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Music influences on health compromising behaviors

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MUSIC INFLUENCES ON HEALTH COMPROMISING BEHAVIORS

by

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ABSTRACT

Considering the vast number of youth that participate in sexual behavior and start using illicit drugs at a young age, it is imperative to investigate the prevalence of media filled with both subliminal and blatant messages about drugs and sexuality. It is hypothesized that lyrical content of music and the content and imagery of music videos will contain conscious messages about drug and alcohol use, and sexual behaviors. Content analysis that used the frequency method determined the amount of sexual and drug messages within five songs from each artist. Additionally, it is postulated that participants who frequently listen to specific music genres, regularly watch music videos, and stay up-to-date on music artists will be more likely to engage in health compromising behaviors compared to participants who are not as involved with popular music. Applying the bio-ecological systems perspective, it is hypothesized that the negative influences of music (i.e., exosystem) can be minimized or heightened by microsystem (i.e., family, friends) influences as well as internal characteristics of participants (i.e., personality). A series of analyses of variance were conducted to determine if there was a relationship between exposure to lyrical content and drug and sexual behavior. Linear regression analysis was conducted to determine if public image of the artist was correlated to health compromising behavior. Overall results indicate that a relationship between music genre preferences—though the combination of lyrical content, the public image of artists, and the imagery in music videos—and illicit drug usage and sexual behavior.

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CHAPTER 1: INTRODUCTION

The use of drugs and other mood altering substances can have treacherous effects on a person, especially when developed into an addiction. Promoted sexual behavior in the media has become so apparent, and essentially inescapable, that there is a sense of nonchalance in society towards sex. Sex, drug and alcohol use may not be intended by the media producers to be advertising to youth, but it is certain that everyone in society is exposed to these explicit messages conveyed through graphic lyrics, music videos, and tabloids covered with, at times, embarrassing public images of various mainstream artists. For this reason, investigating media effects on health compromising behavior in adolescents is an imperative issue considering the vast number of youth that participate in illicit activity. There is an undeniable prevalence of media filled with both subliminal and blatant messages about drugs and sexuality.

Previous researchers have repeatedly documented the increased need to examine the health compromising behaviors of America's youth. Health compromising behaviors include illegal drug use, alcohol consumption, using tobacco, and engaging in risky sexual behaviors such as practicing unsafe sex and having multiple sexual partners. According to the Center for Behavioral Health Statistics and Quality (2009), illegal drug use starts slow between the ages of 12 and 13 (3.6%), gradually increasing until its peak between the ages of 18 and 25 (21.2%). Additionally, males tend to be at a higher risk of using illegal drugs (10.8%) compared to females (6.6%). The same trend is evident in the use of tobacco products. When examining marijuana usage, the peak age remains the same but the gap between males and females reduces substantially (7.9% and 4.4%, respectively). The trend for alcohol use is slightly different with the peak age being between 26 and 34 (64.3%). The legality of alcohol may explain the increased

usage of the product in comparison to illegal drugs. However, legality does not eliminate the risks associated with its use. In 2009, there were over 23,000 deaths related to alcohol use and over 37,000 deaths that were caused by drug consumption (National Center for Health Statistics, 2011). In addition, in 2007 there were over 158,000 people diagnosed with lung cancer with smoking being one of the most prominent factors (U.S. Cancer Statistics Working Group, 2010).

Teenage pregnancies, sexually transmitted infections (STI) and HIV infections all commonly occur each year in the United States. In fact, the United States is in first place regarding numbers of teenage pregnancies in the developed world with more than twice as many pregnancies as Canada and Sweden (Mckay, 2006). Previous research has demonstrated that more than 750,000 unplanned teenage pregnancies occur each year in the United States (Ventura, Abma, Mosher, & Henshaw, 2004). Additionally, in 2000 there were 18.9 million new cases of STI, with almost half of them (48%) occurring among adolescents and young adults (Weinstock, Berman, & Cates, 2004). The number of documented HIV infections in the world increased to 33 million people in 2007 (Joint United Nations Programme on HIV/AIDS, 2008). These statistics can be directly related to risky sexual behaviors (Weinstock et al., 2004).

Influence of Music

The availability of music has increased significantly over the past decade (Rideout, Roberts, Foehr, 2005). Almost everyone is exposed to music on a daily basis whether listening intentionally or unintentionally, consciously or subconsciously (Rideout et al., 2005). Americans are commonly found listening to music in their car on their way to college classes, on the way to work, at the gym, on the radio, using their CD players, or on television. With the advancement of

modern technology Americans have music at their fingertips; literally, with MP3 players, IPODS, and Smart Phones.

