



**“Identity Determined By Music Taste?”: Music preferences and gender in  
relation to the identity formation of adolescents**

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### **Abstract**

Identity formation and music both play an important role in the development of adolescents. However, studies on the relation between music preferences and identity formation of adolescents are lacking. Therefore, the present study investigated whether adolescents' music preferences predict their identity formation two years later, and if this relationship was affected by gender. Data from the Conflict and Management of Relationships (CONAMORE) study collected between 2001 and 2005 were used. The sample included 921 adolescents between 13 and 18 years old. Adolescents' music preferences, measured in wave 3, were subsumed under the general labels of Rock, Pop, Urban, Elite and Dance. Identity formation was measured in wave 5 in two dimensions: commitment and reconsideration. The results showed that contrary to expectations, Rock fans did not score lower on commitment, and even scored lower on reconsideration. Another notable finding was that Pop fans showed positive outcomes on all variables, that is more commitment and less reconsideration. No gender interactions were found. Thus, results suggest that adolescents who prefer Pop, and to a lesser extent Rock, music show positive outcomes in their identity formation, and that this holds for both boys and girls.

### **Abstract (Dutch)**

Identiteitsvorming en muziek spelen beide een belangrijke rol in de ontwikkeling van adolescenten. Studies naar de relatie tussen muziekvoorkeuren en identiteitsvorming van adolescenten ontbreken echter. Daarom onderzocht de huidige studie of muziekvoorkeuren van adolescenten hun identiteitsvorming twee jaar later voorspellen, en of deze relatie werd beïnvloed door geslacht. Er is gebruik gemaakt van gegevens uit de studie Conflict and Management of Relationships (CONAMORE) die tussen 2001 en 2005 is verzameld. De steekproef omvatte 921 adolescenten tussen 13 en 18 jaar oud. De muziekvoorkeuren van adolescenten, gemeten in golf 3, werden ondergebracht in de algemene labels Rock, Pop, Urban, Elite en Dance. Identiteitsvorming werd in wave 5 gemeten in twee dimensies: commitment en heroverweging. Uit de resultaten bleek dat Rockfans, tegen de verwachting in, niet lager scoorden op commitment en zelfs lager scoorden op heroverweging. Een andere opvallende bevinding was dat Popfans positieve resultaten lieten zien op alle variabelen, dat wil zeggen meer commitment en minder heroverweging. Er werden geen geslachtsinteracties gevonden. De resultaten suggereren dus dat adolescenten die de voorkeur geven aan popmuziek, en in mindere mate aan rockmuziek, positieve resultaten laten zien in hun identiteitsvorming, en dat dit geldt voor zowel jongens als meisjes.

## Introduction

Adolescence can be seen as one of the most important periods in life, since it is a time when great changes occur on physical, as well as the cognitive, social, and emotional level (Spano, 2004). During this period, adolescents are looking for autonomy, becoming self-governing and trying to fit into society (Steinberg, 2019). As they self-discover, adolescents try out different roles and behaviors and experiment with different identities and develop a sense of direction in life (Erikson, 1968). A stable and strong sense of identity was found to be associated with better mental health in adolescents (Ragelienė, 2016), with identity uncertainty possibly resulting in feelings of despair (Lichtwarck-Aschoff et al., 2008).

The adolescence period is also the period in life when music is most listened to, peaking at 18 years old with an average of 25 hours a week, and has previously been related to personality characteristics and behavior outcomes (Bonneville-Roussy et al., 2013; Ter Bogt et al., 2021). Music seems to play an essential role in helping young people to explore their identities (Delsing, 2008). In the process of identity formation, commitment and reconsideration of commitment are considered two different dimensions (Becht, 2016). In adolescence, high levels of commitment (i.e., identity certainty) have been associated with positive psychosocial adjustment (Crocetti et al., 2008), while high levels of reconsideration of commitment (i.e., identity uncertainty) appears to contribute to distress, such as anxiety (Luckx et al., 2008). This shows these identity outcomes are related to factors that influence an individual's mental health. Both music and identity formation seem to play an important role in the development of adolescents, nevertheless, research on music preferences and identity formation is lacking. Therefore, this study aims to further examine if musical preferences are related to two aspects of identity formation: commitment and reconsideration of commitment.

### **Theory: Adolescent Identity**

According to Erikson (1968), one of the main and most important developmental tasks for adolescents is to solve the crisis of identity and develop their identity. Personal identity refers “to one's sense of the person one genuinely is, including a subjective feeling of self-sameness and continuity over contexts and time” (Branje et al., 2021, p. 908). At the beginning of adolescence, adolescents start to question and explore what they like, where they fit in and whom they want to become. One way to do this is by integrating past, present, and future selves into a personal narrative about their lives (McAdams, 2001).

