TELEVISION AND MUSIC VIDEO EXPOSURE AND ADOLESCENT ALCOHOL USE WHILE GOING OUT

JAN VAN DEN BULCK* and KATHLEEN BEULLENS

Katholieke Universiteit Leuven, Audience Research Center, Department of Communication, Van Evenstraat 2A, 3000 Leuven, Belgium

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Abstract — Aims: To examine whether television viewing and music video exposure predict alcohol consumption while going out. Methods: Data were collected in two waves (February 2003 and February 2004). Respondents were a random sample of 1648 first and fourth year secondary school children of Flanders, Belgium. Self-reported general TV viewing and music video exposure at time 1 and the quantity of alcohol consumed while going out at time 2 were measured. Controls were gender, age group, smoking behaviour, and alcohol use (at time 1) and pubertal status (at time 2). Results: Overall television viewing per day and music television viewing at time 1 significantly predicted the amount of alcoholic beverages adolescents consumed while going out at time 2. These results remained significant after controlling for alcohol use at time 1, gender, smoking, and pubertal status. Conclusions: TV viewing habits are a significant predictor of alcohol consumption while going out. TV viewing might cause an increase in alcohol consumption or might be an early symptom of developing alcohol habits.

INTRODUCTION

In the past five decades an increasing number of adolescents have started using alcohol, at an increasingly early age (Adalbjarnardottir, 2002). The prevalence of adolescent alcohol use as well as the risks associated with it have been well documented (Bonomo et al., 2001; Robson, 2001). Because the use and abuse of alcohol has been identified as a major cause for concern (Committee on Substance Abuse, 2001) studying processes that might induce adolescents to drink is important. There is now a small, but growing body of research looking at the potential impact of television.

A lot of attention has been given to the portrayal of alcohol use on television. When people are seen drinking on television they seem to be drinking alcohol most of the time (Robinson, 1998; Brown and Witherspoon, 2002). Pendleton et al. (1991), for example, found that every 6.5 min a reference to alcohol was made in their sample of 50 programmes on British television. Especially in fictional series the consumption of alcohol was prominently present. Furnham et al. (1997) concentrated on the portrayal of alcohol and drinking in six British soap operas and concluded that 86% of all programmes contained visual or verbal references to alcoholic beverages. More alcohol was consumed than any other kind of drink. These results combined with the fact that the programmes in their sample almost never referred to the hazards of alcohol consumption indicate that research examining the relationship between alcohol use and television viewing is important.

An Australian content analysis of television programmes found that in prime time 2.6 'acts of alcohol' per hour were shown in 1990 and 1997 (Parsons et al., 1999, p. 67). Even though the authors reported a decrease in the portrayal of alcohol use in Australian prime time series between 1990 and 1997, they concluded that 'uncritical viewers could conclude from watching Australian TV serials that alcohol is everywhere, is there to be drunk, is used and accepted by all ages and both sexes, and is rarely associated with any negative consequences' (p. 67). Durant et al. (1997) investigated alcohol and tobacco use behaviours in different kinds of music videos and came to a similar conclusion. Even adolescents who watch only a limited amount of television are exposed to alcohol and tobacco use. Everett et al. (1998) examined alcohol use in top-grossing American movies and concluded that 96% of the films had positive references to alcohol consumption. Furthermore only 37% of the movies showed any kind of discouraging depiction of alcohol consumption even though an experiment conducted by Bahk (1997) indicated that a movie with references to the negative consequences of drinking led to a less favourable attitude towards alcohol use than the same film without those indications.

Because television offers glamorized depictions of alcohol use in soap operas and other works of fiction and in music videos (Wallack et al., 1989; Durant et al., 1997) over and above which viewers are exposed to a large number of advertisements for alcoholic beverages (Grube and Wallack, 1994; Wyllie et al., 1998) some researchers have started to look at the relationship between television exposure and drinking behaviours, even though Robinson et al. (1998) remark that this issue has received too little attention. Use of alcohol by adolescents has been associated with higher levels of television viewing in general (Atkin, 1990) and music video exposure in particular (Robinson et al., 1998). Brown and Witherspoon (2002) came to similar conclusions.

