement practices. Particularly important, apparently, is the media' role in such reports, that is, its eagerness to both create and spread conceptions of purported shifts in girls' violence (Chesney-Lind, 2004).

These reasons together may also incline commentators to overlook lines of reasoning that might raise at least some caution about the accuracy of girls' arrest trends. As noted, social change is seldom if ever so abrupt and robust as to bring about such a dramatic shift in behavior as characterizes the female-to-male trend in arrests for violence over the past decade or so. Second, it is doubtful that girls' gender roles and life experiences have changed more drastically during the past one to two decades than during the previous one to two. Moreover, it appears that girls' gender roles today, whether one believes they have changed a little or a lot, continue to be a modified variant of traditional roles (Artz, 1998; Aneshensel and Gore, 1991; Brown and Gilligan, 1992). Third, it may be that girls' lives have changed a great deal but not necessarily in ways that would lead to more violence or aggression. For example, even if girls' lives are much more stressful today, this greater role strain may not necessarily translate into more violence on grounds that females tend to internalize stress and would-be aggression whereas males tend to externalize it. Abundant writings contend that girls and women, in spite of their oppression, are much more likely than boys and men to feel shame and guilt instead of feeling humiliation and rage (Aneshensel and Gore, 1991; Broidy and Agnew, 1997; Hagan and Foster, 2003; Heimer and DeCostner, 1999; but see Mirowsky and Ross, 1995). Rather than violence, the internalization of stress hypothesis would predict more depression or perhaps more suicide or some types of drug use. Studying

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gender-disaggregated juvenile trends in these behaviors is also an important topic for future research.

NEED FOR MORE RESEARCH

Although our analysis presents empirical evidence that girls' violence is not rising and the gender gap is not converging, our findings do not negate the possibility of gender convergence in violence trends within some population subgroups. It is sometimes argued that, along with diminished detachment from mainstream institutions, increases in stress and victimization experienced by adolescent girls are apparently greatest among minority and poor females (Heimer, 2000). Perhaps their violence rates have been rising rapidly in ways that are driving the arrest patterns for girls as a whole. Further insight into possibly divergent trends in sexspecific violence rates across population subgroups is needed. But the inquiry must await the development of richer data sets because the arrest data do not provide a gender by race breakdown. Although the survey data do provide the disaggregation, there are too few cases for meaningful analysis, partly because violence is relatively rare and partly because youth from these disadvantaged backgrounds are less likely to be included in household or school surveys.¹⁶

Contextual analyses are needed that involve studies of police and juvenile court records at the local level to provide a better understanding of the organizational management of juvenile crime, including changes in the law and in law enforcement practices, and a detailed breakdown of the kinds of physical attack or intimidation committed by girls and boys. Particularly needed are profiles and case studies of girls arrested for violence in order to examine the circumstances leading to girls' violence and whether juvenile girls and boys commit the same types of violent offenses for similar reasons and whether those reasons have changed over time. The case studies also need to scrutinize girls' pathways into violence, including the role of sexual abuse where their victimization rates are significantly greater than their nonviolent counterparts and also much greater than boys (Artz, 1998; Chesney-Lind, 2004; Schaffner, 1999). As mentioned, the few localized studies that have been done document the traditional nature of girls' violence and the effect of current criminalization policies on trends in girls' arrests and juvenile court

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^{16.} Preliminary gender-by-race analyses revealed consistency across sub-group comparisons and with the results reported here for juveniles as a whole (though keep in mind the small Ns). That is, no matter how they are disaggregated, the survey data show constancy in the juvenile gender gap in violence over the past one to two decades.

RECENT TRENDS IN GIRLS' VIOLENCE

appearances (see Acoca, 1999; Artz, 1998, Chesney-Lind and Shelden, 2004; Mayer, 1994; Schaffner, 1999).

Future inquiry also needs to take into account the movement of male juvenile rates on the gender gap. Male youth rates for violent crime have been dropping in recent years as an apparent result of, on the one hand, crime prevention programs (antigang initiatives and after-school programs, for example) and, on the other, the deterrent or incapacitation effects of targeting high-risk, chronic offenders (Steffensmeier and Harer, 1999). These policy efforts have been largely targeted at male youth because their volume of serious violence is much greater and because male chronic offenders account for the larger share of withingender violent offending (see Kruttschnitt et al., 2002). Since the gender gap is a function of the size and movement of both the male rate and the female rate, a downward trend in male violence levels would also produce a narrowing of the gender gap. Notably, assault arrest rates for juvenile males have leveled or even declined since the mid-1990s whereas female rates have merely stabilized or inched upwards (see Figure 1). Except for a small tick up in the female percentage in the NCVS in the 2000-2002 period, this countervailing trend in assault patterns is not observed in the survey data.

