

**HipHop/R&B and the Early Onset of Sexual Activity: A Cross-Sectional Study on the
Mechanisms Behind Gender Stereotypical Views**

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Abstract

Previous research identifies liking HipHop/R&B as a risk factor for the early onset of sexual intercourse. This cross-sectional study aims to test whether liking HipHop/R&B is associated with having had early first sexual intercourse, and whether holding gender stereotypical views implies underlying mechanisms in this relationship. The goal of this study is to develop further knowledge on the early onset of sexual activity in adolescence, whilst simultaneously furthering scientific knowledge on HipHop/R&B as a potential risk factor. The sample consists of 742 high school students living in the Netherlands (Age: $M = 15.81$; $SD = 1.36$, 54.4% boys). Results of binary logistic regressions showed that (1) HipHop/R&B does not significantly predict the early onset of sexual intercourse ($OR = .95$; $p = .738$), (2) there is no evidence that holding gender stereotypes plays a role in this relationship, and (3) that holding gender stereotypes is significantly associated to the early onset of sexual intercourse ($OR = 2.70$; $p < .001$). Findings suggest that liking HipHop/R&B should not be considered a risk factor when investigating adolescent sexual health, but rather gender stereotypes. Such results should only be interpreted and understood within the context of this study and its limitations.

HipHop/R&B and the Early Onset of Sexual Activity: A Cross-Sectional Study on the Mechanisms Behind Gender Stereotypical Views

Establishing sexual relationships is a central developmental task in adolescence, where individuals learn to make complex decisions regarding selection of partners, initiate sexual activity, and learn about safe sex (Ward, 2002). Whilst sexual activity is considered normal in one's life, much research has addressed the negative effects of early intercourse on the physical and mental health of adolescents. According to Harden (2012), sexual activity may be defined as risky sexual behaviour if it occurs before the age of 14. Establishing an age considered to be "too early" is complicated as definitions are continuously being redefined and remain subjective (Hofferth, 1987). Early sexual activity has often been correlated with health risks such as early pregnancy (Patton et al., 2018), sexually transmitted diseases (Epstein, 2014, Fernandes de Araùjo et al., 2014), substance use (Lanza & Collins, 2002) but also mental health issues such as psychological distress and depressive symptoms (WHO, 2011).

Existing literature relates a variety of environmental, interpersonal, and intrapersonal predictive factors for the early onset of sexual activity, including, coming from a disadvantaged neighbourhood (Kirby & Lepore, 2007), communication problems with family (Goodson et al., 1997), age, and age of first menarche (Bingham, 1990). This research aims to investigate a less studied predictor: HipHop/R&B. Music plays an important role in adolescent life (Reić Ercegovic et al., 2017). Whilst US adolescents listen to music two to three hours a day (Rideout et al., 2010), it has been highlighted as a risk factor for risky sexual behaviour (Miranda, 2013). Specifically, research suggests that disproportionate exposure to rap (a form of music derived from hip-hop culture; Next Level, 2018) and its sexual content may be a risk factor for the early onset of sexual intercourse (Primack et al., 2008). Thus, exploring potential explanations for this association is important to prevent negative health outcomes for adolescents.

Gender stereotypical content in media such as music, can lead to unrealistic expectations of sexual experience (ter Bogt et al., 2010). Gender stereotypes may be defined as preconceptions about attributes, characteristics, and roles ascribed to women and men (United Nations Human Rights Office of the High Commissioner, 2020). Gender roles are prescriptive and proscriptive in nature because they command what men and women should and should not do (Koenig, 2018), which leads to inequality and patterns of discrimination (Smith, 2014). This is illustrated in HipHop/R&B through the disproportionate presence of men in the business, masculinist scripts, and sexist practices, which appear not only in the music itself but also in all commercial and societal aspects of the industry (Phillips et al.,

2005). Yet, from its beginnings, female artists, writers, performers, producers, and industry executives have played integral parts in the evolution of HipHop/R&B culture (Phillips et al., 2005).

It is important to note that research concerned with early sexual activity contains contingencies. Meier's (2007) study on first sexual experience and subsequent mental health reveals that while some adolescents experienced negative effects, a majority did not. This study also found that, compared to males, females were more likely to experience depressive symptoms after first sexual intercourse (Meier, 2007). Therefore, it is noted here that the early onset of sexual activity affects adolescents differently.

In light of the above, it becomes interesting to explore the following research question: To what extent is liking HipHop/R&B linked to the early onset of sexual activity and is this relationship mediated by holding gender stereotypical views?

Hip-Hop/R&B and the Early Onset of Sexual Intercourse

Drawing on social learning theory, whereby individuals learn and develop by imitating role models (Hunter-Reel, 2013), research suggests that media scripts serve as guidance for the audience regarding how to behave in given situations (McCormick, 2010). Similarly, Martino et al. (2006), discuss "sexual scripts" in music as influential in establishing norms and expectations about sexual activity. This notion lends itself to the cultivation theory whereby regular and long exposure to media leads individuals to believe that the world it portrays is an accurate depiction of their own social reality, which in turn influences their attitudes and behaviour (Wright & Craske, 2015). This is in line with Ward's (2005) argument that sexual representations in the media influence sexual decision-making such as early onset of sexual activity.

Although studies on the relationship between HipHop/R&B and the early onset of sexual activity are limited, there exist some interesting findings. In their 2006 longitudinal study, Martino et al. (2006) aimed to assess whether exposure to the content of musical lyrics influences subsequent sexual activity. This national telephone-based survey study consisted of adolescents aged 12-17. Researchers found that degrading sexual lyrics were most prevalent in rap songs and metal music. They further found that over time, listening to music with degrading sexual lyrics, such as rap, was positively associated with earlier onset of sexual intercourse (Martino et al., 2006).

It becomes possible to argue that liking Hip-Hop/R&B is linked to the earlier onset of sexual intercourse. The first hypothesis is (see Figure 1):

H1: *An individual who likes Hip-Hop/R&B is more likely to have had early first sexual intercourse.*

The Mediating Role of Gender Stereotypes

Mediation describes the research process or mechanism whereby a mediating variable explains the effect of an independent variable on a dependent variable (McKinnon et al., 2007).

First, there could be a relationship between liking HipHop/R&B and gender stereotypes. Research supports the idea that media plays a central role in adolescents' assimilation of gender norms through visual and verbal representations (Huston et al., 1998). This is in line with the above social learning theory and further supported by Ward et al.'s (2005) argument that appealing media character portrayals produce representations of what it means to be a woman or a man. Furthermore, Kistler and Lee (2010) discuss the social cognitive theory, whereby long-term exposure to misogynistic hip-hop videos provides models to emulate, and thus enforces or reinforces traditional and stereotypical gender norms and attitudes.

