

PAPER**PSYCHIATRY & BEHAVIORAL SCIENCES; GENERAL**

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An Empirical Analysis of 30 Years of U.S. Juvenile and Adult Sexual Homicide Offender Data: Race and Age Differences in the Victim–Offender Relationship

ABSTRACT: Little is known about the racial patterns of crimes committed by sexual homicide offenders (SHOs). This study examined race and age influences on victim–offender relationship for juvenile and adult SHOs. A large sample ($N = 3868$) from the Supplemental Homicide Reports (1976–2005) was used. Analyses of victim–offender patterns included examining victim age effects (child, adolescent, adult, and elderly). The findings revealed several race- and age-based differences. Black offenders were significantly overrepresented in the SHO population. This finding held for juveniles and adults independently. White SHOs were highly likely to kill within their race, “intra-racially” (range 91–100%) across four victim age categories, whereas Black SHOs killed both intra-racially (range 24–82%) and inter-racially (18–76%), with the likelihood of their killing inter-racially increasing as the age of the victim increased. This study underscores the importance of considering victim–offender racial patterns in sexual murder investigations, and it offers practical implications for offender profiling.

KEYWORDS : forensic science, sexual homicide, homicide, crime victims, rape, race, offender profiling

In a systematic public survey of crime seriousness in North America, sexual homicide was ranked second only to the bombing of a public building that killed 20 people (1). Although sexual homicides have attracted extensive media attention over the years, this type of violent crime is rare. Only 0.8% of over 470,000 known U.S. homicides from 1976 to 2004 appeared to be sexual homicides (2). Furthermore, this percentage was found to be relatively stable over the years, and is consistent with the 0.5% rate found over a 10-year period in Virginia (3), and the 0.6% rate found over a 10-year period in Florida for juvenile sexual homicides (4). Estimates of the proportion of U.S. homicides that were sexual homicides for the 5-year period from 1991 through 1995 similarly ranged from 0.6 to 0.9 (5).

Because of the relative rarity of this form of crime along with only a small number of researchers exploring it, sexual homicide remains a fertile area for future study. In the last 20 years, there have been <40 empirically published studies on sexual homicide (6). Accordingly, many areas in the study of sexual homicide are still largely unexplored, including racial differences. Contributing to the understudied nature of this subject is the absence of a standardized definition for sexual homicide, and in turn the unavailability of dependable governmental statistics. In the Uniform Crime

Reports (UCRs), the official U.S. national crime statistics source, sexual homicide is indexed under the “Unknown Motive” category. This practice occurred because sexual homicide is typically treated as an “ordinary” homicide and not as a sex crime by most of the law enforcement agencies in North America and the United Kingdom (7–10). Complicating this challenge, the sexual dynamics of such crimes are not always apparent at crime scenes, leading to an underreporting of sexual murders (8,11).

A recent empirical study on sexual homicide using a large sample of U.S. data over a span of 29 years was conducted by recoding data from the UCR Supplemental Homicide Reports (SHRs). Homicides that indicated rape-murder and other sex offense-murder were defined as sexual homicides (2). The identification of sexual homicide cases using this method may include some nonsexual homicide cases that were miscoded and exclude others that were sexual homicides but not coded correctly. Additionally, it is dependent on the homicides actually being identified as such and reported by law enforcement to the Federal Bureau of Investigation (FBI), and a small percentage of cases go underreported in this voluntary process. Despite these imperfections, we nonetheless believe this data source to be the best one currently available for a longitudinal study on sexual homicide in the United States given its large sample.

To date, very few studies have investigated the differences between juvenile and adult sexual murderers in terms of the offending process, offender’s characteristics, and victimology. Hill, Habermann, Klusmann, Berner, and Briken (12) were among the first to conduct studies that involved juvenile and adult sexual murderers. They recently published the first follow-up study on sexual murderers ($N = 166$) for a 10-year period after their release

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from incarceration. Eleven percent of the sample subjects ($N = 18$) were juveniles. They found that the recidivism rate of the sexual homicide perpetrators after 20 years at risk was 23.1% for sexual and 18.3% for nonsexual violent offenses. Sexual homicides committed by those under 18 resulted in higher sexual recidivism rates.

Using recoded SHR data, ($N = 3845$), Chan and Heide (2) examined these two distinctive offender age groups in terms of murder weapon selection from 1976 to 2004. Their findings indicated that both juvenile ($N = 452$) and adult sexual murderers ($N = 3393$) were equally likely to use personal weapons and contact and edged weapons in their sex killings. Juveniles, however, were more likely than their adult counterparts to use firearms as their murder weapons in sexual homicides. Juvenile and adult sex killers showed a preference for using personal weapons when they murdered vulnerable victims like children and elderly victims. Contact and edged weapons were more likely to be used against adolescent and adult victims by adult sexual murderers. Juvenile sex killers, however, were more likely to select contact and edged weapons as their murder weapons in killing adolescent victims. Interestingly, firearms were preferred by the juveniles when the sexual homicide victims were adults, consistent with Heide's physical strength hypothesis (13,14).

Literature Review

To provide for a more expansive background to the study at hand, pertinent literature on racial and age differences in homicide, sex crimes, and sexual homicide will be reviewed in the following three sections.

Racial Differences in Nonsexual Homicide

Despite recent declines in homicide, Black offending and victimization rates for homicide have remained much higher than those for their White counterparts, given the low representation of Blacks in the overall U.S. population (15–23). Blacks comprised about 50% of all homicide arrestees, whereas this racial group made up *c.* 13% of the total population in the United States (17,24).

Homicide is an unequivocally intra-racial violent offense; victims and offenders from the same race make up 86–90% of all known homicides (15,25,26). Like single-victim homicides, serial murders are also more likely to be intra-racial killings (27). The percentages of Black homicides that were intra-racial killings were higher than their White counterparts (95–97% vs. 87–91%, respectively) (23,28). According to Phillips (29), the high incidence of intra-racial killings was because of social isolation and residential segregation that limit the social contact among groups of different class and racial backgrounds.

Close to 60% of Black offender–Black victim homicides in Humphrey and Palmer's (26) study involved a primary relationship between the offender and victim when compared to 48% in White intra-racial killings. Black victims who were murdered by their friends were more likely to come from their own racial group. In contrast, White victims were two times more likely to be killed by strangers than Black victims (26).