The present article looks at the longitudinal relationship between alcohol consumption and music video viewing. Alcohol use is difficult to measure. In some cultures children drink small amounts of alcohol as part of religious rituals. In other cultures children are allowed the occasional drink of low alcohol ‘table beer’ or watered wine. Such behaviours and similar occasions in which youngsters are exposed to alcohol might not be seen as alcohol abuse or even as ‘drinking’. To avoid the measurement problems this might induce, the present study looks at the relationship between television use and questions regarding adolescent alcohol use in the context of going out to bars, parties, discos, and similar environments.

*Author to whom correspondence should be addressed at:
Tel.: +32 16 32 32 94; Fax: +32 16 32 33 12; E-mail: jan.vandenbulck@soc.kuleuven.ac.be
METHOD

Subjects
We used data from the first and second wave of the Leuven Study on Media and Adolescent Health (SOMAH). These data were collected in February 2003 (first wave) and February 2004 (second wave) by means of a standardized, self-administered questionnaire including measures of television viewing and drinking behaviour. The study was conducted in accordance with all legal and ethical requirements. Respondents were selected from a sample of first and fourth year students in 15 secondary schools in the Flemish Community of Belgium. First, schools were selected randomly from the official list of secondary schools in Flanders. These schools were contacted with the request to cooperate in a large-scale study on the relationship between media use and adolescent health. When a school agreed to cooperate, all students from the first and the fourth year were included in the sample. This selection procedure was repeated until the threshold of 3000 selected respondents was exceeded. In the weeks following sample selection research assistants visited the selected schools to administer the questionnaires. The study was presented as an omnibus study on the leisure habits of Flemish youngsters and took place in an assembly setting.

A total of 3022 secondary school students were invited to take part in the first wave of the survey. 125 students were either sick or absent on the day of the study. In one school, teachers had informed the students about the real purpose of the study prior to the start of it. As a consequence, all questionnaires collected from that school (n = 351) were excluded from the sample. None of the selected students refused to cooperate. Final sample size was 2546.

In 2004 the same 14 schools were contacted for a follow-up questionnaire. Two schools, representing 323 students from the first wave, declined to participate in the second wave. In the remaining schools all students who participated in 2003 were asked to complete the questionnaire again. 572 students who participated in 2003 were no longer part of the sample in 2004 because they were either sick or absent on the day of the study or because they had changed schools. 642 respondents only participated in the second wave (2004) because they were either sick or absent on the day of the study in 2003 or because they changed schools in 2004. 1648 students filled out both questionnaires. Only the data of those respondents are used in the analyses. Of the respondents 54.6% were boys and 45.4% were girls. In 2003, 52.3% of the respondents were first year students and 47.7% were fourth year students.

Measures
Music video exposure. Exposure to music videos was measured as part of a long list of television content types. Respondents had to answer the question (in 2003) ‘how often do you watch music video programmes such as (list of programmes aired at the time)’ on a scale with values (0) never; (1) a few times a year; (2) a few times a month; (3) a few times a week; (4) nearly every day.

Television viewing volume. Volume of television viewing was measured (in 2003) using a timeline for each day of the week. The timelines began at 7.00 A.M. and ended at 01.00 A.M. They consisted of 38 checkboxes, each representing a half hour of possible television viewing time. For each day of the week, respondents were asked to mark the period(s) of time in which they normally watch TV on that particular day. Total television viewing time (in hours) per week was obtained by counting the marked checkboxes for each respondent and dividing the result by two. Total television viewing in hours per day was obtained by dividing that variable by seven.

RESULTS

Music video viewing

The majority (63.6%) of the respondents watched music videos at least several times a week, 35.6% watched them daily, second year boys watched the least and fifth year girls watched most often (see Table 1).
Table 1. Frequency of music television exposure by school year and gender

<table>
<thead>
<tr>
<th>School Year</th>
<th>First year</th>
<th>Fourth year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys (%)</td>
<td>Girls (%)</td>
<td>Boys (%)</td>
</tr>
<tr>
<td>Never</td>
<td>16.3</td>
<td>7.2</td>
</tr>
<tr>
<td>A few times a year</td>
<td>12.6</td>
<td>10.1</td>
</tr>
<tr>
<td>A few times a month</td>
<td>16.3</td>
<td>17.3</td>
</tr>
<tr>
<td>A few times a week</td>
<td>24.7</td>
<td>28.9</td>
</tr>
<tr>
<td>Almost every day</td>
<td>30.1</td>
<td>36.5</td>
</tr>
<tr>
<td>Tukey test</td>
<td>a</td>
<td>b</td>
</tr>
</tbody>
</table>

Tukey test: columns with a different letter differ at the $P = 0.05$ level, measured across rows.