Marcia (1966) redefined and extended Erikson's views on identity formation. He developed four identity statuses based on the two key processes in identity formation:

exploration and commitment (Marcia, 1966). Exploration is defined as to what extent various alternative commitments have been considered in different domains (gender roles, parents, friends, study, occupation, etc.). Commitment is the degree to which adolescents are committed to choices they have made in different identity domains. These processes lead to the four identity statuses of identity development: identity diffusion (D), foreclosure (F), moratorium (M) and identity achievement (A). Diffusion indicates that the adolescent has not yet made a commitment and could or could not have explored different alternatives. In foreclosure, the adolescent has made a commitment without much exploration. Moratorium is the stage of much exploration, but no commitment yet. In identity achievement, the adolescent has finished their exploration and has made commitments. These identity statuses can be different per domain.

A more recent framework to capture the process of adolescents' identity formation on a daily basis, is the Meeus-Crocetti model (Crocetti et al., 2008; Meeus et al., 2011), which has been proven to be useful (Klimstra et al., 2010). In this framework it is assumed that adolescents start their identity formation while already possessing certain identity commitments (Meeus et al., 1999). These commitments are challenged in the process of identity formation (Erikson, 1968). In the Meeus-Crocetti model this is a dynamic process between the dimensions commitment (i.e., identity certainty) and reconsideration of commitment (i.e., identity uncertainty). Daily levels of identity commitments reflect adolescents' attempts to develop and maintain a stable identity (Becht, 2016). High levels of certainty showed the most positive psychosocial adjustment across adolescence (Crocetti et al., 2008; Meeus et al., 1999, 2012). Contrary, daily levels of reconsideration represent adolescents' uncertainty in identity formation, where adolescents compare commitments with alternative ones (Becht, 2016). Moreover, daily measures of identity reconsideration in early adolescence have been found to predict later anxiety and depression (Schwartz et al., 2011).

### **The Role of Music**

Music is an important medium for adolescents and it has been used as a guidance for self-discovery, self-regulation, and self-expression for most young people (Bonneville-Roussy et al., 2013). Music plays a role in various domains and has been reported to have many functions (North et al., 2004), such as managing self-identity (Hargreaves & North, 1999) and developing a social identity (Ter Bogt et al., 2011). According to Arnett (1991) and Roe (1995), adolescents consume the type of media that fits with their personality and social context. Besides the fact that music in general is related to various aspects of an individuals' life, specific music genres can be linked to personality characteristics (Delsing et al., 2008),

behavior (Ter Bogt et al., 2013) and school achievement (Roe, 1995). These preferences of music genres are already in place by early adolescence, and remain stable across adolescence (Delsing et al., 2008), with certain music preferences predicting more positive results than others. Specifically, Rock fans have shown in various studies to be related to negative outcomes, such as being involved in a problematic relation with school and teachers, and consistently showing more risky behavior (Arnett, 1991). Furthermore, a negative relationship between *heavy metal fans* and school achievement was found (Roe, 1995), *all-out rock fans* displayed the highest peak in depressive symptoms and the lowest dip in well-being, and *rock/metal fans* reported the most aggression (Ter Bogt et al., 2021). Also preferences for loud, rebellious, and so-called “deviant” music predict externalizing problem behavior, like minor delinquency and substance use (Ter Bogt et al., 2013). In previous studies, other individual differences in music preferences were investigated, however, these are often related to personality and psychological characteristics (Bonneville-Roussy et al., 2013). Little is known about music preferences in relation to identity.

### **Gender, Music, and Identity**

Adolescents’ music preferences and their relation to identity outcomes could differ among adolescents. First, gender differences occur in music preferences, where boys showed stronger preferences for rock and girls for elite and urban (Delsing et al., 2008). Gender differences were also found in the reasons to listen to music. Men tended to rate music as more important than women, and used music more to support their social identity, while women were more likely to listen to music for mood enhancement and personal identity construction (Ter Bogt et al., 2011). Second, gender differences are found in identity formation. It appears females are “further ahead” of males when overall identity is measured (Meeus et al., 2011). Dutch females possibly combine their stronger interpersonal commitments with stronger educational commitments (Meeus & Deković, 1995). However, males tend to “catch up” during adolescence (Kroger, 1997). Since gender differences occur in both music preferences, and identity formation, it would be interesting to include the role of gender in this relation.

