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Loss Due to Death and its Association with Mental Disorders in Juvenile Detainees

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Abstract

This study investigated the prevalence of loss due to death and its association with mental disorders in a random sample of 898 newly detained adolescents in Chicago, Illinois. Nearly 90% of youth experienced the loss of an important person; most had also experienced a “high-risk” loss (e.g., loss due to violence, sudden loss). Minority youth were at particular risk. Youth with any loss or multiple losses were more likely to have mood disorders and ADHD/behavioral disorders, respectively, than youth who had no such losses. Interventions focusing on modifiable protective factors following loss may increase positive outcomes in this vulnerable population.

Introduction

As people age, they learn to anticipate the death of older loved ones (Clark, Pynoos, & Goebel, 1996; Sigelman & Rider, 2014). Loss of loved ones through death is difficult for young people. This is particularly true when losses are sudden, due to violence, or involve the loss of a caregiver. Such “high-risk” losses can complicate the mourning process. They can evoke feelings of helplessness, anger, and horror, and increase the risk for psychopathology (Cerel, Fristad, Verducci, Weller, & Weller, 2006; Kristensen, Weisæth, & Heir, 2012; McClatchey & Vonk, 2005; Silverman & Worden, 1992). Losses can also disrupt a youth’s sense of continuity and safety, triggering life changes such as new household members, relocation, and a change in schools (Hooyman & Kramer, 2013; Melhem, Moritz, Walker, Shear, & Brent, 2007; Nolen-Hoeksema, Larson, & Larson, 2013).

Loss can have a particularly adverse effect during adolescence, a critical developmental period, already marked by cognitive, emotional, and biological changes (Balk & Corr, 2001; Blundell, 2001; Melhem, Porta, Shamseddeen, Walker Payne, & Brent, 2011; O’Halloran, Ingala, & Copeland, 2005). Detained youth may be at greater risk than youth in the community for experiencing high-risk losses. Such youth are exposed to greater violence by virtue of their criminal lifestyles, and many grow up in poverty and in high-crime neighborhoods (Crimmins, Cleary, Brownstein, Spunt, & Warley, 2000; Cuevas, Finkelhor, Shattuck, Turner, & Hamby, 2013; Morin & Welsh, 1996).

It is important to study loss among detained youth for three reasons. First, loss may contribute to antisocial behavior and increase risk for criminal recidivism among youth (Crimmins et al., 2000; Farrington, 2007; Juby & Farrington, 2001; Pitt-Aikens & McKinnon, 2000). Understanding the scope and nature of loss among these youth will help identify areas for supportive intervention, which may reduce criminal recidivism. Second, detained youth are at high risk for mental disorders; between half to two-thirds of juvenile detainees have at least one mental disorder (Colins et al., 2010; Fazel, Doll, & Långström, 2008; Kates, Gerber, & Casey, 2014; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002). Losses can exacerbate existing mental disorders among these youth and, left unaddressed, can impede treatment and recovery (Brown, Sandler, Tein, Liu, & Haine, 2007; Melhem et al., 2011; Pillay & Descoins, 2006; Poijula, Dyregrov, Wahlberg, & Jokelainen, 2001). Third, loss can greatly aggravate the risk of poor outcomes among detained youth, who already face numerous risk factors for poor outcomes (Crimmins et al., 2000; Maschi, 2006; Pitt-Aikens & McKinnon, 2000). At-risk youth are less likely than youth in the general population to receive supportive interventions (Stagman & Cooper, 2010), particularly following a loss (Dowdney et al., 1999).

Despite the need, no study has adequately documented the rates of loss among detained youth. Past studies of loss among youth involved in the juvenile justice system have had small samples (Morin & Welsh, 1996) or have focused on only the loss of one type of loved one (Crimmins et al., 2000; Morin & Welsh, 1996; Pitt-Aikens & McKinnon, 2000). None has examined the association of loss with mental disorders.

The current study examines the prevalence and patterns of loss and their association with mental disorders in a large-scale, randomly selected, stratified sample of juvenile detainees using a comprehensive measure of loss.

