**“Naughty By Nature”?: Music Preferences in Relation to Sexual Gender Stereotypes and Sexual Objectification Among Youth**

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Master Thesis

Youth Studies, Utrecht University

June 2022

# Abstract

# Previous research indicated that music has become a prominent medium that can influence adolescents' sexual attitudes and gender stereotypes. Building on social learning theory and cultivation theory, this study examined adolescents' music preferences in relation to sexual gender stereotypes and sexual objectification. Complementing previous studies, it examined not only sexual objectification of the female body but also of the male body, and whether this relationship differs between boys and girls, and between religious and non-religious adolescents. Correlation and regression analyses of data from a 2010 sample of 480 Dutch high school students, aged 13 to 16, showed that music preferences were associated with sexual gender stereotyping and sexual objectification. Urban music was consistently related to higher levels of sexual gender stereotyping and sexual objectification. There were no significant differences between boys and girls. Among non-religious adolescents compared to religious adolescents, a preference for electronic music was associated with higher sexual gender stereotyping and sexual objectification of boys. Further research should focus on exploring ways in which urban music can be used to keep adolescents from sexual gender stereotyping and sexual objectification, and instead educate them about gender roles and sex in a positive, healthy way.

*Key words:* adolescents; sexual gender stereotypes; sexual objectification; music; music preferences; gender; religion

# Eerder onderzoek wees uit dat muziek een prominent medium is geworden dat de seksuele attitudes en genderstereotypen van adolescenten kan beïnvloeden. Voortbouwend op de sociale leertheorie en de cultivatietheorie, onderzocht deze studie de muziekvoorkeuren van adolescenten in relatie tot seksuele genderstereotypen en seksuele objectivering. In aanvulling op eerdere studies werd niet alleen gekeken naar seksuele objectivering van het vrouwenlichaam maar ook van het mannenlichaam. Ook werd onderzocht of de relatie tussen muziekvoorkeuren en seksuele genderstereotypen en seksuele objectivering verschilt tussen jongens en meisjes en tussen religieuze en niet-religieuze adolescenten. Correlatie- en regressieanalyses van data afkomstig uit een steekproef uit 2010 van 480 Nederlandse middelbare scholieren, in de leeftijd van 13 tot 16 jaar, toonden aan dat muziekvoorkeuren samenhingen met seksuele genderstereotypering en seksuele objectivering. Urban muziek was consistent gerelateerd aan hogere niveaus van seksuele genderstereotypering en seksuele objectivering. Er waren geen significante verschillen tussen jongens en meisjes. Onder niet-religieuze adolescenten was een voorkeur voor elektronische muziek geassocieerd met hogere seksuele genderstereotypering en seksuele objectivering van jongens. Verder onderzoek zou zich kunnen richten op het verkennen van manieren waarop urban muziek gebruikt kan worden om adolescenten juist te weerhouden van seksuele genderstereotypering en seksuele objectivering en hen in plaats daarvan op een positieve, gezonde manier te onderwijzen over genderrollen en seks.

*Sleutelwoorden:* adolescenten; seksuele gender stereotypes; seksuele objectivering; muziek; muziek voorkeuren; gender; religie

# Introduction

Over the past decades, lyrics of certain music genres have become more explicit regarding sex (Fuld et al., 2009; Wright and Rubin, 2017). Content of many songs, especially in the hip-hop and R&B genre, contains messages about sexual gender stereotypes (SGS), such as ‘men have power over women and sex is a top priority for men’. Additionally, many songs present messages that sexually objectify especially the female body. Sexual objectification (SO) can be defined as the treatment of a person solely as a sexual object (Wright and Rubin, 2017). Sexualized gender stereotyping may include negative, harmful consequences, such as self-objectification among girls; associating women and men with traditional work roles; and the acceptance of violence against women (Ter Bogt et al., 2010). Being preoccupied with looks and viewing the body as a sexual object, may result in self-objectification, increasing the chance of developing mental and physical health problems (Ter Bogt et al., 2010; Fredrickson and Roberts, 1997).

For adolescents, media, and music in particular, are important sources of information for conceptualising gender differences and sexually related issues (Harrison and O’Neill, 2002). Research indicates that SGS and SO may be related to adolescents’ music preferences (Ter Bogt et al., 2010; Ward, 2011; Peter and Valkenburg, 2007). However, the extent to which boys and girls, and religious and non-religious youth differ on these topics, has hardly been studied. Therefore, this study investigates to what extent one’s music preference is associated with the endorsement of SGS and SO and whether gender and religiousness moderate this relation.

## Theoretical Substantiation

Several theories from different scientific backgrounds provide an understanding of how music preferences may relate to the endorsement of SGS and SO.

Bandura’s (1977) cognitive social learning theory explains how young people construe their evaluation about which behaviours are appropriate and inappropriate through media exposure (Ward, 2003). Adolescents are more likely to imitate behaviour observed in people they find attractive or powerful (Ward, 2003). Therefore, they are more likely to imitate behaviour and thoughts about SGS or SO as shown in their music preferences.

Additionally, gender schema theory (Bem, 1981) explains that gender stereotypes are shaped through gender schemas, which are the whole of what adolescents perceive about the roles men and women have. They construe gender roles by observing behaviour and information displayed in media culture (Vanwesenbeeck, 2020). Nowadays, adolescents are more likely to turn to the media to obtain sexually related information (Ward, 2011). Music may serve as a prominent medium by which adolescents develop gender schemas and in turn shapes adolescents’ SGS.

From a sociocultural perspective, cultivation theory explains how portrayals of men and women in the media, may shape a specific view of reality in adolescents. Consequently, exposure to certain gender stereotypic content makes people cultivate and adopt perspectives about the world that match these viewed portrayals (Ward, 2003). Adolescents may therefore construct SGS, when listening to certain music types.

Objectification theory proposes that ‘the female body is often treated, evaluated and viewed as a sexual object’ and that the media are strong communicators of certain expectations and norms about the female body, which perpetuates the occurrence of SO (Dakanalis and Riva, 2013). Listening to music lyrics that contain messages treating people as bodies that exist for the use and pleasure of others, may prolong SO of the female body.

 The media practice model (Steele and Brown, 1995) states from a communication science perspective that adolescents’ selections and interpretations of media are influenced by sociocultural factors in adolescents’ lives (Ward, 2003). For example, adolescents may filter music content when developing SGS or SO, dependent on their gender, religion, and age. Therefore, it is highly likely that differences exist between boys and girls and religious and non-religious adolescents concerning the relation of music preferences with SGS and SO.

## Review of Empirical Studies

Along with popular music lyrics becoming more sexually explicit (Fuld et al., 2009; Wright and Rubin, 2017), studies on the relation between adolescents’ music consumption and sexually related behaviour have become more common. However, no empirical studies have focused on music preferences in relation to both SGS and SO. Below, empirical studies on related themes will be reviewed.

### Music preferences and gender stereotypes

 To our knowledge, only one study by Ter Bogt and colleagues (2010) explored the relation between music preferences and endorsement of sexual attitudes and stereotypes and the possible moderating role of gender on this relation. For both boys and girls, the researchers found a positive relation between a preference for hip-hop, R&B, and hard-house music and the endorsement of sexual stereotypes. Their results showed gender differences moderating this relation. For instance, a preference for punk music was positively related with endorsing sexual stereotypes within girls and not within boys.

### Media and objectification

Although few studies have focused on the relation between music preferences and SO, only some of these have investigated the impact of media content in relation to SO. Research by Kistler and Lee (2009) and Ward (2011) has found a relation between sexual content in media and the objectification of women. Kistler and Lee (2009) found a significant relation among males, between listening to hip-hop music and the endorsement of objectifying women and gender stereotypes. Peter and Valkenburg (2007) also found that the exposure to sexually explicit material in the media and SO of women were significantly related. Furthermore, their study demonstrated that this relation is related to certain demographic factors, such as educational level (Peter and Valkenburg, 2007). However, they did not find gender differences moderating this relation, while Ward’s (2002) study showed that girls objectify themselves more on their appearance and sexiness than boys did, as a result of media exposure.

## The Gap

The reviewed literature shows there may be a relation between music preferences and SGS as well as SO. However, a focus on the possible moderating roles of gender in studies on such relations remains scarce. Some studies (Peter and Valkenburg, 2007; Ter Bogt et al., 2010; Ward, 2002) have attempted to elaborate on gender differences among adolescents on the relation between their media preferences and the endorsement of gender stereotypes and their notions of SO. These studies found no accordance about the role of gender on such relations. To our knowledge, no studies have focused on the possible differences between religious and non-religious youth on the relation between music preferences and SGS and SO. Strikingly, religion is a strong predictor of beliefs about gender and sexual attitudes (Odimegwu, 2005). Therefore, it becomes relevant to study the possible moderating role of gender and religiousness on the relation between adolescents’ music preferences and SGS as well as their SO.