Inter-racial homicides, killings that cross racial lines, are likely to occur more often in larger cities with higher total homicide rates than in smaller cities, and rural and suburban areas (30). The rate of inter-racial killings depends on the social contacts between the racial groups. If the percentage of a particular racial group in a city is low, then it will increase the probability of inter-racial group

interactions, which leads to the higher likelihood of inter-racial killings (30). In a study by Humphrey and Palmer (26), 14% of all homicides were inter-racial homicides, most commonly Black offenders killing White victims (11%), with the converse of White offenders killing Black victims being only 2%.

According to Jacobs and Wood (30), most of the inter-racial homicides of White offenders–Black victims occurred during inter-personal disputes, whereas murders of Black offenders–White victims largely happened during felonies. Wilbanks (23) argued that Black offenders were far more likely than White offenders to murder over monetary reasons like gambling and to kill in gang-related incidents. Black offender inter-racial homicides were believed to be the result of the deprivation of resources and competition for jobs and political power that fueled the racial antagonism against Whites (31). Most of the victims of inter-racial homicides were strangers or acquaintances to their offenders (26).

Racial Differences in Sex Crime

No detailed national statistics on sexual victimization were collected before the year 1973 (32). Currently, the National Crime Victimization Survey (NCVS), as a replacement of the National Crime Survey in 1992, and the UCRs are the two primary official annual national statistics for sexual victimization in the United States. These annual figures on sexual assaults are inordinately low compared to actual incidence because most victims of sexual assault do not report their victimization to the law enforcement officials (33). Relying on available figures, the United States has the highest reported sexual assault cases in comparison with other developed countries like Canada, England, West Germany, Sweden, Denmark, France, Holland, Belgium, and Japan (34).

Rape is most often an intra-racial violent crime (32,35). Results of a study conducted in San Francisco suggested that *c.* 24% of women will be sexually assaulted and 20% will experience an attempted rape in their lifetime. The majority of sexual assault victims are adolescents 12–17 years of age (36). African-American females may be at even higher risk for rape than females from other racial groups, especially marital rape (37,38). Although it is often believed that the majority of rapists are Blacks (39), research has revealed that six in every 10 sex offenders are White males who are in their early twenties (36). Young Black sex offenders, however, are more often arrested for forcible/stranger rapes (35). This finding is consistent with data showing that, for male against female sexual assaults and rapes combined, Black offenders are more likely than White offenders to assault strangers (44% vs. 28% of victimizations) (33,40).

Racial Differences in Sexual Homicide

The available data in this area, hampered in most cases by small, nonrepresentative samples, are limited. Most sexual homicidal offenders in these studies were White (60–95%) and committed intra-racial killings (41–45). Same race victim selection was particularly true in a study of 14 juvenile sexual murderers, most of whom were White (46); 86% selected intra-racial victims.

The literature on Black sexual murderers, although sparse, reveals some anomalies. A landmark clinical report of a 22-year-old African-American male who sexually assaulted and killed six female African-American strangers was among the first studies to document sexual killings, as well as serial killings, by Black offenders (47). In contrast to the intra-racial nature of these killings, 82% (48) and 77% (49) of two predominantly adult-aged samples of Black sexual murderers (sample sizes of 33 and 110) killed

elderly females inter-racially: These elderly females were all White (48) or a combination of White and Hispanic (49).

To the authors' knowledge, no study has investigated race and age differences in victim-offender relationship for juvenile and adult sexual murderers. The current study examines these relationships using a large national sample of sexual murderers.

Method

Thirty years (1976–2005) of the FBI's Supplementary Homicide Report data (see 50) were used in this study. This database contains demographic information on the victim and offender characteristics in homicidal events that were reported to the FBI by participating law enforcement agencies across the nation. Sample subjects included in this study were individuals arrested for homicide with apparent sexual elements that occurred as a result of rape and other sexual offenses. Out of a total of 597,351 individuals arrested for homicide over the period of 30 years under review, 3868 (0.6%) of cases with pertinent offense-related information were categorized as sexual homicides.

The age of the sexual homicide offender (hereafter abbreviated as "SHO") was one of the two primary offender variables examined in this study. Juveniles were defined as under age 18; adults as 18 years of age and over. The second variable of analysis was the racial group of the SHO. Race differences were investigated by focusing on the two racial groups that comprised 98.1% of all arrests for sexual homicide in the United States: (i) White and (ii) Black. The two other offender racial groups (Asian and Pacific Islander, American Indian or Alaskan Native) coded by the FBI were excluded in this study because of the limited involvement of these racial groups (1.9%) in sexual homicide arrests. The SHR database does not code offenders or victims as multiracial and no longer records Hispanic origin. Accordingly, analyses by multiracial or Hispanic group affiliations are not possible with the SHR dataset.

Four categories were created for victim type: (i) child, age 12 years and below, (ii) adolescent, age 13–17 years, (iii) adult, age 18–59 years, and (iv) elderly, age 60 years and above. Two racial groups were coded for victim type: (i) White and (ii) Black. Victims from other races constituted only 2.6% of the overall victim population and were also excluded from the current study.

This study served two broad aims. It was designed to explore the characteristics of sexual homicide crimes and SHOs using a large national database that consisted of those apprehended for homicide over the 30-year period from 1976 to 2005. In addition to being exploratory, this study had an analytical component. Chi-square analyses were performed to compare victim-offender racial relationships by different offender age and racial groups across different victim age and racial groups. Significance level was set at 0.05.

There are two ways of looking at racial differences in victim-offender data in sex murders. One can focus on the victims, asking the question: By whom are White and Black victims being murdered? Conversely, one can focus on the offenders, asking who are White and Black offenders killing? From the standpoint of offender profiling, the answers to both questions are important. Accordingly, data from chi-square analyses pertinent to both questions are presented.

Characteristics of Sample Subjects

Analyses of sample demographics were based on the available SHR data with known cases for offender's race ($N = 3868$), offender's age according to race ($N = 3792$), victim's race ($N = 3787$),

and victim's age ($N = 3836$). Over a span of three decades, of all those Black and White offenders apprehended for sexual homicide, 59% were White, while the remaining 41% of those arrested were Black. These racial percentages remained the same for juvenile and adult SHO groups independently.

As depicted in Table 1, 88% of all SHOs arrested were over age 18; 52% of the entire sample were White adults; and 36% were Black adults. Juvenile sexual murderers comprised 12% of all sample SHOs, 7% being White juveniles and 5% being Black juveniles.