METHODS

Participants and Sampling Procedures

Participants were part of the Northwestern Juvenile Project, a longitudinal study of 1829 youth (aged 10–18 years) arrested and detained between November 20, 1995, and June 14, 1998, at the Cook County (Illinois) Juvenile Temporary Detention Center (CCJTDC) in Chicago (Teplin et al., 2002). The CCJTDC received approximately 8,500 admissions each year during the time data were collected (1992). The CCJTDC is used solely for pretrial detention and for offenders sentenced for fewer than 30 days. All detainees younger than 17 years are held at the CCJTDC, including youth processed as adults. Youth up to the age of 21 years may be detained at the CCJTDC if they are being prosecuted for an arrest that occurred when they were younger than 17 years.

Like juvenile detainees nationwide (Snyder & Sickmund, 1999), approximately 90% of the CCJTDC detainees are male and most are racial/ethnic minorities. The population of the CCJTDC is 77.9% African-American, 5.6% non-Hispanic white, 16.0% Hispanic, and 0.5% other racial/ethnic groups. The age and offense distributions of the CCJTDC detainees are also similar to detained juveniles nationwide (Snyder & Sickmund, 1999).

No single site can represent the entire country because jurisdictions may have different options for diversion (Grisso, Tomkins, & Casey, 1988). Nevertheless, Illinois' criteria for detaining juveniles are similar to those of other states (Grisso et al., 1988). All states allow for pretrial detention if it is determined that the juvenile needs protection, is likely to flee, or is a danger to the community (Grisso et al., 1988).

All detainees who were awaiting the adjudication or disposition of their case were eligible to participate in the study. Selected strata were oversampled as part of the study design to obtain data on key subgroups (e.g., Hispanic females). The sample was stratified on the following variables: age (10–13 years or 14 years), gender, race/ethnicity (African-American, non-Hispanic white, and Hispanic), and legal status (processed as a juvenile or an adult). Within each stratum, we used a random numbers table to select names from CCJTDC's intake log. Throughout the study, we tracked the number of participants needed to fill each cell. Project staff sampled the rarest categories first. The final sampling fractions ranged from 0.018 to 0.689.

Studying detained youth requires special procedures because they are minors, because they are detained, and because they do not have a parent or guardian who can provide appropriate consent (Federal Register, 1991). Project staff approached participants on their units, explained the project, and assured them that anything they stated during the interview (except acute suicidal or homicidal risk) would be confidential. Participants signed either an assent form (if they were <18 years) or a consent form (if they were 18 years). Federal regulations allow parental consent to be waived if the research involves minimal risk (45 CFR 46.116[c], 45 CFR 46.116[d], and 45 CFR 46.408[c]) (Federal Register, 1991; Shaffer, 1992). The Northwestern University Institutional Review Board, the Centers for Disease Control and Prevention Institutional Review Board, and the U.S. Office of Protection from Research Risks waived parental consent. However, as ethicists recommend, we nevertheless tried to contact parents to provide them an opportunity to decline participation and to offer them additional information (45 CFR 46.116[d][4]) (Fisher, 1993; Nolan, 1992). Despite repeated attempts to contact the parent or guardian, for 43.8% of the participants, none could be found. In lieu of parental consent, youth assent was overseen by an independent participant advocate representing the interests of the participants. Federal regulations allow for a participant advocate if parental consent is not feasible (45 CFR 46.116[d]) (Fisher, 1993).

We began collecting data on loss 13 months after the larger study began. Of the 1148 names selected, 34 youth (2.96%) refused to participate. There were no significant differences in refusal rates by gender, race/ethnicity, or age. Two youth were released from the detention center before completing the interview; 189 youth were released while we were attempting to locate their caregivers for consent or before we were able to schedule an interview; 25 youth were released after consent was obtained but before the interview began. The final sample consisted of 898 youth.

Measures

Loss—Questions about losses refer to loss due to death. They include relationship to the deceased (caregiver, sibling, close friend, other important person), the number of each type

of loss, cause of death, age of the youth at the time of the death, whether the youth was living with the person at the time of the death, and whether the death was sudden or expected. Participants were also asked about the situational and behavioral consequences of losses.