### **The Gap**

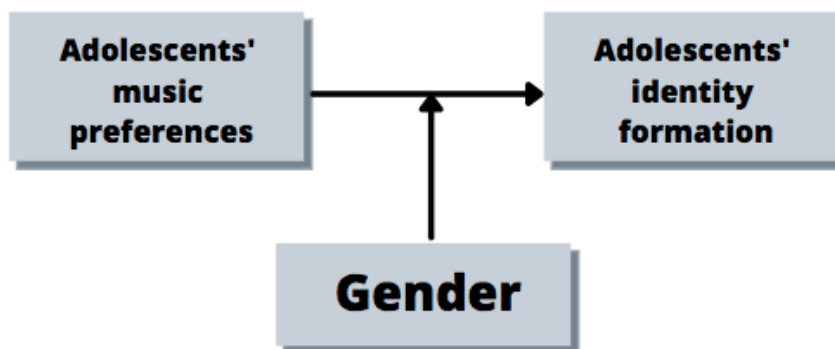
It seems both identity formation and music play an important role in the development of adolescents. Identity formation is a dynamic process of commitments and reconsidering these commitments (Crocetti et al., 2008). Adolescents with relatively high identity certainty showed the most positive psychosocial adjustment, whereas uncertainty contributes to distress (Becht, 2016). Music on the other hand is listened to by adolescents for many reasons and is

an important medium during the adolescence period (North et al., 2004). Music can also predict certain personality traits and behavior, and also plays a role in managing self-identity and developing social identity (Bonneville-Roussy et al., 2013). Little research has investigated the link between adolescent music preferences and identity formation. Since forming preferences of music already takes place in early adolescence and remains stable, this could predict an adolescents' identity formation.

### **The Current Study**

In light of the evidence and reasoning summarized above, the major aim of the current study is to test whether there is a relation between adolescents' music preferences and identity formation comprising two structural dimensions: commitment and reconsideration of commitment. Music preferences already seem to be in place in early adolescence and remain stable (Delsing et al., 2008), whereas identity is developed at a later stage in adolescence (Erikson, 1968). For this reason, a prospective study is conducted, to explore if music preferences could predict the identity formation of adolescents. Identity formation occurs across various domains (Crocetti, 2008), therefore the identity dimensions will be tested in multiple domains. Since Rock fans have previously been related to negative outcomes (Arnett, 1991; Roe, 1995; Ter Bogt et al., 2013; Ter Bogt et al., 2021), there will be a focus on adolescents who prefer Rock music. The second aim of the study is to investigate whether there are gender differences in the relation between music preferences and identity formation. Specifically, girls are expected to form stronger commitments at an earlier stage (Meeus & Deković, 1995). The third aim of the present study is to explore whether there are relations between the other music genres besides Rock (Pop, Dance, Elite, and Urban), and identity formation. Research is important to better understand the relation between music preferences and identity, since identity development plays an important role for adolescents in their process of looking for autonomy, becoming self-governing, and trying to fit into society (Steinberg, 2019). Therefore, this study is focused on the following question: *to what extent do music preferences predict an adolescents' identity formation two years later, and is this relation moderated by gender?* Based on the theory a conceptual model was designed in Figure 1.

### **Figure 1 conceptual research model**



Both dimensions of identity formation, commitment and reconsideration, will be tested in the educational and relational domain. Based on the review of the literature it was hypothesized *that adolescents who prefer Rock music, two years later score lower on commitment* (Hypothesis 1). Additionally, it was assumed that *adolescents who prefer Rock music, two years later score higher on reconsideration* (Hypothesis 2). Furthermore, it was hypothesized *that girls score higher on the relation between music genres and identity commitment* (Hypothesis 3). Given the limited empirical literature on these topics, exploratory research will be conducted on the other music genres and identity formation across both domains. Consequently, no further expectations were made.

## Method

### Sample

This research analyzed existing data from the longitudinal research project “CONflicts And Management Of Relationships” (CONAMORE). This longitudinal study consists of five annual data collection waves from 2001-2006. The fifth wave was conducted in the fall of 2005, in which students from 12 secondary schools in Utrecht province, in the Netherlands, participated. This sample included data from 921 adolescents (49.2% girls; 50.8% boys) whose ages ranged from 12 to 16. The project investigates the adolescents’ music preferences, their educational identity, and their relational identity concerning their best friend.

### Procedure

Parents and students received a letter in which the aims of the study were described and information was given about the option of not participating. Less than 1% of the students decided to not participate. Data of these students, as well as their parents and best friend, has been collected annually for five years, through self-report surveys conducted at home. Written instructions were also included. Students who were absent on the days of testing were not



assessed. Confidentiality of responses was guaranteed. The adolescents received €10 as a reward for every wave in which they participated.

## Measuring Instruments

### *Gender*

Gender was measured using a single-item measure. Adolescents answered one question: ‘Are you a boy (=1) or a girl (=2)’.