Although music can seem comforting as a source of entertainment and enjoyment, it can be harmful as well. The prevalence of music genres that may contain offensive messages are often ignored and rarely observed in a quantitative outlook. Previous research has documented a connection with specific music genres and tobacco and alcohol use (Mulder et al., 2009) as well as illegal drug use (Van Havere, Vanderplasschen, Lammertyn, Broekeart, & Bellis, 2011).

One study examined the relationship between music genre (e.g., pop, adult, urban, hard) and drug use among Dutch adolescents and found that this association could partially by explained by perceived peer drug use (Mulder et al., 2009). The study speculated that music serves as a model to use drugs and that listeners have selective friends with substance use habits that strengthen the participants own temptation to use substances. Music is a significant socializing tool that may connect music preferences and drug use behavior among friends (Mulder et al., 2009). Another study examined 775 dance events, clubs, and rock festivals and specifically inspected habits of going out dancing, music genre and usage of drugs . This study found that an unmitigated party atmosphere correlated with recurrent drug usage (Van Havere, Vanderplasschen, Lammertyn, Broekeart, & Bellis, 2011).

Researchers who investigated popular rap/hip-hop and rock songs found that most songs embedded defiant messages about reckless and disobedient behaviors (Knobloch-Westerwick, Musto, and Shaw, 2008). The researchers used a process called priming as a theoretical explanation for the influence of negative behavior (Knobloch-Westerwick et al., 2008). Priming demonstrates that adolescents that are surrounded by media content afterward hold decisions,

thinking and acting similar to the content of the music and media (Knobloch-Westerwick et al., 2008). Overall, the majority of songs (80%) had at least one rebellious line, making it the norm. The researchers noted that there has been an observable increase in music with messages, both subliminal and conscious, about impulsiveness especially in the rap/hip-hop genre (Knobloch-Westerwick et al., 2008). Personality characteristics that are more present in those who exhibit substance use behaviors are those that are rebellious and sensation seeking (Dillman, Knobloch, & Zillmann, 2003).

Previous research has also documented a relationship between music preferences and sexual activity (Degenhardt, 2005; Primack, Douglas, Fine, & Dalton, 2009). The sexual content contained within music lyrics was found to be degrading (Primack et al., 2008; Martino et al., 2006) and was found to make up 2/3 of all sexual references in popular music (Primack et al., 2008). Previous research has suggested that this form of lyrical content promotes early sexual activity (Primack et al., 2009). However, this form of music may also encourage sexual promiscuity demonstrated by an increased number of sexual partners (Primack et al., 2009).

Additional research has also demonstrated that exposure to explicit sexual content in music are associated with risky sexual behaviors (Hansen, 1995; Johnson, Jackson, & Gatto, 1995; Pardun, L'Engle, & Brown, 2005). A study conducted by Hobbs and Gallup (2011) looked at the lyrical content from three genres—R&B, pop, and country. They obtained 174 song choices from the Billboard charts and also carried out content analysis of the music (Hobbs & Gallup, 2011). Ninety two percent of songs that were obtained from the Top Ten charts fell under one of the 18 "reproductive" categories they created from the content analysis (Hobbs & Gallup, 2011). These categories labeled "courtship, sex, pair-bonding, parenting, fidelity, mate

guarding, and provisioning were initially targeted, along with themes related to long-term as well as short-term mating strategies" (Hobbs &Gallup, 2011). It is apparent that the majority of songs from the Billboard top charts included lyrical content that was sexually suggestive in nature.

Theoretical Perspective

From a theoretical standpoint there is reason to suspect that exposure to content in music that encourages impulsivity, rebelliousness, drug and alcohol use, and sexual behaviors is associated with health compromising behaviors among its listeners. For instance, according to social cognitive theory, humans learn by observing models of behavior and by observing others being rewarded for their behavior (Bandura, 2001). This is exactly what occurs with the content of music unless another aspect of the environment teaches otherwise. This brings the bioecological systems model into consideration, which theorizes that the developing person is embedded among layers of environmental influence (see figure 1) (Bronfenbrenner, 2006). These layers include the (1) *microsystem,* which includes the person's immediate environment, such as family; (2) *mesosystem*, which include connections between the person's immediate environment and other family members activities (e.g., connection between the person and parent's employment); (3) *exosystem,* aspects of the larger social system (e.g., media) that the person has no direct contact with but that impact the person through its interaction with the microsystem (e.g., parental supervision of media in the home); (4) *macrosystem,* the outermost system containing overall cultural customs and laws; and (5) *chronosystem,* the time and place in which all of the environmental layers exist.

