

Journal of Research in Crime and Delinquency

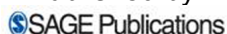
<http://jrc.sagepub.com>

Heavy Metal Music Preference, Delinquent Friends, Social Control, and Delinquency

SIMON I. SINGER, MURRAY LEVINE and SUSYAN JOU
Journal of Research in Crime and Delinquency 1993; 30; 317
DOI: 10.1177/0022427893030003004

The online version of this article can be found at:
<http://jrc.sagepub.com/cgi/content/abstract/30/3/317>

Published by:



<http://www.sagepublications.com>

On behalf of:

[School of Criminal Justice, Rutgers – Newark](#)

Additional services and information for *Journal of Research in Crime and Delinquency* can be found at:

Email Alerts: <http://jrc.sagepub.com/cgi/alerts>

Subscriptions: <http://jrc.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations (this article cites 8 articles hosted on the
SAGE Journals Online and HighWire Press platforms):
<http://jrc.sagepub.com/cgi/content/refs/30/3/317>

HEAVY METAL MUSIC PREFERENCE, DELINQUENT FRIENDS, SOCIAL CONTROL, AND DELINQUENCY

SIMON I. SINGER
MURRAY LEVINE
SUSYAN JOU

The authors examined the relationship between a preference for heavy metal music among a large sample of suburban high school youth (N = 715) and delinquency, controlling for parental and school-related variables, as well as delinquent associations. They found support for the hypothesis that heavy metal has an effect on delinquency when parental control is low. However, they found no support for the hypothesized interaction between a preference for heavy metal and delinquent peers. Contrary to expectations, those students with better school marks and a preference for heavy metal music had higher amounts of self-reported delinquency.

The sounds of "heavy metal" lay along the fringe of contemporary musical preferences. Heavy metal is distinguished from lighter forms of rock and roll by the extremely loud clashing of electrical steel guitars and by lyrics with an imagery of violence. According to Gross's (1990) detailed review, heavy metal music expresses a culture of power, violence, and fatalism. He notes Mötley Crüe's song "Live Wire," which calls women whores, speaks of smashing women's faces, and going for the jugular.¹ Gross further relates a Judas Priest's hit album "Defenders of the Faith," which warns that " 'rising from the darkness where Hell hath no mercy and the screams of vengeance echo on forever, only those who keep the faith shall escape the wrath of the Metallian' ".*

This article is a substantial revision of a paper originally presented at the 1990 annual meetings of the American Society of Criminology, Baltimore. We thank Robert Agnew, Michael Farrell, and Lionel Lewis for their helpful comments on earlier versions of this article. Direct correspondences to Simon I. Singer, Department of Sociology, SUNY-Buffalo, Buffalo, NY 14260.

*"DEFENDERS OF THE FAITH" by G. Tipton/R. Halford/K. Downing. © 1984 EMI APRIL MUSIC INC./CREWGLEN LTD/EBONYTREE LTD/GEARGATE LTD. All Rights Controlled and Administered by EMI APRIL MUSIC INC. All Rights Reserved/International Copyright Secured/Used by Permission.

JOURNAL OF RESEARCH IN CRIME AND DELINQUENCY, Vol. 30 No. 3, August 1993 317-329
© 1993 Sage Publications, Inc.

317

(p. 123). Furthermore, Gross's nonrepresentative sampling of heavy metal music also includes the unpublished lyrics " 'Blessed are the wicked, cursed are the weak,' " and " 'Your God is dead and now you die, Satan rules at last' " (p. 124).

Heavy metal, as a cultural artifact, is not just communicated in lyrical form. It is also contained in distinct patterns of dress. For instance, some fans display a runic lightning bolt, borrowed from the heavy metal group AC/DC's album covers, Nazi Schutz Staffel and swastika designs, skeletons and death heads (Gross 1990, p. 125). Moreover, some of the behavior of heavy metal performers communicates particular norms of conduct. As part of their performance, heavy metal stars, at times, will dramatize bizarre forms of behavior. A widely publicized example is when Ozzy Osbourne allegedly bit the head of a bat in the middle of a concert and then received rabies shots afterwards (Barich 1986). Although the act of biting a bat might be purely theatrical, it can be considered entertainment only by particular segments of society.