Finally, most studies focus merely on the SO of women in relation to music (Kistler and Lee, 2009; Ward et al., 2011), while more and more scientific evidence suggests that SO of males also occurs, with possible negative mental health outcomes for men as a consequence (Dakanalis and Riva, 2013).

## The Current Study

The current study focuses on the relation between music preferences and the endorsement of SGS and SO. It will examine whether gender and/or religiousness moderate this relation. Thus, the research questions of this study are formulated as follows: “Are music preferences related to adolescents’ SGS and SO?” and “Are relations between music preferences and SGS and SO moderated by gender and/or religiousness?”. The research purpose is visualised in the model presented in figure 1.

Additionally another important relation will be examined. A social understanding of gender differentiation is already constructed on an early age (Harrison and O’Neill, 2002). Therefore the relation between music preferences and SGS and SO will be studied with age as a control variable. Also, following the media practice model, education will be included as a control variable in this study (Ward, 2003). Controlling for these variables could help establish the extent to which music preferences are related to SGS and SO.

Based on the reviewed literature, the following hypotheses can be formulated:

H1a: Adolescents’ music preferences relate to the endorsement of SGS and SO, when controlling for age and education.

Music genres that contain more messages about gender roles and SO may relate more strongly to gender stereotyping and SO (Ter Bogt et al., 2010), leading to the following hypothesis:

H1b: Preferences of adolescents for urban music and pop music are related to stronger endorsement of SGS and SO.

Additionally, hypotheses are formulated about the moderating effects of gender differences and religiousness:

H2a: The relation between music preferences and the endorsement of SGS and SO differs between boys and girls.

H2b: Within girls, music preferences relate more strongly to SO than within boys.

H2c: The relation between music preferences and the endorsement of SGS and SO differs between religious and non-religious adolescents.

H2d: Religion serves as a buffer on the relation between music preferences and SGS and SO.

**Figure 1**

*Conceptual Research Model About the Relation Among Adolescents Between Music Preferences and Endorsement of SGS and SO.*



# Method

## Sample and Procedure

This research analysed existing data from a cross-sectional study by Ter Bogt and colleagues (2010). This sample included data from 480 adolescents (53% boys; 47% girls) whose age ranged from 13 to 16-years old (M= 14,3 years, SD=.84). The data of all respondents were included in the analyses. Respondents were selected from three different schools across the Netherlands. Their education level ranged from lower level of education VMBO (48,5 %), middle level of education HAVO (22,9%), to highest level of education VWO (28,5%). In this study educational level was divided into lower level of education (VMBO; 48,5%) and higher level of education (HAVO-VWO; 51,5%), Of the included respondents, 23,8% was Roman Catholic, 6,9% Protestant, 8,4% Muslim, 4% identified with another religion and 57% were non-religious. Participants’ religious backgrounds were divided into religious respondents (57,1%) and non-religious respondents (42,9%). All respondents answered questions concerning their media preference, music preference, sexual stereotypes and sexual attitudes.

In the study by Ter Bogt et al. (2010), parental consent was guaranteed by means of a personal letter notifying parents of the students prior to the study requesting for their permission to include their child in a study about media use, personality factors, and attitudes toward sexuality and romance. Participation in the study was a free choice and confidentiality was ensured during all stages of the study. Anonymity was ensured by not mentioning names of respondents in the data files. Participants completed an online questionnaire that took 30-45 minutes in the media-lab, at their schools.

## Measuring Instruments

***Music Preferences***

In this research a selection was made from the items included in Ter Bogt et al. (2010)’s questionnaire about liking different genres within music, by asking “How much do you like the following types of music?” Participants’ responses were rated on a 5-point Likert scale (1 = *dislike very much* to 5 *= like very much).* The current study divided 11 items into five groups that indicate a certain music preference: 1. Urban (rap and R&B music), 2. Rock/Metal (rock and metal music), 3. Pop (pop-, and Dutch pop music), 4. Elite (classic and jazz), and 5. Electronic music (dance-, dancehall- and techno music). Reliability was calculated for each music preference: Urban α = .89, Rock/Metal α = .76, Pop α = .48, Elite α = .56 and Electronic music α = .65.

***Sexual Gender Stereotypes***

A selection was made from Ter Bogt et al. (2010)’s adapted version of Ward’s (2002) questionnaire “Attitudes Toward Dating and Relationships” to assess adolescents’ SGS. Since the original version by Ward (2002) was designed for American college students, Ter Bogt et al. (2010) translated and simplified the questionnaire to suit the respondents’ younger age, and broader education. All items on this scale were measured on a 6-point Likert scale (1 = *strongly disagree* to 6 = *strongly agree*).

This study included 14 items from the questionnaire. A Factor Analysis (Principal Components Analysis, Varimax rotation) was conducted, to identify the structure of the SGS scale. The results indicated a clear four factor structure with all factor loadings >.45, explaining more than 45% of the variance. These items were structured into 4 subscales. The first subscale, ‘Boys are sex driven, girls should comply’, was formed by 5 items: ‘Boys that can have any girl in bed are cool’, ‘When a boy wants to have sex, girls should do it even if they don’t want it’, ‘Boys are cool when they have a sexy girl as a girlfriend’, ‘As a girl it is better to be a slut than boring’ and ‘There is something wrong if a boy can have sex and he doesn’t do it’. Reliability was calculated: α = .75.

Three items could be structured into the second subscale ‘Boys like sexy girls’, which included the following items: ‘Boys look at other girls, even if they have a girlfriend’, ‘Boys want a sexy girl as a girlfriend’ and ‘A hot girl can get anything done by boys’. Reliability: α = .59.

The third subscale ‘The boy should seduce the girl’, included three items: ‘The boy should seduce the girl’, ‘A girl doesn’t approach a boy, but is seduced by a boy’ and ‘As a boy you can better be a macho than a nerd’. Reliability was calculated α = .65.

The fourth subscale ‘All boys want is sex’ included three items: ‘Boys can’t be friends with girls, it’s only about sex for them’, ‘Boys always want to have sex, they think about it all the time’ and ‘Boys think a lot about sex and easily cheat’. Reliability was calculated α = .65.

***Sexual Objectification***

For SO of girls (SOgirls), five items were selected from Ter Bogt’s translation and simplified version of Ward’s subscale ‘Women as Sexual Objects’. All items were rated on a 6-point Likert scale (1 = s*trongly disagree* to 6 = *strongly agree*). Selected items include: “A girl should look hot to be attractive for boys;” “Girls should spend a lot of time on their appearance. Boys don’t want an ugly girl as a girlfriend;” “It doesn’t matter if a boy is only interested in a girl’s body;” “If a girl looks hot, she has to make use of this;” “In order for a girl to get a boyfriend it is better to look pretty than being very smart;”. Reliability was calculated: α = .77.

The objectification of the female body has been subject to many previous studies. However, the objectification of boys, or male bodies has had little attention. Therefore, a scale was added, which assesses the SO of boys (SOboys). Four items from Ter Bogt’s (2013) translated version of Ward’s (2002) questionnaire were included to assess SOboys: ‘A boy should be strong and well-built to be attractive for girls;” “Hot guys can seduce any girl;” “It is cool for a girl to have a really hot guy as a boyfriend;”. Reliability was calculated: α = .59. Factor Analyses (Principal Components Analysis, Varimax rotation) pointed out for both SOgirls and SOboys to be structured by one factor.

## Data Analysis

First, descriptive statistics are presented to show gender differences in regard to music preferences. Second, descriptive statistics are presented to show group differences including gender, age, education and religion first within regard to the four factors of SGS and SOboys and SOgirls (MANOVA). A post-hoc test was conducted to see which age groups differ, recoding into age group 13-14, and age group 15-16. Second, to determine links between music preferences and SGS and SO, zero-order Pearson correlations were computed between the music factors and SGS and between music factors and SOgirls and SOboys. Third, music preferences were modelled as predictors for both SGS and SO while controlling for confounders. Fourth, the research model was tested with gender and religion as interaction effects in a multi-group regression analysis. The interaction terms were entered into the analysis one at a time. The found interaction effects were plotted and interpreted using an Excel template for 2-way interaction effects.

# Results

## Descriptive Results

Table 1 shows the descriptive results of music preferences and the differences between boys and girls. The most popular music genres were urban music, and pop music. Results of t-tests, presented in Table 1 showed that girls tend to prefer pop music and urban music more than boys (*p* < .001). Boys indicated to prefer rock/metal music more than girls (*p* < .001).