Preliminary Findings and Current Study

Preliminary work by Wright, Qureshi, Garth, and Cassidy (2012, May), Qureshi, Wright, Cassidy, and Garth (2012, May), and Qureshi and Wright (2012, April) found that drug use of choice varies by music genre preferences and the combination of lyrical content in music, the public image of artists, and the content and imagery in music videos promote promiscuity, illegal drug use, and alcohol abuse. That work while promising, however, was based on a sample of primarily white American emerging adults.

Preferred music genres and music artists were related to such health compromising behaviors as drug and alcohol abuse and sexual behavior. This investigation aimed to develop a better understanding of behaviors that correlate with certain music genres. It seems evident that media influence—lyrical content of music—influences the behavior of listeners (Bandura, 2001; Bronfenberner, 2006). However, little research has specifically targeted the realm of influence that comes from music (i.e., lyrics, video, public image of artist) and how these influences impact developing adolescents and emerging adults. Considering the risks associated with illegal drug use, alcohol use and risky sexual behaviors—and the peak age of such behaviors—attaining a better understanding of the mechanisms involved can help reduce the deaths associated with drug, tobacco, and alcohol use as well as contribute to preventing STIs, AIDS, and unwanted pregnancies.

It is hypothesized that lyrical content of music and the content and imagery of music videos would contain overt messages regarding impulsivity, rebelliousness, drug and alcohol use, and sexual behaviors and activities. Additionally, it is hypothesized that participants who frequently listen to specific music genres, regularly watch music videos, and stay up-to-date on

music artists would be more likely to engage in health compromising behaviors compared to those who are not as involved with popular music.

CHAPTER 2: METHOD

Participants

Data for the current analyses was derived from a recent study conducted at the University of Central Florida (UCF). Participants included 729 college students. The majority of participants were White (62.7%, *n* = 457), between the ages of 18 and 21 (73.7%, *n*= 537), and female (62.7%, *n*= 457). When asked how much they liked specific music genres, 37.2% (*n* = 271) stated that they liked Pop "very much," 33.5% (*n* = 244) stated that they liked Rap "very much," 23.0% (*n* = 168) stated that they liked Country "very much," 25.8% (*n* = 188) stated that they liked R&B "very much," and 22.2% (*n* = 162) states that they liked Rock "very much." It was possible for participants to report that they liked more than one music genre.

Measures

Demographic questionnaire**.** Participants answered questions regarding their gender, age, and race.

Sexual behaviors**.** Six questions asked participants about their sexual histories. Examples include "*How old were you when you had your first boy or girlfriend," "How old were you when you went out on your first date," "How old were you when you had your first sexual encounter," "How many sexual partners have you had," "How old were you at the time of your first sexual intercourse, and "How many dating partners have you had."* Age responses ranged from 1 (*< 10 years*) to 5 (*> 18 years or never*) and numerical responses range from 1 (*0*) to 5 (*10 or more*). Numeric responses ranged from 1 (*0*) to 5 (*10 or more*).

Drug and alcohol use**.** Six questions were used to assess participants' cannabis, tobacco, prescription drug, cocaine, hallucinogens, and alcohol use histories. Questions asked the age when participants first used the drug.

Music interests. Seven questions were used to assess music genre preferences (e.g., pop, rap/hip-hop). Additional questions were also asked to determine how often they listened to, how up-to-date they were, and how often they watched music videos by today's top 25 music artists representing various music genres.

Procedure

Participants were recruited through the psychology subject pool and received either class extra credit or research credit for completing the online questionnaire. Participants took an average of 32.54 minutes to complete the study. Participants answered demographic questions along with questions assessing their sexual histories and drug use behaviors. Participants then answered questions about their music preferences.