### *Music Preferences*

In this research, a selection was made from the items included in the questionnaire of the CONAMORE study (2001-2006) on liking different genres within music in wave 3, by asking “*To what extent do different music styles appeal to you? Do you think the music styles named below are ‘very good’, ‘very bad’, or something in between? When you don’t know a music style, fill in the box ‘don’t recognize’.*” Subjects were asked to indicate on five-point-Likert-scale items “the extent to which they liked” each of the genres (ranging from 1 = *very bad* to 5 = *very good*, or 6 = *don’t recognize*). Scores from option 6 were treated as missing values that were estimated in the analyses. The current study divided 13 items into five groups that indicate a certain music preference: 1. Pop (Pop and PopNL), 2. Elite (Jazz and Classical music), 3. Dance (Trance, Club House Mellow, Gabber Hardcore), 4. Urban (Hip hop and R&B), and 5 Rock (Rock, Heavy Metal, Gothic, and Punk New Wave). The music categories ‘Reggae’ and ‘Smartlap’ were excluded from this study since they did not fit in the determined music genres (Ter Bogt et al., 2012). Reliability was calculated for each music preference: Urban  $\alpha = .72$ , Rock  $\alpha = .86$ , Dance  $\alpha = .72$ , Pop  $\alpha = .50$  and Elite  $\alpha = .48$ .

### *Identity formation*

Identity formation in wave 5 was assessed with the Utrecht-Management Scale (U-MICS), a self-report measure designed by Meeus (Crocetti et al., 2010). In the Meeus-Crocetti model (Crocetti et al., 2008; Meeus et al., 2011), identity formation is a dynamic process between identity certainty (i.e., commitment) and identity uncertainty (i.e., reconsideration of commitment). Therefore, this study focuses on the dimensions commitment and reconsideration of commitment. A high score on commitment, and a low score on reconsideration, is interpreted as a positive outcome, and vice versa. These dimensions were measured in the educational, work, and relational domain. There is a focus on the educational and relational identity domain, since these are found to be relevant identity domains (McLean et al., 2014). Additionally, not all adolescents are active in the work domain, therefore this domain is excluded from the present study. The instrument to measure these dimensions consists of 16 five-point-Likert-scale items (1 = *completely untrue*, 5 = *completely true*). Per

domain, there are five items measuring commitment, and three items measuring reconsideration of commitment.

*Commitment* refers to strong choices that adolescents have made concerning the educational and relational domain. A sample item is “My education gives me security in life”. Reliability was calculated for each domain in commitment: educational  $\alpha = .92$  and relational  $\alpha = .92$

*Reconsideration of commitment* refers to the willingness to discard one’s commitments and to search for new commitments when the present ones are no longer satisfactory. A sample item is “I often think it would be better to try to find a different best friend”. Reliability was calculated for each domain in reconsideration: educational  $\alpha = .87$  and relational  $\alpha = .91$ .

### **Data Analysis**

First, descriptive statistics were addressed to examine group differences including gender, music preferences, and identity outcomes. Second, in order to reduce 13 music preferences to certain music genres, a principal axis factoring with oblimin rotation was conducted. Subsequently, the music genres were standardized. Third, the variables gender ( $0 = \text{girl}$  and  $1 = \text{boy}$ ), and commitment and reconsideration ( $1 = \text{completely true}$ ,  $5 = \text{completely untrue}$ ) were recoded. Fourth, in order to determine links between music preferences, gender, and identity formation (EC, ER, RC, and RR), four multiple regression analyses were conducted. Each multiple regression analysis consists of three models: gender was tested in the first model, music preferences were added in the second model, and the interactions, between gender and music preferences, were added in the third model.

### **Results**

The study aimed to examine whether music preferences of adolescents (in wave 3) predict their identity formation in different domains (in wave 5), whereby the moderating effect of gender in this relation is included. The results of three different models are presented; gender (model 1), gender and music preferences (model 2), and a two-way interaction of gender and music preferences (model 3).

**Education Commitment (EC).** In table 1 the results of gender and music preferences regarding EC are shown. In model 1, no significant result was found for gender. When the effects of music preferences are added in model 2, results indicate that boys show higher EC than girls ( $p = .002$ ). Similarly, adolescents who prefer Pop music score higher on education commitment ( $p < .001$ ), whereas adolescents who prefer Dance music score lower on education commitment ( $p = .006$ ). Model 2 shows an explained variance of 4%. No significant interactions were found in model 3. In summary, these results are not in line with

the hypothesis that adolescents who prefer Rock music score lower on EC. Additionally, Pop fans scored higher on EC and Dance fans scored lower on EC.