Research on the effect of Eminem songs on people's sexist beliefs found that misogynistic rap lyrics prime for more sexist attitudes, especially for males (Cobb & Boettcher, 2007). This between-subjects experimental design study included 232 undergraduate participants both male and female, whereby most participants were male (54%) and White (77%) (Cobb & Boettcher, 2007). However, the researchers found that exposure to non-misogynistic rap also resulted in greater sexist attitudes, thus suggesting that it could be exposure to aggressive hip-hop beats, and not lyrics, which are responsible for the endorsement of sexist attitudes. Additionally, ter Bogt et al.'s (2010) cross-sectional study examining the relationship between adolescent exposure to and preference for music, and permissive sexual attitudes and gender stereotypes found that overall, preference for HipHop/R&B was positively associated to holding gender stereotypes. Thus, it becomes arguable that liking hip-hop is linked to holding gender stereotypes (Figure 1):

H2: *An individual who likes Hip-Hop/R&B is more likely to hold gender stereotypes.*

Second, there could be a relationship between gender stereotypes and early sexual intercourse. Sexual socialization theorists have argued that adolescent sexual behaviour is heavily influenced by gender-role stereotypes (Zellman & Goodchilds, 1983). Parsons (1983) has further argued that, during childhood, individuals learn gender-specific characteristics and a set of social scripts, which all lay the foundation for sexual initiation. Cognitive developmental theories suggest that women may initiate sexual conduct to bring their

behaviour in line with the gender attitudes they have integrated (Foshee & Bauman, 1992). Indeed, it has been theorized that adolescents' decision-making regarding their sexual activity initiation relies on the attitudes and beliefs they acquire from their environment (Brown et al., 2005).

Empirical findings on this relationship are scarce. In their 1992 study, Foshee and Bauman used a probability sample of South-eastern US adolescents aged 12 to 14 to test the relationship between gender stereotyping and adolescent sexual behaviour using a home-based survey. They found a positive correlation between female stereotyping and early sexual activity for females but not for males. Kistler and Lee (2010), found that exposure to highly sexual imagery in hip-hop music videos led to greater objectification of women, sexual permissiveness, stereotypical gender attitudes, and acceptance of rape for male participants. Additionally, Ramiro-Sanchez et al.'s (2018) study evaluating differences in the maintenance of sexist beliefs based on gender and sexual experience found positive associations between holding gender stereotypes and engaging in early sexual activity.

Thus, it is reasonable to expect that holding gender stereotypes influences the early onset of sexual intercourse (Figure 1):

H3: *An individual who holds gender stereotypes is more likely to have had early sexual intercourse.*

The following mediation hypothesis will depend on whether all the above hypotheses have been answered (Figure 1):

H4: *Gender stereotypes mediate the relationship between liking HipHop/R&B and earlier onset of sexual intercourse.*

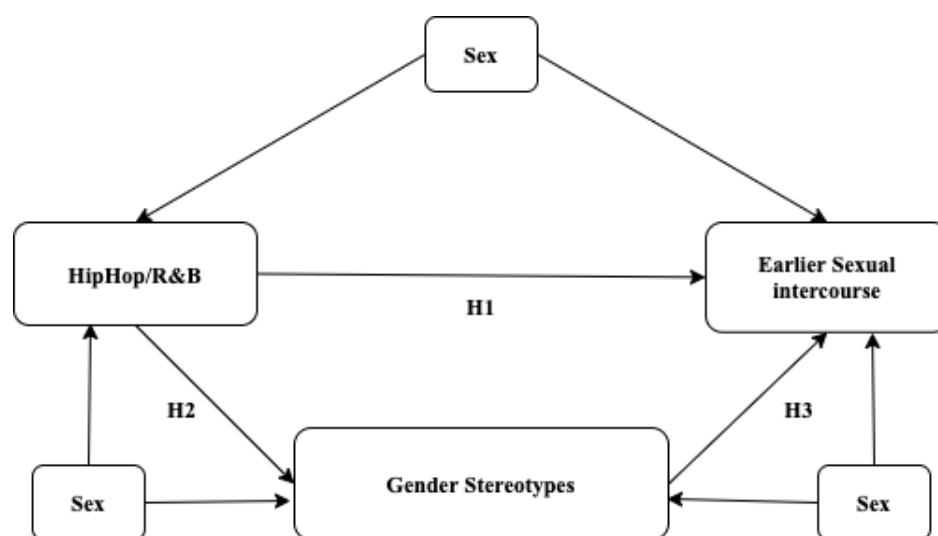


Figure 1. Research model

Methods

Design and Participants

The current study is derived from the 2017 Health Behavior School-aged Children (HBSC) study, which originally comprised of 8980 high-school student participants from the 2017/2018 cohort. As a result of data cleaning, participants who did not answer the questions of interest to the current study and its research model were excluded ($n=8193$). For instance, many participants had either not answered ($n = 1941$) the question: “Have you ever had sexual intercourse?” or answered “no”. Consequently, most participants also chose not to answer the follow-up question ($n = 8191$): “How old were you when you first had sexual intercourse (sex)?”. Missing data may be due to the sensitive nature of these questions especially for younger participants who may not have felt comfortable talking about this topic. Lastly, 8 participants were further excluded due to systemic response tendencies.

The final dataset of the current study therefore comprised of 742 participants, a majority of which were boys (54.4%). The age of participants ranged from 12 to 20 years old ($M = 15.81$; $SD = 1.36$), most of which were aged 16 years old ($n = 222$; 29.9%). All participants were secondary school students living in the Netherlands and Dutch speakers.

Procedure

The quantitative secondary data used for the current research was drawn from the 2017 HBSC study, whereby cross-sectional and survey-based data is collected every four years on 11–16-year-old adolescent boys and girls. It aims to capture information on their health, well-being, social environments, and health behaviours (HBSC, 2020).

The Trimbos Institute was responsible for the collection and processing of the HBSC study data. A random selection process of Dutch schools was performed to identify three to five classes in secondary schools and one class of primary school. Participation to the study was voluntary-based and completed anonymously. Once schools agreed to participate, consent and information forms were given to parents with the option to refuse participation.

The data collection process took place in the participating schools between October and November 2017 during regular teaching hours. Consenting voluntary secondary-school students completed the questionnaire digitally. Research assistants were present to offer any additional guidance.

Measures

Hip-Hop/R&B is the independent variable of this study and encompasses two styles of music merged into one. Participants were asked to rate their opinion of this style on a 6-

point Likert scale (1-I don't know, 2-Very bad, 3-Bad, 4-Not good/Not bad, 5-Good, 6-Very good). It was decided that item "1 – I don't know" did not allow to accurately measure a respondent's opinion and was therefore omitted from the scale ($n = 4081$). The new scale consisted in the following: 1-Very bad, 2-Bad, 3-Not good/Not bad, 4-Good, 5-Very good. This variable was further computed and dichotomised due to negative skewedness of the data: "Does not like" ($0: \leq 3$) and "Likes" ($1: \geq 4$) ($Mod = 1$; 70.6%). Item 3 was included in "Does not like" because it was judged that undecidedness cannot be considered "liking".

