

Self-Reported Copycat Crime Among a Population of Serious and Violent Juvenile Offenders

Ray Surette

A unique population of juveniles, serious and violent juvenile offenders (SVJOs), has emerged as a public concern. A corollary concern is the effect of the mass media on juveniles. Addressing both issues, an exploratory study of copycat crime and the media's role in copycat crime's generation among a sample of SVJOs is conducted. The study's goals are to measure the prevalence of self-reported copycat crime in SVJOs and examine the correlates of self-reported copycat criminal behaviors. Concerning prevalence, about one fourth of the juveniles reported that they have attempted a copycat crime. The correlates of copycat behavior include a set of media and peer-related attitudes. Academic and demographic characteristics are not found to significantly relate to copycat crime. Additional research on specific media, such as video games, as well as offender/nonoffender comparisons is suggested.

In Texas, a group of kids imprisoned for a string of robberies claimed that they "got hyped" on rappers Easy E and N.W.A. Four youths who shot and wounded two Las Vegas police officers are alleged to have been motivated by Ice-T's rap song "Cop Killer." The film *Menace II Society* has been cited by a trial judge for providing a script for two youths accused of robbing and killing a motorist, and four teen boys told authorities that the same movie motivated them to steal a car, wound one man, and kill another. A 16-year-old California boy killed his mother and admitted to investigators that he got the idea from the movie *Scream*. A Kentucky high school student killed three and wounded five based on a scene from the movie *Basketball Diaries*.¹

Anecdotal reports of copycat crimes committed by teenagers regularly appear in the news, and they are a persistent part of the public's image of juvenile crime. Historically, public interest in the relationship of the mass media to youth crime, copycat and otherwise, emerged with popular mass entertainment media in the early 19th century (Bleyer, 1927). However, the long-term

RAY SURETTE: Department of Criminal Justice and Legal Studies, University of Central Florida.

CRIME & DELINQUENCY, Vol. 48 No. 1, January 2002 46-69
© 2002 Sage Publications

public concern over criminogenic effects of the media exists within a sparse and empirically weak research environment. Coexisting with this long-term concern with the media, public concern has also grown in recent years over a specific population of juvenile offenders identified as serious and violent juvenile offenders (SVJOs).² Associated with the public concern with SVJOs has been the growth of punitive-based criminal justice policies aimed specifically at these youth.³ SVJOs have been recognized as a unique juvenile group composed of those who are substantially different from the typical juvenile involved in delinquency. They tend to start offending early and continue to do so longer. Collectively, SVJOs account for more than half of all serious juvenile crime (Loeber & Farrington, 1999; OFFDP, 1998, p. 2).

The exploration of the perception of the criminogenic role of the media within this distinct juvenile population is the aim of this research. The questions that are explored are as follows: (a) How common is self-reported copycat behavior among a group of incarcerated SVJOs, and (b) what are the correlates of self-reported copycat behavior? Asking offenders about their perceptions of the influence of the media follows in the tradition of gathering offender perceptions as a first methodological step (see Casper, 1978) yet suffers the usual weaknesses of self-report studies. However, it is a valid and necessary process in the study of the social reality of copycat crime. Furthermore, the self-report method has been found superior to official sources, particularly in terms of measuring serious and rare forms of delinquency among juvenile inmate populations (Farrington, Loeber, Stouthamer-Loeber, Kammen, & Schmidt, 1996; Junger-Tas & Marshall, 1999). The prevalence of copycat behaviors among juveniles is a good candidate for self-report, and all told, the validity and reliability concerns usually associated with self-report studies do not debilitate a study of self-reported copycat crime among incarcerated juveniles (Junger-Tas & Marshall 1999, p. 351).

COPYCAT CRIME: PRIOR RESEARCH

Despite the long-term interest in media effects on youth (references to copycat crime first appeared in the early 1800s⁴), little empirical research has touched on this phenomenon. Copycat crime research is further complicated by the fact that the size of the at-risk pool of individuals who are likely to be criminally influenced by the media is unknown but likely limited, as suggested by the mixed and contentious results of the “violent media-social aggression” literature (Surette, 1998). In sum, individuals at risk for copycat influences have been difficult to identify, isolate, and study. Therefore,

researchers have relied on anecdotal evidence to argue the existence and extent of copycat crime. The slowly growing file of anecdotal reports does, in fact, indicate that criminal events that are rare in real life are sometimes committed soon after similar events are shown in the entertainment or news media (Cook, Kendzierski, & Thomas, 1983; Wilson & Hunter, 1983). Within the academic literature about terrorism, for example, there are no doubts about the media's ability to motivate copycat terrorist acts (e.g., see Poland, 1988, p. 47).

The anecdotal cases in combination with research on media-copied suicides and studies of the effects of news coverage establish reasonable grounds that copycat crimes occur but at an unknown rate (Comstock, 1980; Pease & Love, 1984b; Schmid & de Graaf, 1982; Surette, 1990; Wilson & Herrnstein, 1985). To date, however, too few copycat criminals have been identified to allow for scientifically adequate research. In the anecdotal case histories, most of the individuals who mimic media crimes have prior criminal records or histories of violence, suggesting that the effect of the media is more likely qualitative (affecting criminal behavior) rather than quantitative (affecting the number of criminals). Based on the available sparse research, the current popular speculation is that the media influence how people commit crimes to a greater extent than why they commit crimes.

What remains surprising is that despite an enormous body of research on offenders, so little research has directly addressed in any fashion the issue of copycat crime in offender populations. For example, only a few researchers have examined offender populations to assess the proportion of self-reported copycat criminals and the perceived role of the media in motivating crimes. In one study, now nearly 25 years old, Heller and Polsky (1976) interviewed 100 young male offenders between the ages of 16 to 27 and found that 22% reported trying criminal techniques that they had seen on television, with only 3% reporting failure or arrest. Another 22% further disclosed that they had contemplated committing crimes they had seen on television. In a second, also dated report that appeared in a popular magazine and was compiled by an offender serving a life term, Hendrick (1977) surveyed inmates at Michigan's Marquette Prison regarding their use of television as a source of crime techniques. He reported that many prisoners took notes while watching crime shows and that 9 out of 10 inmates said that they learned new tricks and increased their criminal expertise by watching crime programs. In addition, Hendrick reported that 4 out of 10 inmates stated that they had attempted specific crimes they had seen on television.

In the early 1980s, Pease and Love (1984a) conducted a well designed study using a random survey at the federal correctional institution at Butner, North Carolina.⁵ Their questionnaire consisted of two parts: a rating of fac-

tors that may have influenced the prisoner to commit a crime and factors that may have shaped the technique used in committing a crime. Regarding the media as a motivation to commit a crime, Pease and Love questioned the inmates on four media influence sources: television shows, movies, newspaper stories, and television news about crime. The authors reported that media factors were not ranked as influential by the large majority of inmates, and only a small percentage (19.7%) endorsed any of the four media items. They also reported that there was a general tendency for participants to respond positively to multiple media influences if they responded positively to any. Thus, the media were not acknowledged by these inmates as particularly influential, but a small yet substantial minority group of about 20% credited media as motivational influences.