**Table 1**

Estimated Marginal Means and Standard Errors of Music Preferences and Gender.

|  |  |  |  |
| --- | --- | --- | --- |
| Music preference  | Boys | Girls | Total |
| (scale 1-5) | *M* | *SD* | *M*  | *SD* | *M* | *SD* |
| Pop | **3.16**  | .97 | **3.46**  | .92 | 3.3 | .96 |
| Elite | 1.98  | .97 | 2.02  | .86 | 2.0  | .92 |
| Urban | **3.59**  | 1.30 | **3.94**  | 1.11 | 3.75  | 1.22 |
| Electronic | 2.92  | .98 | 2.86  | .92 | 2.89  | .95 |
| Rock / metal | **2.51**  | 1.18 | **2.22** | 1.08 | 2.37  | 1.14 |
| Note. Bold typeface indicates a significant difference between girls and boys. |

Table 2 demonstrates adolescents’ background in relation to their endorsement of SGS (Table 2a) and SOboys and SOgirls (Table 2b). Significant effects were found for gender (Wilks’ F(.71)=30.40*, p*<.001), age (Wilks’ F (.97)= 2.71*, p*<.001) and education (Wilks’ F (.94)= 4.84, *p*<.001).

Results of MANOVA analyses showed that gender was associated with the scores of SGS factor 1, factor 2, and with SO of girls (*p* <.001), implying that boys more strongly believe that boys are sex driven and girls should comply (SGS factor 1); that boys are into sexy girls (SGS factor 2); and that boys respond stronger to SOgirls. Gender was also associated with the scores of SGS factor 4 (*p* <.05), implying that girls more strongly believe that all boys want is sex.

Furthermore, a significant effect was found for age in relation to SOgirls, revealing that younger adolescents tend to sexually objectify girls’ bodies more than older adolescents. Lower educated people responded more positively to SGS factor 3, implying they have a stronger belief in the notion that boys should seduce girls and not the other way around (*p*<.05). There was no significant effect found for religion, implying that religion does not predict SGS, nor SO.

**Table 2a**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Boys are sex driven | Boys like sexy girls | Boys seduce girls | Boys only want sex |
|  | *M* | *SD* | *M* | *SD* | *M* | *SD* | *M* | *SD* |
| Gender |
| Boys (254) | **2.34\*\*** | .06 | **4.32\*\*** | .07 | 3.79 | .08 | **2.58\*** | .07 |
| Girls (226) | **1.59\*\*** | .06 | **3.92\*\*** | .07 | 3.80 | .08 | **2.80\*** | .08 |
| Age |
| 13-14 (292) | 2.05 | .06 | 4.10 | .07 | 3.82 | .07 | 2.72 | .07 |
| 15-16 (183) | 1.89 | .07 | 4.13 | .08 | 3.77 | .09 | 2.65 | .08 |
| Education |
| Low (233) | 1.89 | .06 | 4.19 | .07 | **3.94\*** | .08 | 2.62 | .08 |
| High (247) | 2.04 | .06 | 4.05 | .07 | **3.65\*** | .08 | 2.75 | .07 |
| Religiousness |
| Non-religious (206) | 1.93 | .07 | 4.12 | .08 | 3.88 | .08 | 2.71 | .08 |
| Religious (273) | 2.00 | .06 | 4.12 | .07 | 3.72 | .08 | 2.66 | .07 |
| Note. Bold typeface indicates significant mean differences. \*p < .05. \*\* p < .001 |

Estimated Marginal Means and Standard Errors of SGS by Background Characteristics

**Table 2b**

Estimated Marginal Means and Standard Errors of SO by Background Characteristics

|  |  |  |
| --- | --- | --- |
|  | SO boys | SO girls |
|  | *M* | *SD* | *M* | *SD* |
| Gender |
| Boys (254) | 3.44 | .07 | **3.66\*\*** | .07 |
| Girls (226) | 3.31 | .07 | **2.77\*\*** | .07 |
| Age |
| 13-14 (292)  | 3.40 | .06 | **3.37\*** | .06 |
| 15-16 (183)  | 3.35 | .08 | **3.06\*** | .08 |
| Education |
| Low (233) | 3.43 | .07 | 3.29 | .07 |
| High (247) | 3.31 | .07 | 3.14 | .07 |
| Religiousness |
| Non-religious | 3.40 | .07 | 3.20 | .07 |
| Religious | 3.35 | .07 | 3.23 | .07 |
| Note. Bold typeface indicates significant difference between boys and girls. \**p* < .05. \*\* *p* < .001 |

**Music Preferences in Relation to SGS and SO**

Table 3 demonstrates the Pearson correlations between music preferences and SGS and SO (see Table 3a). For boys, pop music was positively linked to thinking boys are into sexy girls and that the boy should seduce the girl (*p* <.05). For girls, pop music was negatively correlated with thinking all boys want is sex (*p* <.05). For both boys and girls, urban music is linked with stronger endorsement to thinking boys are into sexy girls and that the boy should seduce the girl (*p* <.05). Especially for girls, urban music was related positively to thinking boys should seduce girls (*p* < .001). For boys, urban music was linked to stronger endorsement of thinking boys are sex driven; and thinking boys only want sex. For boys, electronic music was linked to stronger thinking that boys should seduce girls.

**Table 3a**

Zero-order Pearson Correlation Between Music Preferences and SGS.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Music preference | Boys are sex driven | Boys like sexy girls | Boys seduce girls | Boys only want sex |
|  | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls |
| Pop | .09 | -.01 | **.15\*** | .03 | **.14\*** | .08 | .02 | **-.19\*\*** |
| Elite | -.42 | -.09 | .03 | -.03 | -.07 | -.04 | .05 | -.01 |
| Urban | **.15\*** | .04 | **.18\*** | **.17\*\*** | **.16\*** | **.25\*\*** | **.14\*** | .09 |
| Electronic | .09 | .03 | .09 | .05 | **.17\*\*** | .00 | .07 | -.07 |
| Rock/metal | -.06 | -.05 | -.06 | -.13 | -.11 | **-.16\*** | .01 | -.04 |
| Note. Bold typeface indicates significant effect on dependent variable. \**p* < .05. \*\* *p* < .001 |

Table 3b demonstrates that three music preferences seem to be significantly correlated to SO. For boys, pop music and urban music were linked to stronger endorsement of SOgirls. For girls, urban music was linked to stronger endorsement of SOboys and SOgirls. While girls liking rock/metal music, they showed less agreement to SOboys.

**Table 3b**

Zero-order Pearson Correlation Between Music Preferences and SO.

|  |  |  |
| --- | --- | --- |
| Music preference | SO boys | SO girls |
|  | Boys | Girls | Boys | Girls |
| Pop | .08 | .07 | **.15\*** | .12 |
| Elite | -.03 | -.06 | .03 | -.06 |
| Urban | .06 | **.16\*** | **.15\*** | **.19\*\*** |
| Electronic | .10 | .11 | .09 | .09 |
| Rock/metal | -.10 | **-.14\*** | -.06 | -.04 |
| Note. Bold typeface indicates significant effect on dependent variable.\**p* < .05. \*\* *p* < .001 |

## Interaction Effects of Religion on the relation between music preferences and SGS and SO

In Table 4(a-f) the results of the multiple regression analyses are presented. When controlled for age and education, urban music significantly indicates higher scores on SGS factor 1, factor 2, factor 3, factor 4 (*p* < .05) and SO girls (*p* <.001). This implies that urban music is a predictor for the notions that boys are sex driven; that boys like sexy girls; and that all boys want is sex; and SO of the girl’s body. The multiple regression analyses with gender as an interaction effect resulted in no significant differences. However, in the multi-group analyses with religion taken as an interaction effect, significant effects were found concerning the relation between music preferences and SGS factor 2, SGS factor 4 and SO boys (*p* < .05). In figure 2a it is demonstrated that for non-religious adolescents, the more they prefer electronic music, the stronger they respond to SGS factor 2, implying that these adolescents have a stronger belief in the notion that boys like sexy girls. Figure 2b shows that for non-religious youth, the more they listen to electronic music, the stronger they respond to SGS factor 4: that all boys want is sex. As demonstrated in figure 2c, non-religious youth who listen to electronic music respond stronger to SOboys. For religious youth there is no difference in SO boys for either liking electronic music or not. Figure 2d shows that adolescents who are fond of elite music and identify as non-religious, responded lower to SO boys, while religious youth who listen to elite music, responded stronger to SO boys.