Based on the literature, the following types of loss were defined as “high-risk”: *Loss of a Caregiver* – death of a parent, step-parent or caregiver; *Sudden Loss* – at least one death perceived as sudden; *Violent Loss* – at least one death was due to violence from another (killed, shot, stabbed, or strangled) or suicide; and *Multiple Losses* – youth experienced two or more losses (Cerel et al., 2006; McClatchey & Vonk, 2005; Silverman & Worden, 1992).

Mental Disorder—To assess the presence of mental disorders we used the Diagnostic Interview Schedule for Children (DISC) Version 2.3 (Bravo, Woodbury-Farina, Canino, & Rubio-Stipec, 1993; Shaffer, Fisher, Dulcan, & Davies, 1996), the most recent English and Spanish versions available at the time of interview. The DISC is a self-report measure that assesses the presence of disorders in the six months prior to the interview. The DISC is highly structured, contains detailed symptom probes, has acceptable reliability and validity (Fisher et al., 1993; Piacentini et al., 1993; Schwab-Stone et al., 1993; Shaffer et al., 1996; Shaffer et al., 1993), and requires a relatively brief training period. Mental disorder was determined via the DISC 2.3 computer algorithms based on *DSM-III-R* criteria. The DISC 2.3 does not have a posttraumatic stress disorder (PTSD) module. We began administering the PTSD module of the DISC-IV, based on *DSM-IV* criteria 13 months after the study began. Additional information on our methods has been published elsewhere (Abram, Teplin, McClelland, & Dulcan, 2003; Teplin et al., 2002).

Sampling and Statistical Analyses

Sample weights were used to estimate descriptive statistics and model parameters that reflected the CCJTDC’s population. Taylor series linearization was used to estimate standard errors (Cochran, 1977; Levy & Lemeshow, 1999). We used weighted logistic regression to examine differences in the prevalence of losses by demographic characteristics (gender and race/ethnicity) and Poisson regressions to examine differences in the lifetime incidence of losses by demographic characteristics. Poisson regression estimates were adjusted for age. We used weighted logistic regression to examine differences in mental disorders by specific types of loss while adjusting for demographic characteristics and the presence of a loss other than the type currently being tested. Data analyses were conducted using Stata 11 (StataCorp, 2009).

The sample of 898 youth included 532 males (59.2%) and 366 females (40.8%). Participants ranged in age from 10 to 18 years. The mean age was 14.8 years, the median age was 15, and the mode was 16. The sample included 490 African-Americans (54.6%), 252 Hispanics (28.1%), and 154 non-Hispanic whites (17.1%). An additional two youth (0.2%) who self-identified as “other” race/ethnicity (one male, one female) were excluded from analyses examining race/ethnicity.

RESULTS

Prevalence Rates of Loss

Table 1 shows the prevalence of loss (any loss, high-risk loss, and other types of loss) among juvenile detainees by gender and race/ethnicity. Nearly all participants (88.3%) experienced at least 1 loss prior to detention, with a mean of 2.6 lifetime losses, and a maximum of 25 losses (not shown).

High-Risk Loss—Table 1 shows that most (86.5%) of the sample experienced at least one high-risk loss. Two-thirds experienced a loss due to violence (65.5%), and two-thirds experienced multiple losses (65.1%).

Loss of a Caregiver—Approximately one-fifth (21.3%) of participants lost a caregiver. Among those participants who lost caregivers, 60.8% lost their biological father, and 28.9% lost their biological mother (not shown). Two-thirds of the sample (66.5%) were living with their caregiver at the time of that caregiver's death (not shown); 15.4% of deceased caregivers died by violent means (not shown).

Loss of a Sibling—More than one-tenth (13.9%) of participants lost a sibling. Of those who lost siblings, 35.1% lost a biological brother and 27.0% lost a biological sister (not shown). More than half of deceased siblings (57.0%) died by violent means (not shown).

Loss of a Close Friend—Two-thirds (67.6%) of participants experienced the death of at least one close friend (mean = 1.4 and range = 0–23); more than one-quarter (27.8%) lost at least two friends (not shown). Most of these losses (79.0%) were of close male friends and nearly all deaths of close friends (85.9%) were due to violence (not shown).