Concerning the media as a source of crime techniques, Pease and Love found a slightly greater proportion (approximately one out of three) credited the media, with books and/or movies about crime cited the most. As with the media as a crime motivator, there was a tendency for inmates to credit more than one medium as a source of their crime techniques if they credited any. Pease and Love concluded that entertainment programs depicting crimes were more important as sources of crime techniques than as motivators to commit crimes.

Only one recent study compared juvenile offenders and nonoffenders. Conducted in England by Hagell and Newburn (1994), it compared the media habits of a sample of mostly White youthful offenders with nonoffenders. In this study, 78 juvenile offenders were compared with 476 school children roughly matched on age and gender.⁶ The offender sample lacked individuals with serious violent crimes (murder, manslaughter, or rape—the most common offense was burglary) and suffered from nonresponse difficulties. Thus, the study focused on frequent rather than serious offenders. Although this study did compare juvenile offenders with nonoffenders, unfortunately it did not explore copycat crime. With these limitations in mind, Hagell and Newburn reported that when compared to nonoffenders, the media menu of juvenile offenders was similar, but the setting in which the media was consumed differed. They concluded that nothing stood out in dramatic contrast in the viewing habits of their juvenile offenders compared to the schoolchildren.⁷ Offenders were found to differ significantly from nonoffenders in their lifestyle rather than in their media consumption. Recognizing their study's shortcomings, the authors recommended that research attention be given to serious juvenile offenders to explore whether media content shapes serious offenders' general characteristics or triggers specific behaviors (Hagell & Newburn, 1994, p. 53).

Regarding possible correlates of juvenile copycat crime, a small number of specific ones are suggested in the literature. In their review of factors associated with criminality, Wilson and Herrnstein (1985) implicated media consumption and low academic achievement as related to media-induced juvenile criminality. In the copycat crime literature, Heller and Polsky (1976) and Pease and Love (1984a, 1984b) suggested that offenders who held attitudes toward the media as useful and influential would be associated with copycat behaviors. Heller and Polsky (1976), Hendrick (1977), and Pease and Love (1984b) further hypothesized that the type of offense committed and a juvenile's offense history should both be significantly related to copycat behaviors. Within this exploratory analysis, these specific correlates and additional demographic factors are examined regarding their relationship to self-reported copycat behavior.

Collectively, the prior studies are interesting and suggestive and show a rough consistency in the proportion of offenders claiming copycat activity. However, they suffer methodological deficiencies and are useless for reaching contemporary suppositions about the relationship between offending youth and copycat crime. Three studies focused on adult male offender populations and predate VCRs, interactive video games, cable-based networks, rap music, and other media developments. None examined differences between the self-reported copycat and noncopycat offenders.

Irrespective of its limitations, the prior research does lead to the supposition that copycat crimes are largely limited to existing offender populations but influence a substantial proportion (between 20% and 40%, if the prior reported proportions hold). If there is a consensus regarding copycat crime and the media, it is that a media criminogenic influence will concentrate in preexisting criminal populations. For example, Pease and Love (1984a, 1984b) concluded that except for isolated cases of mentally ill individuals, copycat offenders usually have the criminal intent to commit a particular crime before they copy a media-based technique. Similarly, Heller and Polsky (1976) stated,

A significant number of our subjects, already embarked on a criminal career, consciously recall and relate having imitated techniques of crimes. For such men, detailed portrayals of criminal techniques must be viewed as a learning process. None of our subjects ascribed any causative role to television viewing. (pp. 151-152)

The bulk of other relevant but noncopycat crime and media research focuses on media and aggression and on the effects of the visual media (Surette, 1998). Relevant for copycat crime, however, this media and aggression research has posited a stimulating effect and has explored a number of mecha-

nisms through which the media can cause aggression (see Wilson & Herrnstein, 1985). The most commonly advanced mechanism involves social learning, imitation, and modeling processes in which viewers learn values and norms supportive of aggression and violence, techniques to be aggressive and violent, or acceptable social situations and targets for aggression and violence (National Institute of Mental Health, 1982, pp. 38-39; see also Bandura, 1994). Overall, this body of research reports persistent behavioral effects from the media for diverse situations and differing social groups. It shows the media to be one of many factors in the cultivation of youthful aggression but that media depictions do not affect all persons in the same way. The emergence of an effect depends on the interaction between each individual, the content of the media, and the setting in which exposure occurs. Important for this study, SVJOs exhibit many of the characteristics cited in the media-aggression literature as important covariates, including anger, poor school performance, youthfulness, poverty, and lower socioeconomic status. SVJOs should comprise a prime at-risk population for criminogenic media influences and copycat effects to appear. Last, exposure to television and other violence models have been identified as specific risk factors for SVJOs (Loeber & Farrington, 1999).

The gist of all of the prior, limited research suggests that an exploratory study of SVJOs regarding copycat crime will be fruitful. Thus guided, the goals of this study are twofold:

1. To measure the prevalence of self-reported copycat behavior in SVJOs. There exist no estimates of the proportion of copycat activity or the perception of the media's criminogenic influence in juvenile offender populations. A measure of the prevalence of copycat criminals in a SVJO population would provide the first empirical indicator and a baseline comparison measure to examine longitudinal trends in offender and nonoffender groups.
2. To examine the correlates of self-reported copycat crime. None of the prior copycat crime research explored the factors that covary with self-reported copycat crime or compared copycat offenders with noncopycat offenders.

METHOD

Survey Administration

Similar to many other states, Florida has fundamentally altered its juvenile judicial process, with the effect of transferring large numbers of juvenile offenders from juvenile correctional to adult correctional facilities. This study's population consists of juvenile offenders transferred to adult criminal

court in Orange County, Florida, and incarcerated in the Orange County Corrections facility, which serves the city of Orlando, and its adjacent suburbs. Survey data were collected on all-male SVJOs processed through the Orange County jail during an 8-month period in 1998.

Access to the juvenile population was gained through the correctional facility administration and educational staff. Juveniles were asked by the correctional personnel if they were interested in participating in a study concerning youth crime. Surveys were completed by 81 youths. Of these, seven surveys were excluded because of the inability to match the respondents to correctional jail data files due to inmate transfers or to the use of nonmatching aliases on the surveys. The refusal rate was low, with 3 of the 81 surveys turned in blank and 3 discarded due to linear response patterns (e.g., marking all items "don't know"). The final sample is composed of 68 male offenders 15 to 17 years of age incarcerated as adults in the Orange County, Florida, Corrections Department.