In terms of victim characteristics, nearly three-quarters (72%) of the victims were White, and the remaining 28% were Black. About three-quarters (77%) of the victims of sexual murderers were over 18 years (64% adult; 13% elderly) and slightly less than one-quarter (23%) were under 18 years (11% children; 12% adolescents).

Results

Chi-square analyses proceeded in eight stages. The first four analyses examined the relationship between offender race and victim race, offender race and victim race controlling for offender age, and the relationship between offender race and victim age group. The next four analyses explored the relationship between offender race and the race of the victim within each of the victim age categories (child, adolescent, adult, and elderly), controlling for the effect of offender age.

Victim-Offender Racial Differences in Sexual Homicides

As shown in Table 2, victim race differed significantly by offender race ($\chi^2(1) = 1459.06, p < 0.001$). Although both racial groups were likely to be killed by members of their own race, Black victims were more likely to be murdered by members of their own race (90%) than White victims (78%). Consistent with the victimization data, the pattern of offending shows sharp racial differences. White SHOs killed within their race 95% of the time. In contrast, Black SHOs killed intra-racially only 61% of the time. Additionally, Black SHOs were significantly overrepresented (41%) in the SHO population given their 13% representation in the U.S. population ($\chi^2(1) = 53.02, p < 0.001$).

TABLE 1—Variables of the sexual homicide sample extracted from the Uniform Crime Reports [United States]: Supplementary Homicide Reports, 1976–2005 ($N = 3868$).

	Number of Cases	Percent of Total (100%)
Sexual murderer race ($N = 3868$)		
White	2286	59%
Black	1582	41%
Sexual murderer age by race ($N = 3792$)		
Juvenile White	263	7%
Juvenile Black	182	5%
Adult White	1990	52%
Adult Black	1357	36%
Victim race ($N = 3787$)		
White	2739	72%
Black	1048	28%
Victim age group ($N = 3836$)		
Child	441	11%
Adolescent	473	12%
Adult	2439	64%
Elderly	483	13%

TABLE 2—Victim–offender racial relationship (N = 3787).

Victim Race	Sexual Murderer Race		Total (%)
	White	Black	
White	2131	608	2739
Row percent	78%	22%	100%
Column percent	95%	39%	
Black	100	948	1048
Row percent	10%	90%	100%
Column percent	5%	61%	
Total (%)	2231	1556	3787
Row percent	59%	41%	100%
Column percent	100%	100%	

$\chi^2(1) = 1459.06$, Phi = 0.62, $p < 0.001$.

Victim–Offender Racial Differences in Sexual Homicides by Juvenile and Adult Offenders

When adult and juvenile samples were independently examined, as in Table 3, Black SHOs were again significantly overrepresented among juvenile SHOs ($\chi^2(1) = 24.11$, $p < 0.001$) given their 15% representation in the U.S. population for those under the age of 18 (51). Similarly, Black SHOs were also significantly overrepresented among adult SHOs ($\chi^2(1) = 60.55$, $p < 0.001$) given their 12% representation in the U.S. population for those 18 years and above (52).

Juvenile White and Black SHOs differed significantly according to the race of victim they targeted ($\chi^2(1) = 125.80$, $p < 0.001$). Table 3 shows that both White and Black victims were likely to be killed intra-racially, with Black victims being more likely to be killed by members of their own group (86%) than White victims (75%). Offender racial differences in victim selection are pronounced when the analysis focuses on the race of the victims whom juvenile SHOs killed. Nearly 19 of 20 White juvenile SHOs killed victims within their own race, whereas only 11 of 20 Black juvenile SHOs killed within their own race.

Adult White and Black SHOs also differed significantly with respect to the race of their victims ($\chi^2(1) = 1334.23$, $p < 0.001$).

TABLE 3—Victim–offender racial relationship of juvenile sexual murderer (N = 436) and adult sexual murderer race (N = 3277).

Victim Race	Offender Race		Total (%)
	White	Black	
Juvenile sexual murderer ($\chi^2(1) = 125.71$, Phi = 0.54, $p < 0.001$)			
White	242	82	324
Row percent	75%	25%	100%
Column percent	94%	46%	
Black	16	96	112
Row percent	14%	86%	100%
Column percent	6%	54%	
Total (%)	263	181	436
Row percent	59%	41%	100%
Column percent	100%	100%	
Adult sexual murderer ($\chi^2(1) = 1334.23$, Phi = 0.64, $p < 0.001$)			
White	1860	502	2362
Row percent	79%	21%	100%
Column percent	95%	38%	
Black	81	834	915
Row percent	9%	91%	100%
Column percent	4%	62%	
Total (%)	1979	1355	3277
Row percent	59%	41%	100%
Column percent	100%	100%	

As depicted in Table 3, a similar killing pattern is observed with respect to adult sexual murderers. Black victims were significantly more likely to be killed intra-racially (91%) than White victims (79%). Similar to their juvenile counterparts, adult Black SHOs were significantly more likely than White adult SHOs to kill outside their race (38% vs. 4%).

Types of Sexual Homicide Victims by Offender Race

As shown in Table 4, the types of victims killed by White and Black SHOs differed significantly ($\chi^2(3) = 55.83$, $p < 0.001$). Adults constituted the largest victim group for both White SHOs (63%) and Black SHOs (64%); differences in these percentages were not significant. Significant differences were found between White and Black SHOs, however, in the killing of children ($\chi^2 = 10.53$, $df = 1$, $p < 0.05$), adolescents ($\chi^2 = 9.87$, $df = 1$, $p < 0.05$), and elderly victims ($\chi^2 = 35.41$, $df = 1$, $p < 0.001$). Children and adolescents were twice as likely to be killed by White than Black SHOs. In contrast, elderly victims were significantly more likely to be killed by Black SHOs than White SHOs (54% vs. 46%).

Differences in victim selection by White and Black SHOs were again notable. When compared to their racial counterparts, White SHOs were significantly more likely to kill children (13% vs. 9%) and adolescents (14% vs. 10%), whereas Black SHOs were significantly more likely to kill elderly victims (17% vs. 10%).