Loss of Other Important Person—More than half (55.8%) of participants reported the death of at least one other important person (not including caregivers, siblings, or close friends) in their lives (mean = 0.8 and range = 0–6). Over half of the losses (56.7%) were of grandparents, 43.0% were of aunts or uncles, and 13.2% were of cousins (not shown). One quarter of youth (24.8%) lost at least one other important person to violence (not shown).

Gender and Racial/Ethnic Differences

Table 1 shows that significantly more males than females lost a close friend (Odds Ratio [Standard Error]: Male v Female=1.7 [0.4]) and experienced losses due to violence (Male v. Female=1.7 [0.4]). There were no other gender differences.

Among females, significantly more African-Americans and Hispanics compared with non-Hispanic whites experienced a high-risk loss (African-American v. non-Hispanic white=2.4 [0.8], Hispanic v. non-Hispanic white=2.7 [1.2]), a loss due to violence (African-American v. non-Hispanic white=2.9 [1.0], Hispanic v. non-Hispanic white=4.0 [1.6]), or lived with the loved one when that person died (not shown: African-American 33.1%, Hispanic 18.2%, non-Hispanic white 16.9%, African-American v. non-Hispanic white=2.4 [1.0], African-American v. Hispanic=2.2 [0.8]). Significantly more African-American females lost an "other" important person than Hispanic females (African-American v. Hispanic=2.1 [0.6]).

However, more Hispanic females lost close friends than African-American females (Hispanic v. African-American=2.2 [0.6]).

Among males, significantly more African-Americans and Hispanics than non-Hispanic whites lost close friends (African-American v. non-Hispanic white=2.6 [0.8], Hispanic v. non-Hispanic white=4.0 [1.5]), experienced multiple losses (African-American v. non-Hispanic white=2.8 [0.9], Hispanic v. non-Hispanic white=2.9 [1.0]), and losses due to violence (African-American v. non-Hispanic white=2.9 [0.9], Hispanic v. non-Hispanic white=5.1 [2.0]). Significantly more African-American males than non-Hispanic white males lost a sibling (African-American v. non-Hispanic white=6.9 [4.6]) and were living with loved ones at the time of their deaths (not shown: African-American 31.6%, non-Hispanic white 14.2%, African-American v. non-Hispanic white=2.8 [1.0]). Significantly more African-American males than non-Hispanic white males or Hispanic males lived with an “other” important person when that person died (not shown: African-American 16.3%, Hispanic 6.7%, non-Hispanic white 4.7%, African-American v. non-Hispanic white=3.9 [2.1], African-American v. Hispanic=2.7 [1.2]). African-American males also had a significantly higher lifetime number of losses than non-Hispanic white males (Incidence-Rate Ratio [Standard Error]: African-American v. non-Hispanic white=1.4 [0.2]).

Effects of Loss

Over one-quarter (27.7%) of youth who lost caregivers and 2.9% of youth who lost other important people moved or changed homes as a result of the death (not shown). The loss of a caregiver led to separation from siblings for 6.5% of youth with such a loss, and for 2.1% of those who lost another important person (not shown).

Approximately one-quarter of youth reported joining a gang following the loss of a caregiver (24.1%), close friend (24.0%), or other important person (17.4%) (not shown). Declining grades were reported by 41.4% of youth after losing a caregiver, 26.0% of youth after losing a sibling, 20.2% of youth after losing a close friend, and 21.5% of youth after losing another important person (not shown).

Mental Disorders and Loss

Table 2 shows the prevalence of mental disorders among youth who experienced various types of losses. Although rates of disorder were uniformly higher among youth who experienced any type of loss compared with youth who experienced no losses, these differences were statistically significant only for mood disorders and attention deficit hyperactivity disorder (ADHD)/behavioral disorders. Youth who experienced loss of any type were at least three times as likely to have a mood disorder as youth who experienced no losses (Odds Ratio [Standard Error]: Any Loss v. No Loss= 3.2 [1.5]; Any High-Risk Loss v. No Loss = 3.3 [1.5]). Youth who experienced multiple losses were more than twice as likely to meet criteria for ADHD/behavioral disorders as youth who experienced no losses (Multiple losses v. no Losses=2.7 [1.6]).