Content analysis using the frequency method was performed for five songs performed by artists of interest using two independent raters. Three artists were selected to represent each music genre (i.e.., Rap, Pop, Rock, R&B, Country) based on the current popularity of the artist. The artists selected to represent Rap were Lil'Wayne, Drake, and Jay-Z; artists selected to represent R&B were Chris Brown, Beyonce, and Rihanna; artists selected to represent Pop were Britney Spears, Katy Perry, and Lady Gaga; artists selected to represent Rock were Green Day, Red Hot Chilli Peppers, and Black Eyed Peas; and artists selected to represent Country were Miley Cyrus, Taylor Swift, and Kelly Clarkson. Songs for each artist were selected from the top-40 charts that had been given the top amount of air play on radio stations and music television.

Raters examined the lyrical content of songs, video content of music videos, and public image of the artists represented by current photographs of the artist for sexual messages and references to drug use. Inter-rater reliability was significant, r (348) = 0.66, $p < .001$ after using Pearson's correlation test. Exposure variables for each genre's lyrical content, visual references, and artist's public image references to sexual behaviors and drug use were created by multiplying self-reported listening habits with each artist of interest by the average content contained in song lyrics, videos, and photographs of artists. Total exposure variables for each genre were created by summing the content across artists for lyrics, videos, and photographs. The total exposure variables were used in analysis.

CHAPTER 3: RESULTS

Preliminary analysis of the data revealed that less than 2% of the data were missing. Analyses found that the missing data were missing completely at random (MCAR). Therefore, a simple mean substitution imputation method was used (Kline, 2005). This method involves replacing the missing data with the overall mean value for the variable. There is the possibility that replacing missing data in this manner can distort the distribution of the data, although it had no detectable effect on this dataset. The distribution of the data was the same before and after the imputation. Results for the main analyses conducted relative to each research question are described below.

Research Question 1: Music and Sexual Behaviors

A series of analyses of variance (ANOVA's) was conducted to determine if there was a significant difference in the sexual behaviors of participants based on their preferred music genre. Sexual behaviors examined included age at first boyfriend or girlfriend, age at first date, age at first sexual encounter, age at first sexual intercourse, number of dating partners, number of sexual partners, and number of cohabiting relationships. Music genres that were examined included Pop, Rap, Country, R & B, and Rock.

Preference for Pop music and preference for Rock music were not significant for any of the sexual behaviors examined. However, preference for Rap music was significant for age at first sexual encounter, F (4, 728) = 7.27, p = .00; age at first intercourse, F (4, 728) = 5.81, p = .00, and number of sexual partners, F (4, 728) = 4.29, p = .00. Those who reported that they liked Rap music very much engaged in their first sexual encounter earlier, engaged in their first sexual intercourse at a younger age, and reported more sexual partners than those who did not report

that they liked Rap music very much. Descriptive statistics for sexual behaviors based on Rap music can be found in Table 1.

Preference for R & B music was significant for age at first date, F (4, 728) = 3.81, p = .00; age at first sexual encounter, F (4, 728) = 5.99, p = .00, age at first sexual intercourse, F (4, 728) = 3.01, p = .02, number of dating partners, F (4, 728) = 3.82, p = .00, and number of sexual partners, F (4, 728) = 2.96, p = .02. Those who reported that they liked R&B music very much engaged in their first sexual encounter earlier, engaged in their first sexual intercourse at a younger age, reported more dating partners, and reported more sexual partners than those who did not report that the liked R&B music very much. However, those who reported that they strongly dislike R&B music reported going on their first date younger than those who liked R&B music. Descriptive statistics of sexual behaviors based on R&B music can be found in Table 2.

Preference for country music was significant for age at first boyfriend or girlfriend, F (4, 728) = 2.98, p = .02, and number of dating partners, F (4, 728) = 2.49, p = .04. Preference for country music was not significant for the other sexual behaviors examined. Participants who reported that they liked Country music very much had their first boyfriend or girlfriend and went on their first date earlier than those who did not report that they liked Country music very much. Descriptive statistics for sexual behaviors based on Country music can be found in Table 3.

Research Question 2: Music and Drug Use

A series of analyses of variance (ANOVA's) was also conducted to determine if there was a significant difference in drug use behaviors of participants based on their preferred music genre. Drug use behaviors examined included the use of tobacco, alcohol, cannabis, cocaine,

amphetamines, hallucinogens, inhalants, and prescription drugs without a prescription. Music genres that were examined included Pop, Rap, Country, R & B, and Rock.

Preference for R&B music was not significant for any of the drug use behaviors examined. However, preference for Pop music was significant for the use of cannabis, F (4, 728) = 3.63, p = .01, and the use of prescription drugs without a prescription, F (4, 728) = 2.88, p = .02. Participants who reported that they did not like Pop music reported using cannabis and prescription drugs without a prescription younger than those who liked Pop music. Descriptive statistics for drug use behaviors based on Pop music can be found in Table 4.