Similarly, there are actual acts of violence reported among heavy metal fans. In numerous concert tours, heavy metal means heavy security, particularly in the wake of high rates of arrest and physical injuries among those attending the concerts (Montgomery 1992). The security precautions that are required at heavy metal concerts are surely much greater than those required at the philharmonic or ballet. It seems obvious that a proportion of youth present at heavy metal concerts is different in their personal taste and behavior from youth attending the symphony. Moreover, parental concern about heavy metal has led to attempts to require parental permission to purchase certain types of music that are considered offensive (see Arnett 1991).

Heavy Metal and Delinquency

Although each generation seems to complain about the music of its youth, we know little about the relationship between popular forms of youth culture and deviant forms of behavior (Newman 1990). There are several possible ways to view the possible effects of heavy metal on delinquency. First, there are those who advocate some form of music censorship based on the argument that heavy metal is directly related to delinquent behavior. Like the viewing of violent television shows and movies, exposure to heavy metal is believed to introduce and reinforce deviant values and behaviors. This view of heavy metal ignores the possible effects of other important determinants of delinquency.

Indeed, a recent analysis by Arnett (1991) found that heavy metal listeners are already alienated youth whose reckless behavior is little affected by their

music preference. Arnett (1991) further reported that youth listened to heavy metal when they were angry, and the music had the effect of making them less angry (p. 93). If anger is associated with delinquent behavior (Agnew 1985), then heavy metal music should produce a lower rate of delinquent behavior. Indeed, Arnett concludes that, contrary to what might be suggested by those who wish to ban heavy metal music, "it would seem more appropriate to advocate subscribing to heavy metal music for adolescents who show evidence of a propensity for aggression" (1991, p. 94). Thus a preference for heavy metal may even reduce delinquent behavior.

In contrast to viewing the delinquent behavior of youth as either heightened or suppressed by their preference for heavy metal, a more complex model would consider the effects of music in interaction with other indicators of delinquency. Heavy metal may be related to delinquent behavior in interaction with social control and peer group affiliations. The influence of social control and culture is emphasized in Barich's analysis of violent delinquency among suburban youth. Based on the interviews with Los Angeles suburban gang members and gang workers, Barich (1986) suggests that heavy metal lyrics increase the likelihood of delinquent behavior among naive youth and youth low in parental attachment and control.

An intelligent kid might be able to react to heavy metal as theater, but a dull or confused kid took its messages seriously. If a kid had no parental guidance, no filter between him and the music, its anthems, however bizarre, burned into his brain with all the power of gospel. (Barich 1986, p. 102)

Thus Barich's hypothesized interaction between music and delinquency stresses that contemporary forms of youth culture affect the emerging pattern of suburban delinquency, but only among youth low in parental attachment and control. Those youth who are weak in intelligence, according to Barich, are more likely to take the words of heavy metal music seriously in justifying their delinquent behavior.

The specific and interactive effects of culture on delinquency are further specified in the research literature on subcultures and delinquency. Subcultural theory stresses that deviant values and norms are supported in the context of adolescent groups. In Matza's (1964) view, the dynamic aspects of a subculture are more important than the static vision of subcultures presented in theories that directed towards explaining lower-class delinquency (Cohen 1955; Cloward and Ohlin 1960). Rather than refer to a "delinquent subculture," he repeatedly emphasizes a "subculture of delinquency" in which peer group interactions lead to the common acceptance of

delinquent behavior. According to Matza (1964), delinquency becomes "public within the confines of more or less provincial groupings" (p. 33).