DISCUSSION

Detained youth have experienced remarkably high rates of loss. Although studies of youth in the general population report overall rates of loss only slightly lower than our rates for detained youth (Balk, 1997; Harrison & Harrington, 2001; Ringler & Hayden, 2000), the nature and impact of the losses experienced by the two groups of youth are vastly different. Most losses experienced by youth in the general population were anticipated or from natural causes, and were of older relatives, primarily grandparents (Balk, 1997; Harrison & Harrington, 2001; Kaplow, Saunders, Angold, & Costello, 2010; Ringler & Hayden, 2000). In contrast, more than four-fifths of detained youth experienced high-risk loss such as the loss of a caregiver, sudden loss, and loss due to violence. Furthermore, two-thirds of detained youth reported having experienced multiple losses, compared with only 20% of youth in a general population survey (Balk, 1997).

Elevated rates of loss among detainees may stem, in part, from their greater likelihood of residing in neighborhoods rife with poverty, gangs, drugs, crime, and violence (Pastore & Maguire, 2002; Snyder & Sickmund, 1999; Teplin, McClelland, Abram, & Mileusnic, 2005). Such environments increase exposure to traumatic death of loved ones (Fleischman & Barondess, 2004; Geronimus, Bound, Waidmann, Hillemeier, & Burns, 1996) and may account for our findings.

However, our rates appear to be substantially higher than those of inner-city, general-population youth. Perez-Smith et al. found that approximately half of a sample of inner-city adolescents knew someone who had been murdered (Perez-Smith, Albus, & Weist, 2001). Breslau et al. similarly found that approximately half of urban young adults had experienced the sudden and unexpected death of a loved one; 26% had experienced the loss of a loved one by homicide (Breslau, Wilcox, Storr, Lucia, & Anthony, 2004). Jenkins et al. (2009) found that among African-American middle school students from chronically violent neighborhoods in Chicago, 25% had had a family member killed in a violent incident, and 14% had had a close friend killed in a violent incident. In contrast, nearly two-thirds of our sample had experienced a loss due to violence and over 85% had experienced a sudden and unexpected loss. Ickovics et al. found that 23% of teenage girls sampled from urban health clinics had experienced the death of a loved one in the past year and 50% had experienced such a loss more than a year ago (cause not specified) (Ickovics et al., 2006). In contrast, nearly 84% of detained females in our sample had experienced the loss of a loved one, and over 80% had experienced a high-risk loss.

Our findings are consistent with research suggesting a link between delinquency and high-risk loss (Crimmins et al., 2000; Draper & Hancock, 2011; Juby & Farrington, 2001; Pitt-Aikens & McKinnon, 2000) and trauma (Kerig, Becker, & Egan, 2010). Risk for gang involvement may be particularly great for youth who have experienced a high-risk loss, as our findings show that up to one-quarter of participants who experienced a loss subsequently joined a gang. There are many reasons that bereaved youth would be drawn to gangs, including the desire for a substitute family, for security (Ritter, Simon, & Mahendra, 2014; Voisin & Neilands, 2010), or for revenge (Levine, 1999). The gang offers powerful enticements to youth who have suffered losses and who often feel overlooked by their

communities and schools (Levine, 1999). Gang involvement and other forms of delinquency further increase the risk for additional negative outcomes, including early violent death (Krohn, Ward, Thornberry, Lizotte, & Chu, 2011; Levine, 1999; Richardson, Brown, & Van Brakle, 2013; Sickmund & Puzzanchera, 2014; Teplin et al., 2005).

Our findings also indicate an association between loss and mood disorders. Although our findings cannot determine a causal relationship between loss and disorder, they are consistent with reports of the elevated vulnerability for mental disorders among youth experiencing high-risk losses (Crimmins et al., 2000; Koenen, Moffitt, Poulton, Martin, & Caspi, 2007; Kristensen et al., 2012; Pitt-Aikens & McKinnon, 2000; Rheingold, Zinzow, Hawkins, Saunders, & Kilpatrick, 2012). It is likely that a variety of factors mediate the relationship between loss and the development of disorders. These include family cohesion or conflict following loss (Christ, Siegel, & Christ, 2002; Gray, 1987; Kaplow et al., 2010; Raveis, Siegel, & Karus, 1999; Tiet et al., 1998), and the availability or lack of social support and public services following loss (Clark et al., 1996; Ribbens McCarthy, 2007; Ringler & Hayden, 2000).

