Heavy Metal and Hip-Hop Style Preferences and Externalizing Problem Behavior

A Two-Wave Longitudinal Study

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This study examines (a) the stability of Dutch adolescents’ preferences for heavy metal and hip-hop youth culture styles, (b) longitudinal associations between their preferences and externalizing problem behavior, and (c) the moderating role of gender in these associations. Questionnaire data were gathered from 931 adolescents between the ages of 11 and 18 years in two waves with a 2-year interval. Results suggest that preferences for heavy metal and hip-hop youth culture styles are moderately stable over a 2-year period. Preference for the hip-hop style was found to predict later externalizing problems in both boys and girls. Preference for the heavy metal style predicted later externalizing problems exclusively in boys. Adolescents’ externalizing problems did not predict later preferences for hip-hop or heavy metal.

Keywords: heavy metal; hip-hop; youth culture style preferences; externalizing problem behavior; adolescents

Contemporary ethnographic and empirical studies provide compelling evidence that adolescent peer culture is made up of a disparate set of youth cultural groups (Bennet, 2001; Hebdige, 1979) or crowds (Brown & Lohr, 1987; Brown, Mory, & Kinney, 1994). Some of these youth cultural groups are crystallized around shared preference for specific pop-musical

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genres (Miranda & Claes, 2004). Over the past decades, adolescents’ affiliation with two of these youth cultural styles, heavy metal and hip-hop, has raised concern among educators, health professionals, and parents. The potentially harmful effects of the louder, brasher varieties of hip-hop and heavy metal were widely publicized and debated in public media. Research among American, Canadian, and Australian adolescents has addressed this issue and indeed provided some empirical evidence for the link between music preferences, youth cultural orientations, and adolescent adjustment (Miranda & Claes, 2004; Urberg, Deginancioglu, Tolson, & Halliday-Scher, 2000). However, the modeling of the development of the association between youth cultural affiliations and problems is hampered by the fact that nearly all research in this field is made up of cross-sectional studies. Our line of inquiry extends previous research by examining the full reciprocal longitudinal associations between adolescents’ youth cultural style preferences and externalizing problems in a large Dutch sample of adolescents.

Music plays an important role in the lives of adolescents (Zillmann & Gan, 1997), and shared music preference is one of the key elements in the formation of youth culture groups (Miranda & Claes, 2004; ter Bogt, 2004). Some youth cultures even derive their names from a specific music genre, for example, “rockers,” “punks,” “metal kids,” and “ravers.” These musical youth cultures are believed to provide adolescents with values, beliefs, and social identities (Arnett, 1995; Bennet, 2001; Tarrant, North, & Hargreaves, 2001). Apart from the potentially positive aspects of adolescents’ identification with certain music subcultures, it has been argued that certain subcultures may have deleterious effects on adolescents’ adjustment. In particular, adolescents’ preferences for heavy metal and hip-hop have raised considerable concern, as some of the subgenres of these broad musical styles frequently refer to controversial issues such as violence, suicide, Satanism, lewd sex, rebellion, and substance use (Christenson & Roberts, 1998; Lacourse, Claes, & Villeneuve, 2001).

Research on links between adolescents’ youth culture style preferences and adjustment suggests that preferences for heavy metal and hip-hop may indeed be associated with a range of problem behaviors (Miranda & Claes, 2004; Urberg et al., 2000). U.S., Canadian, and Australian research have found that heavy metal fans report more hostile attitudes (especially against women), delinquency, aggression, drug and alcohol use, and reckless behavior than other adolescents (Arnett, 1991, 1993; Martin, Clarke, & Pearce, 1993; Scheel & Westefeld, 1999; Singer, Levine, & Jou, 1993; Took & Weiss, 1994; Urberg et al., 2000). For example, Martin et al. (1993) found that Australian heavy metal fans reported higher levels of risk-taking
behaviors and delinquency than their pop-oriented peers. Several studies performed in these same countries found that rap fans also exhibit more externalizing behavior such as drug use, engagement in unsafe sex, aggression, and delinquency than other adolescents (Ballard & Coates, 1995; Miranda & Claes, 2004; Took & Weiss, 1994; Urberg et al., 2000). For example, Miranda and Claes (2004) reported that a preference for rap music among Canadian adolescents predicted several types of delinquency, even when statistically controlling for frequency of violent media consumption and delinquency of peers.