This group orientation to subcultures of delinquency is extended in the work of Schwendinger and Schwendinger (1985). They relate modern-day "consumption patterns" to contemporary adolescent subcultures. For example, they identify White street-corner youth as "punks" and "heavy metalers." Groups of punks and heavy metalers develop collective relationships that facilitate group decisions and acceptable forms of delinquent behavior (Schwendinger and Schwendinger 1985, p. 304).

Similarly, Willis's (1978) ethnographic study of British youth views music as a means of integrating adolescents into a common culture. Within this general youth culture, subgroups are united by their taste for particular forms of music (Willis 1990). Roe's (1985) longitudinal survey data also show that music is a vehicle for the expression of adolescent group values and identity (p. 361). According to Roe, allegiance to particular youth groups is defined by clothing, hair styles, attitudes, models of behavior, and musical preferences.

Thus a subcultural perspective leads us to suggest that patterns of delinquent peer group involvement varies by heavy metal preference. Heavy metal music should have no effect on the delinquent behavior of youth who are isolated from other delinquent youth. In the words of Sutherland's theory of differential association, "the principal part of the learning of criminal behavior occurs within intimate personal groups" (Shoemaker 1990, p. 152). Therefore, heavy metal music should increase delinquent peer identification and delinquent behavior.

HYPOTHESES

We can summarize the above discussion on the relationship between heavy metal and delinquency in terms of the following hypotheses:

1. A preference for heavy metal leads to higher rates of delinquency among youth, independent of other important indicators of delinquent behavior.

This hypothesis reflects the direct-effects model by predicting that heavy metal increases the likelihood of delinquency independent of delinquent peers, parental, and school controls. It is the hypothesis that is supported by those who favor censoring or restricting access by attaching warning labels to heavy metal music. The direct-effects model is contrary to Arnett's (1991) suggestion that heavy metal actually reduces delinquency by providing an outlet for reducing adolescent frustration and anger.

2. A preference for heavy metal leads to higher rates of delinquency among youth low in intelligence and social control.

This hypothesis reflects the suggested interactive effects of heavy metal on delinquency based on Barich's (1986) observations of suburban delinquent gangs. It stresses that heavy metal is likely to have an effect on delinquent behavior only for youth weak in parental control and low in intelligence.

3. A preference for heavy metal leads to higher rates of delinquency among youth with delinquent friends.

This may be termed the subcultural model because it suggests that delinquent peer associations are organized around music preferences. The hypothesis further suggests that a preference for heavy metal creates more delinquent conduct because of increased delinquent associations. This hypothesis stems from the literature on subcultures of adolescents and their music preferences (Roe 1985; Schwendinger and Schwendinger 1985; Willis 1978).

METHOD

The Sample

In spring 1987, we collected data on the delinquent conduct of 705 suburban high school youth. The community from which we drew our sample is largely affluent.² Of the population, 95% was classified as White. It should also be stressed that the vast majority of heavy metal fans are White and that they are not confined to particular urban or suburban parts of the United States (Gross 1990).

We sampled 1,475 youth in public and private high schools from school board lists. After receiving the consent of the sampled youth and their parents, we were able to complete interviews with 705 youth during noninstructional school time. The youth were administered the survey in groups of about 30 students.

Based on the demographic characteristics provided by the school districts and Bureau of Census, we are confident that the survey sample is representative of the town's senior high school population. The distribution of grade and age in our sample is within 2% of the distribution in the total high school population. The percentage of boys and girls in the survey is within 1% of the township population.

Parental and School-Related Control Measures

We measured parental attachments and supervision as reported by youth. Supervision was measured by the combined responses to the questions: "Does your (mother) (father) know who you are with when you are away from home?" The response categories were *usually*, *sometimes*, or *never* (3, 2, 1, respectively). Attachments were measured by questions assessing the youth's perception of parental trust and identification. We combined responses to the questions: "Does your (mother) (father) trust you?" and "Do you share your thoughts and feelings with your (mother) (father)?" The alpha for the parental attachment scale is .65.