Preference for Rap music was significant for the use of alcohol, F (4, 728) = 4.28, p = .00, and the use of cannabis, F (4, 728) = 3.98, p = .00. Participants who stated that the liked Rap music very much reported using alcohol and cannabis at a younger age than those who did not report that they liked Rap music. Descriptive statistics of drug use behaviors based on Rap music can be found in Table 5.

Preference for Rock music was significant for the use of tobacco, F (4, 728) = 4.47, p = .00, cannabis, F (4, 728) = 2.40, p = .05, and the use of hallucinogens, F (4, 728) = 3.01, p = .02. Those who reported that they somewhat liked Rock music used tobacco, cannabis, and hallucinogens at an earlier age than those who liked Rock music very much and those who did not like Rock music. Descriptive statistics for drug use behaviors based on Rock music can be found in Table 6.

Preference for Country music was significant for the use of prescription drugs without a prescription, F (4, 728) = 3.38, p = .01. Those who liked Country music very much were the youngest when they first used prescription drugs without a prescription (M = 4.76, SD = .72),

followed by those who strongly disliked Country music (M = 4.82, SD = .60), those who do not like Country music (M = 4.87, SD = .42), and those who somewhat liked Country music (M = 4.91, SD = .36).

Research question 3: Music Factors Related to Health Compromising Behaviors

The extent to which music related to sexual behaviors and drug use was assessed with exploratory linear regression analyses. Gender of participants as well as lyrical content, visual imagery in videos, and the public image of artists were included in the model as predictor variables. Music influence variables (i.e., lyrical content, visual imagery, public image) were selected for each regression analysis based on results from research questions 1 and 2. It was hypothesized that lyrical content, visual imagery in music videos, and references to sexually explicit material or drug use by artists would combine to best predict health compromising behaviors.

A linear regression analysis was conducted to determine how exposure to sexual lyrical content, sexual video content, and sexual references by artists in R&B, rap, and country music combined to predict college student's sexual and dating behavior. The overall model was significant for first sexual encounter, F (7, 721) = 4.37, p = .00, R^2 = 0.04, age at intercourse, F (7, 721) = 4.82, p = .00, R^2= .05, number of sexual partners, F (7, 721) = 4.08, p = .00, R^2 = .04, and number of dating partners, F (7, 719) = 2.20, p =.05, R^2= .02.

Multiple instances of significant regression models were found determining drug use as well. Gender, lyrical and video drug content in rock, rap, pop and country music genres were able to predict using cocaine age when first used cannabis was significant for F (10, 728) = 3.98, p = .000, R^2 = .05. The use of prescription drugs was significant in this model F (6, 722) = 1.98,

p = .07, R^2 =.02. Viewing the images of public image of rap artists, listening to rap lyrical content, and watching rap music videos were found significant to the use of alcohol F (4,724) = 4.57, p = .001, R^2 =.03. Tobacco use was found significant, F (4, 724) =4.92, p = .001, R^2= 0.03. Frequency of listening to rock music, watching rock music videos, and following rock artists contributed significantly to the early onset of hallucinogen drug use, F (4, 724) =3.10, p = .02, R^2= 0.02. Regression results can be found in Table 7 and Table 8.

CHAPTER 4: DISCUSSION

In a society where the youth is surrounded by media filled with subliminal and conscious messages about drugs and sexual behavior, it is imperative to examine correlations between media and health compromising behavior. It was postulated that music preference can serve as an underlying motivation for illicit drug usage and risky sexual behaviors. More specifically, it was hypothesized that music was correlated with health compromising behaviors in means additional to lyrical content. It was furthermore hypothesized that the vivid imagery and embedded content in music videos and the public exposure of the artist could moreover contribute in explicating the correlation between music genre preferences and illicit drug use. Results of the current study indicate that there is a relationship between music genre preferences and illicit drug usage and sexual behaviors. It appears as though the combination of lyrical content, the public image of artists, and the imagery in music videos are significant to early sexual activity and number of sexual partners. Lyrical content, video content, and public image of R&B, rap, rock, country, and pop music also contributed to significant correlations to the illicit drug usage of cannabis, hallucinogens, and drinking alcohol. Overall results indicate that listeners of particular types of music are at an increased risk of risky sexual behaviors and drug use.