Youth Culture Preferences Precede Externalizing Behavior

Several theoretical perspectives can be found in discussions about mechanisms behind associations between youth culture style preferences and externalizing problems. One line of reasoning is that adolescents’ youth culture style preferences influence their behaviors. According to the sociocognitive perspective, a preference for music styles with antisocial content activates antisocial schemas, which may in turn lead to actual antisocial behavior (Hansen, 1995; Miranda & Claes, 2004). In support of the sociocognitive hypothesis, several experimental studies have revealed that exposure to heavy metal and hip-hop music and music videos may increase the prevalence of several externalizing problems (Barongan & Hall, 1995; Hansen & Hansen, 1990; Johnson, Jackson, & Gatto, 1995; Wester, Crown, Quatman, & Heesacker, 1997). For example, Johnson et al. (1995) found that males exposed to violent rap music videos expressed more acceptance of the use of violence than those who had seen nonviolent videos or no videos at all.

Several other processes have been proposed to account for the effect of adolescents’ youth cultural style preferences on their behaviors. First, there may be a tendency for someone to conform to the perceived deviant lifestyle and behavioral characteristics of the youth culture style with which he or she most identifies, regardless of whether this person actually interacts with members of that crowd (Sussman et al., 1994). Second, if adolescents are actual members of a clique (i.e., friendship group) embedded within a certain youth culture style group, they may conform to perceived group norms (Brown et al., 1994). Third, the desire to be affiliated with a certain youth culture style may guide adolescents toward deviant behaviors (Brown et al., 1994).
Externalizing Behavior Predicts Youth Culture Orientation and Choice of Peers

Another line of reasoning is that effects run the opposite direction, from adolescents’ adjustment to their youth culture style preferences. According to the sociocognitive perspective, deviant behaviors tend to guide adolescents toward preferences for nonmainstream youth cultures (Miranda & Claes, 2004). Roe (1995) argued that academic problems and deviant behaviors in Swedish adolescents might result in a preference for music with antisocial themes. Several U.S. studies have also suggested that adolescents with more problems may indeed choose to affiliate themselves with nonmainstream youth cultures and peers facing or acting out the same types of problems (Arnett, 1991; Bleich, Zillmann, & Weaver, 1991; Carpentier, Knobloch, & Zillmann, 2003; Dollinger, 1993; Gardstrom, 1999; Hansen & Hansen, 1991; McNamara & Ballard, 1999). For example, Gardstrom (1999) found that juvenile delinquents consider their preference for deviant music to mirror reality, rather than cause their deviant behavior. From the sociocognitive perspective, it is thus hypothesized that attitudinal and behavioral patterns that tend to be problematic propel young people toward music that reflects these ideas and behaviors.

This Study

A major limitation of most studies that have investigated associations between adolescents’ cultural preferences and their adjustment is their use of cross-sectional designs. Consequently, little is known about the stability of adolescents’ cultural preferences over time. Furthermore, a cross-sectional design does not allow definite conclusions to be drawn on the direction of effects between youth culture preferences and adolescents’ adjustment. An isolated cross-sectional correlation may indicate that youth culture preferences influence problem behavior (e.g., the sociocognitive perspective), that problem behavior influences youth culture preferences (e.g., the psychosocial perspective), or that both are bidirectionally related. Studies examining full reciprocal associations over longer periods of time are more suitable for determining the nature of the relationships between youth culture preferences and adolescents’ externalizing problem behavior. In this study, a cross-lagged panel design (see Method section) was used to examine the stability of adolescents’ cultural preferences over time and the longitudinal associations between them and adolescents’ externalizing problem behavior.