School performance was measured according to self-reported marks ($A = 5$, $F = 0$). Our measure of the importance of school to youth was based on combined responses to three questions: "How important is it to you (a) to do well in school, (b) to have high grades, and (c) to complete high school?" (5 = *important*, 1 = *not important*). The alpha for the school importance scale is .69.

Delinquent Peers and Heavy Metal Preference

We measured delinquent associations by responses to the statement: "My friends rarely get into trouble." Responses were coded on a 5-point scale (5 = *agree*, 1 = *disagree*).

Our measure of preference for heavy metal music was based on responses to the question: "Who is your favorite musical group?" These groups were classified into categories based on a consensus among several knowledgeable individuals, consisting of a graduate student, the vice president of a large chain of retail record stores, and several of his staff.³ Music preference data were coded soon after the survey was administered.

Nearly half of all youth (48%) said they preferred musical groups falling into the rock-pop category (e.g., Bon Jovi, Genesis, U2, Phil Collins). An additional 19% preferred "vintage or classic rock" (e.g., The Who, Rush, The Grateful Dead). Less than 1% said they preferred classical music. About 7% preferred heavy metal groups. The heavy metal category included such groups as Iron Maiden, Mötley Crüe, Metallica, and AC/DC.⁴

Stated music preference predicted the type of music youth purchased. As an incentive for completing the survey, each youth was provided with a coupon redeemable for a tape or a record in a local chain of stores.⁵ When the youth purchased the record, the cashier coded the album or tape cassette the youth selected into specific music categories and placed these on the coupons, which were returned to us. Among the youth who said they

preferred heavy metal, about half actually purchased a heavy metal album. If preferences were randomly related to purchases, we would expect only 7% to have purchased a heavy metal album. We use musical preference because we have more complete data than if we relied on actual purchases. We assume that preference is related to actual behavior, although it is quite possible that our heavy metal measure does not tap the extent to which youth actually listen to heavy metal music.

In the following analysis, youth who listed a heavy metal group as their favorite were coded into a heavy metal preference category (1 = heavy metal preference, 0 = others).

Delinquency

Our dependent variable, delinquency, was measured by asking youth to indicate if during the past year they had committed the following offenses: stolen anything by shoplifting or other ways (worth less than \$5, between \$5 and \$50, over \$50); purposely damaged or destroyed property that did not belong to them; physically injured (not accidentally) or beaten someone up. We asked each youth to estimate how often he or she did each act in the past year on a 4-point scale (0-3), consisting of *never*, *once* or *twice*, 3 to 11 times, and 12 or more times. The sum of points on these five items provided the measurement of delinquency. The alpha coefficient is .68.

ANALYSIS

Youth who preferred heavy metal reported significantly more delinquency than other youth (for youth preferring heavy metal music, $x = 2.5$, $SD = .41$, $n = 46$; for youth preferring non-heavy metal music, $x = 1.3$, $SD = .07$, $n = 659$, $F = 2.4$ $p < .01$). Among those who preferred heavy metal, 83% reported that they had committed an act of delinquency within the last year, compared to 58% of those who preferred other kinds of music.

To test for interactions, we standardized the continuous predictors variables (Aiken and West 1991; Jaccard, Turrisi, and Wan 1990). By standardizing the predictor variables, the problem of multicollinearity in testing interactions is substantially reduced. For example, the highest correlation coefficient between the standardized variables (including interaction terms) is .39, which is substantially less than the correlations for unstandardized interaction terms. We checked the pattern of interactions by regressing delinquency on the raw scores separately for youth preferring heavy metal and non-heavy metal music. The pattern and size of coefficients produced

virtually identical estimates, so we feel confident in presenting the unstandardized coefficients based on standardized values.

Also, we examined the pattern of interactions in separate analyses, controlling for gender and age and type of offense, and found that the results do not differ significantly. Higher order interactions are not presented here to simplify the analysis, but they are available upon request. Furthermore, our hypothesized relationships are not specific to gender or age characteristics.