The goal of this research was to help determine the relationship between music and problematic behaviors. One of the main areas of concern is pinpointing what it is about music that is specifically correlated to health compromising behaviors on its listeners. The combination of lyrics, videos, and public image is what creates the most powerful influence on a listener. Previous studies demonstrate media is becoming steadily available in virtually every aspect of

life (Rideout, Roberts, Foehr, 2005). Music, videos, and websites following celebrities' lives and gossip such as www.perezhilton.com are within reach at a moment's effort.

Past studies have determined an association between heavy metal, rap, reggae, electronic dance music and substance use in Dutch adolescents (Mulder et al., 2009). The study concluded that adolescents that prefer listening to nonmainstream music are positively correlated with drug. Contrary to the present study, the past study found that those that listen to typical pop and classical music demonstrate less of a connection to substance use (Mulder et al., 2009). Dissimilarly, the present study did not include classical music and found that pop music was highly correlated to drug use. The current study found a correlation between tobacco, alcohol, and illegal drug use in relation to music lyrical content, video content, and public image of artists rather than looking at the music event or dancing environment in which the participant was present (Van Havere et al., 2011). Mulder's and Van Havere's studies also signified that because the data was based on correlation, a concrete cause behind the connection between music preferences and drug use was left undiscovered.

Further, an additional previous study took a quantitative outlook on lyrics in 240 popular rap songs and rock music entrenched in rebellious connotation about irresponsible and defiant behavior (Knobloch-Westerwick, Musto, and Shaw, 2008). The authors of study used content analysis to assess the top charts of various years and anticipated to find that rebellious messages in fact were the norm in popular music (Knobloch-Westerwick et al., 2008). The results concurred with their hypothesis in noting that majority of the lyrical content demonstrated rebellious messages, however, they noted that their study did not accurately reflect exposure amount for adolescents, rather just examined the top charts (Knobloch-Westerwick et al., 2008).

In comparison to the present study, the present study results reflect that in addition to lyrical content, following an artist's public image and viewing videos significantly adds to the problem. Also, the present study did not look upon personality characteristics of the participants.

Previous research that had a focus on music in relation to sexual behavior had similar results to the present study. With more than one third of popular songs containing some form of sexual content (Primack, Gold, Schwarz, & Dalton, 2008), this should not be surprising. A difference in the methodology from previous studies was that if in the previous study there was a lyric that was repeated in the chorus of the song, it was accounted for only once (Hobbs & Gallup, 2011). The results that were significant demonstrated that R&B had the most sexual content compared to Pop and Country (Hobbs & Gallup, 2011). Another difference between the study by Hobbs and Gallup (2011) and the present study is that it only looked at the lyrical content and disregarded any video content that is considered sexual in nature or the public image of the artist (Hobbs & Gallup, 2011).

Limitations

The present study utilized 729 participants and gathered the data by a questionnaire regarding music preferences, how often the participants are exposed to the music, how much they follow the artist and watch music videos, about their history of drug use, and about their courtship behavior. Some possible confounding variables that could have affected the results include that the data based on the top charts as representing popular music does not fully exemplify the exposure to which the participants were influenced by the music. House/electronic, reggae, or classical music was not included in the study. In the initial questionnaire, although there was a question on biological sex of the participant, the option for

those people who identify themselves as neither male nor female or identify themselves as transgender was not provided. A possible weakness in the study is that the emphasis on content was subjective in nature and could be improved by a significant inter-rater reliability utilizing more raters looking at the same content. The methodology could be improved by providing a more standardized manner in representing public image of artist. Another drawback of the study is that the participants may have extraneous influences that can affect their answers, such as unintentionally trying to please the researcher, false memory of their past, or untrue response to try to make the participant look better.

Significance

The overall significance of the study demonstrates a scientific correlation between the variables music content, music videos, and public image of the artists and potential sexual behavior or drug use. Popular artists in the music industry are infamous for scandals and drug abuse, gossip and news of which are readily available in the newsstands at the local grocery store. Videos are more explicit than ever, leaving nothing to the imagination and displaying the use of drugs and sex appeal to sell. Considering that music enters the ears of large audiences because of its appeal to the mass population, it is imperative to consider the possible influences music can have. Music can serve as a source of entertainment and pleasure, but due to some of the lyrical content and imagery found in videos it can have a negative impact on persons as well. Music may not be directly causal of sexually deviant and drug behavior, but there is no doubt it is significantly correlated. Particularly regarding health compromising behaviors, with further knowledge on this topic measures could possibly be taken to prevent unwanted pregnancies, STIs, HIV, and illnesses and deaths caused by drug use. The results of the study point out the

prominent areas of music lyrics, video content, and public image and highlight its relationship with health compromising behaviors.