Table 1

*Regression Analysis of Gender and Music Preferences in Relation to Education Commitment*

	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	$\beta$	<i>B</i>	<i>SE</i>	$\beta$
<i>Background</i>						
Gender	.08	.05	.05	.17	.05	.12**
<i>Music preferences</i>						
Rock				-.00	.02	-.01
Urban				.04	.02	-.06
Dance				-.08	.03	-.10**
Elite				-.03	.03	-.04
Pop				.13	.03	.17***
<i>R</i> <sup>2</sup>	.00			.04		
<i>F Change</i>	2.375			5.515***		

*Note.*  $N = 846$ . Dependent variable: wave 5 Education Commitment. The non-significant interactions between music and gender are absent from this Table.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Education Reconsideration (ER).** Table 2 shows that no significant results were found in model 1. In model 2, adolescents who prefer Rock music ( $p = .012$ ) or Pop music ( $p < .001$ ) score lower on ER. This model shows an explained variance of 4%. In model 3 no significant interactions were found. Thus, inconsistent with the hypothesis, results showed that adolescents who prefer Rock music would score higher on ER, Rock fans scored lower on ER. Additionally, Pop fans also scored lower on ER.

Table 2

*Regression Analysis of Gender and Music Preferences in Relation to Education Reconsideration*

	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	$\beta$	<i>B</i>	<i>SE</i>	$\beta$

<i>Background</i>						
Gender	.08	.06	.05	-.01	.7	-.00
<i>Music preferences</i>						
Rock				-.08	.03	-.09*
Urban				.05	.03	.06
Dance				.07	.04	.07
Elite				.05	.04	.05
Pop				-.17	.04	-.18***
<i>R</i> <sup>2</sup>		.00			.04	
<i>F Change</i>		1.619			5.766***	

*Note.*  $N = 846$ . Dependent variable: wave 5 Education Reconsideration. The non-significant interactions between music and gender are absent from this Table.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Relational Commitment (RC).** The results in Table 3 show that, in model 1, boys show lower RC than girls ( $p < .001$ ). Similar results regarding gender were found in model 2 ( $p < .001$ ). In model 2, adolescents who prefer Pop music score higher on RC ( $p = .020$ ) and those preferring Elite music scored lower ( $p = .004$ ). Model 2 shows an explained variance of 4%. No significant interactions were found in model 3. Thus, contrary to the expectations, no support was found for the hypothesis that adolescents who prefer Rock music score lower on RC. Additionally, Pop fans scored higher on RC, while Elite fans scored lower on RC.

Table 3

*Regression Analysis of Gender and Music Preferences in Relation to Relational Commitment*

	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	$\beta$	<i>B</i>	<i>SE</i>	$\beta$
<i>Background</i>						
Gender	-.20	.05	-.14***	-.18	.05	-.12***
<i>Music preferences</i>						
Rock				-.01	.03	-.01
Urban				.02	.02	.03
Dance				-.00	.03	-.00
Elite				-.08	.03	-.10**
Pop				.07	.03	.09*
<i>R</i> <sup>2</sup>		.02			.04	
<i>F Change</i>		16.180***			2.872*	

*Note.*  $N = 859$ . Dependent variable: wave 5 Relational Commitment. The non-significant interactions between music and gender are absent from this Table.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Relational Reconsideration (RR).** According to model 1, in Table 4, results indicate that boys score higher on RR than girls ( $p < .001$ ). Similar results regarding gender were found in model 2 ( $p < .001$ ). In line with the results of music preferences on ER, adolescents who prefer Rock music ( $p = .005$ ) or Pop music ( $p = .026$ ) score lower on RR. Model 2 shows an explained variance of 6%. No significant interactions were found in model 3. In summary, these results do not support the hypothesis that adolescents who prefer Rock music score higher on RR. Additionally, Pop fans also scored lower on RR.

Table 4

*Regression Analysis of Gender and Music Preferences in Relation to Relational Reconsideration*

	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	$\beta$	<i>B</i>	<i>SE</i>	$\beta$
<i>Background</i>						
Gender	.32	.06	.20***	.30	.06	.18***

*Music preferences*

Rock		-.08	.03	-.10**
Urban		-.02	.03	-.02
Dance		-.03	.03	-.04
Elite		.04	.03	.04
Pop		-.07	.03	-.08*
<b>R<sup>2</sup></b>		.04	.06	
<b>F Change</b>		33.924***	3.610**	

*Note.*  $N = 859$ . Dependent variable: wave 5 Relational Reconsideration. The non-significant interactions between music and gender are absent from this Table.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

No significant interactions were found in model 3 across all dependent variables, therefore no coefficients of model 3 are presented in table 1-4.