Types of Sexual Homicide Victims by Offender Race Controlling for Offender Age

Table 5 reveals that the types of victims killed by juvenile White and Black SHOs differed significantly ($\chi^2(3) = 18.57$, $p < 0.001$). Adult victims were the most common class of victims chosen by juvenile White (42%) and Black (51%) offenders. Adolescents (28%) were the next frequent victim age group to be killed by juvenile White SHOs, whereas juvenile Black SHOs selected elderly victims (21%) as their second most common victim class. Only the difference between juvenile White and Black SHOs in the killing of adolescents, however, was significant ($\chi^2 = 11.07$, $df = 1$,

TABLE 4—Victim age group by sexual murderer race (N = 3836).

Victim Age Group	Sexual Murderer Race		Total (%)
	White	Black	
Child*	294	147	441
Row percent	67%	33%	100%
Column percent	13%	9%	
Adolescent†	313	160	473
Row percent	66%	34%	100%
Column percent	14%	10%	
Adult	1438	1001	2439
Row percent	59%	41%	100%
Column percent	63%	64%	
Elderly‡	221	262	483
Row percent	46%	54%	100%
Column percent	10%	17%	
Total (%)	2266	1570	3836
Row percent	59%	41%	100%
Column percent	100%	100%	

$\chi^2(3) = 55.83$, Cramer's V = 0.12, $p < 0.001$.

*Child victims ($\chi^2 = 10.53$, $df = 1$, $p < 0.05$).

†Adolescent victims ($\chi^2 = 9.87$, $df = 1$, $p < 0.05$).

‡Elderly victims ($\chi^2 = 35.41$, $df = 1$, $p < 0.001$).

TABLE 5—Victim age group by juvenile sexual murderer race (N = 444) and adult sexual murderer race (N = 3319).

Victim Age Group	Offender Race		Total (%)
	White	Black	
Juvenile sexual murderer ($\chi^2(3) = 18.57$, Cramer's $V = 0.20$, $p < 0.001$)			
Child	46	28	74
Row percent	62%	38%	100%
Column percent	18%	15%	
Adolescent*	74	24	98
Row percent	75%	25%	100%
Column percent	28%	13%	
Adult	111	92	203
Row percent	55%	45%	100%
Column percent	42%	51%	
Elderly	31	38	69
Row percent	45%	55%	100%
Column percent	12%	21%	
Total (%)	262	182	444
Row percent	59%	41%	100%
Column percent	100%	100%	
Adult sexual murderer ($\chi^2(3) = 38.81$, Cramer's $V = 0.11$, $p < 0.001$)			
Child†	248	118	366
Row percent	68%	32%	100%
Column percent	13%	9%	
Adolescent	238	134	372
Row percent	64%	36%	100%
Column percent	12%	10%	
Adult	1298	884	2182
Row percent	60%	40%	100%
Column percent	66%	65%	
Elderly‡	188	211	399
Row percent	47%	53%	100%
Column percent	9%	16%	
Total (%)	1972	1347	3319
Row percent	59%	41%	100%
Column percent	100%	100%	

*Adolescent victims ($\chi^2 = 11.07$, $df = 1$, $p < 0.05$).

†Child victims ($\chi^2 = 10.54$, $df = 1$, $p < 0.05$).

‡Elderly victims ($\chi^2 = 25.06$, $df = 1$, $p < 0.001$).

$p < 0.05$). Nearly three-quarters of the 98 adolescents killed in sexual murders were killed by White SHOs.

Like their juvenile counterparts, adult White and Black SHOs also differed significantly in the killing of different types of victims ($\chi^2(3) = 38.81$, $p < 0.001$). Racial differences were significant with respect to children and elderly victims killed. More than two-thirds of children killed in sexual homicides by adult offenders were killed by White offenders ($\chi^2 = 10.54$, $df = 1$, $p < 0.05$). Although no significant differences were found, adolescents and adults were also more likely to be killed by White SHOs (64% and 60%, respectively) than their Black counterparts (36% and 40%). In contrast, more elderly victims were killed by Black SHOs than White SHOs (53% vs. 47%) ($\chi^2 = 25.06$, $df = 1$, $p < 0.001$). Similar to the juvenile Black sexual homicide offending pattern, elderly victims (16%) were the next frequently selected victim age group behind the adult victim age group (65%) to be killed by adult Black SHOs. Interestingly, in contrast to their juvenile White sexual homicide offending, children (13%) were the next frequently killed victim age group after the adult victim age group (66%) by adult White sex killers.

Specific Types of Sexual Homicide Victims by Offender Race Within Offender Age Categories

Analyses examined differences between juvenile and adult sexual murderers by offender race within each of the victim types (child,

TABLE 6—Child victim race by juvenile sexual murderer race (N = 74) and adult sexual murderer race (N = 360).

Child Victim Race	Offender Race		Total (%)
	White	Black	
Juvenile sexual murderer ($\chi^2(1) = 43.67$, $\Phi = 0.77$, $p < 0.001$)			
White	43	5	48
Row percent	90%	10%	100%
Column percent	94%	18%	
Black	3	23	26
Row percent	12%	88%	100%
Column percent	6%	82%	
Total (%)	46	28	74
Row percent	62%	38%	100%
Column percent	100%	100%	
Adult sexual murderer ($\chi^2(1) = 223.04$, $\Phi = 0.79$, $p < 0.001$)			
White	232	21	253
Row percent	92%	8%	100%
Column percent	95%	18%	
Black	12	95	107
Row percent	11%	89%	100%
Column percent	5%	82%	
Total (%)	244	116	360
Row percent	68%	32%	100%
Column percent	100%	100%	

adolescent, adult, and elderly victims). Several racial differences emerged.

Child Victim Race Results

As depicted in Table 6, significant differences were found between juvenile White and Black SHOs in the killing of White and Black children ($\chi^2(1) = 43.67$, $p < 0.001$). White children were significantly more likely to be killed by juvenile SHOs from their own racial group (90%) than were Black children (88%). However, the differences in the percentages were rather small. In contrast to victim data, examination of offender data reveals noticeable racial differences with respect to child victims. Black SHOs relative to White SHOs were three times more likely to target children outside of their race (18% vs. 6%).

Significant racial differences were also found in the killing of children by adult White and Black SHOs ($\chi^2(1) = 223.04$, $p < 0.001$). The patterns observed are very similar to those observed with respect to juvenile SHOs. Although White children were significantly more likely to be murdered by adult SHOs within their race (92%) than their Black counterparts (89%), the difference is rather small. Once again, however, offender data revealed startling findings, very consistent with those found with respect to juvenile SHOs. Adult Black SHOs were 3.5 times more likely to kill victims outside of their race than adult White SHOs (18% vs. 5%).