In general, African-American and Hispanic youth were more likely to have experienced losses than non-Hispanic white youth. Other studies of general population youth have reported similar findings (Rheingold et al., 2004; Zinzow, Rheingold, Hawkins, Saunders, & Kilpatrick, 2009). The higher rate of loss among African-American and Hispanic youth may be due to several factors, including a greater likelihood of living in the inner city (Osypuk & Acevedo-Garcia, 2010; Pastore & Maguire, 2002; Snyder & Sickmund, 1999), greater exposure to violence (Buka, Stichick, Birdthistle, & Earls, 2001; Farrell, Mehari, Kramer-Kuhn, & Goncy, 2014; Hanson et al., 2006; Sickmund & Puzzanchera, 2014), and higher rates of gang affiliation (Lahey, Gordon, Loeber, Stouthamer-Loeber, & Farrington, 1999; Sickmund & Puzzanchera, 2014).

Most Hispanic males were living with their caregiver at the time of that caregiver's death; this was less often true for African-American and non-Hispanic white males. In contemporary urban communities, the percentage of intact families tends to be higher among Hispanics than among other ethnic groups (Stoiber & Good, 1998), reflecting increased family cohesion among Hispanic families (Kamo, 2000; Landale, Oropesa, & Bradatan, 2006; MacPhee, Fritz, & Miller-Heyl, 1996). Such increased family cohesion may lead to a more profound sense of loss than for youth with a lower degree of family cohesion.

Male detainees were more likely than female detainees to have experienced violent losses and the death of a close friend. As in our study, males in the general population are more likely than females to have experienced adverse life events such as the loss of a loved one (Tiet et al., 1998), to have been exposed to violence (Hanson et al., 2006), and to report physical victimization (Finkelhor, Ormrod, Turner, & Hamby, 2005; Hanson et al., 2006). Each of these factors may be related to higher rates of impulsivity and risk-taking behavior among males, which lead to higher levels of dangerous behaviors such as fighting, truancy, substance abuse, risky sexual behaviors, and gang involvement (Rainone, Schmeidler, Frank, & Smith, 2006; Weden & Zabin, 2005; Wu, Rose, & Bancroft, 2006).

Limitations of the Study

Because our findings are drawn from a single site, they may pertain only to youth in urban detention centers with a similar demographic composition. Interview data rely on the reliability and the validity of the respondent's self-report. Questions about loss were composed for this study and their psychometric properties have not been determined. We did not examine the association between loss and socioeconomic status or type of criminal activity. Participants were recruited in the late 1990's; findings may differ for youth currently in detention. However, important aspects of the population (the disproportionate incarceration of minorities, the increase in delinquent females, and demographic characteristics) have not changed. Data on mental disorders may have differed slightly if they were based on *DSM-IV* criteria.

Implications

1. **Increase mental health services to delinquent youth who have experienced high-risk losses.** Although not all bereaved individuals require psychotherapeutic interventions (Brody, 2004; Brown et al., 2007), outreach services are often needed. The timing, duration, nature, and quality of treatment received after the loss of a loved one can affect adjustment following a childhood loss (Brown et al., 2007; Poijula et al., 2001). Youth who need intervention but do not receive adequate treatment following a traumatic loss are more likely to display mental health problems (Pojula et al., 2001) and to be at risk for poor outcomes, such as spending additional time in detention (Crimmins et al., 2000; Pillay & Descoins, 2006; Pitt-Aikens & McKinnon, 2000). Historically, high-risk youth have rarely received the care they need following a loss (Garland et al., 2005; Kearney, Draper, & Barón, 2005; Snowden, 2001). More recent efforts to adapt trauma-informed approaches to the care and management of youth in the juvenile justice system (Ford, Chapman, Hawke, & Albert, 2007; Griffin, Germain, & Wilkerson, 2012; Ko et al., 2008) are potentially powerful steps toward encouraging healing and more adaptive behavior.
2. **Enhance sources of social support to protect youth from negative outcomes following loss.** Youth with a strong sense of family and community are more likely to fare well after a high-risk loss (Kaplou et al., 2010; Ringler & Hayden, 2000; Tiet et al., 1998). In the absence of such support, youth may find a sense of belonging by joining gangs (Levine, 1999). Gang involvement, however, only increases the likelihood that youth will suffer more losses and other negative outcomes such as drug addiction and further criminal activity (McShane, Williams, & Dolny, 2003).