Administration of the survey took about 1 hour and was conducted in classrooms within the jail facility by the researcher and teams of pretrained graduate research assistants. Initially concerned with reading comprehension, the survey was adjusted for an elementary reading level and read aloud to the juveniles, but this concern proved unwarranted and the juveniles expressed impatience with the slow process. Although reading comprehension did not prove a problem, the juveniles did differ in their speed in completing the survey. Subsequently, the survey was handed out one section at a time, and the juveniles were instructed to ask if they had any difficulty understanding the items. After everyone completed each section, the next section was distributed. Validity check items for the 68 juveniles showed good response patterns and correlations. Survey administration was repeated on four dates as new juveniles were incarcerated.

The study was described to the juveniles as a general study about juvenile crime that would have no effect on their court cases, jail programs, or jail activities. Participation was voluntary, and the respondents were instructed to leave blank any questions they did not wish to answer. Names were required to match the survey data with other available correctional data, but the lack of anonymity was evaluated and determined to have not affected responses or response rates. After the survey instrument was developed and pretested in the jail setting, administration was conducted in groups of 5 to 20 juveniles. The final survey included sections on (a) the perceived reasons that other young people commit crimes; (b) the reasons why each participant felt he personally wound up in trouble with the law; (c) demographics; (d) how helpful various sources are for ideas about how to commit crime; (e) a set of attitu-

dinal questions about crime, society, and the media; and (f) a set of self-report copycat crime measures, media consumption, and preferences.

Demographic variables obtained from each SVJO's correctional record (non-self-reported) include race, age, and school grade as well as each juvenile's reading, math, and verbal grade performance level. The three school performance-related measures were combined into a single index of academic grade achievement. The grade level index generated for math, reading, and language shows an average of 5.89, a median of 5.80, a standard deviation of 2.52, and a Cronbach's alpha of .93, ranging from a low of 1.47 to a high of 12.33. Just 7 of the juveniles scored greater than a 9.0 on the index. Providing measures of juvenile adjustment to jail regulations and the nature of their criminal history (particularly whether it was violent or involved weapons), criminal justice-related variables were also culled from the jail records. Number of prior arrests, current arrest offense, classification as a violent offender, whether current offense was gun related, and number of negative jail incident reports were all derived from the jail records. One additional piece of self-reported information regarding juvenile gang membership was also obtained from the jail files (all SVJOs were asked upon admission by jail personnel whether they identified themselves as a member of a gang). Also, from the study survey, self-report measures of the quantity of media consumption information were collected. Variables included the typical number of weekday hours of television watched, the typical number of weekday music hours listened to, the number of movies watched per year, and the number of books (excluding school and comic books) read yearly.⁸

Copycat Crime

Five measures of copycat behavior were obtained. A primary question regarding self-reported copycat crime is the reliability of the measures. The reliability of self-report copycat crime measures is supported from prior research that found that reliability is improved when a delinquent behavior is measured via "ever" questions and for more rarely committed acts such as copycat crime (Bruinsma, 1989; Junger-Tas & Marshall, 1999 p. 346). Previous delinquency research also suggests that the copycat crimes that will be recalled will be predominately more serious copycat events, reducing the likelihood of trivial copycat imitations being included and increasing the probability of the measure differentiating serious copycat offenders from noncopycats (Junger-Tas & Marshall, 1999). Therefore, all five copycat items are forced-choice questions with "yes," "no," and "unsure" as the replies. In addition, to avoid confusion about time spans, the juveniles were

asked about lifetime experiences. The specific survey items are provided in Table 2.

In addition, a composite index score of copycat behaviors based on these five questions was created depending on the number of individual copycat indicator items each juvenile answered in the affirmative. It provides a measure with a range of 0 to 5, with a zero score indicating that a juvenile answered "yes" to none of the five items and a score of 5 reflecting answers of "yes" to all five. The resulting copycat score has a mean of 1.40, a standard deviation of 1.55, and a Cronbach's alpha of .79, with interitem correlations that range from .31 to .68. In addition to the copycat crime score, analysis also examined the second copycat crime item individually because this item directly asked about copycat crime attempts, which is a measure of particular interest in this study.

Also based on survey items, three indexes were created that reflect the juvenile's perceptions of the media's criminogenic influences. All three indexes range from 1 to 3, with scores near 1 indicating perceptions of strong media influence and scores near 3 indicating slight media influences. Collectively, the indexes provide measures of each SVJO's perception of the media as an influence on another juvenile's crime, on themselves, and as criminogenically helpful.⁹

As a final exploratory step, guided by the bivariate analysis, an exploratory multivariate "media influence model" regression was run on the copycat crime index variable, and a logistic regression was run on the individual copycat crime item.

FINDINGS

The SVJO Study Population

Table 1 summarizes the total group of SVJOs. As can be seen, the typical juvenile incarcerated as an adult in the study's jurisdiction is a 16.5-year-old Black youth who has not performed well at academics and has an extensive and violent criminal history, which is a finding demographically similar to SVJOs reported in prior research (OFFDP, 1998). Regarding their criminal histories, two thirds are violent felony offenders and nearly half are incarcerated for an offense in which a gun played a role. One out of 7 admits to being a gang member. Eight are charged with murder and 21 with armed robbery. The remainder are charged with drug-related offenses (mostly dealing) and varied other serious offenses, such as assault, rape, and burglary. Although they

TABLE 1: Serious Violent Juvenile Offenders (SVJOs) Demographic and Criminal Justice Summary (N = 68)

Average age	16.63	
Average academic grade levels		
Reading	6.3	
Math	6.4 (Overall grade level index average = 5.89)	
Language	5.6	
Race (%)		
Black	75	
White	23.5	
Hispanic	1.5	
Criminal history (%)		
Classified as violent		
felony offenders	69.1	
Incarcerated for gun-related		
offense	47.1	
Gang member	16.2	
Current charged offense		
Murder	11.8	
Armed robbery	30.9	
Drug offense	22.1	
Other	35.3	
Average number of prior arrests	4.90 (25% in jail on first arrest, range 1 to 32)	
Average number of pending charges	7.16 (median = 5.0; range 1 to 29)	
	<i>Average</i>	<i>Median</i>
Media consumption		
Daily television hours	5.5	5.0 (11.5% reported none)
Daily music hours	13.8	12.0 (26.7% reported 24 hours a day)
Books per year read	7.8	2.0 (39.1% reported none)
Films per year watched	64.6	19.5

average nearly five prior arrests, one fourth are in jail on their first arrest. The number of prior arrests ranges from 1 to 32.