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| --- |
| **Table 4a.** *Multiple Linear Regression Including Main Effects of and Two-Way Interactions among SGS factor 1, Music Preference, Gender and Religion* |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|   | Model 1  |   | Model 2 |   | Model 3 |   |
|   | B | SE B | β |  | B | SE B | β |  | B | SE B | β |  |
| *Background* |  |  |  |  |  |  |  |  |  |  |  |  |
| Age | -.15 | .10 | -.07 |  | -.16 | .09 | -.08 |  | -.12 | .09 | -.06 |  |
| Education level | .12 | .09 | .06 |  | .16 | .09 | .08 |  | **.18** | **.09** | **.09\*** |  |
| *Moderators* |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender |  |  |  |  | .75 | .09 | -.37 |  | **-.79** | **.09** | **-.39\*** |  |
| Religion  |  |  |  |  | .06 | .09 | .03 |  | .10 | .09 | .05 |  |
| *Music preference* |  |  |  |  |  |  |  |  |  |  |  |  |
| Pop |  |  |  |  |  |  |  |  | .01 | .05 | .01 |  |
| Rock/metal |  |  |  |  |  |  |  |  | -.02 | .04 | -.03 |  |
| Electronic |  |  |  |  |  |  |  |  | .07 | .05 | .07 |  |
| Elite |  |  |  |  |  |  |  |  | -.09 | .05 | -.08 |  |
| Urban  |  |  |  |  |  |  |  |  | **.09** | **.04** | **.11\*** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***R2*** |  | .01 |  |  |  | .14 |  |  |  | .17 |  |  |
| ***F change*** |  | 2.07 |  |  |  | **38.50\*\*** |  |  |  | **2.49\*** |  |  |

|  |
| --- |
| Note. Bold typeface indicates a significant effect on SGS factor 1: boys are sex driven, girls should comply.Note. Model 4 is diminished, since no significant interaction effects were found. \* p <.05, \*\* p <.001. |

|  |
| --- |
| **Table 4b.** *Multiple Linear Regression Including Main Effects of and Two-Way Interactions among SGS factor 2, Music Preference, Gender and Religion* |
|   | Model 1  |   | Model 2 |   | Model 3 |   | Model 4 |   |
|   | B | SE B | β |  | B | SE B | β |  | B | SE B | β |  | B | SE B |  β |   |
| *Background* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age | .02 | .10 | .01 |  | .01 | .10 | .01 |  | .06 | .10 | .03 |  | .03 | .10 | .01 |  |
| Education level | -.15 | .10 | -.07 |  | -.13 | .10 | -.06 |  | -.13 | .10 | -.06 |  | -.11 | .10 | -.05 |   |
| *Moderators* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender |  |  |  |  | **-.40** | **.10** | **-.18\*\*** |  | **-.47** | **.10** | **-.22\*\*** |  | **-.48** | **.10** | **-.22\*\*** |  |
| Religion  |  |  |  |  | -.00 | .10 | -.01 |  | .07 | .10 | .03 |  | .09 | .10 | .04 |  |
| *Music preference* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pop |  |  |  |  |  |  |  |  | .05 | .06 | .04 |  | .10 | .11 | .08 |  |
| Rock/metal |  |  |  |  |  |  |  |  | -.08 | .05 | -.09 |  | -.04 | .09 | -.05 |  |
| Electronic |  |  |  |  |  |  |  |  | .07 | .06 | .06 |  | **.27** | **.11** | **.24\*** |  |
| Elite |  |  |  |  |  |  |  |  | -.01 | .06 | -.01 |  | -.06 | .10 | -.05 |  |
| Urban  |  |  |  |  |  |  |  |  | **.11** | **.05** | **.13\*** |  | .13 | .08 | .15 |   |
| *Two-way interactions* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pop \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | -.19 | .12 | -.11 |  |
| Rock/metal \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | -.07 | .10 | -.05 |  |
| Electronic\* Gender |  |  |  |  |  |  |  |  |  |  |  |  | .04 | .12 | .03 |  |
| Elite \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | -.10 | .12 | -.05 |  |
| Urban \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | .07 | .09 | .05 |  |
| Pop \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | .07 | .12 | .05 |  |
| Rock/metal \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | -.02 | .10 | -.02 |  |
| Electronic \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | **-.34** | **.12** | **-.24\*** |  |
| Elite \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | .13 | .12 | .08 |  |
| Urban \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | -.07 | .09 | -.07 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***R2*** |  | .01 |  |  |  | .04 |  |  |  | .08 |  |  |  | .10 |  |  |
| ***F change*** |  | 1.21 |  |  |  | **8.16\*\*** |  |  |  | **3.80\*** |  |  |  | **7.09\*** |  |  |

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| Note. Bold typeface indicates significant effect on SGS factor 2: boys are into sexy girls. \* p <.05, \*\* p <.001. |

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| **Table 4c**. *Multiple Linear Regression Including Main Effects of and Two-Way Interactions among SGS factor 3,* *Music Preference, Gender and Religion* |
|   | Model 1  |   | Model 2 |   | Model 3 |   |
|   | B | SE B | β |   | B | SE B | β |   | B | SE B | β |   |
| *Background* |  |  |  |  |  |  |  |  |  |  |  |  |
| Age | -.03 | .11 | -.01 |  | -.05 | .11 | -.02 |  | .00 | .11 | .00 |  |
| Education level | **-.28** | **.11** | **-.12\*** |  | **-.29** | **.11** | **-.12\*** |  | **-.28** | **.11** | **-.12\*** |  |
| *Moderators* |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender |  |  |  |  | .01 | .11 | .01 |  | -.07 | .11 | -.03 |  |
| Religion  |  |  |  |  | -.16 | .11 | -.07 |  | -.07 | .11 | -.03 |  |
| *Music preference*  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pop |  |  |  |  |  |  |  |  | .02 | .07 | .02 |  |
| Rock/metal |  |  |  |  |  |  |  |  | -.09 | .05 | -.09 |  |
| Electronic |  |  |  |  |  |  |  |  | .09 | .06 | .07 |  |
| Elite |  |  |  |  |  |  |  |  | -.06 | .06 | -.05 |  |
| Urban  |  |  |  |  |  |  |  |  | **.18** | **.05** | **.18\*** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***R2*** |  | .01 |  |  |  | .02 |  |  |  | .07 |  |  |
| ***F change***  |  | **3.3\*** |  |  |  | .99 |  |  |  | **5.41\*\*** |  |  |
| *Note.* Bold typeface indicates significant effect on SGS factor 3: boy should seduce the girl.*Note.* Model 4 is diminished, since no significant interaction effects were found. *\* p* <.05*,* *\*\* p* <.001. |

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| **Table 4d.** *Multiple Linear Regression Including Main Effects of and Two-Way Interactions among SGS factor 4, Music Preference, Gender and Religion* |
|   | Model 1  |   | Model 2 |   | Model 3 |   | Model 4 |   |
|   | B | SE B | β |  | B | SE B | β |  | B | SE B | β |  | B | SE B | β |  |
| *Background* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age | -.08 | .11 | -.03 |  | -.08 | .11 | -.03 |  | -.09 | .11 | -.04 |  | -.14 | .11 | -.06 |  |
| Education level | .14 | .10 | .06 |  | .13 | .10 | .06 |  | .06 | .11 | .03 |  | .05 | .11 | .02 |  |
| *Moderators* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender |  |  |  |  | **.22** | **.10** | **.10\*** |  | **.23** | **.10** | **.10\*** |  | **.21** | **.10** | **.10\*** |  |
| Religion  |  |  |  |  | -.05 | .11 | -.02 |  | -.01 | .11 | -.01 |  | .02 | .11 | .01 |  |
| *Music preference* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pop |  |  |  |  |  |  |  |  | **-.18** | **.06** | **-.15\*** |  | -.12 | .11 | -.11 |  |
| Rock/metal |  |  |  |  |  |  |  |  | .01 | .05 | .01 |  | -.06 | .09 | -.06 |  |
| Electronic |  |  |  |  |  |  |  |  | .06 | .06 | .05 |  | **.26** | **.12** | **.23\*** |  |
| Elite |  |  |  |  |  |  |  |  | -.00 | .06 | -.00 |  | -.01 | .10 | -.01 |  |
| Urban  |  |  |  |  |  |  |  |  | **.15** | **.05** | **.16\*** |  | **.21** | **.08** | **.23\*** |  |
| *Two-way interactions* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pop \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | -.22 | .13 | -.13 |  |
| Rock/metal \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | -.07 | .10 | -.04 |  |
| Electro\* Gender |  |  |  |  |  |  |  |  |  |  |  |  | -.08 | .12 | -.05 |  |
| Elite \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | -.07 | .12 | -.04 |  |
| Urban \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | .06 | .10 | .04 |  |
| Pop \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | .10 | .12 | .06 |  |
| Rock/metal \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | .13 | .10 | .10 |  |
| Electronic \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | **-.27** | **.13** | **-.19\*** |  |
| Elite \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | .06 | .12 | .04 |  |
| Urban \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | -.14 | .10 | -.13 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***R2*** |  | .01 |  | \* |  | .02 |  |  |  | .05 |  |  |  | .05 |  |  |
| ***F* change** |  | 1.23 |  |  |  | 2.40 |  |  |  | **2.86\*** |  |  |  | 3.19 |  |  |