Adolescent Victim Race Results

When adolescent victims of juvenile sexual murderers are examined, significant racial differences were also found between juvenile White and Black SHOs ($\chi^2(1) = 44.60$, $p < 0.001$). Whites in the age of 13–17 years were significantly more likely to be murdered intra-racially (91%) by juvenile SHOs than Black adolescents (83%). Dramatic differences are discernible when offending data are examined. Juvenile Black SHOs were eight times more likely to sexually murder adolescents outside their race than White SHOs (32% vs. 4%).

Adult White and Black SHOs also differed significantly in the killing of adolescents when victim and offender race were

examined ($\chi^2(1) = 214.58, p < 0.001$). Although Black and White adolescent victims were more likely to be killed by SHOs within their own racial group, the pattern observed with respect to adult offenders is different from the one observed with respect to juvenile offenders. White adolescents were noticeably less likely than Black adolescents to be murdered intra-racially by adult SHOs (86% vs. 98%). Offender data once again highlight large racial differences. Adult Black SHOs were far more likely to kill outside of their race than their White counterparts (29% vs. 1%) (Table 7).

Adult Victim Race Results

Table 8 reveals that races of adult sexual homicide victims differed significantly by juvenile White and Black SHOs ($\chi^2(1) = 47.59, p < 0.001$). Both victim and offender data reveal

TABLE 7—Adolescent victim race by juvenile sexual murderer race (N = 94) and adult sexual murderer race (N = 365).

Adolescent Victim Race	Offender Race		Total (%)
	White	Black	
Juvenile sexual murderer ($\chi^2(1) = 44.60, \text{Phi} = 0.69, p < 0.001$)			
White	69	7	76
Row percent	91%	9%	100%
Column percent	96%	32%	
Black	3	15	18
Row percent	17%	83%	100%
Column percent	4%	68%	
Total (%)	72	22	94
Row percent	77%	23%	100%
Column percent	100%	100%	
Adult sexual murderer ($\chi^2(1) = 214.58, \text{Phi} = 0.77, p < 0.001$)			
White	232	38	270
Row percent	86%	14%	100%
Column percent	99%	29%	
Black	2	93	95
Row percent	2%	98%	100%
Column percent	1%	71%	
Total (%)	234	131	365
Row percent	64%	36%	100%
Column percent	100%	100%	

TABLE 8—Adult victim race by juvenile sexual murderer race (N = 200) and adult sexual murderer race (N = 2131).

Adult Victim Race	Offender Race		Total (%)
	White	Black	
Juvenile sexual murderer ($\chi^2(1) = 47.59, \text{Phi} = 0.49, p < 0.001$)			
White	99	42	141
Row percent	70%	30%	100%
Column percent	91%	46%	
Black	10	49	59
Row percent	17%	83%	100%
Column percent	9%	54%	
Total (%)	109	91	200
Row percent	55%	45%	100%
Column percent	100%	100%	
Adult sexual murderer ($\chi^2(1) = 849.75, \text{Phi} = 0.63, p < 0.001$)			
White	1199	322	1521
Row percent	79%	21%	100%
Column percent	95%	37%	
Black	62	548	610
Row percent	10%	90%	100%
Column percent	5%	63%	
Total (%)	1290	883	2131
Row percent	59%	41%	100%
Column percent	100%	100%	

striking racial differences. Although both adult White and Black victims were likely to be killed intra-racially by juvenile SHOs, adult White victims were significantly less likely to be killed intra-racially (70%) than their Black counterparts (83%). Examination of offender data reveals that juvenile Black SHOs were about five times more likely to kill adult victims outside their race than their White counterparts (46% vs. 9%).

Similarly, significant differences were found in the killing of adult victims of different races by adult White and Black SHOs ($\chi^2(1) = 849.75, p < 0.001$). The same pattern in intra-racial victimization is seen with respect to adult victims, with White victims less likely to be killed by members of their own race (79%) than Black victims (90%). Offender data indicate that adult Black SHOs were more than seven times as likely to murder victims outside their race as adult White SHOs (37% vs. 5%).

Elderly Victim Race Results

Table 9 reveals that elderly victims of different races who were murdered by juvenile White and Black SHOs differed significantly ($\chi^2(1) = 8.43, p < 0.01$). White elderly victims were only slightly more likely to be killed by SHOs from their own race (52% vs. 48%). Conversely, all of the Black elderly sexual homicide victims were intra-racially killed ($\chi^2 = 7.2, \text{df} = 1, p < 0.01$). In terms of the offending pattern against elderly victims, juvenile White SHOs only killed intra-racially. In sharp contrast, 76% of juvenile Black SHOs killed outside their race. There were no cases of White juvenile SHOs having victimized elderly Black females.

When the races of adult sexual murderers are examined, significant differences were found in the killing of elderly victims of different races by White and Black SHOs ($\chi^2(1) = 92.25, p < 0.001$). Although most elderly victims murdered by adult SHOs were killed by members of their own race, White victims were less likely to be killed intra-racially (60%) than Black victims (96%). Offender data are again striking. More than half of adult Black SHOs killed inter-racially (56%), when compared to only one of 45 adult White SHOs (2%) who murdered inter-racially.

TABLE 9—Elderly victim race by juvenile sexual murderer race (N = 67) and adult sexual murderer race (N = 394).

Elderly Victim Race	Offender Race		Total (%)
	White	Black	
Juvenile sexual murderer ($\chi^2(1) = 8.43, \text{Phi} = 0.36, p < 0.01$)			
White	30	28	58
Row percent	52%	48%	100%
Column percent	100%	76%	
Black*	0	9	9
Row percent	0%	100%	100%
Column percent	0%	24%	
Total (%)	30	37	67
Row percent	45%	55%	100%
Column percent	100%	100%	
Adult sexual murderer ($\chi^2(1) = 92.25, \text{Phi} = 0.48, p < 0.001$)			
White	180	118	298
Row percent	60%	40%	100%
Column percent	98%	56%	
Black	4	92	96
Row percent	4%	96%	100%
Column percent	2%	44%	
Total (%)	184	210	394
Row percent	47%	53%	100%
Column percent	100%	100%	

*Elderly victims ($\chi^2 = 7.2, \text{df} = 1, p < 0.01$).