Last, there is an ongoing need to continue to monitor and compare girls' violence trends and the gender gap using a variety of data sources.¹⁷ For example, will the gender gap in arrests continue to narrow in the years ahead—because of what some commentators see as ever more stressful lives experienced by girls or because of what other commentators see as an increasingly proactive and punitive juvenile justice system? We note, first, that recent arrest gains made by juvenile females have been large enough to downsize the dampening effect of low female base rates on trends in the gender gap. Because the gap for simple assault now approaches 35 percent, it becomes statistically more difficult for the female percentage to continue to rise (that is, female gains were more possible in earlier years when the feamle rate was much smaller than the male rate). Second, it is plausible that girls eventually will become more violent possibly because

^{17.} An empirical inquiry into adult trends in women's violence and the gender gap would also be informative (perhaps along the lines of the present analysis), given that many of the enforcement practices elevating the arrest-risk of juvenile females are also driving arrest trends among their adult counterparts. Most notably, domestic violence statutes and pro-arrest policies, ostensibly intended to promote greater safety for women, have apparently resulted in proportionately more arrests of females than males for "violent" crimes committed in a domestic or relational context that, in turn, may account in large part for a narrowing gender gap during the 1990s in arrests of adults (18 and older) for aggravated assault and simple assault (see Chesney-Lind, 2001; Miller, 2001).

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of greater stress in their lives (Schaffner 1999) or because they begin to live up to changing perceptions of them as being more violent prone (Harris, 1977) or because of the self-fulfilling effects on their self-identities and reputations of stigmatizing arrest or court labels (Fuentes, 1998; Ulmer, 2000).

The main conclusion we draw is that future trends in girls' arrests for violence will depend less on what girls do than on whether the netwidening effects identified in this report as causing the rise in girls' arrests for violence continue to define public policies. Broader developments in policing, the academic-research-prevention sector, the women's and victim's movement, and law and order politics have brought about major changes in law enforcement priorities and practices. Among other policy shifts, these developments together have contributed to what many observers consider the most important and sweeping legal trend of the past two to three decades-the expanded use of law and public agents to curb violence and resolve disputes and incivilities, even some that seem minor (Mastroski et al., 2000; Reiss, 1992). Further, exacerbating this trend has been the various agencies, both private and public, springing up to aid, repress, punish, rehabilitate or in other ways deal with both victims and offenders of violence (Christie, 1994; Garland, 2001). While affecting all segments of society, concerns targeting youth violence or aggression as a particularly serious social problem have promoted policies and agency involvements that have in turn markedly expanded criminal law into vouthful lives (Feld, 1998; Fuentes, 1998; Males, 1996).¹⁸ Should these risk management and expressive-preventive punishment trends continue, while they may produce the desired effects of holding "violent" youth more accountable, they simultaneously also will result in arresting more

^{18.} An important area for current research is to assess the effects of recent implementation of the federal No Child Left Behind law on reported levels of school violence (and the gender gap). Notably, after rising sharply in prior years, schools are now reporting large declines over the past one to two years in the frequency of incidents of students victimized by a violent crime on school property (see review in Riley, 2004). The trend apparently reflects a sudden departure from zero-tolerance policies in sanctioning and reporting violent incidents at school as school and community officials attempt to avoid the unsafe school designation. A school is considered unsafe or persistently dangerous if the number of offenses plus the number of students victimized by violent crimes on school property exceeds 3 percent of school enrollment for three consecutive years. Under the No Child Left Behind law, students are eligible to go to another school (at the expense of the school district) if the school is deemed unsafe. Schools in most states started tracking this safety threshold in 2003 or 2004. Reflecting what appears to be a national pattern, summary statistics from Tennessee public schools show violent victimization on school property falling about 61 percent from 2000-2001 to 2003-2004 (see Riley, 2004). Likewise, sharp declines in school violence have been reported in some other states (for example, Pennsylvania, California).

adolescent females and in proportionately larger numbers than would be expected based on the typical sex ratio in violent offending.