Future Studies

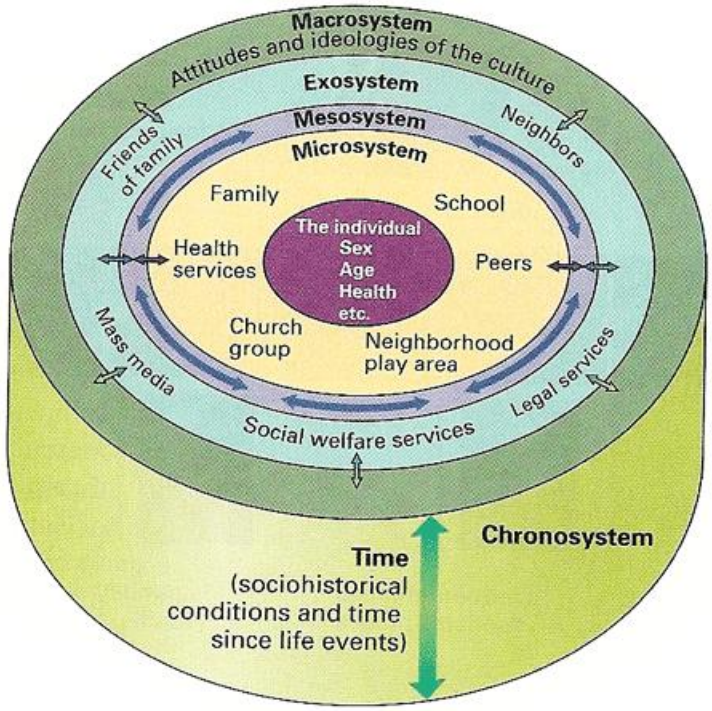
Future studies could build upon this study by updating song lists, using a more diverse pool of participants, or including more genres of music. The questionnaire could provide the participants with the top song choices by the top artists of each genre so the participant could select which songs they preferred listening to and watching. By utilizing more raters to perform content analysis, the raters could make the study even more reliable and produce more credible results.

Even without some of these enhancements, there are multiple contributions of the results of the current study due to the significance of correlation which demonstrates a strong implication of the effects of media on health compromising behavior. The exposure to sexuality and drug use can strongly influence the mind of curious and hormonal adolescents, thus the occurrence of health compromising behavior in the media is worth being studied. It is crucial to acknowledge external factors that affect development of self in adolescence and that transform into adult habits. Considering the number of youth that participate in health compromising behavior and the prevalence of media filled with subliminal and blatant messages about drugs and sexuality, it is only with substantial research and analysis that a definite relationship can be made between potential negative effects of music and risky behaviors. Prevention strategies could be created and encouraged such as age ratings that are appropriate to play on the radio or other forms of mass media because of their exposure from children to adults. Reaching out to the homes of families and providing them with the tools to evaluate the lyrical, video, and public

content of music could help parents educate their youth about what could be influencing their behavior. It is with substantial observation and evidence that a clear relationship can be discovered between potential negative effects of music and risky behaviors. Then preventative measures can be developed to help reduce health compromising behaviors among adolescents and emerging adults.

APPENDIX A: FIGURES

Figure 1. *Biological Systems Model*



Source: Santrock, MacKenzie-Rivers, Leung, & Malcomson (2003)

APPENDIX B: TABLES

Table 1. *Sexual Behaviors Based on Rap Music Preference*

	Encounter		Intercourse		Sexual Partners	
	M	*SD*	*M*	*SD*	*M*	*SD*
Like Very Much	3.59	.90	4.07	.68	2.60	1.27
Like Somewhat	3.82	.82	4.27	.67	2.40	1.17
Do not Like	3.96	.90	4.36	.74	2.12	1.07
Strongly Dislike	4.13	.75	4.38	.63	2.17	1.11
Don’t know this type of Music	4.17	.98	4.67	.52	3.33	1.63