Churches, community centers, and mentoring programs in inner-city neighborhoods have been shown to have a positive influence on high-risk youth (Barron-McKeagney, Woody, & D'Souza, 2001; Keating, Tomishima, Foster, & Alessandri, 2002; Levine, 1999; Osofsky, 2004; Thompson & Kelly-Vance, 2001) and thus have an opportunity to assist youth following loss. In addition, teachers and community leaders can be coached in responses that may help youth cope with their losses (Buka et al., 2001). When a loss occurs within the family (e.g. parental

death), youth as well as other surviving family members may benefit from supportive family interventions, including those that foster positive family relationships and open communication about the loss (Ayers et al., 2014; Howarth, 2011; Sandler et al., 2010).

Conclusion

The numerous losses sustained by youth in detention are among the most difficult to mourn: the sudden, violent loss of intimates. Swift, focused interventions for bereaved youth may attenuate the wide-ranging negative impact of these losses.

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Table 1

Prevalence (%) of Loss Among Juvenile Detainees by Gender and Race/Ethnicity

	Males					Females						
	Total (n=898)	Total (n=532) <i>a</i>	African- American (n=247)	Non- Hispanic White (n=107)	Hispanic (n=177)	Tests of Racial/Ethnic Differences ^b	Total (n=366) ^a	African- American (n=243)	Non-Hispanic White (n=47)	Hispanic (n=75)	Tests of Racial/Ethnic Differences ^b	Test of Gender Differences ^b
Experienced Any Loss												
Experienced Any Loss Listed (%)	88.3	88.6	88.7	83.7	89.5	n.s.	83.7	84.3	70.5	85.3	n.s.	n.s.
Lifetime # of Losses (mean)	2.6	2.6	2.8	2.0	2.2	AA>W**	2.3	2.2	2.0	2.5	n.s.	n.s.
High Risk Loss (%) ^c												
Any High Risk Loss	86.5	87.0	87.0	78.2	89.3	n.s.	80.4	81.0	64.2	82.7	AA>W*,H>W*	n.s.
Loss of Caregiver/s	21.3	21.5	22.3	17.0	19.4	n.s.	19.9	22.9	10.5	16.3	n.s.	n.s.
Sudden Loss	85.7	86.3	86.8	76.2	86.7	n.s.	78.5	78.9	64.2	80.1	n.s.	n.s.
Violent Loss	65.5	66.4	65.7	40.0	77.1	AA>W***,H>W***	54.3	53.8	28.4	61.3	AA>W**,H>W***	M>F*
Multiple Losses	65.1	65.6	66.7	41.4	67.5	AA>W***,H>W**	59.6	59.3	49.4	57.8	n.s.	n.s.
Other Types of Loss (%) ^c												
Loss of Sibling/s	13.9	14.2	16.4	2.8	8.0	AA>W**	10.0	13.3	4.2	1.3	n.s. ^d	n.s.
Loss of Close Friend/s	67.6	68.6	68.2	45.2	76.6	AA>W**,H>W***	55.7	50.8	51.6	69.1	H>AA**	M>F*
Loss of Other Important Person/s	55.8	55.7	58.5	50.2	44.3	n.s.	56.5	59.4	46.3	40.9	AA>H**	n.s.

Note. Estimates and analyses are weighted to reflect the population of the detention center.

^a One male and one female who self-identified as “other” are excluded from analyses of race/ethnicity.

^b Tests are based on weighted logistic regression, except for “Lifetime # of losses” which are based on a poisson regression adjusted for age.

^c Participants may have experienced more than one loss.

^d Racial/ethnic differences could not be estimated for Hispanic females. Only one Hispanic female experienced the loss of a sibling.

* p<0.05;

** p<0.01;

*** p<0.001