CONCLUSION

The conference, "Girls' Aggression, Antisocial Behavior, and Violence," was held at Duke University in 2002 (for conference proceedings, see Putallaz and Bierman, 2004). As the name indicates, concerns about girls' violence have taken hold of criminology, developmental psychology and the social sciences more generally, especially those interested in violence prevention and crime control policies. Researchers and practitioners in attendance were reminded by the conference convener and (some) presenters of recent FBI arrest statistics documenting the growth in girls' violent crime. Besides serving to enlighten conference attendees, these statistics were also used to provide empirical grounding for appeals for more (funded) research on girls' violence and for development of programs to address the problem. Particular emphasis was placed on the need to advance risk-factor and prediction paradigms, and to develop and implement more suitable, gender-tailored prevention and treatment approaches-and to do so at various levels: the family, the school, the community, and the juvenile justice system. (See Surgeon General Report on Youth Violence 2000 for a similar use of violence statistics and policy recommendations.) The Duke conference also called for more and better data on girls' violence levels and trends as necessary foundation of an informed opinion, theory, or policy. Or, as the Surgeon General report concluded, "the most urgent need is a national resolve to confront the problem of youth violence systematically, using research-based approaches, and to correct damaging myths and stereotypes that interfere with the task at hand" (Office of the Surgeon General, 2000: 6)

Thus, the results of our analysis are timely as well as cautionary in their portrayal of girls' violence trends. We find that the rise in girls' violence as counted in police arrest data is not borne out in unofficial longitudinal sources—victimization data in the National Crime Victimization Survey (where the victim identifies sex of offender), along with self-reported violent behavior in Monitoring the Future and the National Youth Risk Behavior Survey. These sources all show little overall change in girls' levels of violence over the past one to two decades and constancy or very little, if any, change in the gender gap in youth violence. The significance of these findings is underscored, first, by their consistency across the three survey sources that involve national samples from the general youth population and are independent of criminal justice selection biases, and that are held in high regard within the social science research community

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(especially the NVCS and MTF). Second, the finding of little overall change has added credibility because it is observed in the context of heightened perceptions about girls today as being more violent and "malelike." These perceptions might sway some victims and citizens to more readily identify girls as violent offenders, and also encourage girls in survey samples to self-report incidents of physical attack or threat.

While we have stressed their substantive and theoretical significance (for example, assessment of normative versus constructionist approaches to social problems), from a policy perspective these findings have important implications that derive from the longstanding sociological concern for considering collateral or unintended consequences of social or policy changes from their motives or stated objectives (see Merton's classic discussion of "manifest and latent functions" [1949, 19ff]). For example, more attention and research directed at girls' aggression and violence may have the intended result of bringing about juvenile justice systems in the United States better equipped to deal with delinquent or "forgotten" girls. But such policies may have spinoffs: more girls may be brought into the justice system for behaviors that in the past would have been overlooked or ignored. More girls, as a result, are facing damaged lives brought on by the stigmatization of arrest and criminal labeling. At stake also is whether the enhanced criminalization processes are likely to further confirm media and professional beliefs that girls' violence is worsening and in ways that justify calls for greater resources for treatment or sanctioning. Other self-fulfilling effects may materialize as girls adapt to these beliefs or stigmatization, for example, by becoming more prone to be physically aggressive or verbally intimidating.

So, why is it that there is such a disproportionate number of girls being arrested for violent crimes today? The answer, it appears, is that several forces in the last one to two decades have driven the increased number of girls coming to police attention and into our juvenile justice system. Greater role strain and more stressful lives may characterize girls today relative to earlier periods, which may help account for their higher arrest rates for violence. But it is also true that we have changed our laws, our police practices, and our policies in other ways toward enhanced identification and criminalization of youth violence in general and girls' violence in particular. Viewed more broadly and in historical context, these policy shifts have not occurred in a vacuum but reflect what appear to be the largely unintended consequences of broader developments in the culture and machinery of social control toward more expressive and punitive punishment policies on the one hand, and the application of risk management and prevention paradigms in criminology, on the other. The analysis here, based on the best data available, makes a strong case for the position that it is the cumulative effect of these policy shifts, rather than a

change in girls' behavior toward more violence, that accounts for their higher arrest rates and the narrowing gender gap in official counts of violent crime. The rise in girls' violence, it appears then, is more a social construction than an empirical reality. It is not so much that girls have become any more violent; it is that the avenues to prevent or punish violence have grown so enormously.

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