Table 2. *Sexual Behaviors Based on R&B Music Preference*

	Age Date		Encounter		Intercourse		Dating Partners		Sexual Partners	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Like Very Much	3.70	.75	3.61	.98	4.16	.70	2.78	1.14	2.57	1.30
Like Somewhat	3.48	.82	3.76	.82	4.19	.70	2.74	1.03	2.49	1.20
Do not Like	3.56	.80	3.92	.81	4.30	.66	2.51	.93	2.17	.99
Strongly Dislike	3.45	.68	4.02	.75	4.33	.63	2.60	1.11	2.40	1.27
Don’t know this type of Music	4.09	.70	4.45	.69	4.73	.47	1.82	.75	2.09	1.51

Table 3. *Sexual Behaviors Based on Country Music Preference*

	Age Boy/girlfriend		Age Date	
	M	*SD*	*M*	*SD*
Like Very Much	3.17	.95	3.51	.73
Like Somewhat	3.24	1.03	3.59	.76
Do not Like	3.43	1.04	3.58	.84
Strongly Dislike	3.44	1.00	3.54	.84
Don't know this type of Music	4.00	1.10	4.00	.89

Table 4. *Drug Use Behaviors Based on Pop Music Preference*

	Cannabis		Prescription Drugs	
	M	*SD*	*M*	*SD*
Like Very Much	4.54	.77	4.82	.58
Like Somewhat	4.47	.76	4.89	.42
Do not Like	4.31	.75	4.70	.84
Strongly Dislike	4.04	.81	4.89	.32
Don’t know this type of Music	4.60	.89	4.40	1.34

Table 5. *Drug Use Behaviors Based on Rap Music Preference*

	Alcohol		Cannabis	
	M	*SD*	*M*	*SD*
Like Very Much	3.61	.97	4.32	.83
Like Somewhat	3.73	.97	4.50	.75
Do not Like	4.01	.96	4.64	.63
Strongly Dislike	4.02	.88	4.55	.75
Don't know this type of Music	4.17	.98	4.83	.41

Table 6. *Drug Use Behaviors Based on Rock Music Preference*

	Tobacco		Cannabis		Hallucinogens	
	M	*SD*	*M*	*SD*	*M*	*SD*
Like Very Much	4.19	1.00	4.42	.79	4.87	.48
Like Somewhat	4.12	.88	4.35	.85	4.81	.50
Do not Like	4.35	.87	4.45	.76	4.92	.29
Strongly Dislike	4.44	.80	4.58	.69	4.94	.37
Don’t know this type of Music	5.00	.00	4.50	.56	5.00	.00

Table 7. *Regression Results for Sexual Behaviors*

	Sexual Encounter	Intercourse	Boy/girlfriend	Sex Partners	First Date	Dating Partners
Gender	-.03	-.03	.02	.07	.06	.09**
Rap lyrics	-.21#	-.22#	-	.13**	-	-
Rap video	.09	.10	-	-.06	-	-
Rap images	-.11	-.14 *	-	.15*	-	-
R&B lyrics	.09	.14**	-	-.05	.01	.10*
R&B video	-.18	-.18	-	.49**	.24	.20
R&B images	.19	.18	-	-.58***	.30*	-.23
Country lyrics	-	-	.01	-	-	-.05
Country video	-	-	-.08	-	-	-.06
Country images	-	-	.03	-	-	.00
R^2	.04	.05	.00	0.04	.01	.02
F	4.37#	4.82#	.40	4.08***	2.24	2.02*

#$p < .001$, ***$p < .01$, **$p < .05$, *$p < .10$

Table 8. *Regression Results for Drug Use Behaviors*

	Cannabis	Prescription	Alcohol	Tobacco	Hallucinogens
Gender	-.04	-.01	-.03	.07#	-.02
Rock lyrics	.05	-	-	-.03	.02
Rock video	-.05	-	-	.07	-.02
Rock images	-.11	-		-.18**	-.15**
Rap lyrics	-.17***	-	-.12***	-	-
Rap videos	.11	-	-.01	-	-
Rap images	-.09	-	-.03	-	-
Pop lyrics	.17***	.06	-	-	-
Pop videos	-.90**	-.87***	-	-	-
Pop images	.89**	.83**	-	-	-
Country lyrics	-	-.04	-	-	-
Country video	-	.00	-	-	-
Country images	-	-.07	-	-	-
R^2	.05	.02	.03	.03	.02
F	3.98#	1.98*	4.57***	4.93***	3.10**

#p < .001, ***p < .01, **p < .05, *p < .10,

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