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| Note. Bold typeface indicates significant effect on SGS factor 4: all boys want is sex. \* p <.05, \*\* p <.001. |

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| **Table 4e.** *Multiple Linear Regression Including Main Effects of and Two-Way Interactions among SOboys, Music Preference, Gender and Religion* |
|   | Model 1  |   | Model 2 |   | Model 3 |   | Model 4 |   |
|   | B | SE B | β |  | B | SE B | β |  | B | SE B | β |  | B | SE B | β |  |
| *Background* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age | -0.06 | .10 | -.03 |  | -.07 | .10 | -.03 |  | -.04 | .10 | -.02 |  | -.04 | .10 | -.02 |  |
| Education level | -0.13 | .09 | -.06 |  | -0.12 | .09 | -0.06\*\*\* |  | -0.11 | .10 | -0.05\*\* |  | -0.05 | .10 | -0.03\*\*\* |  |
| *Moderators* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender |  |  |  |  | -.14 | -.09 | -.07 |  | -.19 | .09 | -.09 |  | -.19 | .09 | -.09 |  |
| Religion  |  |  |  |  | -.04 | .10 | -.02 |  | .01 | .10 | .01 |  | .02 | .10 | .01 |  |
| *Music preference* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pop |  |  |  |  |  |  |  |  | .00 | .06 | .00 |  | .07 | .10 | .07 |  |
| Rock/metal |  |  |  |  |  |  |  |  | **-.10** | **.05** | **-.11\*** |  | -.07 | .009 | -.08 |  |
| Electronic |  |  |  |  |  |  |  |  | **.12** | **.05** | **.11\*** |  | **.31** | **.10** | **.29\*** |  |
| Elite |  |  |  |  |  |  |  |  | -.04 | .06 | -.03 |  | -.15 | .09 | -.14 |  |
| Urban  |  |  |  |  |  |  |  |  | .06 | .04 | .08 |  | .01 | .07 | .01 |  |
| *Two-way interactions* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pop \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | -.06 | .11 | -.03 |  |
| Rock/metal \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | -.04 | .09 | -.03 |  |
| Electronic \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | .05 | .11 | .03 |  |
| Elite \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | -.09 | .11 | -.05 |  |
| Urban \* Gender |  |  |  |  |  |  |  |  |  |  |  |  | .10 | .09 | .07 |  |
| Pop \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | -.10 | .11 | -.08 |  |
| Rock/metal \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | -.02 | .09 | -.02 |  |
| Electronic \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | **-.30** | **.11** | **-.23\*** |  |
| Elite \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | **.26** | **.11** | **.17\*** |  |
| Urban \* Religion |  |  |  |  |  |  |  |  |  |  |  |  | .05 | .09 | .04 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***R2*** |  | .01 |  |  |  | .01 |  |  |  | .04 |  |  |  | .08 |  |  |
| ***F change*** |  | 1.09 |  |  |  | 1.25 |  |  |  | **3.25\*** |  |  |  | 1.77 |  |  |

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| Note. Bold typeface indicates significant effect on dependent variable.\* p <.05, \*\* p <.001. |

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| **Table 4f**. *Multiple Linear Regression Including Main Effects of and Two-Way Interactions among SOgirls, Music Preference, Gender and Religion* |
|   | Model 1  |   | Model 2 |   | Model 3 |   | Model 4 |   |
|   | B | SE B | β |   | B | SE B | β |   | B | SE B | β |   | B | SE B | β |   |
| *Background* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age | **-.33** | **.11** | **-.12\*** |  | **-.35** | **.10** | **-.14\*\*** |  | **-.28** | **.10** | **-.12\*** |  | **-.29** | **.10** | **-.12\*** |  |
| Education level | **-.24** | **.11** | **-.10\*** |  | -.19 | .10 | -.08 |  | -.17 | .10 | -.07 |  | -.13 | .10 | -.06 |   |
| *Moderators* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender |  |  |  |  | **-.94** | **.10** | **-.40\*\*** |  | **-1.0** | **.10** | **-.43\*\*** |  | **-.99** | **.10** | **-.42\*\*** |  |
| Religion  |  |  |  |  | .04 | .10 | .02 |  | .09 | .10 | .04 |  | .10 | .10 | .04 |  |
| *Music preference* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pop |  |  |  |  |  |  |  |  | .04 | .06 | .03 |  | .12 | .10 | .10 |  |
| Rock/metal |  |  |  |  |  |  |  |  | -.03 | .05 | -.03 |  | .05 | .09 | .05 |  |
| Electronic |  |  |  |  |  |  |  |  | .06 | .06 | .05 |  | .20 | .11 | .16 |  |
| Elite |  |  |  |  |  |  |  |  | -.11 | .06 | -.09 |  | -.09 | .10 | -.07 |  |
| Urban  |  |  |  |  |  |  |  |  | **.15** | **.04** | **.16\*\*** |  | **.16** | **.08** | **.16\*** |   |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***R2*** |  | .03 |  |  |  | .19 |  |  |  | .22 |  |  |  | .24 |  |  |
| ***F change*** |  | **6.43\*** |  |  |  | **45.87\*\*** |  |  |  | **4.38\*\*** |  |  |  | 1.03 |  |  |

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| Note. Bold typeface indicates significant effect on dependent variable.\* p <.05, \*\* p <.001. |

# Discussion

This study addressed the research question whether adolescents’ music preferences are related to SGS and SO of both females and males. Furthermore, this study aimed to answer the question whether this relation differs between boys and girls, and if the relation differs between religious and non-religious adolescents. The results from correlational and regression analyses indicate that adolescents’ music preferences play a role in the endorsement of SGS and SO. Urban music was consistently related to higher SGS and SOgirls. Youth who prefer urban music, hold stereotypes thinking that: boys are sex-driven, boys are into sexy girls, boys are supposed to seduce girls, and all boys want is sex. Also electronic music was associated with higher SGS and SOboys. Overall, results showed no significant differences between boys and girls. Confirming the expectations, religion did interact within some associations of SGS and SO and seemed to buffer the relation between electronic music and SGS.

**Music Preferences Indicating SGS and SO**

The results of the correlational and regression analyses showed that particularly a preference for urban music is related to stronger SGS and SOgirls, which supports the theory that music genres with more messages about gender roles and SO relate more strongly with SGS and SO (Ter Bogt et al., 2010). However, in contrast to what was expected, pop music was not consistently associated with higher SGS and SO. It did not come as a surprise that electronic music was related to SGS and SOboys because the literature has shown that the electronic music is related to a nightlife scene, associated with sexism and unwanted sexual behaviour, where it is often about looking sexy, dancing and flirting (Wiltsher, 2016; Reynolds, 2013).

The found relation between urban music and positive endorsement of SGS and SO may be explained by content analytical research which showed that many R&B and rap songs contain lyrics that refer to SGS and SO (Wright and Rubin, 2017). The sexual role of women in popular rap and hip-hop music videos is predominantly to please men, and research indicates that references to body objectification, gaze and attractiveness are more likely to take place in rap, R&B and hip-hop music than in other genres (Ward, Hansbrough, and Walker, 2005; Flynn et al., 2016). These content analytical studies, in combination with the found results in this study about urban music, support the hypothesis that music genres with more messages about gender roles and SO relate more strongly to SGS and SOgirls.

How listening to sexual gender stereotypic music is related to higher levels of SGS and SO among youth may be explained by Bandura’s (1977) social learning theory and the cultivation theory. Young people might be influenced by behaviours and beliefs from people they find attractive or powerful and therefore, perhaps take up on sexual gender stereotypic beliefs found in music lyrics of music genres they adore. Furthermore, as cultivation theory explains (Ward, 2003), youth might construct their beliefs on SGS and about viewing the body due to how the body is portrayed in their music preference.