A second limitation of studies performed to date is that links between youth culture style preferences and externalizing problems have been investigated
almost exclusively in North American and Australian adolescents. The extent to which the findings of these studies apply to other cultural contexts is unclear. This study has used data from a sample of adolescents living in the Netherlands, which can be used to cross-culturally test the generalizability of these associations.

A final limitation of previous research is that most studies did not systematically investigate gender differences. U.S. and Canadian studies suggest that females may be a small, vulnerable group in nonmainstream youth cultures, because it is more socially acceptable for boys to prefer deviant musical youth cultures (Lacourse et al., 2001; ter Bogt, 2003). For example, Lacourse et al. (2001) found that Canadian female heavy metal fans reported feeling more alienation and anomie and had a higher risk of suicide than their male peers. Accordingly, the final aim of this study was to examine the moderating role of gender in longitudinal links between youth culture style preferences and externalizing problems.

Research Questions

In summary, this study sought to answer the following questions:

1. How stable are Dutch adolescents’ preferences for the heavy metal and hip-hop youth culture styles over time? It has been suggested that youth culture style is a relatively stable feature of adolescent life (e.g., ter Bogt, 2000), and it was therefore expected that at least moderate ($\beta > .40$, see Cohen, 1988) stability would be found for adolescents’ style preferences over a 2-year period.

2. To what extent do Dutch adolescents’ preferences for youth culture styles predict later externalizing problem behavior, and to what extent does externalizing problem behavior predict later preferences for youth culture styles? Based on the empirical evidence and theoretical perspectives above, two contrasting hypotheses could be formulated, because different paradigms take different temporal sequences into account in modeling associations between youth culture style preferences and problem behavior: Youth culture style preferences may predict externalizing behavior or externalizing behavior may predict youth culture style preferences.

3. What role does gender play in longitudinal links between Dutch adolescents’ cultural styles and externalizing problem behavior? Previous research (e.g., Lacourse et al., 2001) has suggested that girls in nonmainstream groups may be particularly at risk of developing problem behaviors, and therefore the effects of preferences for both nonmainstream youth culture styles on externalizing problems were expected to be more pronounced for girls.
Method

Procedure

Data from this study came from 12 schools participating in two waves of the CONAMORE 2001-2006 longitudinal study (CONflicts And Management Of Relationships; Meeus et al., 2002). The time interval between the first and second wave was 2 years. Parents and students received a letter describing the aims of the study and giving information about the option of not participating. If students elected to participate, they were required to provide written informed consent. Less than 1% decided not to participate. Written informed consent was also obtained from all of the participating schools. Participants completed a series of questionnaires in their classrooms after school hours. Research assistants who attended administration of the questionnaires gave verbal instructions about completing them; written instructions were also included. Students absent on the day of testing were not assessed. Participants received €10 for completing the questionnaires.

Participants

The sample of 931 adolescents included 52.3% boys and 47.7% girls, who were between 11 and 18 years of age (M = 13.65, SD = 2.06). The majority were Dutch (87.4%, N = 814), and 12.6% were ethnic minorities (N = 117); 23.9% of the adolescents were enrolled in high schools preparing them for lower level tertiary education or lower level jobs, and 76.1% were in high schools preparing them for college or university education. The educational levels of the fathers and mothers of the adolescents were as follows: 23.1% and 31.2% had finished only primary or high schools, 36.2% and 39.4% had finished lower secondary education, and 40.6% and 29.4% had finished college or university education, respectively.

Subject Attrition

Of the original 1,007 adolescents, 931 completed the questionnaires in both waves (92%). No differences were found between the attrition and the nonattrition groups with regard to gender, age, youth culture style preferences, or externalizing problem behavior.
Measures

Self-report measures pertaining to adolescents’ youth culture style preferences and externalizing problems were administered.