Although they are clearly unique in terms of criminal justice involvements, these juveniles do not appear unique in terms of media consumption. Like many of their generation, most listen extensively to music and watch numerous films but read less frequently. They average about 5.5 hours of daily television and about 14 hours of music. These values compare favorably with nonincarcerated youth from similar backgrounds.¹⁰ One fourth of these juveniles report that they listened to music constantly, and the high

TABLE 2: Prevalence of Self-Reported Copycat Behavior Among Incarcerated Juveniles: Proportion Responding Yes to Each Item, in Percentages (N = 68)

	Yes	N
1. Thinking of the media as including television and radio shows, movies, videos, music, books, magazines, and newspapers, can you recall ever having seen, read, or heard about a crime in the media and thought about trying the same crime?	32.4	22
2. Can you recall ever having tried to commit the same crime that you had seen, read, or heard about in the media?	26.5	18
3. Have you ever watched a movie or television show or heard a song and afterwards gone out looking to get into a fight?	22.1	15
4. Have you ever wanted a gun after seeing a gun used in a television program or movie?	32.4	22
5. Have you ever wanted a gun after hearing about guns in music?	26.5	18

mean and median values reflect the use of music as an ever-present background activity. Because of a few self-reported prolific readers in the group, the mean is high for books read, but the median of 2 books per year is within the national norm. Reflecting their poor academic achievement levels, 40% report that they read no books. However, they frequently view films, half seeing more than 20 movies a year.

SELF-REPORTED COPYCAT CRIME

The prevalence of copycat behaviors in this sample of SVJOs is reported in Table 2 for the five copycat measures and in Table 3 for the copycat score based on those measures. As seen in Table 2, about one out of three juveniles reports having considered a copycat crime and about one out of four reports actually having attempted one.¹¹ In addition, about one out of five reports having been induced by the media to seek out fights.¹² About one out of four credits music and one out of three credits visual media as having encouraged them to seek out a gun. All of these results fall within the prevalence levels suggested by the prior research on adult offenders by Heller and Polsky (1976), Hendrick (1977), and Pease and Love (1984a).

As noted above, a cumulative score of copycat activity using the five copycat items was created. Table 3 depicts the scores and shows that, as expected, most of the juveniles reported little or no copycat activity, with about three out of five scoring one or zero. This result leaves approximately 40% of the juveniles indicating two or more copy categories and a small percentage (about 10%) indicating four or five activities. The mean value of 1.40 also

TABLE 3: Copycat Crime Score

<i>Score</i>	<i>Frequency</i>	<i>Percentage</i>	<i>Cumulative Percentage</i>
0	28	41.2	41.2
1	12	17.6	58.8
2	13	19.1	77.9
3	8	11.8	89.7
4	2	2.9	92.6
5	5	7.4	100.0
Total	68	100.0	

suggests that although rare, self-reported copycat behavior does exist at significant levels in this group.¹³ These proportions also fall within the ranges reported in the prior research. Copycat behaviors emerge as a characteristic of a substantial number of the SVJOs surveyed. Most of the SVJOs do not report copycat crime behaviors, but a worrisome proportion do. The existence of a substantial number of copycat indicators leads one to inquire about the correlates of these measures; that is, what factors and characteristics covary with self-reported copy cat behavior among SVJOs?

Copycat crime correlates. Using the media influence indexes and additional nonmedia variables, the correlates of copycat behaviors are analyzed. The attitudinal indexes of general criminogenic influences on other juveniles, personal criminogenic influences, and helpful sources for crime information as well as criminal justice, demographic, and media consumption variables are examined. Table 4 presents the significant Pearson's zero order (or bivariate) correlations between these variables and the copycat crime score and the single-item measure of having actually tried a copycat crime (where 1 = yes and 0 = no, unsure answers are excluded). The Pearson's correlations reflect each item's ability to differentiate self-reported copycat SVJOs from noncopycat SVJOs.

Table 4 reports the significant correlations between the copycat index and attempt measures and factors that the juveniles considered important for why other juveniles commit crimes. Of 10 factors examined, only 2 emerge as significantly correlated.¹⁴ The first, "ideas young people get from their close friends," shows a significant negative correlation for both the copycat score and the individual item. This negative sign means that self-reported copycat juveniles are significantly more likely to credit ideas from friends as an important factor for why other juveniles commit crime than their noncopycat counterparts. The second factor, the media index variable, shows similar sig-

TABLE 4: Pearson's Correlations With Self-Reported Copycat Scale Score and Copycat Attempts: Selected Variables

	<i>Copycat Score</i>			<i>Attempted a Copycat Crime</i>		
	<i>r</i>	<i>n</i>	<i>Significance</i>	<i>r</i>	<i>n</i>	<i>Significance</i>
Reasons why young people commit crimes						
Ideas from friends or classmates	-.414	64	.000	-.441	58	.000
Media influence index	-.447	64	.000	-.343	57	.004
Reasons why serious and violent juvenile offender (SVJO) wound up in trouble						
People I hung out with	-.208	65	.048	-.302	64	.007
Ideas from my friends	-.318	64	.005	-.252	64	.022
Drug and alcohol use	-.232	67	.029	-.277	67	.012
Trying to act like older guys	-.356	66	.002	-.326	66	.004
Media influence index	-.488	66	.000	-.348	66	.002
Helpful sources for ideas on how to commit a crime						
Friends helpful	-.478	62	.000	-.398	62	.001
Adults helpful	-.383	63	.001	-.307	63	.007
Jail inmates helpful	-.289	49	.022	-.286	49	.027
Media helpful	-.450	66	.000	-.355	66	.002
Criminal justice-related factors						
Number of prior arrests	.265	68	.014	.198	68	.053
Current offense gun related	.217	68	.038	.236	68	.026

NOTE: Negative correlation indicates that item is perceived as more important by copycat SVJOs.

nificant negative correlations and indicates that copycat juveniles are more likely to see the media as influencing other juveniles than the noncopycat juveniles. Or put another way, there are significant differences between copycat juveniles and noncopycat juveniles in their perception of the influence of the media on juveniles.¹⁵ Taken together, the two factors indicate juveniles who see the media and close friends as particularly influential on other juveniles are also those juveniles who themselves report copycat behaviors.

The correlations between the copycat measures and factors that the juveniles thought were important for why they personally got into trouble are

listed next. In total, 13 factors were examined, with 5 showing significance.¹⁶ The pattern of correlations with copycat behavior is more complex than that found within the general criminogenic influences. Starting with the “media influence index,” similar significant and negative correlations are seen. Not surprisingly, copycat juveniles are more likely than noncopycat juveniles to credit the media as personally influential. In addition, there is also evidence that copycat juveniles see their friends’ ideas, drug and alcohol use, and trying to act like older guys in their neighborhoods as more personally influential than do the noncopycat SVJOs. In general, a constellation of external influences are listed by the copycat juveniles that includes the media and extends to peers and substance abuse.