EarlyOrLate is the dependent variable of this study and is assessed based on the age of first sexual intercourse. Participants specified that age according to a scale (1 = 11 years or younger, to 7 = 17 years or older), whereby higher scores indicated later first sexual intercourse. The variable was named SexAge (Table 1) ($M = 4.65$; $SD = 1.47$). Scores were then computed and dichotomised into a new variable due to lack of normality of the data. This new variable EarlyOrLate was composed of the following groups: "Early" ($0: \leq 4$, 14 or under) and "Late" ($1: > 5$, 15 or over) ($Mod = 1$; 59%).

Table 1.
SexAge Descriptives

Age	%
11 years or younger	5.4
12 years	3.2
13 years	10.5
14 years	22.1
15 years	29.1
16 years	21.1
17 years or older	8.6

GenderStereotypes is the mediator in the study and is considered here a latent construct operationalized as a new scale based on a question from the HBSC survey. Each participant was presented with five gender stereotypical-role statements and used a 5-point Likert scale to inform to what extent they agreed or not with them. The following statements have been translated from their original Dutch language: "In a family, a son should be more encouraged to go to higher education than a daughter.", "In general, the father should have more to say than the mother when making decisions in a family.", "It is more important for boys than girls to do well at school.", "Boys are better leaders than girls.", "Girls should be

more concerned with becoming good wives and mothers than with building a career.”. This new 5-value point scale was found to be reliable (5 items; Cronbach’s alpha = .93). It was used to compute a new variable named TotalStereotypes ($M = 4.11$; $SD = 1.13$) by calculating mean scores for each participant. Lower scores indicated stronger holding of gender stereotypical views. Due to lack of normality, a new dichotomous variable was computed: GenderStereotypes, composed of two groups: “Holds gender stereotypes” (0: < 3) and “Does not hold gender stereotypes” (1: > 3).

Sex is the control variable of this study because girls and boys significantly differ in their level of preference for R&B, their likeliness of having early sexual intercourse, and their holding of gender stereotypes (ter Bogt, et al., 2010; Singh et al., 2000; Kistler & Lee, 2010). This was measured according to participants’ indication of whether they were a “boy” (0) or a “girl” (1).

Data Analysis

All data analyses of this research were conducted using IBM Statistics SPSS 25 and replicability was ensured using syntax. Initial checks for multivariate outliers, normal distribution, and multicollinearity using VIF were performed. Mahalanobis and Cook’s distance were also used to test for influential cases. Due to lack of normal distribution, it was decided that all variables would be dichotomised.

Thus, due to the binary nature of all the variables, each hypothesis was tested using binary logistic regression. The significance limit chosen for the current research was $\alpha = .05$. The model of mediation developed by Baron and Kenny (1986) was used to test the mediating effect of GenderStereotypes.

Results

Descriptive statistics

Descriptive findings showed that most participants had engaged in late first sexual intercourse (59%). A majority also indicated they liked HipHop/R&B (70.6%). Spearman’s correlations were drawn between the variables of interest in Table 2 to evaluate associations. HipHop/R&B was not correlated to EarlyOrLate, whilst Sex was positively correlated with GenderStereotypes and EarlyOrLate. Chi-Square tests (Table 3) were performed to further test these correlations. A significant association was found between Sex and EarlyOrLate ($p = 0.004$, $\chi^2 = 8.526$), whereby of all participants who had sexual intercourse early, 60.9% were boys and 39.1% were girls, and of all participants who had engaged in late intercourse, 50%

were boys. A significant association was also found between Sex and GenderStereotypes ($p < .001$), whereby of all participants who held gender stereotypes 80.5% were boys and 19.5% were girls, while of all participants who did not hold gender stereotypes 52.9% were girls. Only models with the control variable Sex were included in the tables of this paper.

Table 2.

Correlation matrix

	1.	2.	3.	4.
1.HipHopRnB	–	–	–	–
2. Sex	-.016	–	–	–
3. GenderStereotypes	.063	.279**	–	–
4. EarlyOrLate	-.014	.107**	.217**	–

Note. N=742. * $p < .05$; ** $p < .01$

Table 3.

Associations between Sex and EarlyOrLate

		Early		Late		Total
		n	%	n	%	
Sex	boy	185	60.9%	219	50%	404
	girl	119	39.1%	219	50%	338
Total		304	100%	438	100%	742

Table 4.

Associations between Sex and Gender Stereotypes

		Holds GS		Does not hold GS		Total
		n	%	n	%	
Sex	boy	132	80.5%	272	47.1%	404
	girl	32	19.5%	306	52.9%	338
Total		164	100%	578	100%	742

The Relationship Between HipHop/R&B and EarlyOrLate

First, the main effect of HipHop/R&B on EarlyOrLate was assessed. This binary regression analysis consisted in testing the first hypothesis which stipulated that an individual

who likes HipHop/R&B is more likely to have had early first sexual intercourse. The results of the analysis (Table 5) revealed that HipHop/R&B did not significantly predict EarlyOrLate ($OR = .95; p = .738$). This hypothesis was therefore not supported. Additionally, the control variable Sex did significantly predict EarlyOrLate with a small effect size ($OR = 1.55; p = .004$). Thus, in this study, girls are 1.55 times more likely to have had late first sexual intercourse than boys.

The Mediating Role of GenderStereotypes on HipHop/R&B and EarlyOrLate

Second, the mediating effect of GenderStereotypes was assessed. This regression analysis consisted in testing the second hypothesis which stipulated that an individual who likes HipHop/R&B is more likely to hold gender stereotypes. The results of the analysis (Table 6) revealed that HipHop/R&B did not significantly predict GenderStereotypes ($OR = 1.46; p = .056$). The second hypothesis was therefore not supported. The control variable Sex did significantly predict GenderStereotypes with a medium effect size ($OR = 4.70; p < .001$). This means that, in this study, girls were 4.70 times more likely not to hold gender stereotypes than boys.

Third, a final regression analysis allowed to test the third and fourth hypotheses. The results displayed in Table 7 show that the mediator GenderStereotypes did significantly predict EarlyOrLate with a small effect size when controlling for liking HipHop/R&B and for Sex ($OR = 2.70; p < .001$). This relationship reflected the third hypothesis, which stipulated that an individual who holds gender stereotypes is more likely to have had early sexual intercourse. These results therefore supported the third hypothesis, which means that a participant who does not hold gender stereotypes is 2.70 times more likely to have had late first sexual intercourse than a participant who holds gender stereotypes.

Finally, in line with the findings discussed for the main effect of HipHop/R&B on EarlyOrLate, and the correlations shown in Table 2, the results in Table 7 showed that when controlling for GenderStereotypes, HipHop/R&B did not significantly predict EarlyOrLate ($OR = .89; p = .470$). Thus, these results mean that GenderStereotypes was not a mediator in the relationship between HipHop/R&B and EarlyOrLate, and so the fourth hypothesis was not supported.