Youth Culture Style Preferences

Adolescents’ youth culture style preferences were assessed on the basis of two measures pertaining to crowd identification and musical preferences. Adolescents’ crowd affiliation was assessed by means of the Peer Crowd Identification Questionnaire (PCIQ; ter Bogt, 2000). The PCIQ includes 10 items related to contemporary youth subcultures in the Netherlands. Participants were asked to indicate on 5-point Likert-type scales the extent to which they identified with each of the crowds listed (1 = not at all like me, 5 = completely like me). In this study, only responses on the items “heavy metal fans” and “hip-hop fans” were analyzed, whereas the other items served to disguise the purpose of the study. Previous studies have shown that self-identification of crowd membership is as valid a measure of affiliation patterns as traditional reports based on a select group of expert adolescent participants (Urberg et al., 2000).

Musical preferences were assessed with the Musical Preference Questionnaire (MPQ; Sikkema, 1999). The MPQ includes 11 items related to well-known musical genres. Participants were asked to indicate on 5-point Likert-type scales the extent to which they liked each of the 11 genres listed (1 = very bad, 5 = very good). Only the items “heavy metal” and “hip-hop” were used in this study. The other items again served to disguise the purpose of the study. Correlations between PCIQ and MPQ items measuring heavy metal were .45 and .48 at Wave 1 and Wave 2, respectively. Correlations between PCIQ and MPQ items measuring hip-hop preferences were .46 and .42 at Wave 1 and Wave 2, respectively.

Externalizing Problem Behavior

Adolescents’ externalizing problem behavior was assessed with three measures pertaining to adolescents’ direct and indirect aggression and delinquency. Direct and indirect aggression were assessed with two scales of the Direct and Indirect Aggression Scales (DIAS; Björkqvist, Lagerspetz, & Österman, 1992): direct (5 items; e.g., I kick someone) and indirect (12 items; e.g., I tell bad or false stories about someone) aggression. Participants were
asked to indicate on 4-point scales how often they display the behavior described when they are mad at someone in their class (1 = never, 4 = very often). A total score for each type of aggression was computed by adding up responses to the items. Good validity and reliability have been reported for the DIAS (Björkqvist et al., 1992). Delinquency was measured with a questionnaire used and tested in a previous study (Baerveldt, Van Rossem, & Vermande, 2003). Participants were asked to indicate on 4-point scales how many times they had committed 23 minor offenses, such as shoplifting, petty theft, vandalism, and unarmed fights, in the previous 12 months (1 = never, 2 = once, 3 = two or three times, 4 = four times or more). A total score was computed by adding the responses to each item. In this sample, reliability (Cronbach’s alpha) was .90 and .87 for indirect aggression, .87 and .83 for direct aggression, and .89 and .85 for delinquency, for the first and second waves, respectively.

**Strategy for Analysis**

Figure 1 shows the general cross-lagged model used to determine the stability of youth culture style preferences as well as the effects of youth culture style preferences on externalizing problems and vice versa. An important feature of the cross-lagged panel design is that one controls for the initial correlation between the two variables, while estimating the cross-lagged and stability effects (i.e., effects of variables on themselves over time). Due to its strengths, the design was classified as “quasi-experimental” in the well-known evaluation by Campbell and Stanley (1966).

Scores on the scales for direct and indirect aggression and delinquency were used as indicators of a latent variable representing adolescents’ externalizing problem behavior. Scores on the PCIQ item “heavy metal fans” and the MPQ item “heavy metal” were used as indicators of a latent variable representing a heavy metal style preference. Scores on the PCIQ item “hip-hop fans” and the MPQ item “hip-hop” were used as indicators of a latent variable representing a hip-hop style preference. The loadings of the indicators of the youth culture style preference variables and the externalizing problem behavior variable at Wave 1 were constrained to be equal to the corresponding loadings at Wave 2. Separate models were specified for each of the three youth culture style preference variables. The Amos (Arbuckle, 1997) structural equation modeling (SEM) program was used to test the two models. Multiple group analyses were performed to test for gender differences. Missing data were imputed using the relative means substitution approach developed by Raaijmakers (1999).
Results