The correlations between the perception of how helpful six varied sources might be for crime information and the two copycat measures are listed next, with four of six factors found significant.¹⁷ This section of Table 4 shows that the perception of the media as a crime information source emerges as significantly related to copycat behaviors. The copycat juveniles are also more likely to credit three other nonmedia sources as more criminogenically helpful than the noncopycat SVJOs. Thus, the copycat juveniles see the media, friends, adults, and to a lesser degree, other jail inmates as more helpful crime information sources than do their noncopycat counterparts. Copycat SVJOs appear to look to multiple external sources for crime ideas, including but not limited to the media.

Last, the correlations between a set of demographic and media consumption variables and copycat behaviors were examined. Table 4 reports the significant relationships under “Criminal justice–related factors.”¹⁸ As shown, there exists a partial relationship between copycat behavior and number of prior arrests where juveniles who score high on the copycat crime index are seen to have a significantly higher number of prior arrests, but the correlation falls below significance levels for actual copycat attempts. In addition, whether a juvenile’s current offense is gun related is correlated with the copycat index and copycat attempts.

It is also revealing to note factors that are not related to copycat behavior and thus not reported in Table 4. Demographically, age and academic achievement are not related to copycat behaviors. Criminal justice–related factors, such as gang membership, jail adjustment, and classification as a violent offender, are also not significantly related to self-reported copycat behaviors. In addition, media consumption, as measured by television, music, movies, and books, is not correlated.¹⁹ Overall, copycat juveniles cannot be identified by their media consumption or academic abilities and are only moderately predicted by their arrest record and their current offense.

In addition, as an additional analysis, the 7 SVJOs who were charged with first-degree murder and 1 charged with attempted first-degree murder were examined individually. Although conclusions cannot be drawn from such a small sample of juveniles, it is thought provoking that of these 8 serious offenders, 5 reported that they had thought about committing a copycat crime. Furthermore, 4 reported that they have actually attempted a copycat crime and that they have wanted a gun after seeing guns portrayed in visual media; 3 reported that they have sought out fights after media exposure and have wanted a gun after music-based portrayals. Self-reported copycat measures are prevalent in this small group. Concerning the media consumption variables, these 8 juveniles also report that they watch significantly more television and read more books than the other SVJOs. However, because these 8 inmates have been incarcerated significantly longer than average, these media consumption values should be carefully scrutinized because they may reflect length of incarceration. Compared with the other SVJOs who average 4 months in jail, these juveniles average 16 months (with a range of 6 months to 3 years). The television and reading amounts reported for these 8 juveniles may reflect time spent reading or watching in jail more than it does for the other juveniles. These more serious SVJOs do not differ substantively from their cohorts in their perceptions of the media as an influence on other young people or themselves or as criminogenically helpful.

Multivariate analysis. Using the five factors that demonstrated the highest bivariate correlations from Table 4, the three media index variables ("media influential on other juveniles," "media influential on themselves," and "media helpful for crime ideas") and two attitudinal variables ("friends helpful for ideas for committing crime" and "ideas young people get from their close friends influential in why other juveniles commit crimes") were included in the model.²⁰

Examining the copycat index regression results first, Table 5 shows that copycat behavior is significantly predicted by three variables, which explain about 44% of the index's variance. The negative beta signs indicate that juveniles who see these factors as more important are more likely to score higher on the copycat crime index. Not surprisingly, a perception of the media as a criminogenic influence on themselves (followed closely by their perceptions of peers as both helpful and influential in committing crimes) emerges as the best predictor of these juveniles' scores on the copycat index. Keeping in mind the small, nonrandom nature of the sample and the fact that these variables leave more than half of the copycat index variance unexplained, the regression does suggest the hypothesis that an SVJO who looks to other

TABLE 5: Media Influence Model Stepwise Regression on Copycat Crime Index: Final Model Step Results

	B	Beta	Significance
Variables remaining			
Media influence on myself index	-.756	-.320	.009
Friends helpful for ideas to commit crime	-.600	-.318	.007
Ideas young people get from their close friends	-.616	-.291	.009
Variables excluded			
Media Influence on Juvenile Crime Index	-.183	.213	
Media Helpful for Committing Crime Index	-.032	.819	

NOTE: $R = .69$; $R^2 = .47$; adjusted $R^2 = .44$; $df = 55$; $F = 15.59$ ($p = .000$).

sources for guidance and influence will more likely apply that information in a copycat crime.

Of additional theoretical interest is the ability to discriminate those juveniles who have attempted copycat crimes from those who have not. With this goal in mind, Table 6 reports the results of a logistic regression. The analysis reflects that the variables concerning the perception of friends as helpful for committing crime and ideas young people get from their close friends do a fair job of predicting whether a juvenile reports an attempted copycat crime. The variables correctly classify all but 10 of the SVJOs for an 84% success rate. The three media indexes do not contribute significantly. As noted previously, caution in interpreting these results is warranted because predicting group membership is usually higher in the group under study than when the variables are applied to a larger population of serious violent juvenile offenders.

CONCLUSION

This exploratory study of self-reported copycat behavior among a sample of incarcerated serious juveniles offenders shows that copycat group membership and propensity are significantly related to various media and peer-related perceptions. The total set of variables that emerges as significantly related reflects a pattern of influences dominated by perceptions of the media and peers as both a personal and a social influence. Additional theoretical conceptualization is needed to bring the divergent sources into a coherent juvenile copycat crime model. Because results are tentative, eliminating variables from future consideration based on this exploratory analysis is not pru-

TABLE 6: Media Influence Model Logistic Regression on "Tried to Commit a Copycat Crime" Final Model Step Results

<i>Classification Table</i>	<i>Predicted</i>		<i>Percentage Correct</i>
	<i>No</i>	<i>Yes</i>	
Observed			
No	42	3	93.3
Yes	7	10	58.8
			83.9

<i>Variable Included</i>	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Significance</i>	<i>R</i>	<i>Exp(B)</i>
Friends helpful for committing crime	-1.21	.43	7.81	.005	-.28	.30
Ideas young people get from their close friends	-1.47	.61	5.78	.016	-.23	.23

NOTE: $-2 \log \text{likelihood} = 50.49$; Nagelkerke $R^2 = .44$; $\chi^2 = 22.35$ ($p = .0000$).

dent, nor should this set of variables be viewed as exhaustive. Conclusions concerning media causality from these present data are not possible.