Table 1 presents the unstandardized regression coefficients and their corresponding significant levels for regression models with and without interactions. In the main effects model without interactions, the significant predictors of delinquency are school marks, school importance, delinquent friends, and heavy metal preference. Once these variables are entered into the equation, the importance of parental attachment and parental supervision is reduced to below the .05 level of significance. The direction of the estimated effects are in the expected direction; that is, in these data low social control and delinquent associations are directly related to delinquency. Although the effect of heavy metal preference is significant in the expected direction, it is not as strong as the effects of delinquent friends and school importance. Yet the heavy metal preference variable makes a unique and significant contribution to the variance in self-reported delinquency.

Next we consider, in Table 1, main effects with interactions. When interaction effects are entered, the main effects of heavy metal preference and school marks on delinquency are above the .05 level of significance. Among the two-way interactions with heavy metal preference, only parental supervision and school marks are significant in their effects on delinquency. The two-way interaction for heavy metal preference and parental supervision is in the expected direction. But the interactive effect of school marks with heavy metal on delinquency is opposite from what was hypothesized. Moreover, contrary to expectations, the interaction between delinquent friends and heavy metal is not significant. This suggests that the effects of delinquent peers on delinquency are the same for those youth who prefer heavy metal and youth preferring other kinds of music.

Table 2 displays the standardized effects of heavy metal preference on delinquency for one standard deviation above and below the mean. In interpreting the coefficients in Table 1, recall that all variables are standardized, with a mean of zero and a standard deviation of one. The coefficients for the "main effects" refer to the effect of each variable on delinquency when all other variables are set at zero or their mean value. When all other variables are set at their mean, heavy metal preference has a standardized effect of .16 on delinquency. The coefficient for the interaction between heavy metal and parental supervision is $-.23$. This means that for every standard deviation

TABLE 1: Delinquency Regressed on Social Control, Delinquent Peer, and Heavy Metal Preference Variables, With and Without Interaction Terms

<i>Variable</i>	<i>Main Effects</i>	<i>With Interactions</i>
Parental Attachment	-.03	-.08
Parental Supervision	-.10	-.06
School Marks	-.15*	-.14
School Importance	-.25**	-.27**
Delinquent Friends	.57**	.55**
Heavy Metal Preference	.13*	.16
Parental Attachment × Metal		.07
Parental Supervision × Metal		-.23**
School Marks × Metal		.22**
School Importance × Metal		.05
Delinquent Friends × Metal		.07
Adjusted R^2	.19	.22

NOTE: Standardized effects are shown.

* $p < .01$; ** $p < .05$.

increase in parental supervision, the effect of heavy metal preference on delinquency decreases by $-.23$. When parental supervision and all other independent variables are at their mean, the effect of heavy metal on delinquency is $.16$. When parental supervision is one standard deviation above its mean, the effect of heavy metal preference on delinquency decreases to $-.07$ ($.16 + -.23$). Conversely, when parental control is one standard deviation below its mean, the effect of heavy metal on delinquency increases to $.39$ ($.16 + .23$).

Although the above pattern of effects for the interaction between parental supervision and heavy metal preference is in the expected direction, this is not the case for school marks. When the variable school marks is one standard deviation above its mean, the effect of heavy metal on delinquency increases to $.38$. Among youth who prefer heavy metal, it is not the less intelligent ones who are reporting the most delinquent acts. Rather, youth who prefer heavy metal and have higher rates of delinquency appear to achieve relatively better grades in school.

SUMMARY

The results of this analysis provide mixed support for the hypothesized interactive effects of heavy metal preference. We found support for the main effects of heavy metal preference on delinquency controlling for other important indicators. In partial support of Barich's observation on the relationship between heavy metal and delinquency, we found support for that part of our hypothesis that dealt with parental supervision. Youth who

TABLE 2: Effect of Heavy Metal on Delinquency When Parental Supervision and School Marks are Set at Various Levels

Parental supervision	
Mean – one <i>SD</i>	.39
Mean	.16
Mean + one <i>SD</i>	–.07
School marks	
Mean – one <i>SD</i>	–.06
Mean	.16
Mean + one <i>SD</i>	.38

preferred heavy metal music and were low in parental supervision had higher rates of delinquency. However, this was not the case for parental attachment. Moreover, contrary to Barich's point about intelligence, our data suggest that the rate of delinquency among youth preferring heavy metal was not inversely related to school marks.