**Gender Differences in the Associations Between Music Preferences and SGS and SO**

The regression analyses pointed out there were no significant differences between boys and girls within the relation between music preferences and SGS and SO, in contrast to the hypothesis that girls would hold more notions on SO in relation to their music preferences. This indicates that the associations of music preferences with SGS and SO are not strongly different between boys and girls.

However, correlational analyses showed a few associations between music preferences and SGS and SO that appeared to be specific for one gender. A preference for urban music for boys was linked to increased SGS. Additionally, boys with a preference for pop music showed increased SGS, while for girls pop music was related negatively to SGS. Furthermore, stronger SOgirls was found for girls in relation to urban music, indicating girls objectify other girls’ bodies and possibly their own even more. As for girls, urban music was also linked to endorsement of SOboys. Having a preference for urban music may thus indicate an increased view of the male body as a sexual object for girls. This partly supports the theory that in urban music lyrics, women are more likely to be objectified and objectify themselves, while men are more likely to engage in objectification and are the more common sources of objectification of others, especially females (Flynn et al., 2016).

**Differences Between Religious and Non-Religious Youth in the Associations between Music Preferences and SGS and SO**

Confirming the hypothesis that there are differences between non-religious and religious adolescents within the relation between music preferences and SGS and SO, the results of regression analyses showed that in some particular cases religion buffered the association between music preferences and SGS and SO. Compared to religious youth who prefer electronic music, non-religious youth had stronger SGS. Furthermore, non-religious youth listening to electronic music were more likely to sexually objectify boys than religious youth. However, religiousness had a moderation effect on the relation between elite music and SOboys.

A possible explanation for the above mentioned interaction effects might be that religion is already a strong predictor of sexual attitudes and beliefs about gender, since religious adolescents may receive more information about gender roles and relationships from their religious upbringing (Odimegwu, 2005). Possibly, this association remains stable when listening to certain music, because the relationship between religiosity and adolescent sexual attitudes and behaviour may be stronger than between music preferences and SGS and SO, while non-religious adolescents may get more information about sexuality and gender roles from the media. Consequently, non-religious youth who listen to certain music styles have more SGS and SO. However, these are assumptions that require future research.

**Contribution**

In addition to research by Ter Bogt et al. (2010) and Ward (2002), this study contributes to the field of media and music in relation to SGS and SO, by offering a more detailed view into the various factors that account for SGS. Although Ter Bogt et al.’s (2010) research already showed a link between liking specific music and stronger endorsement of SGS, the results in this research also show stronger endorsement of SO. Furthermore, the relationship between music preferences and SOboys had not been previously investigated, while this study found associations between music preferences and endorsement of SOboys. In addition, the relationship between SGS and SO had not yet been explored interacting with religion.

Studies on the relation between adolescents’ music preferences and SGS and SO are important. During adolescence, becoming comfortable with your own body and body image and learning how to deal with sexuality, relations and gender roles are important issues (Ter Bogt et al., 2010). In this rapidly changing world, young people have turned to the media and music to obtain information about these issues (Ward, 2003; Guerra et al., 2020). This study suggests that young people might have become more likely to imitate beliefs on SGS or SO in the way it is presented in their music preferences. Overemphasizing looks and SGS might lead to negative consequences. People who are preoccupied with appearance are more likely to objectify their own bodies, which implies other negative effects such as anxiety, shame and increases the opportunity of developing mental and physical problems (Fredrickson and Roberts, 1997; Ter Bogt et al., 2010).

**Limitations and Suggestions for Future Research**

However, a few limitations are present in this study. First, its cross-sectional design makes it impossible to find out whether there is a causal effect of certain music styles leading to endorsement of SGS and SO. A longitudinal experimental study could be a first step in finding out the structure of the relationship between music preferences and endorsement of SGS and SO, and discover whether music preferences precede the occurrence of stereotypes and SO in adolescents or vice versa.

Second, future research should attempt to further detail the structure of the relation between youth who listen to urban music and SGS and SO. Although previous research has suggested that overall, urban music is predominantly characterized by more sexually oriented lyrics and SGS, it is important to notice that not all songs contain sexual gender stereotypic lyrics. For example, young people who listen to urban music, may not all listen to the same songs. Therefore it is important to be careful with the use of certain music genres in a negative context and future research is needed to take into account the diversity of, for instance urban and electronic music in examining the relationship between music preferences and SGS and SO.

Third, this study used existing data from a study conducted in 2010. For this reason, the results cannot be interpreted in the present day. Much has changed in the past decade in terms of youth in relation to media and the music industry and ways of listening to music (Guerra et al., 2020). In addition, much has changed in the discourse of gender and sexuality. According to some scholars, we live in a gender revolution, in which the traditional gender system is no longer taken for granted, and the media contribute to a growing visibility of gender diversity (Vijlbrief, Saharso, and Ghorashi, 2020). Therefore it becomes interesting to investigate the relationship between the same variables of this study, with a sample from today's generation of young people.

**Conclusion**

This study found that adolescents who listen to urban and electronic music are more likely to hold sexual gender stereotypic beliefs and sexually objectify bodies. Research has suggested that exposure to certain sexual content and certain scripts about sexual gender roles, may provide an unrealistic picture of healthy sexual relationships and attitudes (Ter Bogt et al., 2010). As this study suggests that music serves as a powerful medium through which young people learn about sexual gender roles and the ways in which they view (their) bodies, it is recommended using this to educate youth on gender roles and sex in a positive and healthy way. Future research should thus focus on ways how, for example urban music, can be used to positively educate young people about sexual gender roles and sexual objectification.

# References

Bandura, A., & Walters, R. H. (1977). *Social learning theory*. Prentice Hall: Englewood Cliffs.

Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review, 88(4),* 354–364.

Dakanalis, A., & Riva, G. (2013). Mass media, body image and eating disturbances: The underlying mechanism through the lens of the objectification theory. In L.B. Sams & J.A. Keels (Eds.) *Handbook on Body Image: Gender Differences, Sociocultural Influences and Health Implications,* 217-36.

Flynn, M. A., Craig, C. M., Anderson, C. N., & Holody, K. J. (2016). Objectification in popular music lyrics: An examination of gender and genre differences. *Sex Roles*, *75*(3), 164-176. <https://doi.org/10.1007/s11199-016-0592-3>

Fredrickson, B. L., & Roberts, T.A. (1997). Objectification theory: Toward understanding women’s lived experiences and mental health risks. *Psychology of Women Quarterly, 21*(2), 173-206. <https://doi/pdf/10.1111/j.1471-6402.1997.tb00108.x>?

Fuld, G. L., Mulligan, D. A., Altmann, T. R., Brown, A., Christakis, D., Clarke-Pearson, K., Dreyer, B. P., Falik, H. L., Nelson, K. G., O’Keefe, G. S., Strasburger, V. C., Rosario González deRivas, M., Milteer, R. M., Shifrin, D. L., Brody, M., Wilcox, B., Noland, V. L. & Steiner, G. L. (2009). Policy statement-impact of music, music lyrics, and music videos on children and youth. *Pediatrics*, *124*(5), 1488-1494. <https://doi.org/10.1542/peds.2009-2145>

Guerra, P., Feixa Pampols, C., Blackman, S., & Ostegaard, J. (2020). Introduction: songs that sing the crisis: music, words, youth narratives and identities in late modernity. *YOUNG*, *28*(1), 5-13. <https://doi.10.1177/1103308819879825>

Harrison, A. C., & O'Neill, S. A. (2002). II. The development of children's gendered knowledge and preferences in music. *Feminism & Psychology*, *12*(2), 145-152. <https://doi.org/10.1177/0959353502012002004>

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/10.1080/15205430902865336>

Odimegwu, C. (2005). Influence of religion on adolescent sexual attitudes and behaviour among Nigerian university students: affiliation or commitment?. *African Journal of Reproductive Health*, 125-140.

Peter, J., & Valkenburg, P. M. (2007). Adolescents’ exposure to a sexualized media environment and their notions of women as sex objects. *Sex Roles*, *56*(5-6), 381-395. <https://doi.org/10.1007/s11199-006-9176-y>

Reynolds, S. (2013). *Generation ecstasy: Into the world of techno and rave culture*. Routledge. <https://doi.org/10.4324/9780203824962>

Steele, J. R., & Brown, J. D. (1995). Adolescent room culture: Studying media in the context of everyday life. *Journal of Youth and Adolescence, 24*(5), 551-576.

Ter Bogt, T. F., Engels, R. C., Bogers, S., & Kloosterman, M. (2010). “Shake it baby, shake it”: Media preferences, sexual attitudes and gender stereotypes among adolescents. *Sex Roles*, *63*(11), 844-859. <https://doi.org/10.1007/s11199-010-9815-1>

Vanwesenbeeck, I. (2020). Sociale perspectieven op gender en seks: Verworvenheden en uitdagingen. *Tijdschrift Voor Seksuologie*, *44*(2)*, 58-67*.