Discussion

This study has described race and age differences in victim–offender relationship for juvenile and adult SHOs using three decades of data from a large national database, the FBI’s SHRs. Several limitations of the study will be mentioned here to help frame the ensuing discussion. The limitations of the SHR dataset have been noted earlier, but should be considered in the interpretation of these data. For example, the SHR data form is limited to such basics as offender and victim age, sex, race, victim–offender relationship, type of weapon used, and circumstances (e.g., “bar room brawl,” “victim shot by robber”). This level of detail does not allow for a more in-depth investigation into offender factors like the nuances of motivation, presence of paraphilias, degree of psychopathy, and criminal history. Likewise, this dataset provides only limited information for the victims. On the other hand, given that the current study results are derived from national data spanning three decades, we have confidence that the findings are reasonably representative of sexual homicides in the United States for the time span identified. Unfortunately, the number of SHOs of racial backgrounds other than White or Black (specifically American Indian or Alaskan Native, and Asian and Pacific Islanders) accounted for only 1.9% of the total sample. Accordingly, examining crime patterns for offenders of other racial backgrounds in a meaningful way was not possible.

Involvement of White and Black Offenders in Sexual Homicides

According to the U.S. Census Bureau (53,54), Blacks comprised roughly 13% of the U.S. population in 1996 and 2004. Thirty years of arrest data indicated that proportionally speaking, Black offenders in this study of sexual homicide were markedly overrepresented, consistent with Black arrestees being overrepresented in both nonsexual homicides (24) and rapes (33). Although the involvement of Black offenders in sexual homicides was less than their *c.* 50% representation in nonsexual homicides (2), Black offenders’ participation in sexual homicide remains a matter of serious concern. Four Black offenders were arrested for every 10 sexual homicides, yet based on demographics one would predict that Black offenders would be involved in about one in eight of these crimes. Similar significant race-based findings were noted when Black juvenile and adult SHOs were studied separately.

In contrast, White offenders were underrepresented based on their proportion of the population. Although Whites comprised 72% of the population in 1996 and 68% in 2004 (53,54), they accounted for only 59% of offenders arrested for sexual homicide. Despite the underrepresentation of Whites proportionately speaking, the modal SHO for this sample was still an adult White offender because there were only two offender groups (Whites, 59%; Blacks, 41%). The modal victim was an adult White female. Caution is advised, however, when reporting these modal categories. Racial disparities are discernible when one notes that in the 3868 sexual homicides identified, although 72% of the victims were White, only 59% of the offenders were White.

Perusal of Tables 6–9 reveals some remarkable race-based disparities in victim–offender relationship. Overall, juvenile and adult White SHOs predominantly killed intra-racially, in the range of 91–100%, across all victim age categories. Of note, there was not one recorded instance of a White juvenile SHO killing a Black elderly victim for the study period, yet 28 crimes involving a Black juvenile SHO killing a White elderly victim were documented.

In contradistinction are the patterns for juvenile and adult Black SHOs; they killed intra-racially or inter-racially in a fashion largely

dependent on victim age. The percentages of juvenile Black SHOs who killed intra-racially (range 24–82%) began robustly at 82% for child victims, then progressively dwindled as victim age increased, with 68% killing adolescents intra-racially, 54% killing adults intra-racially, and only 24% killing elderly victims intra-racially. A similar progression, although not quite as marked, of intra-racial killing diminishing with increasing victim age was seen in adult Black SHOs (range 44–82%). They largely killed intra-racially for child victims, also at 82%, then down to 71% for adolescent victims, 63% for adult victims, and only 44% for elderly victims.

In sum, White SHOs were highly likely to kill within their race, “intra-racially” (range 91–100%), whereas Black SHOs killed both intra-racially (range 24–82%) and inter-racially (range 18–76%), with the likelihood of their killing inter-racially increasing as the age of the victim increased. A parallel pattern for elderly victims of SHOs was pointed out by Safarik and colleagues (49): Most of the sexual homicides of elderly victims in their study were White and killed by younger Black offenders.

Reasons for Offender Racial Differences in Sexual Homicide

Why Blacks are overrepresented proportionately speaking in comparison with Whites as SHOs in this study, and why they are more likely to commit inter-racial offenses, are interesting questions that defy easy explanation and raise a number of complex issues for consideration. To mention a few, are Blacks more likely to engage in sexual murder because of some confluence of cultural, socioeconomic, environmental, and geographical influences? Are political factors or racial antagonism somehow at play in a percentage of these crimes?

Do a significantly greater proportion of Black SHOs who set out to commit sexual assault end up killing their victims to diminish the possibility of later being identified to authorities by a surviving victim witness? In a similar vein, might Black SHOs have different arrest histories or more negative experiences with law enforcement than White SHOs that would predispose them to harsher sentences were they arrested for a sexual assault, and thus they would have a greater motivation to kill their victims? Alternatively, could racial stereotypes play into victim response and a greater degree of resistance thereby be mustered by victims of Black SHOs, thereby increasing the likelihood of a fatal outcome given the offender’s greater counter-response in turn to achieve and maintain victim control?

Is there a difference in the presence, degree, and expression of psychopathy or sexual sadism in Black versus White SHOs? Might other personality characteristics play a role? What about sexual preferences based on victim race or age? Studies indicate that Black males are more accepting of inter-racial sexual contact than White males (e.g., see [55]). These studies of course refer to consensual, noncriminal interactions, but there is undoubtedly a sexual component at play in nonconsensual sexual crimes as well.

A finding that particularly stood out in these data was that Black juvenile SHOs accounted for all of the Black on Black sexual homicides involving elderly Black victims, and almost half of sexual homicides involving elderly White victims. Are some of the elderly victim crimes accounted for by a malignant gerontophilia, and if so, are there race-based differences in its phenotypic expression? Or, might intended simple burglaries of an aged victim’s home at times evolve into a sexual crime based on the opportunity to obtain an easily conquerable sexual victim combined with a polymorphous, psychopathic approach to sexuality?

The statistical rarity of some of the types of sexual homicides might buttress claims for a mental health defense or for mitigation

at sentencing. For example, could the offender have a serious mental disorder that, when combined with alcohol and/or drugs, impaired his ability to distinguish right from wrong or to refrain from sexually acting out in a hypersexualized state?