### Discussion

Results of the present study provide insight into the relation between music preferences of adolescents and their identity formation regarding commitment and reconsideration of commitment in the domains of education and relations. The first hypothesis of the present study was that adolescents who prefer Rock music score lower on identity commitment. This hypothesis is not confirmed, since the findings of this study did not confirm a lower EC, in the educational and relational domain, for Rock fans. The second hypothesis was that adolescents who prefer Rock music score higher on identity reconsideration. This relation was also not found, in the contrary, Rock fans scored lower on identity reconsideration in both the educational and the relational domain. The third hypothesis assumed that girls scored higher on the relation between music genres and identity commitment. This effect was not found. Moreover, no other gender interactions were found in any of the identity outcomes. Finally, exploratory research was conducted to investigate how adolescents with other music preferences would score on the different domains of identity formation. An interesting finding was that adolescents who prefer Pop music show positive results across all identity outcomes, scoring higher on EC and RC, and lower on ER and RR. Additionally, adolescents who prefer Dance music score lower on EC, and adolescents who prefer Elite music score lower on RC.

#### *Rock fans*

Based on previous studies (Arnett, 1991; Roe, 1995; Ter Bogt et al., 2021), adolescents who prefer Rock music were expected to show lower commitment and higher reconsideration of commitment in the educational and relational domain. Contrary to the expectations, adolescents who prefer Rock music did not score lower on EC and RC. Even more, adolescents who prefer Rock music scored significantly lower on ER and RR. These results are remarkable, since Rock fans tend to score relatively high on Openness to Experience, which indicates that they would have a desire for variety and are interested in new experiences (Delsing et al., 2008). Moreover, Rock fans have previously been related to various negative outcomes, while a lower score on ER and RR is interpreted as positive results. Two possible explanations for these inconsistent results were formulated. First, the use of different variables could be an explanation for these conflicting results. Previous studies were mostly focused on personality characteristics and behavior (Bonneville-Roussy et al., 2013), instead of identity formation. Besides, the genre Rock could be assessed differently, particularly with more specific Rock genres in other studies, such as *heavy metal fans* and *popular rock fans* (Ter Bogt et al., 2021). Moreover, negative associations for Rock fans were found regarding education (Roe, 1995), but not particularly in the relational domain. Second, time could be another explanation for the inconsistent results. Some results were found in another era (Arnett, 1991; Roe, 1995), with music genres and identity formation possibly perceived differently. Additionally, the current study tested prospective relations, but different results might have occurred if concurrent relations were also tested.

#### *Pop fans*

The final objective of the present study was to explore whether there would be significant results about the identity formation among adolescents who prefer other music genres, besides Rock. The most notable finding of the current study was found among adolescents who prefer Pop music, scoring high on commitment and low on reconsideration across both domains. This is in line with previous studies, with adolescents who prefer Pop music showing positive outcomes. According to Roe (1995), there is a positive relationship between school achievement and liking mainstream forms of Pop. In the study of Bonneville-Roussy et al. (2013), the Pop genre was included in the dimension Unpretentious, which was described as uncomplicated, simple, and consistent. This corresponds to more certainty (i.e., commitment) and less uncertainty (i.e., reconsideration). Pop fans also displayed a profile characterized by low depressive symptoms and aggression, and high mental well-being (Ter Bogt et al., 2021). Therefore, even though the variables of previous studies are different, the current results are not surprising, with positive results for Pop fans. Results of the present

study indicate that Pop fans are more certain, about their education and relations, than adolescents who do not like Pop music. Current findings strengthen previously found results of Pop fans, which are positive.

#### *Elite, Dance, and Urban fans*

Furthermore, results were found for adolescents who prefer Elite and Dance music. Two significant results were found among these music genres. First, adolescents who prefer Dance music score lower on EC. In previous studies by Delsing et al. (2008) and Selfhout et al. (2009), Dance and Pop fans were scaled under the same genre '*Pop/Dance*'. Therefore, the current finding of Dance fans could be surprising, since it seems to be related to Pop fans, who display positive results. Although, another study by Ter Bogt et al. (2012) found negative effects for adolescents preferring Dance music, where liking Dance music indicated more substance use, and was therefore described as the new "risky" music. These are different variables, but could indicate the possible negative outcomes for Dance fans.

Second, adolescents who prefer Elite music scored lower on RC. This contrasts a previous study by Selfhout et al. (2009), where stable friends showed higher music similarity in Elite fans. A possible explanation for this result could be that Elite fans are considered sophisticated, which is perceived as intelligent, thoughtful, and complex (Bonneville-Roussy et al., 2013). These psychological characteristics are associated with Openness (Rentfrow et al., 2012), which could partly explain a lower score on RC, one of the domains of commitment. These, and previous, results of Elite, Dance, and Urban fans showed different results in different domains, with no general conclusion. No significant results were found for adolescents who prefer Urban music.