Table 5.

Logistic Regression Analysis between HipHop/R&B and EarlyOrLate

	B	S.E.	Exp(B)	95% C.I.
Sex	.440	.151	1.553*	[1.154-2.090]
HipHopRnB	-.055	.165	.946	[.684-1.308]
Cox & Snell R Square	.012			
Nagelkerke R Square	.016			

Note. *p<.05

Table 6.

Logistic Regression Analysis between HipHop/R&B and Gender Stereotypes

	B	S.E.	Exp(B)	95% C.I.
Sex	1.548	.215	4.702*	[3.088-7.162]
HipHopRnB	.377	.197	1.458	[.990-2.147]
Cox & Snell R Square	.084			
Nagelkerke R Square	.129			

Note. *p<.05

Table 7.

Logistic Regression Analysis between HipHop/R&B and EarlyOrLate Including Gender Stereotypes

	B	S.E.	Exp(B)	95% C.I.
Sex	.214	.160	1.238	[.905-1.694]
HipHopRnB	-.122	.169	.885	[.635-1.233]
GenderStereotypes	.993	.190	2.699*	[1.860-3.915]
Cox & Snell R Square	.048			
Nagelkerke R Square	.065			

Note. *p<.05

Discussion

The aim of this study was to evaluate the relationship between adolescents liking HipHop/R&B and the probability of them having had early first sexual intercourse whilst including GenderStereotypes as a possible mediator. Results showed that there was no

significant relationship between HipHop/R&B and EarlyOrLate and that GenderStereotypes was not a significant mediator. However, there was a significant relationship between GenderStereotypes and EarlyOrLate.

The Relationship Between Hip Hop/ R&B and EarlyOrLate

The first hypothesis stipulated that an individual who likes HipHop/R&B is more likely to have had early first sexual intercourse. The results showed that a participant's opinion of HipHop/R&B was not associated to EarlyOrLate. Thus, regardless of their liking or not of HipHop/R&B, adolescents of this study presented similar likeliness of having had early sexual intercourse. Surprisingly, these results seem to contradict past research, whereby listening to music such as rap with degrading sexual lyrics was positively associated with earlier onset of sexual activity (Martino et al., 2006). This also means that, in the context of this study, liking HipHop/R&B cannot be considered a risk factor for the initiation of early sexual intercourse.

It is possible to assign two potential explanations for this finding. The first is that there may be other factors that come into play in this relationship that were not controlled for. For instance, Brown and Pardun (2004) found that preference for different types of music often varies according to race and ethnicity. Whilst a predominant part of the Dutch population is White, the fact that the current research does not control for race and ethnicity may have specific implications for its results because it does not reflect multiple cultures and ethnic groups within the sample. Hip-hop culture was developed by Black and Latino youth on the East Coast of the United States in the mid-1970s (Morgan & Bennett, 2011). Thus, Hip-Hop/R&B has been highlighted for its ability to motivate and speak specifically to Black youth by creating a form of cultural capital and empowerment for Black identity (George, 1999; Kelley, 1994; Clay, 2003). This in line with Christenson and Robert's (1998) findings that Hispanic and Black youth listen to more rap music than White youth and are significantly more exposed to degrading sexual content. Additionally, research also found that African American teens report earlier sexual initiation than their White and Hispanic peers (Gavin et al., 2009). Based on these findings, it would be reasonable to expect that if race and ethnicity had been controlled for in the current study, some of the main results may have differed. Future research could integrate race and ethnicity as controlling factors.

Secondly, unlike what the cultivation theory suggests, it could be that participants of the current study were not influenced to normalize risky sexual behaviour due to overly sexualized visuals and HipHop/R&B lyrics. Indeed, a study found that despite being aware of engaging in risky sexual behaviour, adolescents did not view their behaviour as normal

(Wright & Craske, 2015). The fact that the current results revealed no significant relationship between liking HipHop/R&B and EarlyOrLate suggests that despite being aware of potential risks, participants are not likely to be influenced by this style of music when it comes to their sexual behaviour. Future research may choose to explore this state of consciousness qualitatively to gain more insight into participants' specific opinions.

Furthermore, it is also possible to attribute three methodological explanations for this finding. Firstly, it could be that despite truly liking Hip-Hop/R&B, those students who reported liking it had a stronger preference for another style of music which was not included in the study. Indeed, liking Hip-Hop/R&B does not exclude the possibility that a participant might enjoy and listen to another style of music even more, and which exerts a greater influence on the early onset of sexual activity. For example, studies have shown that pop music features sexually suggestive but also openly provocative lyrics (Ward et al., 2005), which have become increasingly explicit over time (Christenson et al., 2019). The results of the current study suggest that there is no link between liking HipHop/R&B and having had early first sexual intercourse. However, it is possible that other styles of music play a significant role in this relationship. It is suggested here that future research could include a variety of music styles and evaluate participants' music preferences through rating scales to allow for comparisons to be made across styles.

Alternatively, the cross-sectional nature of this study does not account for changes across time. It could be that some participants reported not liking HipHop/R&B and having had early sexual intercourse simply because they used to like this style of music at the time of their first sexual intercourse but no longer do. Indeed, a study found that an individual's musical taste is subject to changing over time (Bonneville-Roussy et al., 2013). Future studies may choose to adopt a longitudinal design to draw causal conclusions.

Lastly, all variables of the study were dichotomised to fit the data. As a result, one could argue that the data was simplified, which did not allow for nuanced results. Indeed, it could be that there exist significant differences across the ages of first sexual intercourse considered "early" in the context of this study. There could also be significant differences between levels of liking HipHop/R&B.

The Mediating Role of Gender Stereotypes on HipHop/R&B and EarlyOrLate

The second hypothesis of this study stipulated that an individual who likes Hip-Hop/R&B is more likely to hold gender stereotypes. The results showed that participants' opinion of HipHop/R&B was not positively associated to GenderStereotypes. This means that regardless of their opinion on Hip-Hop/R&B, students of this study presented similar

likeliness of holding gender stereotypes. The second hypothesis was not supported on this basis. These results are not in line with previous research (Foshee & Bauman, 1992; Kistler & Lee, 2010; Ramiro-Sanchez et al., 2018) and two possible explanations may be given to explain this.

First, Kistler and Lee (2010) have drawn on social cognitive theory to suggest that long-term exposure to misogynistic hip-hop videos provides models to emulate and in turn enforces traditional and stereotypical gender norms and attitudes. However, the results of the current study show no significant relationship between liking HipHop/R&B and holding gender stereotypes. Thus, despite their liking or not of HipHop/R&B, participants of this study presented similar likeliness of holding gender stereotypes. This could mean that despite exposure to misogynistic content of HipHop/R&B these participants chose not to imitate the cognitive models produced by misogynistic HipHop/R&B content because they were aware of their degrading nature, thus demonstrating a level of awareness. Indeed, Gourdine and Lemmons (2011) found that the more youth matured, the less likely they were to listen to HipHop/R&B and the less-positive reactions they had to misogynistic lyrics. This further implies that age is a factor, which should be included in future research.