Addressing such questions as outlined here is far beyond the scope of this study. Clearly, more research is needed to understand the dynamics that propel individuals to commit sexual homicide. In-depth interviews of convicted SHOs are needed to determine whether racial differences in sexual homicides can be explained by sociological or cultural factors, political or criminal justice operational realities, the offenders' life experiences and experiences with criminal justice system, the victims' responses to the offenders during the incident, and/or the diagnosis of mental disorders in the offenders? Many of these explanations could be operationalized and tested. For example, do Black and White SHOs significantly differ from one another in scores on the Psychopathy Check List (PCL-R, 56) overall, by offender age, and/or by victim age type? Do offenders' criminal histories and prior dispositions significantly differ by race? In light of the little research available to date on racial differences among SHOs, directionality of hypotheses seems premature. Null hypotheses, such as the statement that there will be no difference in PCL-R scores between Black and White SHOs, would seem the prudent way to proceed.

Sexual Homicide Victims

Remarkably, Black SHOs (juveniles and adult offenders) were more likely to kill inter-racially against Whites as the age of the victim increased. A large majority of the reported sexual homicide victims in this study were Whites (72%). Although a comparatively small sample, similar findings were found by Myers (4) in a sample of 14 juvenile sexual homicides who primarily killed White victims. This discovery of a predominance of White victims stands in contrast to various studies on nonsexual homicide and sex crime in which it was shown that Black victims were overrepresented (15,16,19,37,38).

Contrary to media depictions and public concern, victims of sexual homicide in this sample were infrequently found to be children (57). In fact, children were the least likely group to be sexually killed (11%), followed by adolescents (12%) and the elderly (13%). Adult victims, accounting for 64% of victims, exceeded all other age categories combined (36%). White SHOs overall were twice as likely to kill children (67% vs. 33%), and both White and Black offenders, whether juveniles or adults, typically killed intra-racially when it came to child victims, with about 95% of Whites and 82% of Blacks doing so.

Implications for Offender Profiling

We believe that the data provided in this article may prove valuable in certain instances by assisting law enforcement with prioritizing their investigation efforts with respect to developing suspects. In general, sexual homicides are intra-racial—most offenders will kill within their own race. For all cases combined in the present study, White offenders killed White victims nearly 80% of the time, and Black offenders killed Black victims in about 90% of cases.

Table 10 portrays what the odds are the killer will be of the same race as the victim based on the victim and offender age. Understandably, investigators in any given case will have varying quality of evidence to suggest the killer's age, ranging from nil to solid. Moreover, many factors will shape the directions of the investigation energy, including crime scene evidence, geographical

TABLE 10—Victim-offender intra-racial/inter-racial odds ratios.*

Victim Type	Offender Age	
	Juvenile	Adult
White child	9:1	12:1
Black child	7:1	8:1
White adolescent	10:1	6:1
Black adolescent	5:1	49:1
White adult	2:1	4:1
Black adult	5:1	9:1
White elderly	1:1	1.5:1
Black elderly	100% of cases were intra-racial	

*Rounded off to nearest whole number except for elderly females.

issues, clues to offender transportation methods. Certainly no formula based on "cold" data such as provided here can speak to an individual crime. However, the ratios provided in Table 10 may prove helpful in certain case scenarios. For example, if a Black adolescent victim is discovered, and eye-witnesses believe the offender of unknown race was an adult, the odds are overwhelmingly suggestive that the offender was Black (49:1).

The intra-racial versus inter-racial odds ratios in Table 10 clearly suggest that as the age of White victims increases, police need to consider the possibility that the SHO may be either White or Black. The likelihood of a juvenile or adult Black offender being involved in the killing of an elderly White female is especially high in relation to other victim age groups. In sharp contrast, if the elderly female is Black, the likelihood that the SHO is White is very remote. The patterns observed here underscore the need for further clinical explanation and law enforcement explanation.

References

1. Wolfgang M, Figlio R, Tracy P, Singer I. The national survey of crime severity. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 1985.
2. Chan HC, Heide KM. Weapons used by juveniles and adult offenders in sexual homicides: an empirical analysis of 29 years of U.S. data. *J Investigative Psychol Offender Profiling* 2008;5(3):189–208.
3. McNamara JJ, Morton RJ. Frequency of serial sexual homicide victimization in Virginia for a ten-year period. *J Forensic Sci* 2004;49:1–5.
4. Myers WC. Juvenile sexual homicide. London: Academic Press, 2002.
5. Meloy JR. The nature and dynamics of sexual homicide: an integrative review. *Aggress Violent Behav* 2000;5:1–32.
6. Chan HC, Heide KM. Sexual homicide: a synthesis of the literature. *Trauma Violence Abuse* 2009;10(1):31–54.
7. Brownmiller S. *Against our will: men, women, and rape*. New York, NY: Simon and Schuster, 1975.
8. Burgess AW, Hartman CR, Ressler RK, Douglas JE, McCormack A. Sexual homicide: a motivational model. *J Interpers Violence* 1986;1: 251–72.
9. Myers WC. Sexual homicide by adolescents. *J Am Acad Child Adolesc Psychiatry* 1994;33(7):962–9.
10. Revitch E. Sex murder and the potential sex murderer. *Dis Nerv Syst* 1965;26:640–8.
11. Ressler RK, Burgess AW, Douglas JE. *Sexual homicide: patterns and motive*. New York, NY: Free Press, 1988.
12. Hill A, Habermann N, Klusman D, Berner W, Briken P. Criminal recidivism in sexual homicide perpetrators. *Int J Offender Ther Comp Criminol* 2008;52(1):5–20.
13. Heide KM. Weapons used by juveniles and adults to kill parents. *Behav Sci Law* 1993;11:397–405.
14. Heide KM, Petee TA. Weapons used by juvenile and adult offenders in U.S. parricide cases. *J Interpers Violence* 2007;22(11):1400–14.
15. Beeghley L. *Homicide: a sociological explanation*. Lanham, MD: Rowman and Littlefield Publishers, 2003.
16. Hannon L. Race, victim precipitated homicide, and the subculture of violence thesis. *Soc Sci J* 2004;41:115–21.
17. Maguire K, Pastore A. *Sourcebook of criminal justice statistics 2000*. Washington, DC: United States Government Printing Office, 2001.