Despite the limitations of this study, a number of expectations regarding copycat SVJOs derived from prior research have been confirmed. First, 20% to 40% of the SVJOs report copycat crime histories. One-third of the sampled juveniles report that they have considered committing a copycat crime, and one fourth report that they have attempted one. Second, juveniles who perceive the media as more useful and as containing more helpful information do display a greater likelihood to commit copycat crime. Similar to findings regarding adult male inmates by Pease and Love (1984a), Hendrick (1977), and Heller and Polsky (1976), juveniles who see the information available in the media as criminally helpful are significantly more likely to engage in copycat activities. The limited adult-based research indicated a pragmatic use of the media by offenders, with borrowing media crime techniques as the most common practice (Heller & Polsky, 1976; Hendrick, 1977; Pease & Love, 1984a). A similar use of the media among SVJOs is also suggested by these findings. Third, juveniles who perceive the media as more criminogenically influential also report greater likelihood to commit copycat crime. Associated with the prior expectation regarding the media's information as criminally helpful, the findings support the existence of a significant relationship between perceptions of the media as socially and personally influential and self-reported copycat behaviors.

However, evidence for other expectations suggested by the prior research is not found. Juveniles in this study with greater levels of media consumption

do not display greater likelihood to commit copycat crime. Media consumption is not related to any of the copycat measures. Also, juveniles with low academic reading, writing, and math levels do not display greater likelihood to commit copycat crimes. No relationship between academic ability or performance and copycat behaviors is found. Hendrick's (1977) and Heller and Polsky's (1976) suggestion that juveniles involved in property offenses would display a greater likelihood to commit copycat crime is also not supported. In fact, there is evidence of the opposite relationship. Juveniles involved in gun offenses are significantly more likely to report copycat behaviors in this sample.

In summary, those juveniles who are self-reported copycats are significantly more likely to credit the media as both a general and personal influence. This result follows from the prior research literature, which postulates that there is a small population of people at risk for pernicious media influences (Surette, 1998). As a full group, these juveniles do not see media as a significant influence. However, a small percentage of the juveniles, who also consistently identify themselves as engaging in copycat behaviors, sees the media as significant and more influential in their own and other juveniles' criminality. An at-risk group of juveniles who identify themselves as engaging in copycat behaviors is suggested. They cannot be identified by the common demographic variables; however, they do hold a set of perceptions about the media that differentiate them from noncopycat SVJOs. These conclusions raise a number of future research questions.

One hypothesis generated from this exploratory study is that a susceptible modeling personality that looks to and sees other people, especially peers, and the media as profitable crime information sources is related to self-reported copycat behavior. A juvenile who is more apt to seek out varied sources for crime information is a plausible candidate for a media criminogenic influence. The media are, however, likely one of a set of possible crime information sources for these at-risk juveniles. These findings generally reflect copycat juveniles who look beyond themselves for help with crime information and postulate a juvenile copycat personality seeking numerous external social role models and are influenced by either live models available in their neighborhoods or ethereal ones provided by the media.

Additional research methodologies, including the use of in-depth interviews and the direct viewing behavior of offenders, need to be pursued (Hagell & Newburn, 1994). First, the severely dated research conducted with adult inmates and the absence of research on nonincarcerated and nondelinquent juveniles demonstrate the need to explore current differences in media effects on SVJOs, adult offenders, and nonincarcerated juveniles. The role of interactive media in the form of video games is another pressing

research issue that should be explored among SVJOs. Research to date has focused exclusively on the nondelinquent juvenile and has not examined in any systematic way the relationship between interactive video and juvenile criminality.²¹ The Internet is another form of interactive media that might influence youth criminality, but it has not been seriously studied. Despite notable public interest, the available research remains highly speculative concerning the effects of either medium.

This exploratory research substantiates that a meaningful proportion of serious and violent juvenile offenders identify themselves as media attentive and criminogenically influenced. Bounded by the limitations of self-reports, this effort suggests that successful identification of juveniles at risk for copycat crime is feasible and that the exploration, development, and testing of predictive instruments and intervention efforts should be pursued. A media and juvenile criminality connection has been identified and needs exploration and analysis.

NOTES

1. See *Copycat Crimes* (1998) and Ferrell (1998, pp. 73-75).

2. Juveniles were involved in 14% of all murder and aggravated assault arrests, 37% of burglary arrests, 30% of robbery arrests, and 24% of weapons arrests in 1997 (Snyder, 1998). For overviews of the national trend to treat certain juveniles as adults, see Devine, Coolbaugh, and Jenkins (1998); Griffin, Torbet, and Szymanski (1998); Storm and Smith (1998); Torbet and Szymanski (1998); and Loeber and Farrington (1999).

3. By 1996, 43 states had changed their laws to make it easier to prosecute juveniles as adults, and the majority of states no longer have a minimum age for adult criminal offenses (Foote, 1997; "U.S. Society," 1998).

4. The term *copycat crime* has appeared in the academic literature for many years. See Bleyer (1927, p. 157); Berkowitz, Parke, Leyens, West, and Sebastian (1978); Eysenck and Nias (1978); Siegel (1974); and Toplin (1975) for discussions.

5. Eighty-three inmates were selected randomly from the 339 total inmates housed. Nine inmates refused to participate, and 2 were disqualified, 1 based on language and another based on disorientation, leaving 71 participants.

6. Starting with an initial population set of 531 juveniles with three or more arrests in 1 year and an average of 10 offense arrests and/or convictions in 1992, 200 were selected for interviews and 75 located for full interviews. The nonresponse rate was high. An additional 3 opportunity interviews were included for a final sample of 78 mostly White juvenile offenders.

7. Hagell and Newburn (1994) summarized their findings as follows: (a) Offenders did not read as much, and a larger proportion did not read at all; (b) offenders have less home access to television, less chance to control what they watch, and less chance to view television on their own; (c) offenders were not viewing substantially more television, but a larger proportion of the offenders reported that they watched no television at all (offenders watched both more and less television than did nonoffenders) but were viewing television at different times (i.e., late at night) and less often alone; (d) offenders liked "real" programs but displayed a general lack of engage-

ment with television (could not identify characters they would like to be); (e) overall media nonuse tended to be higher among offenders; (f) there was little difference in whether or not they played video games (three fourths of both groups), but locations differed and offenders had more of the high-end consumption cases (true also in film and television watching); (g) general media engagement showed no difference (overall use and spread of media usage across five areas: newspaper, TV, film, film character identification, video games); (h) offenders reported less access to television, video, and other media equipment; (i) offenders did not report watching more television or select more violent programs or films; (j) violent juvenile offenders with at least one violent conviction (38% of total) showed no significant differences in preferences than other offenders or to the school student comparison group. For a review, see Livingstone (1994).

8. Survey items: "Before coming to the jail, on an average weekday (Monday through Friday) how many hours of television did you watch each day?" "Before coming to the jail, on an average weekday (Monday through Friday) how many hours of music did you listen to each day?" "Before coming to the jail, about how many books a year did you read? (Do not count school or comic books.)" "Before coming to the jail, about how many times a year did you go to a movie theater or watch a videotaped movie?"