Vijlbrief, A., Saharso, S., & Ghorashi, H. (2020). Transcending the gender binary: Gender non-binary young adults in Amsterdam. *Journal of LGBT Youth*, *17*(1), 89-106. <https://doi.org/10.1080/19361653.2019.1660295>

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](https://doi.org/10.1023/A%3A1014068031532)

Ward, L. M. (2003). Understanding the role of entertainment media in the sexual socialization of American youth: A review of empirical research. *Developmental Review*, *23*(3), 347-388. [https://doi.org/10.1016/S0273-2297(03)00013-3](https://doi.org/10.1016/S0273-2297%2803%2900013-3)

Ward, L. M., Epstein, M., Caruthers, A., & Merriwether, A. (2011). Men's media use, sexual cognitions, and sexual risk behavior: Testing a mediational model. *Developmental Psychology*, *47*(2), 592–602. <https://doi.org/10.1037/a0022669>

Wiltsher, N. (2016). The aesthetics of electronic dance music, part I: history, genre, scenes, identity, blackness. *Philosophy Compass*, *11*(8), 415-425. <https://doi.org/10.1111/phc3.12333>

Wright, C. L., & Rubin, M. (2017). “Get lucky!” Sexual content in music lyrics, videos and social media and sexual cognitions and risk among emerging adults in the USA and Australia. *Sex Education*, *17*(1), 41-56. <https://doi.org/10.1080/14681811.2016.1242402>

# Appendix 1

SPSS Syntax:

\*\*\*\*\*\*Descriptive statistics gender differences and music preferences

GLM POP URBAN ELITE ELECTRONIC ROCK\_METAL BY gender

 /METHOD=SSTYPE(3)

 /INTERCEPT=INCLUDE

 /EMMEANS=TABLES(OVERALL)

 /EMMEANS=TABLES(gender)

 /PRINT=DESCRIPTIVE ETASQ

 /CRITERIA=ALPHA(.05)

 /DESIGN= gender.

\*\*\*\*\*\*.Descriptive statistics group differences incl gender, age, education and religion for SGS1,2,3, 4, SOboys and SOgirls

DATASET ACTIVATE DataSet1.

GLM SO\_boys SGS\_f1 SGS\_f2 SGS\_f3 SO\_girls SGS\_f4 BY Religion\_yes\_dummy education\_2 Age\_2\_cat

 /METHOD=SSTYPE(3)

 /INTERCEPT=INCLUDE

 /PRINT=DESCRIPTIVE ETASQ

 /CRITERIA=ALPHA(.05)

 /DESIGN= Religion\_yes\_dummy education\_2 Age\_2\_cat Religion\_yes\_dummy\*education\_2 Religion\_yes\_dummy\* Age\_2\_cat

 education\_2\* Age\_2\_cat Religion\_yes\_dummy\*education\_2\* Age\_2\_cat

GLM SO\_boys SGS\_f1 SGS\_f2 SGS\_f3 SO\_girls SGS\_f4 BY Age\_2\_cat

 /METHOD=SSTYPE(3)

 /INTERCEPT=INCLUDE

 /PRINT=DESCRIPTIVE ETASQ

 /CRITERIA=ALPHA(.05)

 /DESIGN= Age\_2\_cat

\*\*\*\*\*\*.Zero-order Pearson correlations music factors with SGS and SOgirls and SOboys

CORRELATIONS

 /VARIABLES=SGS\_f1 SGS\_f2 SGS\_f3 POP\_c SGS\_f4 ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /PRINT=TWOTAIL NOSIG FULL

 /STATISTICS DESCRIPTIVES /CI CILEVEL(95) BIAS(TRUE)

 /MISSING=PAIRWISE.

NONPAR CORR

 /VARIABLES=SGS\_f1 SGS\_f2 SGS\_f3 POP\_c SGS\_f4 ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /PRINT=BOTH TWOTAIL NOSIG FULL

 /CI METHOD(FHP) CILEVEL(95)

 /MISSING=PAIRWISE.

**CORRELATIONS**

 /VARIABLES=gender SGS\_f1 SGS\_f2 SGS\_f3 SGS\_f4 POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /PRINT=TWOTAIL NOSIG FULL

 /STATISTICS DESCRIPTIVES /CI CILEVEL(95)

 /MISSING=PAIRWISE.

**CORRELATIONS**

 /VARIABLES=So\_boys, SO\_girls, ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /PRINT=TWOTAIL NOSIG FULL

 /STATISTICS DESCRIPTIVES /CI CILEVEL(95) BIAS(TRUE)

 /MISSING=PAIRWISE.

NONPAR CORR

 /VARIABLES=SGS\_f1 SGS\_f2 SGS\_f3 POP\_c SGS\_f4 ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /PRINT=BOTH TWOTAIL NOSIG FULL

 /CI METHOD(FHP) CILEVEL(95)

 /MISSING=PAIRWISE.

\*\*\*\*\*\*.Regression analyses for music factors with SGS and SOgirls and SOboys, controlled for age and education, interacting with gender and religion

**DATASET ACTIVATE DataSet2.**

GLM SGS\_f1 SGS\_f2 SGS\_f3 SGS\_f4 BY gender Religion\_yes\_dummy education\_2

 /METHOD=SSTYPE(3)

 /INTERCEPT=INCLUDE

 /CRITERIA=ALPHA(.05)

 /DESIGN= gender Religion\_yes\_dummy education\_2 gender\*Religion\_yes\_dummy gender\*education\_2

 Religion\_yes\_dummy\*education\_2 gender\*Religion\_yes\_dummy\*education\_2.

**\*\*\*\*\*RECODE age (13 thru 14=0) (15 thru 16=1) (ELSE=SYSMIS) INTO Age\_2\_cat.**

VARIABLE LABELS Age\_2\_cat 'Age in 2 categories'.

EXECUTE.

GLM SGS\_f1 SGS\_f2 SGS\_f3 SGS\_f4 BY gender Religion\_yes\_dummy education\_2 Age\_2\_cat WITH POP\_c

 ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=SSTYPE(3)

 /INTERCEPT=INCLUDE

 /PRINT=DESCRIPTIVE ETASQ

 /CRITERIA=ALPHA(.05)

 /DESIGN=gender Religion\_yes\_dummy education\_2 Age\_2\_cat POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c

 URBAN\_c.

execute.

GLM SGS\_f1 SGS\_f2 SGS\_f3 SGS\_f4 BY gender Religion\_yes\_dummy education\_2 Age\_2\_cat WITH POP\_c

 ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=SSTYPE(3)

 /INTERCEPT=INCLUDE

 /PRINT=DESCRIPTIVE ETASQ

 /CRITERIA=ALPHA(.05)

 /DESIGN=gender Religion\_yes\_dummy education\_2 Age\_2\_cat POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c

 URBAN\_c POP\_c\*gender ROCK\_METAL\_c\*gender ELECTRONIC\_c\*gender ELITE\_c\*gender URBAN\_c\*gender

 POP\_c\*Religion\_yes\_dummy ROCK\_METAL\_c\*Religion\_yes\_dummy ELECTRONIC\_c\*Religion\_yes\_dummy

 ELITE\_c\*Religion\_yes\_dummy Religion\_yes\_dummy\*URBAN\_c.

**REGRESSION**

 /MISSING LISTWISE

 /STATISTICS COEFF OUTS R ANOVA CHANGE

 /CRITERIA=PIN(.05) POUT(.10)

 /NOORIGIN

 /DEPENDENT SGS\_f1

 /METHOD=ENTER Age\_2\_cat education\_2

 /METHOD=ENTER gender Religion\_yes\_dummy

 /METHOD=ENTER POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=ENTER Interaction\_pop\_gender Interaction\_elite\_gender Interaction\_urban\_gender

 Interaction\_rock\_gender Interaction\_electro\_gender interaction\_pop\_religion

 interaction\_rock\_religion interaction\_electro\_religion interaction\_elite\_religion

 interaction\_urban\_religion.

execute.

**REGRESSION**

 /MISSING LISTWISE

 /STATISTICS COEFF OUTS R ANOVA CHANGE

 /CRITERIA=PIN(.05) POUT(.10)

 /NOORIGIN

 /DEPENDENT SGS\_f2

 /METHOD=ENTER Age\_2\_cat education\_2

 /METHOD=ENTER gender Religion\_yes\_dummy

 /METHOD=ENTER POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=ENTER Interaction\_pop\_gender Interaction\_elite\_gender Interaction\_urban\_gender

 Interaction\_rock\_gender Interaction\_electro\_gender interaction\_pop\_religion

 interaction\_rock\_religion interaction\_electro\_religion interaction\_elite\_religion

 interaction\_urban\_religion.