All factor loadings in all models were significant and all indicators loaded highly (i.e., loadings of .40 or more) on the latent constructs. Table 1 shows the standardized estimates for the initial correlations, stability paths, and cross-lagged paths for the heavy metal and hip-hop models. The goodness-of-fit indices and the root mean square errors of approximation of the two models were more than .95 and less than .03, respectively, indicating that all models provided an excellent data fit.
### Table 1
Standardized Maximum Likelihood Estimates for Final Heavy Metal and Hip-Hop Models

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Heavy Metal Model</th>
<th>Hip-Hop Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (N = 931)</td>
<td>Boys (N = 487)</td>
</tr>
<tr>
<td>T1 correlations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy metal T1–externalizing problems T1</td>
<td>0.17**</td>
<td>0.11*</td>
</tr>
<tr>
<td>Hip-hop T1–externalizing problems T1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stability paths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Externalizing problems T1-T2</td>
<td>0.47**</td>
<td>0.38**a</td>
</tr>
<tr>
<td>Youth culture style preferences T1-T2</td>
<td>0.40**</td>
<td>0.49**</td>
</tr>
<tr>
<td>Cross-lagged paths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy metal T1–externalizing problems T2</td>
<td>0.14**</td>
<td>0.18* b</td>
</tr>
<tr>
<td>Externalizing problems T1–heavy metal T2</td>
<td>-0.03</td>
<td>-0.01</td>
</tr>
</tbody>
</table>

Note: Corresponding superscripted letters indicate significant \( p < .05 \) differences between paths for boys and girls. T1 = Wave 1; T2 = Wave 2.
Stability of Youth Culture Style Preferences and Externalizing Problems

As can be seen in the first column of Table 1, heavy metal (.40) and hip-hop (.68) style preferences were moderately stable over a 2-year period. Adolescents’ externalizing problem behavior was also found to be moderately stable in both models (.46 and .46, respectively).

Longitudinal Links Between Youth Culture Style Preferences and Externalizing Problems

Significant positive cross-sectional correlations at Wave 1 were found between heavy metal/hip-hop style preferences and externalizing problems, indicating that adolescents with stronger preferences for either the heavy metal or hip-hop style report more externalizing problems (correlations = .17 and .28, respectively; see first column of Table 1).

With regard to the effects over time between youth culture style preferences and adolescent problem behavior, the results of Models 1 (heavy metal) and 2 (hip-hop) showed that, when controlling for the initial correlations between style preferences and problem behavior and the stabilities of both, heavy metal (.14) and hip-hop (.14) style preferences both significantly ($p < .01$) predicted externalizing problems 2 years later. In the opposite direction, from externalizing problems to later heavy metal or hip-hop style preferences, no significant longitudinal links were found.

Boys Versus Girls

To examine whether the longitudinal associations between youth culture style preferences and adolescent problem behavior were different for boys and girls, a series of multiple group analyses was performed. Models were run in several steps for this. We first specified multiple group models in which the initial correlation between youth culture style preferences and externalizing problems and their stabilities was either set to equal (restricted model) or unequal (unrestricted model) across gender groups. Next, the paths from youth culture style preferences at Wave 1 to externalizing problems at Wave 2 were allowed to differ across groups. Finally, the paths from externalizing problems at Wave 1 to youth culture style preferences at Wave 2 were allowed to differ across groups. Chi-square difference tests were used to compare the fit of the restricted and unrestricted models. Table 2 shows that several gender differences were found. Allowing the initial correlation between youth culture style preferences and externalizing problems and
their stabilities to differ across groups significantly improved the fit of the heavy metal model ($\Delta \chi^2 = 10.24, \Delta df = 3, p < .05$ for the heavy metal model). Examination of the critical ratios of differences revealed that externalizing problem behavior was more stable for girls (.51 and .52, respectively) than for boys (.38 and .40, respectively) in the heavy metal model (see second and third columns of Table 1). No gender differences were found for the initial correlations between youth culture style preferences and externalizing problems nor for the stabilities of the former.

Unrestricting the path from a heavy metal style preference at Wave 1 to externalizing problems at Wave 2 significantly improved the fit in Model 1 ($\Delta \chi^2 = 4.38, \Delta df = 1, p < .05$). As can be seen in the second and third columns of Table 1, a heavy metal style preference predicted later externalizing problems for boys (.18; $p < .01$) but not for girls (.03). No other significant gender differences were found.