Moreover, it is interesting that Sex, the control variable of this study, showed a significant relationship with GenderStereotypes. Despite grounding Hip-Hop/R&B and the culture surrounding it as a male-run genre, research highlights women of colour, and specifically African American female rappers, as able to create their own empowering discourse through HipHop/R&B (Phillips et al., 2005). By translating feminist and womanist ideas that exist in larger societal culture to a “street level” language, female rappers gain a farther audience reach than just the academic level (Phillips et al., 2005). This might explain why no significant relationship was found between liking or not HipHop/R&B and holding gender stereotypes because feminism is gaining more influence within HipHop/R&B discourse, which in turn might shape and influence its audience’s perceptions of gender roles. Future research may benefit from conducting a moderated mediation, one for boys and one for girls, to broaden knowledge on this topic by comparing results across sexes. Specifically, it may be interesting to explore whether girls who like Hip-Hop/R&B are less likely than boys to hold gender stereotypes, and whether the said feminist and womanist HipHop/R&B might be empowering to them.

The third hypothesis of this study stipulated that an individual holding gender stereotypes is more likely to have had early sexual intercourse. The results showed that GenderStereotypes did significantly predict whether a participant had early or late first sexual

intercourse. This means that participants holding gender stereotypes had increased likeliness of having had early first sexual intercourse. The results of the current study seem to be in line with previous theories and findings. Indeed, sexual socialisation theorists have argued that adolescent sexual behaviour is influenced by gender-role stereotypes (Zellman & Goodchilds, 1983), and that this is done through social scripts, which lay the foundation for sexual initiation (Parsons, 1983). Cognitive developmental theories further suggest that adolescent decision-making regarding their sexual activity initiation depends on the attitudes and beliefs they have previously acquired from their environment (Brown et al., 2005). Thus, in the context of this study, it could be that holding gender stereotypes might have influenced the decision-making process of engaging in early first sexual intercourse. It is further concluded that holding gender stereotypes may in fact present a risk for the early onset of first sexual intercourse.

The fourth hypothesis focused on the mediating role of gender stereotypes. Based on the results of the first and second hypotheses, whereby a participant's opinion of HipHop/R&B was not associated to having early or late first sexual intercourse (H1) and participants of this study presented similar likeliness of holding gender stereotypes regardless of their opinion on Hip-Hop/R&B (H2), it was concluded that GenderStereotypes is not a significant mediator for the relationship between liking HipHop/R&B and having had early sexual intercourse. It is for this reason that this hypothesis was not supported.

Strengths and Limitations

This study presented a series of strengths. First, the sample of students was composed of roughly an equal number of boys and girls. This enabled a more accurate comparison between the two groups. The sample was also age representative, given the subject matter. The sources used to substantiate the research and explore results were varied and are trusted within scientific knowledge. The topic of this study was chosen in an effort to limit adolescent risky behaviour regarding their sexual activity. Thus, it seeks to contribute to the wellbeing of a sometimes-vulnerable population.

Important limitations also need to be outlined. Firstly, the cross-sectional design of this study did not allow for comparisons to be made over time, neither did it allow for causal relationships to be drawn. Thus, it is advised that future research on this topic adopt a longitudinal design. Secondly, the measure used for gender stereotypes only reflected attitudes toward gender roles in society but did not explore attitudes toward sexual activity such as permissive sex for example. Knowledge on whether participants held gender stereotypical attitudes toward early sexual intercourse for instance, may have enabled a more

in-depth understanding of the results. Thirdly, as mentioned previously, this study did not include other styles of music, which would have enabled comparisons to be drawn and to potentially contrast results. Lastly, the fact that all variables were dichotomised limited the scope for the interpretation of results. Undeniably, the opportunity for more detailed analysis was lost in the process of simplifying data. For example, dichotomising the variable measuring age of first sexual intercourse did not allow for conclusions to be drawn across age groups.

Conclusion

Overall, the results of this study showed no evidence that liking HipHop/R&B is linked to having had early first sexual intercourse and that holding gender stereotypes mediates this relationship. Such results suggest a need for further research to bridge some of the limitations of this study. However, this study has been helpful in showing that HipHop/R&B should not necessarily be considered a risk factor for adolescent risk behaviour regarding their sexual activity. It is advised here that interventions aimed at reducing risky adolescent behaviour put emphasis on and bring attention to gender stereotypes as results indicated a significant relationship with the early onset of first sexual intercourse.

References

- Baron, R. M., Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182. <https://doi-org.proxy.library.uu.nl/10.1037/0022-3514.51.6.1173>
- Benton, F. (2018). Getting a bad rap: Misogynistic themes in YouTube's top 100 most viewed Pop and Hip Hop/Rap music videos by artists' gender. *CLA Journals*, 3(2015), 11-35. <https://uca.edu/cahss/files/2020/07/4-benton-11-35.pdf>
- Bingham, C. R., Miller, B. C., Adams, G. R. (1990). Correlates of age at first sexual intercourse in a national sample of young women. *Journal of Adolescent Research*, 5: 18-33. <https://doi.org/10.1177/074355489051004>
- ter Bogt, T.F.M., Delsing, J.M.H., van Zalk, M., Christenson, P.G., Meeus, W. H. J. (2011). Intergenerational continuity of taste: Parental and adolescent music preferences. *Social Forces*, 90(1), 297-319. <https://login.proxy.library.uu.nl/login?url=https://www.jstor.org/stable/41682642>
- ter Bogt, T. F. M., Engels, R. C. M. E., Bogers, S., & Kloosterman, M. (2010). "Shake It Baby, Shake It": Media preferences, sexual attitudes and gender stereotypes among adolescents. *Sex Roles*, 63(11-12), 844-859. <https://doi.org/10.1007/s11199-010-9815-1>
- ter Bogt, T. F. M., Gabhainn, S. N., Simons-Morton, B. G., Ferreira, M., Hublet, A., Godeau, E., Kuntsche, E., Richter, M. & the HBSC Risk Behavior and the HBSC Peer Culture Focus Groups. (2012). Dance is the new metal: Adolescent music preferences and substance use across Europe, *Substance Use & Misuse*, 47:2. <https://doi.org/10.3109/10826084.2012.637438>
- Bonneville-Roussy, A., Rentfrow, P. J., Xu, M. K., & Potter, J. (2013). Music through the ages: Trends in musical engagement and preferences from adolescence through middle adulthood. *Journal of Personality and Social Psychology*, 105(4), 703-717. <https://doi.org/10.1037/a0033770>
- Brown, J.D., Pardun, C.J. (2004). Little in common: Racial and gender differences in adolescents' television diets. *Journal of Broadcasting & Electronic Media*, 48(2), 266-278. https://doi.org/10.1207/s15506878jobem4802_6
- Brown, J.D., Tucker Halpern, C. L'Engle, K.L. (2005). Mass media as a sexual super peer for early maturing girls. *Adolescent Health*, 36(5), 420-427. <https://doi.org/10.1016/j.jadohealth.2004.06.003>