We also found little support for our subcultural hypothesis in that the effects of delinquent peers were not significantly different for youth by music preference. The effect of delinquent peers is significant and youth preferring heavy metal music may fall into a delinquent subculture, but it cannot be distinguished with these data from other subcultures that revolve around the cultural artifacts and delinquent behavior of friends.

CONCLUSION

We may have identified an element that relates an aspect of the tastes or styles of contemporary youth to their delinquent behavior. But with the available data we are unable to determine exactly how the varying elements of youth culture are related to music preferences. Parenthetically, in comparison to other youth in our sample, the few youth who preferred classical music have the lowest mean delinquency score. However, classical music oriented youth consist of a much smaller number of youth ($n = 7$) precluding any detailed analysis. There seems, however, to be some variation in the music preference of youth and their delinquent behavior.

Our multivariate analysis reveals that the direct effects of heavy metal preference are relatively small, and that it is important to consider its interaction with measures of social control. The interactive effect of parental supervision was particularly significant. Our finding that the effects of school marks for youth preferring heavy metal on delinquency were in the opposite direction from that of youth preferring non-heavy metal music requires a more complex explanation. It is possible that heavy metal may attract

intelligent youth whose rebellion takes the form of heavy metal music and delinquent behavior. Or, it may be that the better grades reflect a different academic track for more delinquent youth who prefer heavy metal.

Thus future research on delinquency should further consider the manner in which popular forms of youth culture relate to delinquency. With regard to heavy metal, we have neglected to survey such symbols of heavy metal as displayed in articles of clothing and jewelry. Questions about how youth see themselves and others falling into particular adolescent subgroups, such as "punks" and "head bangers," might have more closely specified the nature of delinquent peer group associations.

Future research might also further explore the degree to which youth who said that their favorite music group is what we classified as heavy metal actually identify with the lyrics or the styles of particular heavy metal songs and groups. Obviously, not everyone who listens to heavy metal or wears a runic lighting bolt can be considered a committed heavy metal fan, or even part of a heavy metal subculture. However, music should be viewed as one of the many contemporary cultural artifacts that can provide insight into youth subcultures and their relationship to delinquency.

In a critique of prior empirical tests of subcultural theory based exclusively on surveyed norms and values, Fine and Kleinman (1979) stressed the importance of looking at the interactive and dynamic aspects of subcultures. Similarly, Messner (1983, p. 106) has made this point in arguing that sociological research on homicide should look into music preference to further understand high homicide rates in the South, controlling for the structural characteristics of southern metropolitan areas. More recently, Stack and Gundlach (1992) reported a relationship between country music and suicide with aggregate level data. And, with individual-level survey data, Hagan (1991) has considered the importance of subcultures of delinquency as predictors of status attainment.

Our research is consistent with that of others which has considered the importance of culture in explaining behavior. The more interactive and dynamic aspects of culture need to be examined through a variety of analytical techniques. Although the present research considered only the quantity of delinquent acts, much of the subcultural literature would suggest considering youth subcultures in the context of types of delinquent acts. The effects of heavy metal preference may be greater for drug offenses rather than the common forms of delinquency measured in this article. In either case, culture and subculture should not be ignored in attempts to understand the more dynamic aspects of youth and their delinquent behavior.

Finally, we wish to emphasize the correlational nature of our data and that the findings cannot be used to support music censorship as a means of

preventing delinquency. Longitudinal research designs are needed to examine further the causal effects of music on delinquency. Moreover, our data is confined to music preference so we were unable to estimate the possible effects of actually listening to heavy metal music on delinquency. However, the findings do stress the importance of looking at how aspects of culture may influence delinquent behavior.