#### *Gender differences*

Since girls showed higher interpersonal and educational commitment (Meeus & Deković, 1995), it was expected that girls score higher on the relation between music genres and identity commitment. Results of the current study did not support this hypothesis, since no gender interactions were found.

### **Strengths, Limitations, and Future Directions**

This research aimed to contribute to the knowledge about the relation between music preferences and identity formation, and several strengths and limitations have to be acknowledged. This current study has several important strengths. First, the present study used data from a longitudinal study, with the same respondents participating in five waves. Consequently, a prospective study could be conducted. Second, the study consisted of a large



sample size of Dutch adolescents, which increases the validity of the results. Third, this is the first study to examine the relation between music preferences and identity outcomes, measured by commitment and reconsideration. Both variables have previously been studied and found to be important factors in the development of adolescents, but the relation was not tested yet. In addition to these strengths, some limitations need to be addressed. First, the current study only consisted of Dutch adolescents from schools in Utrecht province. This sample is not representative for all adolescents in the Netherlands. Second, the questionnaire only consisted of a limited number of questions on the educational and relational domain. This might not be completely representative for the labels 'commitment' and 'reconsideration'. Finally, only a prospective study was conducted, but it would be interesting to explore if a concurrent study provides similar results. Therefore, future studies could investigate whether there are differences between music preferences and identity formation across multiple waves. Next, it would also be interesting to study the outcome variable, identity formation, more extensively. Based on previous studies, the dimensions 'commitment' and 'reconsideration' were tested in the current study, but the third dimension 'exploration' could also be included to gain a more complete insight into identity formation. Despite the limitations, this study contributed to our understanding of the relation between music preferences and identity formation in adolescence.

## **Conclusion**

The present study did not find the expected results for Rock fans, even opposite results were found for Rock fans on educational reconsideration and relational reconsideration. Even though the expected results for Rock fans were not found, interesting results for Pop fans were found. Adolescents who prefer Pop music consistently scored positive in commitment and reconsideration across both the educational and relational domain. This shows, that adolescents who prefer, the more mainstream, Pop music show more positive results in their identity formation.

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## Appendix A Syntax

\* Encoding: UTF-8.

\*Descriptive statistics\*

```
DATASET ACTIVATE DataSet1.
FREQUENCIES VARIABLES=vagecat im_CHART_3 im_NLPOP_3 im_TEARJ_3
im_ROCK_3 im_METAL_3 im_GOTH_3
  im_PUNK_3 im_RAP_3 im_RB_3 im_TRANCE_3 im_CLUB_3 im_GABBER_3
im_CLASSIC_3 im_JAZZ_3 im_REGGAE_3
  w5schcomit w5schrecon w5relcomit w5relrecon
/ORDER=ANALYSIS.
```

\*Factor analysis music genres\*

```
FACTOR
/VARIABLES im_CHART_3 im_NLPOP_3 im_ROCK_3 im_METAL_3 im_GOTH_3
im_PUNK_3 im_RAP_3 im_RB_3
  im_TRANCE_3 im_CLUB_3 im_GABBER_3 im_CLASSIC_3 im_JAZZ_3
/MISSING LISTWISE
/ANALYSIS im_CHART_3 im_NLPOP_3 im_ROCK_3 im_METAL_3 im_GOTH_3
im_PUNK_3 im_RAP_3 im_RB_3
  im_TRANCE_3 im_CLUB_3 im_GABBER_3 im_CLASSIC_3 im_JAZZ_3
/PRINT INITIAL EXTRACTION ROTATION
/FORMAT SORT BLANK(.30)
/CRITERIA FACTORS(5) ITERATE(25)
/EXTRACTION PAF
/CRITERIA ITERATE(25) DELTA(0)
/ROTATION OBLIMIN
/METHOD=CORRELATION.
```