- Christenson, P.G., Roberts, D.F. (1998). *It's not only rock'n roll: Popular music in the lives of adolescents*. Hampton Press
- Christenson, P.G., de Haan-Rietdijk, S., Roberts, D. F., ter Bogt, T.F.M. (2019). What has America been singing about? Trends in themes in the U.S. top-40 songs: 1960-2010. *Psychology of Music*, 47(2), 194-212. <https://doi-org.proxy.library.uu.nl/10.1177/0305735617748205>
- Clay, A. (2003). Keepin' it real: Black youth, Hip-Hop culture, and black identity. *American Behavioral Scientist*, 46(10), 1346-1358. <https://doi-org.proxy.library.uu.nl/10.1177/0002764203046010005>
- Cobb, M.D., Boettcher III, W.A. (2007). Ambivalence sexism and misogynistic rap music: Does exposure to Eminem increase sexism?. *Journal of Applied Social Psychology*, 37(12), 3025-3042. <https://doi-org.proxy.library.uu.nl/10.1111/j.1559-1816.2007.00292.x>
- Epstein, M., Bailey, J. A., Manhart, L. E., Hill, K. G., Hawkins, J. D., Haggerty, K. P., & Catalano, R. F. (2014). Understanding the link between early sexual initiation and later sexually transmitted infection: Test and replication in two longitudinal studies. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*, 54(4), 435–441.e2. <https://doi.org/10.1016/j.jadohealth.2013.09.016>
- Fernandes de Araújo, Ludgleydson, & Teva, Inmaculada, & Bermúdez, María de la Paz (2014). Psychological and socio-demographic variables associated with sexual risk behavior for sexually transmitted infections/HIV. *International Journal of Clinical and Health Psychology*, 14(2),120127. <https://www.redalyc.org/articulo.oa?id=337/33730456006>
- Foshee, V. Bauman, K. (1992). Gender stereotyping and adolescent sexual behavior. – A test of temporal order. *Journal of Applied Social Psychology*, 22(20), 1561-1579. <https://doi-org.proxy.library.uu.nl/10.1111/j.1559-1816.1992.tb01757.x>
- Gavin, L., MacKay, A. P., Brown, K., Harrier, S., Ventura, S. J., Tangel, M., Ryan, G. (2009). Sexual and reproductive health of persons aged 10-24 years—United States, 2002-2007. *Morbidity and Mortality Weekly Report*, 58, 1-60. <https://www.cdc.gov/mmwr/PDF/ss/ss5806.pdf>
- George, N. (1999). *Hip-hop America*. Penguin Books

- Goodson, P., Evans, A., Edmundson, E. (1997). Female adolescents and onset of sexual intercourse: A theory-based review of research from 1984 to 1994. *Journal of Adolescent Health*, 21, 147-156. [https://doi.org/10.1016/S1054-139X\(97\)00004-9](https://doi.org/10.1016/S1054-139X(97)00004-9)
- Gourdine, R.M., Lemmons, B.P. (2011). Perceptions of misogyny in Hip Hop and rap: What do the youths think? *Journal of Human Behavior in the Social Environment*, 21(1), 57-72. <https://doi.org/10.1080/10911359.2011.533576>
- Harden, K. P. (2012). True Love Waits? A sibling-comparison study of age at first sexual intercourse and romantic relationships in young adulthood. *Psychological Science*, 23(11), 1324-1336. <https://doi.org/10.1177/0956797612442550>
- HBSC International Coordinating Centre. (2014). Health Behaviour in School Children (HBSC): Terms of reference. *Health Behaviour in School-Aged Children (HBSC) Network 2014*. <http://www.hbsc.org/about/HBSC%20ToR.pdf>
- Hofferth, S.L. (1987). Chapter 1 factors affecting initiation of sexual intercourse. In Hofferth, S.L., Hayes, C. D. (1987). *Risking the future: Adolescent sexuality, pregnancy, and childbearing, Volume II: Working papers and statistical appendices*. National Academies Press (US). <https://www.ncbi.nlm.nih.gov/books/NBK219217/>
- Hunter-Reel, D. (2013). Chapter 30 interpersonal factors and addictive disorders. In Miller, P.M. Blume, A. W., Kavanagh, D. J., Kampman, K. M., Bates, M. E., Larimer, M. E., Petry, N. M., De Witte, P., Ball, S. A. (2013). *Principles of Addiction. Volume I*. Academic Press.
- Huston, A. C., Wartella, E., & Donnerstein, E. (1998). *Measuring the effects of sexual content in the media*. Kaiser Family Foundation
- Kelley, R. D. G. (1994). Kickin reality, kickin ballistics: The cultural politics of gansta rap in postindustrial Los Angeles. In E. Perkins (Ed.), *Droppin 'science: Critical essays on rap music and hip-hop culture*, 117-158. Temple University Press.
- Kirby, D., Lepore, G. (2007). *Sexual risk and protective factors: Factors affecting teen sexual behavior, pregnancy, childbearing and sexually transmitted disease: Which are important? Which can you change?*. The National Campaign to Prevent Teen and Unplanned Pregnancy.
https://healtheducationresources.unesco.org/sites/default/files/resources/bie_etr_sexual_risk_protective_factors_en.pdf
- Kistler, M. E., Lee, M. J. (2009). Does exposure to sexual Hip-Hop music videos influence the sexual attitudes of college students?. *Mass Communication and Society*, 13(1), 67-86. <https://doi-org.proxy.library.uu.nl/10.1080/15205430902865336>