### Effects of Age, Ethnicity, and Educational Level

To control for possible age, ethnicity, and educational level differences in the associations between youth culture style preferences and adolescent
problem behavior, three additional multiple group analyses were performed. Unrestricting Wave 1 correlations, stability paths, and cross-lagged paths one by one did not result in significant improvement of fit when examining younger (11 to 14 years of age, \( n = 652 \)) versus older (15 to 18 years of age, \( n = 279 \)) adolescents (\( \Delta \chi^2 = 8.41, \Delta df = 5, p > .05 \) for restricted vs. fully unrestricted models), Dutch (\( n = 814 \)) versus ethnic minorities (\( n = 117; \Delta \chi^2 = 9.56, \Delta df = 5, p > .05 \) for restricted vs. fully unrestricted models), and lower educated (adolescents in lower level tertiary education or lower level jobs, \( n = 223 \)) versus higher educated (adolescents in high schools preparing them for college or university education, \( N = 708 \)) adolescents (\( \Delta \chi^2 = 6.37, \Delta df = 5, p > .05 \) for restricted vs. fully unrestricted models). Thus, these results indicate that there were no effects of age, ethnicity, and educational level on the associations between youth culture style preferences and adolescent problem behavior.

**Discussion**

This study examined the stability of Dutch adolescents’ preferences for heavy metal and hip-hop youth culture styles and the longitudinal associations of these preferences with externalizing problem behavior. In line with our first hypothesis, the stability paths of the youth culture style preferences were found to be of moderate magnitude. These findings suggest that, as proposed by other authors (Bennet, 2001; Christenson & Roberts, 1998; ter Bogt, 2000), adolescents do not change their youth culture affiliation regularly and that their preferences are relatively stable over time. These results also imply that youth cultures may be serious risk factors, if adolescents’ youth culture preferences really do have an effect on their behavior, because these affiliations persist over time (Brown et al., 1994; ter Bogt, 2003).

With regard to our second hypothesis on the temporal sequencing of music and problem behavior, cross-lagged modeling indicated that preferences for both heavy metal and hip-hop predicted later externalizing problem behavior, whereas there were no significant associations found between adolescents’ externalizing problem behavior and later preferences for heavy metal and hip-hop. The same pattern was found for younger and older adolescents, Dutch and ethnic minority adolescents, and lower and higher educated adolescents. Consequently, our findings support the aforementioned sociocognitive perspective (see Hansen, 1995) and other views in which adolescents’ cultural orientations precede problem behavior rather than result from it. Adolescents with relatively strong preferences for heavy metal or hip-hop
may be more frequently exposed to music and videos with antisocial content, which may make them behave more defiantly and activate more antisocial cognitive schemas (Miranda & Claes, 2004). Strong preferences for heavy metal and hip-hop may also lead to externalizing problems through modeling processes and conformity to group norms (Arnett, 1991; Hussong, 2002; La Greca, Prinstein, & Fetter, 2001). For example, the peer socialization hypothesis suggests that adolescents more deeply embedded in a deviant peer context have more peer models, encouragement, and rewards for exhibiting problem behavior (Dishion, Spracklen, Andrews, & Patterson, 1996).

No support was found for the psychosocial perspective: Adolescents’ externalizing problems did not predict later heavy metal and hip-hop youth culture style preferences. Our results fail to provide evidence for Roe’s (1995) and Arnett’s (1995) proposition that adolescents’ cultural style preferences are a function of their own personal characteristics. Our findings seem to indicate that deviant behaviors in adolescents do not tend to guide them toward preferences for youth culture styles that are supposedly associated with antisocial themes (i.e., heavy metal and hip-hop).