Table 2. Quantity of alcohol consumption while going out (2004)

<table>
<thead>
<tr>
<th>School Year</th>
<th>Second year</th>
<th>Fifth year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys (%)</td>
<td>Girls (%)</td>
<td>Boys (%)</td>
</tr>
<tr>
<td>Never goes out</td>
<td>22.8</td>
<td>21.5</td>
</tr>
<tr>
<td>1 or 2 drinks</td>
<td>39.5</td>
<td>49.2</td>
</tr>
<tr>
<td>3 or 4 drinks</td>
<td>20.1</td>
<td>16.9</td>
</tr>
<tr>
<td>5 or 6 drinks</td>
<td>8.6</td>
<td>8.3</td>
</tr>
<tr>
<td>7 or 8 drinks</td>
<td>4.0</td>
<td>1.7</td>
</tr>
<tr>
<td>9 or more drinks</td>
<td>4.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Tukey Test</td>
<td>a</td>
<td>a</td>
</tr>
</tbody>
</table>

Tukey test: columns with a different letter differ at the $P = 0.05$ level, measured across rows.

Consumption of alcohol

Table 2 shows the details of the quantity of alcohol consumed while going out in the second wave. Differences between boys and girls and between second year and fifth year students were analysed statistically using one way Analysis of Variance. Differences between the groups were analysed with a post hoc Tukey test. The oldest students drink more while going out than the youngest respondents. Fifth year boys drink significantly more than girls of the same age group. Of the fifth year boys 39% have between 5 and 8 drinks while going out, 32% even drink 9 alcoholic beverages or more. In the second school year girls and boys do not differ in the quantity of alcohol consumption while going out.

Table 3 indicates how much respondents of both age groups go out: fifth year boys go out most, second year students (boys and girls) go out least, 26.5% of the oldest boys and 20.4% of the fifth year girls go out several times a week, most of the second year students only go out a number of times a year (37.3% boys and 48.1% girls).

Television viewing, music video viewing, and alcohol consumption

Whether the amount of television viewing per day and music video viewing in 2003 predicted drinking while going out in 2004 was tested in a Regression model. Dependent variable was the variable estimating the quantity of alcohol consumed while going out. Because the best predictor of behaviour in 2004 might be similar behaviour in 2003 the measurement of the same variable in 2003 was entered as an independent variable. The volume of alcohol consumed at time 1 predicted 47% of the variance of the volume of alcohol consumed one year later ($F = 1115.875; df = 1.1235; P < 0.0001$). Control variables were gender, school year, smoking status, and puberty status.

Table 4 shows the results of the analysis. The adjusted $R^2$ for the regression model was 0.568 ($F = 230.374; df = 7.1229; P < 0.0001$).

All control variables make a significant contribution to the model. Gender, school year, smoking status, and puberty status were significant predictors of alcohol consumption while going out.

Two television variables were entered into the model. Overall television viewing was measured as self-reported hours of TV viewing per day. Exposure to music television was measured on a five-point scale raging from never to daily. Television viewing volume and music video viewing volume are positively related to the amount of alcohol consumed while going out, measured in the second wave.
DISCUSSION

Watching music videos is one of the most favourite pastimes of adolescents today. In this study, 63.6% of the adolescents watched them at least several times a week, around a third of them watched them every day. Previous research identified music videos as a source of positive images of alcohol use. Both the content, which has been shown to glamorise the use of alcohol, and the advertisements surrounding the music videos have a potential to make drinking alcohol more enticing to young viewers.

The present study examined the association between music video viewing and the amount of drinking in adolescents. The results showed that the quantity of alcohol consumed while going out in the second wave was predicted by the amount of television viewed in the first wave. Even after controlling for gender, school year, smoking, drinking in 2003, and puberty status these results remained significant. The biggest predictor of drinking behaviour turned out to be past drinking behaviour, as measured a year before. This variable predicted almost 50% of self-reported drinking behaviour at time 2. Apart from that variable age and gender turned out to be the two most important predictors of drinking behaviour.