- Koenig, A.M. (2018). Comparing prescriptive and descriptive gender stereotypes about children, adults, and the elderly. *Frontiers in Psychology*, 9(1086), 1-13.
<https://doi.org/10.3389/fpsyg.2018.01086>
- Lanza, S.T., Collins, L.M.(2002). Pubertal timing and the onset of substance use in females during early adolescence. *Prevention Science*, 3(1), 69-82. <https://doi-org.proxy.library.uu.nl/10.1023/A:1014675410947>
- McCormick, N.B. (2010). Sexual scripts: Social and therapeutic implications. *Sexual and Relationship Therapy*, 25(1), 96-120. <https://doi.org/10.1080/14681990903550167>
- McKinnon, D.P., Fairchild, A. J., Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology*, 58, 593-614. <https://doi-org.proxy.library.uu.nl/10.1146/annurev.psych.58.110405.085542>
- Martino, S. C., Collins, R. L., Elliott, M. N., Strachman, A., Kanouse, D. E., & Berry, S. H. (2006). Exposure to degrading versus nondegrading music lyrics and sexual behavior among youth. *PEDIATRICS*, 118(2), e430–e441.
<https://doi.org/10.1542/peds.2006-0131>
- Meier, A. M. (2017). Adolescent first sex and subsequent mental health. *American Journal of Sociology*, 112(6), 1811-47. <https://doi-org.proxy.library.uu.nl/10.1086/512708>
- Miranda, D. (2013). The role of music in adolescent development: Much more than the same old song, *International Journal of Adolescence and Youth*, 18:1, 5-22.
<https://doi.org/10.1080/02673843.2011.650182>
- Morgan, M., Bennett, D. (2011). Hip-Hop & the global imprint of a black cultural form. *Daedalus* 140: 176–196. https://www.researchgate.net/publication/254924908_Hip-Hop_the_Global_Imprint_of_a_Black_Cultural_Form
- Next Level. (2018). Rap vs. Hip Hop. *Next Level – USA*. <https://www.nextlevel-usa.org/blog/rap-vs-hip-hop#:~:text=The%20standard%20answer%20is%20that,out%20of%20Hip%2DHop%20culture.&text=Rap%2C%E2%80%9D%20KRS%2DONE%20famously,Hop%20is%20something%20you%20live.%E2%80%9D>
- OHCHR | Gender stereotyping*. (n.d.). United Nations Office of the High Commissioner Human Rights. Retrieved January 2, 2021, from <https://www.ohchr.org/en/issues/women/wrgs/pages/genderstereotypes.aspx>
- Parsons, J. E. (1983). Sexual socialization and gender roles in childhood. In Allgeier, E.R., McCormic, N. B. (Eds.), *Changing boundaries: Gender roles and sexual behavior*, 19-63, Mayfield

- Patton, G. C., Olsson, C. A., Skirbekk, V., Saffery, R., Wlodek, M. E., Azzopardi, P. S., Stonawski, M., Rasmussen, B., Spry, E., Francis, K., Bhutta, Z.A., Kassebaum, N.J., Mokdad, A. H., Murray, C. J. L., Prentice, A. M., Reavley, N., Sheehan, P., Sweeny, K., Viner, R. M., Sawyer, S. M. (2018). Adolescence and the next generation. *Nature*, 21;554(7693), 458-466. <https://doi.org/10.1038/nature25759>
- Phillips, L., Reddick-Morgan, K., & Stephens, D. P. (2005). Oppositional consciousness within an oppositional realm: The case of feminism and womanism in rap and Hip Hop, 1976-2004. *The Journal of African American History*, 90(3), 253-277. <https://www.jstor.org/stable/20064000>
- Primack, B. A., Gold, M. A., Schwarz, E. B., & Dalton, M. A. (2008). Degrading and non-degrading sex in popular music: A content analysis. *Public health reports (Washington, D.C. : 1974)*, 123(5), 593–600. <https://doi.org/10.1177/003335490812300509>
- Ramiro-Sánchez, T., Ramiro, M. T., Bermúdez, M. P., & Buela-Casal, G. (2018). Sexism and sexual risk behavior in adolescents: Gender differences. *International Journal of Clinical and Health Psychology*, 18(3), 245–253. <https://doi-org.proxy.library.uu.nl/10.1016/j.ijchp.2018.04.002>
- Reić Ercegovac, I., Dobrota, S., Surić, S. (2017). Listening to music and music preferences in early adolescence. *Metodički obzori*, 12(1), 6-23. https://www.researchgate.net/publication/329790576_listening_to_music_and_music_preferences_in_early_adolescence
- Rideout, V., Foehr, U., Roberts, D. (2010). Generation M2: Media in the lives of 8-to 18-year-olds. *Henry J. Kaiser Foundation*. <https://files.eric.ed.gov/fulltext/ED527859.pdf>
- Singh, S. Wulf, D., Smara, R., & Cuca, Y.P. (2000). Gender differences in the timing of first intercourse: Data from 14 countries. *International Family Planning Perspectives*, 26(1), 21-28 & 43. <https://www.guttmacher.org/sites/default/files/pdfs/pubs/journals/2602100.pdf>
- Smith, S. (2014, October 16). *Limitations to equality: Gender stereotypes and social change*. IPPR. <https://www.ippr.org/juncture/limitations-to-equality-gender-stereotypes-and-social-change>
- Ward, L. M. (2002). Does television exposure affect emerging adults' attitudes and assumptions about sexual relationships? Correlational and experimental

- confirmation. *Journal of Youth and Adolescence*, 31(1), 1–15.
<https://doi.org/10.1023/a:1014068031532>
- Ward, L.M., Hansbrough, E., Walker, E. (2005). Contributions of music video exposure to black adolescents' gender and sexual schemas. *Journal of Adolescent Research*, 20(2),143–166. <https://doi-org.proxy.library.uu.nl/10.1177/0743558404271135>
- Weitzer, R., Kubrin, C. E. (2009). Misogyny in rap music – A content analysis of prevalence and meanings. *Men and Masculinities*, 12(1), 3-29.
<https://doi.org/10.1177/1097184X08327696>
- World Health Organization (WHO). (2011). *Adolescent development: WHO*. World health organization. Retrieved December 7, 2020, from https://www.who.int/maternal_child_adolescent/topics/adolescence/development/en/
- Wright, C. L., & Craske, M. (2015). Music's influence on risky sexual behaviors: Examining the cultivation theory. *Media Psychology Review*, 9 (1).
DOI:10.1080/10646175.2019.1567407
- Zellman, G . L., & Goodchilds, J . D. (1983). Becoming sexual in adolescence. In Allgeier, E. R., McCormic, N. B. (Eds.), *Changing boundaries: Gender roles and sexual behavior*, 49-63, Mayfield.

Appendix A. Interdisciplinarity

Sameroff (2010) suggests that it is important to adopt an interdisciplinary approach for developmental research as it enables the researcher to capture an all-encompassing understanding of the topic of research. Thus, using Bronfenbrenner's (1979) Ecological model (Figure A1), this section will discuss how each environmental level (micro-system, meso-system, ecosystem, and macro-system) affects the development of an individual in the context of the current research question.

Regarding the first level, microsystem, the individual's opinion of HipHop/R&B and their sex are the two areas of focus for this research as they both hold the potential of exerting an influence on the individual's development. Indeed, previous research shows that music preference varies both across sexes (Colley, 2008), but also in terms of the influence musical lyrics can have for example (van Oosten, Peter & Valkenburg, 2015).