Partial support was found for the moderating role of gender in bidirectional associations between preferences for youth culture styles and externalizing problem behavior. However, heavy metal style preferences had an unexpected stronger effect on externalizing problems for boys than girls, suggesting that girls in the Netherlands who prefer heavy metal may be a less vulnerable group for developing externalizing problems than boys who prefer this music. No evidence for a moderating role of gender was found in bidirectional associations between hip-hop style preferences and externalizing problems. A possible explanation for these findings may be that a milder variety of heavy metal has recently become very popular in the Netherlands, specifically among girls (ter Bogt, 2000). Gothic metal with representatives such as Marilyn Manson may be a controversial genre in the United States (Wright, 2000). In the Netherlands, however, gothic metal, rooted in the new wave music and heavy metal of the eighties, combines fairy tales with horror stories in clips and lyrics in a musical base that mixes melodic elements from symphonic rock and folk music with the heavy guitar-bass-and-drum-driven sound of older metal. Girls in the Netherlands may be more attracted to these popular, more mainstream subgenres of heavy metal, which may be relatively harmless, whereas boys may prefer the more deviant categories of heavy metal, possibly putting them at risk for developing problem behaviors. Although hip-hop also has its popular, more mainstream subgenres (ter Bogt, 2003), some of the male and female hip-hop fans may prefer the same “deviant” subgenres of hip-hop, accounting for the
fact that boys’ and girls’ adjustment was found to be just as strongly predicted by hip-hop preferences. In line with these findings, it has been argued that hip-hop values and attitudes can be very easily adopted by both male and female fans, whereas male fans seem primarily attracted to the more extreme heavy metal scenes (Mulder, ter Bogt, Raaijmakers, & Vollebergh, in press).

Several limitations of this study should be noted. First, although the longitudinal nature of these analyses allows more definite conclusions to be drawn on the direction of effects than cross-sectional designs, no claim can be made of definite causal effects. Our type of modeling does not rule out the alternative explanation that a third variable accounts for the relationship between adolescents’ youth culture style preferences and externalizing problem behavior. Ter Bogt (2004) has suggested a more extensive model that conceptualizes youth culture orientations as a mediator between personality characteristics and adolescent externalizing behavior. Children scoring high on traits such as sensation seeking may be attracted to music styles and youth culture affiliations that reflect their activity level, curiosity, and need for arousal at the start of adolescence (see Bleich et al., 1991; Carpentier et al., 2003). High-energy music and the associated youth cultures geared to adventurousness and excitement can disproportionately appeal to these young people. Basic personal characteristics, later cultural preferences, and membership of peer groups that occasionally break social rules in seeking sensation may result in (collective) externalizing behavior in adolescent development. In this developmental sequence model, popular youth cultures function as a bridge between personality and highly prevalent externalizing behaviors that are specific to middle and late adolescence. Second, although this study is unique in the sense that almost all other studies concerning youth culture style preferences and problem behavior have focused exclusively on U.S., Canadian, and Australian adolescents, the results can only be generalized to Dutch adolescents in medium-sized towns and surroundings. Finally, this study made no distinctions between preferences for different subgenres of heavy metal and hip-hop. These styles can be divided into a number of subtypes (ter Bogt, 2000) and preferences for more extreme types of heavy metal and hip-hop may show stronger relationships with later externalizing problem behavior (see Lacourse et al., 2001; Miranda & Claes, 2004).

In spite of the above limitations, this study represents one of the first attempts to disentangle the effects that adolescents’ youth culture style preferences and externalizing problems exert on one another. Furthermore, the magnitudes of cross-sectional associations between hip-hop and heavy metal preferences and problem behavior found in our study are similar to
those found in studies performed in English-speaking countries (Lacourse et al., 2001; Miranda & Claes, 2004), suggesting that our longitudinal associations may also apply to these countries. Our findings suggest that the youth culture style preferences of adolescents are relatively stable over time. In addition, our results at least indicate that adolescents’ cultural preferences precede externalizing problems, rather than the other way around. Future studies should examine longitudinal links between personality, youth culture style preferences, and externalizing problems across different cultural contexts, incorporating a wider variety of subgenres to gain more insight into the intricate interplay of risk factors for problem behavior.

References


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