\*Compute and standardize five music genres\*

```
DATASET ACTIVATE DataSet1.
COMPUTE Rock=(im_ROCK_3 + im_METAL_3 + im_GOTH_3 + im_PUNK_3)/4.
EXECUTE.
```

```
COMPUTE Urban=(im_RAP_3 + im_RB_3)/2.
EXECUTE.
```

```
COMPUTE Dance=(im_TRANCE_3 + im_CLUB_3 + im_GABBER_3)/3.
EXECUTE.
```

```
COMPUTE Elite=(im_JAZZ_3 + im_CLASSIC_3)/2.
EXECUTE.
```

```
COMPUTE Pop=(im_NLPOP_3 + im_CHART_3)/2.
EXECUTE.
```

```
COMPUTE ZPop=Pop - 3.2214.  
EXECUTE.
```

```
COMPUTE ZElite=Elite - 2.1921.  
EXECUTE.
```

```
COMPUTE ZDance=Dance - 2.2820.  
EXECUTE.
```

```
COMPUTE ZUrban=Urban - 3.5724.  
EXECUTE.
```

```
COMPUTE ZRock=Rock - 2.1267.  
EXECUTE.
```

```
*compute interaction variable musicxgender*
```

```
DATASET ACTIVATE DataSet1.  
COMPUTE Rockxgender=Dummygender * ZRock.  
EXECUTE.
```

```
COMPUTE Urbanxgender=Dummygender * ZUrban.  
EXECUTE.
```

```
COMPUTE Elitexgender=Dummygender * ZElite.  
EXECUTE.
```

```
COMPUTE Dancexgender=Dummygender * ZDance.  
EXECUTE.
```

```
COMPUTE Popxgender=Dummygender * ZPop.  
EXECUTE.
```

```
*Recode identity variables*
```

```
COMPUTE W5Rschocomit=6 - w5schcomit.  
EXECUTE.
```

```
COMPUTE W5Rschorecon=6 - w5schrecon.  
EXECUTE.
```

```
COMPUTE W5Rrelcomit=6 - w5relcomit.  
EXECUTE.
```

```
COMPUTE W5Rrelrecon=6 - w5relrecon.  
EXECUTE.
```

```
*Multiple Regression analysis*
```

## REGRESSION

```

/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA CHANGE
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT W5Rschocomit
/METHOD=ENTER Dummygender
/METHOD=ENTER ZPop ZElite ZDance ZUrban ZRock
/METHOD=ENTER Popxgender Rockxgender Urbanxgender Elitexgender Dancexgender.

```

## REGRESSION

```

/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA CHANGE
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT W5Rschorecon
/METHOD=ENTER Dummygender
/METHOD=ENTER ZPop ZElite ZDance ZUrban ZRock
/METHOD=ENTER Popxgender Rockxgender Urbanxgender Elitexgender Dancexgender.

```

## REGRESSION

```

/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA CHANGE
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT W5Rrelcomit
/METHOD=ENTER Dummygender
/METHOD=ENTER ZPop ZElite ZDance ZUrban ZRock
/METHOD=ENTER Popxgender Rockxgender Urbanxgender Elitexgender Dancexgender.

```

## REGRESSION

```

/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA CHANGE
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT W5Rrelrecon
/METHOD=ENTER Dummygender
/METHOD=ENTER ZPop ZElite ZDance ZUrban ZRock
/METHOD=ENTER Popxgender Rockxgender Urbanxgender Elitexgender Dancexgender.

```

## Appendix B Igitur-form

### Information about your thesis

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:	4834542
Initials & prefixes:	M
Family name:	Verheij
Master:	Youth Studies

### *Begeleider*

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

### *Scriptie*

Title thesis: *	The Role of Music in Adolescents' Identity Formation
Language thesis: *	English
Abstract:	<p>Identity formation and music both play an important role in the development of adolescents. However, studies on the relation between music preferences and identity formation of adolescents are lacking. Therefore, the present study investigated whether adolescents' music preferences predict their identity formation two years later, and if this relationship was affected by gender. Data from the Conflict and Management of Relationships (CONAMORE) study collected between 2001 and 2005 were used. The sample included 921 adolescents between 13 and 18 years old. Adolescents' music preferences, measured in wave 3, were subsumed under the general labels of Rock, Pop, Urban, Elite and Dance. Identity formation was measured in wave 5 in two dimensions: commitment and reconsideration. The results showed that contrary to expectations, Rock fans did not score lower on commitment, and even scored lower on reconsideration. Another notable finding was that Pop fans showed positive outcomes, that is more commitment and less reconsideration. No</p>



	gender interactions were found. Thus, results suggest that adolescents who prefer Pop, and to a lesser extent Rock, music show positive outcomes in their identity formation, and that this holds for both boys and girls.
Key words: (seperated by ;)	Music; Identity formation; Commitment; Reconsideration
Make public: *	Yes
Make public after date:	24-6-2022



Ingevuld op: \* 7-6-22  
 Door: \* Martijn Verheij

\* = Obligated to fill in

**Appendix C**  
**Research Activities for TED-students (60 hours)**

**Martijn Verheij**

**4834542**

<b>Research Activities</b>	<b>Total number of Hours</b>	<b>Signature YS staff</b>
<b>Leeronderzoek ISW</b> - <b>Begeleiding woensdagen</b>	<b>30 hours</b>	
<b>Extra werkzaamheden rondom het leeronderzoek ISW</b> - <b>Materialen checken</b> - <b>Presentatie</b> - <b>Werkboek</b> - <b>Vragen via mail beantwoorden</b> - <b>Nadenken verbeteren opzet</b> - <b>Etc.</b>	<b>30 hours</b>	
<b>Total</b>	<b>60 hours</b>	