Secondly, regarding the mesosystem, which relates to the individual's connections, parental guidance on the use and consumption of media and sexual activity, as well as peer influence of media consumption and sexual activity, may have a direct influence on the way developing adolescents engage with music and whether they are sexually active or not. Indeed, in their study sampling parents of North-Western Tanzania, Wamoyi et al. (2011) found that parents were motivated to have control and monitor their children's sexual behaviour to protect them from undesirable sexual and reproductive health outcomes. Additionally, ter Bogt et al. (2011) suggest that parents often control the resources available to their children and manage their environments, thus suggesting that adolescent music socialization may not always be a conscious process.

Furthermore, regarding the exosystem, socio-economic status and level of education may play a role in shaping an individual's opinion of Hip-Hop/R&B, holding or not gender stereotypes, and the early onset of sexual intercourse. As a supporting example, Greenfeld, Greiner and Wood (1980) found that fathers' educational attainment was correlated with the gender stereotyping of their daughters' career orientation. Indeed, women in male dominated roles were more likely to have highly educated fathers, as opposed to women in female dominated roles. Additionally, Liu, Xu, and Schedl (2018) found that there exists a difference in musical taste between people from upper-income backgrounds, people from lower-income backgrounds, and with those of lower education levels.

Lastly, regarding the macrosystem, depending on the specific cultural context in which an adolescent grows up in, they may be exposed to different types of music, different views and expectations of sexual activity, and different views on gender stereotypes in society.

Indeed, Juma, Askew, Alaii, and Bartholomew (2014), found that specific cultural practices in a community in western Kenya predisposed adolescents (orphans and non-orphans) to risky sexual behaviour.

The current research lies at multiple levels of influence because it seeks to study whether liking or not Hip-Hop/R&B (microsystem) is linked to having had early or not first sexual intercourse (mesosystem) and whether holding gender stereotypes mediates this relationship (macrosystem).

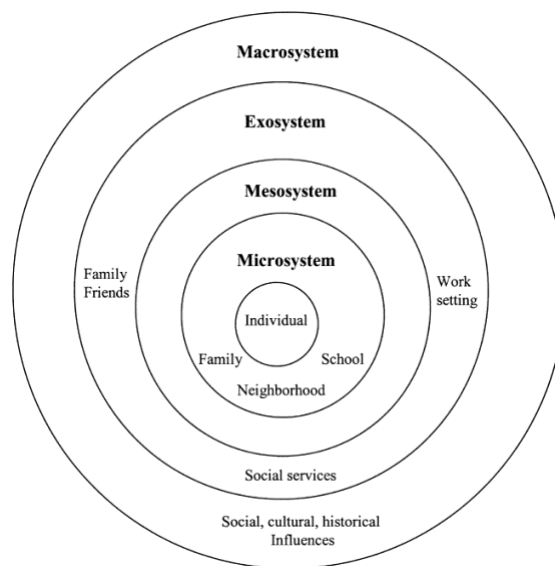


Figure A1. Bronfenbrenner's Ecological model

References Appendix A

- ter Bogt, T.F.M., Delsing, J.M.H., van Zalk, M., Christenson, P.G., Meeus, W. H. J. (2011). Intergenerational continuity of taste: Parental and adolescent music preferences. *Social Forces*, 90(1), 297-319
<https://login.proxy.library.uu.nl/login?url=https://www.jstor.org/stable/41682642>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press
- Colley, A. (2008). Young people's musical taste: relationship with gender and gender-related traits. *Journal of Applied Social Psychology*, 38(8), 2039-2055 <https://doi-org.proxy.library.uu.nl/10.1111/j.1559-1816.2008.00379.x>
- Greenfeld, S., Greiner, L., Wood, M. M. (1980). The "Feminine Mystique" in male-dominated jobs: A comparisons of attitudes and backgrounds factors of women in

- male-dominated versus female-dominated jobs. *Journal of Vocational Behaviors*, 17, 291-309.
- Juma, M., Askew, I., Alaii, J., Bartholomew, L.K. (2014). Cultural practices and sexual risk behavior among adolescent orphans and non-orphans: A qualitative study on perceptions from a community in western Kenya. *BMC Public Health*, 14(84), 1-9 <http://www.biomedcentral.com/1471-2458/14/84>
- Liu, M. Hu, X. Schedl, M. (2018). The relation of culture, socio-economics, and friendship to music preferences: A large-scale, cross-country study. *PLoS ONE*, 13(12) e0208186. <https://doi.org/10.1371/journal.pone.0208186>
- van Oosten, J. M. F., Peter, J., Valkenburg, P.M. (2015). The influence of sexual music videos on adolescents' misogynistic beliefs: The role of video content, gender, and affective engagement. *Communications Research*, 1-23 <https://doi-org.proxy.library.uu.nl/10.1177/0093650214565893>
- Sameroff, A. (2010). A unified theory of development: A dialectic integration of nature and nurture. *Child Development*, 81(1), 6-22. DOI: [10.1111/j.1467-8624.2009.01378.x](https://doi.org/10.1111/j.1467-8624.2009.01378.x)
- Wamoyi, J., Fenwick, A., Urassa, M., Zaba, B., Stones, W. (2011). Parental control and monitoring of young people's sexual behaviour in rural North-Western Tanzania: implications for sexual and reproductive health interventions. *BMC Public Health*, 11(106). DOI: [10.1186/1471-2458-11-106](https://doi.org/10.1186/1471-2458-11-106)

Appendix B. Data use contract (TED)

Utrecht, 2020

This letter constitutes formal confirmation of the fact that the data from the 2017 Health Behavior School-aged Children (HBSC) study have been made available to Louise Obrecht of Utrecht University.

These data will not be made available to others, and the data may be used only for analysis and reporting on topics for the thesis, about which agreement has been reached with Regina van den Eijnden.

Louise Obrecht will receive access to the data from the dataset in order to answer the following research questions within the framework of the thesis:

Research question: To what extent is liking HipHop/R&B linked to the early onset of sexual activity and is this relationship mediated by holding gender stereotypical views?

The following variables will be used:

Dependent variable: Music preference (Q92)

Independent variables: Sexual Intercourse (Q84), Age of First Time Sex (Q85)

Other variables:

- Mediator: Son should be encouraged more than daughter to go to higher education (Q91), Father should have more say in decision making (Q91), More important for boys than girls to do well at school (Q91), Boys are better leaders than girls (Q91), Girls should be more concerned with being a good wife and mother than a career (Q91)
- Control variable: Sex (Q2)

No report based on the data from the project entitled “HipHop/R&B and the Early Onset of Sexual Activity: A Cross-Sectional Study on the Mechanisms behind Gender Stereotypical Views” may be made public, unless permission has been obtained in advance from the Project Coordinator.

After the expiration of this contract, dated 14/01/2021, Louise Obrecht shall delete the “HipHop/R&B and the Early Onset of Sexual Activity: A Cross-Sectional Study on the Mechanisms behind Gender Stereotypical Views” data.

Dates and signature: January 29th, 2021

Name of student:
Louise Obrecht

Name of Project Coordinator:
Gerdien van Eersel