18. Parker KF, Pruitt MV. Poverty, poverty concentration, and homicide. *Soc Sci Q* 2000;81(2):555-70.
19. U.S. Department of Justice. Sourcebook of criminal justice statistics 1998. Washington, DC: United States Government Printing Office, 1999.
20. U.S. Department of Justice. Sourcebook of criminal justice statistics 1999. Washington, DC: United States Government Printing Office, 2000.
21. U.S. Department of Justice. Crime in the United States 2006, http://www.fbi.gov/ucr/cius2006/offenses/expanded_information/homicide.html (accessed February 24, 2009).
22. U.S. Department of Justice. Crime in the United States 2007, http://www.fbi.gov/ucr/cius2007/offenses/expanded_information/index.html (accessed February 24, 2009).
23. Wilbanks W. Criminal homicide offenders in the U.S.: Black vs. White. In: Hawkins DF, editor. *Homicide among Black Americans*. Lanham, MD: University Press of America, 1986;43-55.
24. Heide KM, Petee TA. Parricide: an empirical analysis of 24 years of U.S. data. *J Interpers Violence* 2007;22(11):1382-99.
25. Block R. Homicide in Chicago: a nine-year study (1965-1973). *J Crim Law Criminol* 1976;66:496-510.
26. Humphrey JA, Palmer S. Race, sex, and criminal homicide offender-victim relationships. In: Hawkins DF, editor. *Homicide among Black Americans*. Lanham, MD: University Press of America, 1986;57-67.
27. Fox JA, Levin J. Multiple homicide: patterns of serial and mass murder. *Crime Justice* 1998;23:407-55.
28. Pokorny AD. A comparison of homicide in two cities. *J Crim Law Criminol Police Sci* 1965;56:479-87.
29. Phillips JA. White, Black, and Latino homicide rates: why the difference? *Soc Probl* 2002;49(3):349-73.
30. Jacobs D, Wood K. Interracial conflict and interracial homicide: do political and economic rivalries explain white killings of blacks or black killings of whites? *Am J Sociol* 1999;105(1):157-90.
31. Wadsworth T, Kubrin CE. Structural factors and black interracial homicide: a new examination of the causal process. *Criminology* 2004;42(3):647-72.
32. Garland T. An overview of sexual assault and sexual assault myths. In: Reddington FP, Kreisel BW, editors. *Sexual assault: the victims, the perpetrators, and the criminal justice system*. Durham, NC: Carolina Academic Press, 2005;5-27.
33. Belknap J. *The invisible woman*, 2nd edn. Boulder, CO: Wadsworth, 2001.
34. Palermo GB, Farkas MA. *The dilemma of the sexual offender*. Springfield, IL: Charles C. Thomas Publisher, 2001.
35. Laufersweiler-Dwyer DL, Dwyer G. Rapists. In: Reddington FB, Kreisel BW, editors. *Sexual assault: the victims, the perpetrators, and the criminal justice system*. Durham, NC: Carolina Academic Press, 2005;205-31.
36. Bureau of Justice Statistics. *Sex offenses and offenders: an analysis of date rape and sexual assault*. Washington, DC: U.S. Department of Justice, 1997.
37. Russell DE. *Sexual exploitation*. Beverly Hills, CA: Sage, 1984.
38. Russell DE. *Rape in marriage*. Indianapolis, IN: Indiana University Press, 1990.
39. Patton TO, Snyder-Yuly J. Any four black men will do: rape, race, and the ultimate scapegoat. *J Black Stud* 2007;37(6):859-95.
40. U.S. Department of Justice. Criminal victimization in the United States, 2003 statistical tables, <http://www.ojp.usdoj.gov/bjs/pub/pdf/cvus0302.pdf> (accessed February 27, 2009).
41. Gacono CB, Meloy JR, Bridges MR. A Rorschach comparison of psychopaths, sexual homicide perpetrators, and nonviolent pedophiles: where angels fear to tread. *J Clin Psychol* 2000;56:757-77.
42. Grubin D. Sexual murder. *Br J Psychiatry* 1994;165:624-9.
43. Milsom J, Beech AR, Webster SD. Emotional loneliness in sexual murderers: a qualitative analysis. *Sex Abuse* 2003;15:285-96.
44. Swiger VL, Farrell RA, Yoels WC. Sexual homicide: social, psychological, and legal aspects. *Arch Sex Behav* 1976;5(5):391-401.
45. Warren JI, Hazelwood RR, Dietz PE. The sexually sadistic serial killer. *J Forensic Sci* 1996;41:970-4.
46. Myers WC, Burgess AW, Nelson JA. Criminal and behavioral aspects of juvenile sexual homicide. *J Forensic Sci* 1998;43(2):340-7.
47. Leach G, Meloy JR. Serial murder of six victims by an African-American male. *J Forensic Sci* 1999;44(5):1073-8.
48. Safarik ME, Jarvis J, Nussbaum K. Elderly female serial sexual homicide: a limited empirical test of criminal investigative analysis. *Homicide Stud* 2000;4:294-307.
49. Safarik ME, Jarvis JP, Nussbaum KE. Sexual homicide of elderly females: linking offender characteristics to victim and crime scene attributes. *J Interpers Violence* 2002;17:500-25.
50. Fox JA, Swatt ML. Uniform crime reports [United States]: supplemental homicide reports with multiple imputation, cumulative files 1976-2005 [Computer file]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research 2008, <http://icpsr.umich.edu/> (accessed September 18, 2008).
51. U.S. Census Bureau. Characteristics of children under 18 years by age for the United States, region, states, and Puerto Rico: 2000, <http://www.census.gov/population/www/cen2000/briefs/phc-t30/tables/tab01.pdf> (accessed March 7, 2009).
52. U.S. Census Bureau. Race and Hispanic or Latino origin by age and sex for the United States: 2000, <http://www.census.gov/population/www/cen2000/briefs/phc-t8/tables/phc-t-08.pdf> (accessed March 7, 2009).
53. U.S. Census Bureau. Selected social characteristics of the population, by sex, region, and race: March 1996, <http://www.census.gov/population/socdemo/race/black/tabs96/tab01-96.txt> (accessed February 6, 2009).
54. U.S. Census Bureau. Population by sex and age, for Black alone and White alone, not Hispanic: March 2004, <http://www.census.gov/population/socdemo/race/black/ppl-186/tab1.pdf> (accessed February 6, 2009).
55. Knox D, Zusman ME, Buffington C, Hemphill G. Interracial dating attitudes among college students. *Coll Stud J* 2000;34(1):69-71.
56. Hare RD. *Psychopathy checklist—revised technical manual*, 2nd edn. Toronto: Multihealth Systems, Inc., 2003.
57. Heide KM, Beauregard E, Myers W. Sexually motivated child abduction murders: synthesis of the literature. *Vict Offenders* 2009;4(2):58-75.

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