NOTES

1. Originally we had quoted directly from the Mötley Crüe song. But at the time of publication permission was denied by representatives of Mötley Crüe. Thus we paraphrase the song that Gross quotes. However, this illustrates part of the difficulty in publishing research on popular forms of culture.

2. Parents of youth surveyed were asked to indicate their occupational class. Fathers are largely in occupational positions of employers or managers (73%). The remaining proportion are equally divided among employee and self-employed occupational positions. The proportion of unemployed fathers in the survey is 6%.

3. The following music groups were classified as "heavy metal": AC/DC, Black Sabbath, Deep Purple, Dokken, Iron Maiden, Judas Priest, Mahles, Metallica, Mötley Crüe, Primitive Urges, Scorpions.

4. We realize that there is some debate as to classification of heavy metal groups. Such groups can be delineated further into lighter forms of heavy metal (e.g., Bon Jovi) and heavy heavy metal (e.g., Metallica). We prefer to confine our analysis to what might be considered as heavy heavy metal. Also, current popular heavy metal groups, such as Megadeath, Nuclear Assault, Suicidal Tendencies, and Motorhead may not have been popular at the time of the survey, which was conducted in 1987.

5. Recall the survey was completed in 1987, before the popularity of compact discs.

REFERENCES

- Agnew, Robert. 1985. "A Revised Strain Theory of Delinquency." *Social Forces* 64:151-66.
- Aiken, Leona S. and Stephen G. West. 1991. *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage.
- Arnett, Jeffrey. 1991. "Adolescents and Heavy Metal Music: From the Mouths of Metalheads" *Youth & Society* 23:76-98.
- Barich, William. 1986. "A Reporter at Large: The Crazy Life." *The New Yorker*, November 3, pp. 97-130.
- Cloward, Richard and Lloyd E. Ohlin. 1960. *Delinquency and Opportunity: A Theory of Delinquent Gangs*. New York: Free Press.
- Cohen, Albert K. 1955. *Delinquent Boys*. New York: Free Press.
- Fine, Gary A. and Sheryl Kleinman. 1979. "Rethinking Subculture: An Interactionist Analysis." *American Journal of Sociology* 85:1-20.
- Gross, Robert L. 1990. "Heavy Metal Music: A New Subculture in American Society." *Journal of Popular Culture* 24:119-30.

- Hagan, John. 1991. "Destiny and Drift: Subcultural Preferences, Status Attainments, and the Risks and Rewards of Youth." *American Sociological Review* 56:567-82.
- Jaccard, James, Robert Turrisi, and Choi E. Wan. 1990. *Interactive Effects in Multiple Regression*. Newbury Park, CA: Sage.
- Matza, David. 1964. *Delinquency and Drift*. New York: Wiley.
- Messner, Stephen F. 1983. "Regional and Racial Effects on the Urban Homicide Rate: The Subculture of Violence Revisited." *American Journal of Sociology* 88:997-1007.
- Montgomery, David. 1992. "Injuries, Arrests Vie with Music at Heavy-Metal Fest." *The Buffalo News*, July 26, sec. C1, C4.
- Newman, Graeme R. 1990. "Popular Culture and Criminal Justice: A Preliminary Analysis." *Journal of Criminal Justice* 18:261-74.
- Roe, Keith. 1985. "Swedish Youth and Music: Listening Patterns and Motivations." *Communication Research* 12:353-62.
- Schwendinger, Herman and Julia S. Schwendinger. 1985. *Adolescent Subcultures and Delinquency*. New York: Praeger.
- Shoemaker, D. J. 1990. *Theories of Delinquency: An Examination of Explanations of Delinquent Behavior*. 2nd ed. New York: Oxford.
- Stack, Steven and Jim Gundlach. 1992. "The Effects of Country Music on Suicide." *Social Forces* 71:211-18.
- Willis, Paul. 1978. *Profane Culture*. London: Routledge.
- . 1990. *Common Culture*. England: Open University.