9. Media Influence on Juvenile Crime Index. An index of media influence on the criminality of juveniles other than themselves was created based on following question: "Young people commit crimes for a lot of different reasons. How important do you think each of the following reasons are for why young people commit crimes?" Index variables include ideas obtained from watching television, watching movies, reading, and listening to music, and trying to act like people in television or movies. The media index on juvenile crime has a mean of 2.26, a median of 2.20, a standard deviation of .57, and a Cronbach's alpha of .84. As expected, most of the serious and violent juvenile offenders do not credit the media as generally influential, but a substantial minority do.

Media Influence on Their Own Crime Index. An index of the juveniles' perception of media criminogenic influence on themselves was generated based on following question: "Thinking about your life over the past few years and not counting what happened right before your last arrest, how important do you feel each of the following reasons were for why you wound up in trouble?" Media-related variables include ideas from watching television, watching movies, listening to music, and trying to act like people in television or movies. This index has a mean of 2.48, a median of 2.75, a standard deviation of .66, and a Cronbach's alpha of .89. Most of the serious and violent participants (56%) scored the media as having only slight (2.75 or higher index score) influence on themselves.

Media Helpful for Crime Ideas Index. A third media influence index of how helpful the media would be for ideas about committing crimes was created based on the following question: "Suppose you were looking for ideas on how to commit a crime. Circle whether you think the following sources would be very helpful, somewhat helpful, or not at all helpful." Media variables include movies, music videos, magazines, newspapers, and television shows as helpful crime sources. The media helpfulness index has a mean of 2.40, a median of 2.50, a standard deviation of .56, and a Cronbach's alpha of .79. Although greater proportions saw the media as helpful rather than as influential, a substantial proportion (30%) also saw the media as not at all helpful.

10. See "Glued to their TV Sets" (1998), *Report on Television* (1998), *Trends in the Well-Being of America's Children and Youth* (Office of the Assistant Secretary, 1997), and "U.S. Society Wants to Get Tough With Juvenile Offenders" (1998).

11. The reliability of the estimates of recalling the number of times copycat crimes that were considered or attempted is unknown. It has been reported, however, that frequent events are often forgotten in terms of their number (accurately estimating high-frequency behaviors, such as number of movies watched, is error prone) but that rare and recent events are more easily

retained (Junger-Tas & Marshall, 1999, p. 339). When asked how many times they could recall thinking about a copycat crime, those juveniles responding affirmatively averaged 4.5 times that they could recall considering a copycat crime. Regarding attempts, those serious and violent juvenile offenders who answered yes averaged 3.35 times that they could recall trying to commit a crime they had learned about from the media.

12. The average number of times recalled seeking out fights is 5.7. For those reporting media influence, they average 5 recalled times that visual media induced gun acquisition and 4.25 times that they recalled music inducement.

13. All analyses were also conducted with "unsure" coded as missing, with no difference in results.

14. Nonsignificant factors include ideas from people juveniles hang out with, too much free time, influence of older guys, lack of parental supervision, drug or alcohol use, joining a gang, other kids at school, and people being naturally dishonest. Note that Table 4 is derived from 39 total correlations, of which 13 or one third are significant.

15. The survey also included an item about the "influence of ideas from video games on other youth." This item was ranked below the other media items and the media index by the total sample of serious and violent juvenile offenders. The video question also did not correlate with the other media index items and was therefore excluded from the index. The video question does not significantly correlate with the copycat index (Pearson $r = -.179$, $n = 57$, one-tailed significance = .092) or individual copycat crime (Pearson $r = -.190$, $n = 50$, one-tailed significance = .093).

16. Nonsignificant factors not reported in Table 4 include own decisions, needed money, lived in a bad neighborhood, unfairly accused, parents didn't care, people out to get me, just unlucky, and parental influence.

17. Nonsignificant factors not reported include own ideas helpful and family helpful for ideas on how to commit a crime. An item on the helpfulness of video games was included but was ranked below the media index variable. The perception of video games as helpful for crime ideas is significantly related to copycat attempts (Pearson $r = -.333$, $n = 57$, one-tailed significance = .006) but not to the copycat index (Pearson $r = -.192$, $n = 63$, one-tailed significance = .077). Serious and violent juvenile offenders who see video games as more helpful for committing crime are significantly more likely to report that they have attempted a copycat crime. This finding is surprising in that these same copycat juveniles did not see video games as influential on other juveniles (see Note 15) but did see it as personally helpful.

18. Nonsignificant factors include gang membership (self-reported), hours of television watched, hours of music listened to, number of books read, number of movies viewed, age, number of negative jail reports, and academic grade level performance.

19. A set of dichotomous variables was created and examined further for media consumption. Readers (40% of the juveniles who had read one or more books), heavy music listeners (48% who listened to more than 12 hours a day), heavy television viewers (59% who watched more than 3 hours a day), and heavy movie watchers (57% who watched more than 12 films a year) were compared with their lighter media consuming counterparts on the copycat correlations without significant differences emerging from the analysis.

20. The sample size constrained the number of independent variables that could be validly examined (Newton & Rudestam, 1999). Five variables found to be significant from the bivariate analysis and having theoretical interest were selected. Initial ordinary least squares (OLS) regression diagnostic analysis revealed two outlier cases that caused number of arrests to emerge as significant. A second OLS regression on the data with the removal of cases with arrests greater than 25 resulted in a significant overall model (adjusted $R^2 = .303$) but with no single independent variables having significant betas. A stepwise regression was thus run to determine which variables were the best predictors.

21. See Anderson and Ford (1987); Calvert and Tan (1994); Cooper and Mackie (1986); Dominick (1987); Graybill, Strawniak, Hunter, and O'Leary (1987); Schutte, Malouff, Post-Gorden, and Rodasta (1988); Silvern and Williamson (1987); and Winkel, Novak, and Hopson (1987).