**REGRESSION**

 /MISSING LISTWISE

 /STATISTICS COEFF OUTS R ANOVA CHANGE

 /CRITERIA=PIN(.05) POUT(.10)

 /NOORIGIN

 /DEPENDENT SGS\_f2

 /METHOD=ENTER Age\_2\_cat education\_2

 /METHOD=ENTER gender Religion\_yes\_dummy

 /METHOD=ENTER POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=ENTER interaction\_electro\_religion.

**REGRESSION**

 /MISSING LISTWISE

 /STATISTICS COEFF OUTS R ANOVA CHANGE

 /CRITERIA=PIN(.05) POUT(.10)

 /NOORIGIN

 /DEPENDENT SGS\_f3

 /METHOD=ENTER Age\_2\_cat education\_2

 /METHOD=ENTER gender Religion\_yes\_dummy

 /METHOD=ENTER POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=ENTER Interaction\_pop\_gender Interaction\_elite\_gender Interaction\_urban\_gender

 Interaction\_rock\_gender Interaction\_electro\_gender interaction\_pop\_religion

 interaction\_rock\_religion interaction\_electro\_religion interaction\_elite\_religion

 interaction\_urban\_religion.

**REGRESSION**

 /MISSING LISTWISE

 /STATISTICS COEFF OUTS R ANOVA CHANGE

 /CRITERIA=PIN(.05) POUT(.10)

 /NOORIGIN

 /DEPENDENT SGS\_f3

 /METHOD=ENTER Age\_2\_cat education\_2

 /METHOD=ENTER gender Religion\_yes\_dummy

 /METHOD=ENTER POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=ENTER Interaction\_pop\_gender Interaction\_elite\_gender Interaction\_urban\_gender

 Interaction\_rock\_gender Interaction\_electro\_gender interaction\_pop\_religion

 interaction\_rock\_religion interaction\_electro\_religion interaction\_elite\_religion

 interaction\_urban\_religion.

**REGRESSION**

 /MISSING LISTWISE

 /STATISTICS COEFF OUTS R ANOVA CHANGE

 /CRITERIA=PIN(.05) POUT(.10)

 /NOORIGIN

 /DEPENDENT SGS\_f4

 /METHOD=ENTER Age\_2\_cat education\_2

 /METHOD=ENTER gender Religion\_yes\_dummy

 /METHOD=ENTER POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=ENTER Interaction\_pop\_gender Interaction\_elite\_gender Interaction\_urban\_gender

 Interaction\_rock\_gender Interaction\_electro\_gender interaction\_pop\_religion

 interaction\_rock\_religion interaction\_electro\_religion interaction\_elite\_religion

 interaction\_urban\_religion.

**REGRESSION**

 /MISSING LISTWISE

 /STATISTICS COEFF OUTS R ANOVA CHANGE

 /CRITERIA=PIN(.05) POUT(.10)

 /NOORIGIN

 /DEPENDENT SGS\_f4

 /METHOD=ENTER Age\_2\_cat education\_2

 /METHOD=ENTER gender Religion\_yes\_dummy

 /METHOD=ENTER POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=ENTER interaction\_electro\_religion.

**REGRESSION**

 /MISSING LISTWISE

 /STATISTICS COEFF OUTS R ANOVA CHANGE

 /CRITERIA=PIN(.05) POUT(.10)

 /NOORIGIN

 /DEPENDENT SO\_girls

 /METHOD=ENTER Age\_2\_cat education\_2

 /METHOD=ENTER gender Religion\_yes\_dummy

 /METHOD=ENTER POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=ENTER Interaction\_pop\_gender Interaction\_elite\_gender Interaction\_urban\_gender

 Interaction\_rock\_gender Interaction\_electro\_gender interaction\_pop\_religion

 interaction\_rock\_religion interaction\_electro\_religion interaction\_elite\_religion

 interaction\_urban\_religion.

**REGRESSION**

 /MISSING LISTWISE

 /STATISTICS COEFF OUTS R ANOVA CHANGE

 /CRITERIA=PIN(.05) POUT(.10)

 /NOORIGIN

 /DEPENDENT SO\_boys

 /METHOD=ENTER Age\_2\_cat education\_2

 /METHOD=ENTER gender Religion\_yes\_dummy

 /METHOD=ENTER POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=ENTER Interaction\_pop\_gender Interaction\_elite\_gender Interaction\_urban\_gender

 Interaction\_rock\_gender Interaction\_electro\_gender interaction\_pop\_religion

 interaction\_rock\_religion interaction\_electro\_religion interaction\_elite\_religion

 interaction\_urban\_religion.

**REGRESSION**

 /MISSING LISTWISE

 /STATISTICS COEFF OUTS R ANOVA CHANGE

 /CRITERIA=PIN(.05) POUT(.10)

 /NOORIGIN

 /DEPENDENT SO\_boys

 /METHOD=ENTER Age\_2\_cat education\_2

 /METHOD=ENTER gender Religion\_yes\_dummy

 /METHOD=ENTER POP\_c ROCK\_METAL\_c ELECTRONIC\_c ELITE\_c URBAN\_c

 /METHOD=ENTER interaction\_electro\_religion interaction\_elite\_religion.

# Appendix 2

# scripties_fsw_onlineIgitur form

Please save this form, modify it and e-mail it to your supervisor together with the digital final version of your thesis. For further questions see: <http://studion.fss.uu.nl/helpdesk/student/scrol>

|  |  |
| --- | --- |
| Student nummer: | 5649951 |
| Initials & prefixes: | M.E.  |
| Family name: | Ketelaar |
| Master: | Youth Studies  |

*Begeleider*

|  |  |
| --- | --- |
| Name supervisor/assesor: \* | Tom ter Bogt |
| Name 2th assesor: | Ina Koning  |

*Scriptie*

|  |  |
| --- | --- |
| Title thesis: \* | **“**Naughty By Nature”?: Music Preferences in Relation to Sexual Gender Stereotypes and Sexual Objectification Among Youth |
| Language thesis: \* | English  |
| Abstract: | Previous research indicated that music has become a prominent medium that can influence adolescents' sexual attitudes and gender stereotypes. Building on social learning theory and cultivation theory, this study examined adolescents' music preferences in relation to sexual gender stereotypes and sexual objectification. Complementing previous studies, it examined not only sexual objectification of the female body but also of the male body, and whether this relationship differs between boys and girls, and between religious and non-religious adolescents. Correlation and regression analyses of data from a 2010 sample of 480 Dutch high school students, aged 13 to 16, showed that music preferences were associated with sexual gender stereotyping and sexual objectification. Urban music was consistently related to higher levels of sexual gender stereotyping and sexual objectification. There were no significant differences between boys and girls. Among non-religious adolescents compared to religious adolescents, a preference for electronic music was associated with higher sexual gender stereotyping and sexual objectification of boys. Further research should focus on exploring ways in which urban music can be used to keep adolescents from sexual gender stereotyping and sexual objectification, and instead educate them about gender roles and sex in a positive, healthy way. |
| Key words:(seperated by ;) | Adolescents; sexual gender stereotypes; sexual objectification; music; music preferences; gender; religion |
| Make public: \* | **Yes**/ No |
| Make public after date: | 21st of June 2022  |

Ingevuld op: \* 10-6-2022

Door: \* Marlotte Ketelaar

\* = Obliged to fill in

# Appendix 3

**Registration Form: Research Activities for TED-students (in total 60 hrs)**

**Marlotte Ketelaar ………………………………………………(Name)**

**5649951………………………………………………………(Student number)**

|  |  |  |
| --- | --- | --- |
| **Research Activities** | **Total number of Hours**  | **Signature YS staff** |
| Helping a PhD student with his research on music listening by being interviewed (including preparation, filling in consent form etc.) | **2,5 hours**  |  |
| Helping a PhD student with his research on music listening by keeping a daily journal for a week about listening to music.  | **14 hours** |  |
| Helping a PhD student with his research on music listening by collecting and providing certain data forms that he will use for his research. | **3,5 hours**  |  |
| Assisted the LEF research project by analyzing the data and designing a fact sheet (using SPSS, EXCEL and Canva). | **25 hours** |  |
| **Final hours will be worked in June 2022 as an assistant of Ina Koning** |  | **Tom ter Bogt** |
|  |  |  |
| **Total** | **60** | **Afbeelding met insect, hangertje  Automatisch gegenereerde beschrijving** |