These results lead to a number of conclusions and observations. First, there is a significant, longitudinal relationship between exposure to music television programmes and alcohol use while going out. Second, the relationship does not disappear when controlling for overall TV viewing. In television audience research it has often been stated that ‘there is a first-level phenomenon of individual volume of viewing when heavy viewers of one type are generally also heavier viewers of other types’ (Weimann et al., 1992, p. 497). People who watch a lot of TV appear to watch a lot of everything (Brosius et al., 1992; Van den Bulck, 1995). This could have led to a spurious relationship between watching particular types of television programmes and any other variable overall viewing might be related to. In the present study, however, watching music video remains a significant predictor even after controlling for overall viewing, which also predicts alcohol use. This study thus supports previous findings showing that alcohol use appeared to be related to television viewing (Atkin, 1990) and music video viewing (Robinson et al., 1998; Brown and Witherspoon, 2002). Third, our data are longitudinal. The reported amount of drinking alcoholic beverages while going out in February 2004 was related to their overall TV viewing and their music video exposure a year earlier. Even though this does not offer conclusive proof of a causal link, it does offer extra support for a hypothesis that such a causal link might exist and that watching television and, in particular, music television might encourage adolescents to consume alcohol. While previous drinking behaviour and age turned out to be the best predictors it has to be noted that the predictive value of TV viewing and music television exposure was of the same magnitude and level of significance as questions measuring whether the respondent was a smoker or not and what level of pubertal development the respondent had reached, two more ‘traditional’ variables in research about the epidemiology of alcohol abuse.

Previous authors have remarked that more research needs to be done in order to understand the mechanisms that explain whether and how television exposure might lead to an increase in alcohol use in young people (Robinson et al., 1998). Because the subject is alcohol use by children, experimental answers to the causal questions involved are hard to obtain for ethical reasons. Studies of prevalence and association with other variables might lift part of the veil.

Three hypothetical explanations have been put forward to explain the relationship between alcohol consumption and music television viewing. One is that advertisements for alcoholic beverages are more prominent on music video channels or during the broadcasting of music videos on other channels. More empirical content analyses are needed to ascertain whether this is the case. Even though it has been noted that advertisements are unlikely to have a large impact on children’s drinking behaviours (Robson, 2001), not all scholars agree with this assumption. Atkin (1990, p. 10), for instance, noted in his review of survey research on the effects of alcohol consumption on television that the viewing of alcohol commercials can lead to ‘a modest increase in overall consumption by teenagers’. Unger et al. (2003) also suggest that alcohol advertising has an effect on adolescents. They found that affective and cognitive responses to alcohol advertisements were associated with the drinking of alcoholic beverages among adolescent girls and boys. The second hypothesis is that music videos promote a lifestyle that stimulates the consumption of alcohol. More research is needed to establish whether the message of certain music videos taps into the atmosphere associated with the use of alcoholic beverages by young people. Finally it remains possible that the causal link goes in the other direction or that some other kind of process explains the relationship. Research has shown that deviant or problematic behaviours sometimes lead to changes in media use instead of the other way around, and in young people this has often been linked to music (Roe and Jarlbro, 1998). Similarly, it has been shown that bad school results generate a context for the use of socially disvalued media (Roe, 1995). Students who do badly at school sometimes turn to media not appreciated by elders and teachers as a means of distinguishing themselves from children whose motivations and goals are still defined by school. As such, (over-) exposure to television in general or music television in particular at time 1 might only be the first symptom of a process that ultimately leads to alcohol consumption at time 2. Here, too, however, it has to be noted that in the present study the television and music video relationship survived strong controls.

CONCLUSIONS

Although it may be too early to conclude that watching music videos and watching television encourages adolescents to consume alcohol, the fact remains that in this study respondents who watched more television and were exposed to music television more often were more likely to drink more alcoholic drinks while going out a year later. At its worst this means that music videos and television might lower the threshold for experimenting with alcohol, at the least it suggests that viewing behaviours are a symptom of developing alcohol habits and as such may serve as an early warning. Therefore, until this relationship and its causal agents have been studied in greater depth it might be safer for practitioners...
and parents to consider limiting adolescent exposure to televised alcohol use.

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REFERENCES