REFERENCES

- Anderson, C., & Ford, C. (1987). Affect of the game player: Short-term effects of highly and mildly aggressive video games. *Personality and Social Psychology Bulletin*, *12*, 390-402.
- Bandura, A. (1994). Social cognitive theory of mass communication. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research*. Hillsdale, NJ: Lawrence Erlbaum.
- Berkowitz, L., Parke, R., Leyens, J., West, S., & Sebastian, R. (1978). Experiments on the reactions of juvenile delinquents to filmed violence. In L. A. Hersov & M. Berger (Eds.), *Aggression and antisocial behavior in childhood adolescence* (pp. 59-72). Oxford, UK: Pergamon.
- Bleyer, W. (1927). *Main currents in the history of American journalism*. Boston: Houghton Mifflin.
- Bruinsma, G. (1989). Scaling and reliability problems in self-reported property crime. In M. Klein (Ed.), *Cross-national research in self-reported crime and delinquency*. Dordrecht, the Netherlands: Kluwer.
- Calvert, S., & Tan, S. (1994). Impact of virtual reality on young adults' physiological arousal and aggressive thought; interaction versus observation. *Journal of Applied Developmental Psychology*, *15*, 125-139.
- Casper, J. (1978). *Criminal courts: The defendant's perspective*. Washington, DC: U.S. Department of Justice.
- Comstock, G. (1980). *Television in America*. Beverly Hills, CA: Sage.
- Cook, T., Kendzierski, D., & Thomas, S. (1983). The implicit assumptions of television research: An analysis of the 1982 NIMH report on television and behavior. *Public Opinion Quarterly*, *47*, 161-201.
- Cooper, J., & Mackie, D. (1986). Video games and aggression in children. *Journal of Applied Social Psychology*, *16*, 726-744.
- Copycat Crimes* (Issue Brief Series). (1998). Studio City, CA: Mediascope Press.
- Devine, P., Coolbaugh, K., & Jenkins, S. (1998, December). Disproportionate minority confinement: Lessons learned from five states. *Juvenile Justice Bulletin*. Washington, DC: U.S. Department of Justice.
- Dominick, J. (1987). Videogames, television violence, and aggression in teenagers. *Journal of Communication*, *34*, 136-147.
- Eysenck, H., & Nias, D. (1978). *Sex, violence and the media*. New York: Harper & Row.
- Farrington, D. R., Loeber, M. M., Stouthamer-Loeber, W., Kammen, V., & Schmidt, L. (1996). Self-reported delinquency and a Combined Delinquency Seriousness Scale based on boys, mothers, and teachers; concurrent and predictive validity for African Americans and Caucasians. *Criminology*, *34*, 493-517.
- Ferrell, J. (1998). Criminalizing popular culture. In F. Bailey & D. Hale (Eds.), *Popular culture, crime and justice* (pp. 71-83). Belmont, CA: West/Wadsworth.
- Foote, J. (1997, October). Expert panel issues report on serious and violent juvenile offenders. *OJJDP Fact Sheet*, *68*. Washington, DC: U.S. Department of Justice.
- Glued to their TV sets: The viewing habits of Black children may be more a factor of poverty than of race. (1996, July 1-7). *The Washington Post* (national weekly edition), p. 31.

- Graybill, D., Strawniak, M., Hunter, T., & O'Leary, M. (1987). Effects of playing versus observing violent versus nonviolent video games on children's aggression. *Psychology, 24*, 1-8.
- Griffin, P., Torbet, P., & Szymanski, L. (1998). *Trying juveniles as adults in criminal court: An analysis of state transfer provisions*. Washington, DC: U.S. Department of Justice, National Center for Juvenile Justice.
- Hagell, A., & Newburn, T. (1994). *Young offenders and the media: Viewing habits and preferences*. London: Policy Studies Institute.
- Heller, M., & Polsky, S. (1976). *Studies in violence and television*. New York: American Broadcasting Company.
- Hendrick, G. (1977, January 29). When TV is a school for criminals. *TV Guide*, pp. 10-14.
- Junger-Tas, J., & Marshall, I. (1999). The self-report methodology in crime research. *Crime and Justice, 25*, 291-367.
- Livingstone, S. (1994). Review of young offenders and the media: Viewing habits and preferences. *British Journal of Criminology, 35*(3), 469-471.
- Loeber, R., & Farrington, D. (1999). *Serious & violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, CA: Sage.
- National Institute of Mental Health. (1982). *Television and behavior: Ten years of scientific progress and implications for the eighties: Vol. 1. Summary report*. Rockville, MD: Author.
- Newton, R., & Rudestam, K. (1999). *Your statistical consultant*. Thousand Oaks, CA: Sage.
- Office of the Assistant Secretary for Planning and Evaluation. (1997). *Trends in the well-being of America's children and youth*. Washington, DC: Department of Health and Human Service.
- Office of Juvenile Justice and Delinquency Prevention. (1998, May). *Serious and violent juvenile offenders*. Washington, DC: U.S. Department of Justice.
- Pease, S., & Love, C. (1984a, November). The prisoner's perspective of copy cat crime. Paper presented at the annual meeting of the American Society of Criminology, Cincinnati, OH.
- Pease, S., & Love, C. (1984b). The copy-cat crime phenomenon. In R. Surette (Ed.), *Justice and the media* (pp. 199-211). Springfield, IL: Charles C Thomas.
- Poland, J. (1988). *Understanding terrorism*. Englewood Cliffs, NJ: Prentice Hall.
- Report on television*. (1998). New York: Nielsen Media Research.
- Schmid, A., & de Graaf, J. (1982). *Violence as communication*. Newbury Park, CA: Sage.
- Schutte, N., Malouff, J., Post-Gorden, J., & Rodasta, A. (1988). Effects of playing videogames on children's aggressive and other behaviors. *Journal of Applied Social Psychology, 18*, 454-460.
- Siegel, A. (1974). The effects of media violence on social learning. In V. B. Cline (Ed.), *Where do you draw the line? An exploration into media violence, pornography, and censorship* (pp. 129-146). Provo, UT: Brigham Young University Press.
- Silvern, S., & Williamson, P. (1987). The effects of video game play on young children's aggression, fantasy and prosocial behavior. *Journal of Applied Developmental Psychology, 8*, 453-462.
- Snyder, H. (1998, December). Juvenile arrests 1997. *Juvenile Justice Bulletin*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.
- Storm, K., & Smith, S. (1998, September). *Juvenile felony defendants in criminal courts* (Bureau of Justice Statistics Special Report). Washington, DC: U.S. Department of Justice.
- Surette, R. (1990). Estimating the magnitude and mechanisms of copy cat crime. In *The media and criminal justice policy: Recent research and social effects*. Springfield, IL: Charles C Thomas.
- Surette, R. (1998). *Media, crime, and criminal justice*. Belmont, CA: West/Wadsworth.
- Toplin, R. (1975). *Unchallenged violence: An American ordeal*. Westport, CT: Greenwood.

- Torbet, P., & Szymanski, L. (1998, November). *State legislative responses to violent juvenile crime: 1996-97 Update Juvenile Justice Bulletin*. Washington, DC: U.S. Department of Justice.
- U.S. society wants to get tough with juvenile offenders*. (1998, May 24). *The Sun*, p. 9A.
- Wilson, J. Q., & Herrnstein, R. (1985). *Crime and human behavior*. New York: Simon & Schuster.
- Wilson, W., & Hunter, R. (1983). Movie-inspired violence. *Psychological Reports*, 53, 435-441.
- Winkel, M., Novak, D., & Hopson, H. (1987). Personality factors, subject gender, and the effects of aggressive video games on aggression in adolescents. *Journal of Research in Personality*, 21, 211-223.