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Abstract

While previous research has established relationships between perceived parenting styles and children's deviant behaviours, and links between these behaviours and liking for intense and rebellious music, no research has explored the associations between perceived parenting styles and children's liking for different music styles. Whereas previous research has considered musical taste by looking at a small number of individual difference variables in isolation from one another, the present research used a cross-sectional correlational design to investigate whether parenting styles, the big five personality traits, sensation-seeking, age, and gender were associated with liking for different music styles. Three hundred and thirty-six Australians completed an online, self-report questionnaire. Analyses demonstrated that there were relationships between five of the six parenting style variables and five of the music styles considered. This indicates that various parenting styles were associated with musical taste, and that the nature of these associations extends well beyond those concerning rebellious music and neglectful parenting that have been identified by previous research.

Key words: Musical taste, parenting style, personality, sensation-seeking, genre preference

Parenting style as a predictor of music preference

Much of the existing research on parenting style and musical taste has focused on an association between liking for musical styles associated with anti-authoritarian subcultures and specific types of family background: given the number of studies yielding significant results, the present research considers whether relationships exist involving liking for a range of musical genres and the much broader classification of parenting styles outlined by Baumrind (1991), such that several aspects of parenting style may be relevant to liking for a range of genres. Parents obviously play a fundamental role in the psychological and behavioural development of their children (Reitman, Rhode, Hupp, & Altobello, 2002). Parenting practices have been categorised into various styles, which reflect the manner in which a parent both exercises control over their children and demonstrates emotional warmth towards them. Baumrind (1991) proposed three main styles, namely authoritative, authoritarian and permissive, which are defined by their combination of parental responsiveness (i.e., parental warmth and communication) and demands made of children (i.e., supervision and discipline). At the risk of over-generalising, authoritative parents exhibit high levels of both demands and responsiveness, communicating clear and fair rules for their children in a supportive and assertive manner (see e.g., Baumrind, 1991; Reitman et al., 2002); authoritarian parents are highly demanding and controlling, but provide low levels of responsiveness and warmth to the child (see e.g., Love & Thomas, 2014; Reitman et al., 2002); and permissive parents make low demands and provide low levels of discipline, but provide high levels of responsiveness and affection (see e.g., Love & Thomas, 2014; Reitman et al., 2002).

Several studies indicate that authoritative parenting appears to be associated with a greater incidence of positive child outcomes, such as increased psychological well-being and lower levels of delinquent behaviours (see e.g., Hoeve et al., 2009; Love & Thomas, 2014). In contrast, authoritarian and permissive parenting styles are associated with a greater incidence of negative child outcomes such as increased aggression, substance abuse and poor self-esteem (Love & Thomas, 2014; Pang, Ang, Kom, Tan, & Chiang, 2013; Patock-Peckham & Morgan-Lopez, 2007). For instance, American college students who had authoritative parents were more likely to experience high levels of self-esteem, and those with authoritarian and permissive parents were more likely to experience low levels of emotional well-being and self-esteem (Love & Thomas, 2014).

Moreover, authoritative parenting has been found to function as a protective factor against delinquent behaviours, such as alcohol use, petty theft, vandalism and assault: for example, American adolescents with authoritative parents were less likely to partake in heavy drinking than were adolescents with authoritarian or permissive parents (Bahr & Hoffmann, 2010); children with highly authoritative parents were less likely to exhibit delinquent behaviour than were those with non-authoritative parents (Hoeve et al., 2013); and Cablova, Pazderkova, and Miovsky's (2014) systematic review concluded that authoritative parenting may be a protective factor in childhood and adolscent alcohol use.

Interestingly, a reasonable number of disparate studies also suggest the inter-relationship of specific musical tastes and music-related behaviours with specific types of family background and specific life outcomes (see review in North & Hargreaves, 2008). For instance, elevated risk-taking behaviour among heavy metal fans was related to poor family relationships (Arnett, 1992); and Schwartz and Fouts (2003) found that participants who liked 'heavy music' also experienced poorer intra-familial relationships

than did others. B. D. Gold (1987, p.535) found that self-image was similar between fans and non-fans of punk, but that "analysis suggested group differences relative to family dynamics". Strouse, Buerkel-Rothfuss, and Long (1995) found that family environment mediated the apparent relationship between attitudes towards pre-marital sex and time spent watching music videos; and Strouse, Goodwin, and Roscoe (1994) showed greater acceptance of sexual harassment among those interested in pop music, but also that this relationship was stronger among participants from what they termed 'non-intact' families. Additionally, Scheel and Westefeld (1999) showed that the relationship they identified between liking rock and suicidality was mediated by participants' degree of commitment to family; and Martin, Clarke, and Pearce (1993) argued that the relationship they observed between suicidal ideation and liking for rock music was elevated among participants who did not have access to their biological father and whose parents were divorced.

In this context, we also note a number of studies which show that the apparent relationships between musical taste and various undesirable outcomes are also modified by personality factors, particularly sensation-seeking. Litle and Zuckerman (1986) argued that high sensation-seekers have an elevated optimal level of arousal and thus seek high intensity and/or complexity via their behaviours, experiences, and preferences. As such, it is unsurprising that several studies should show that sensation-seeking correlates positively with various indices of recklessness and liking for music that is dynamic and sensational (see review by North & Hargreaves, 2008; and Litle & Zuckerman, 1986; Zuckerman & Kuhlman, 2000). For instance, Arnett (1992) found that sensation-seeking mediated the relationship between liking for anti-authoritarian music and reckless behaviour. Therefore, an individual's sensation-seeking is potentially relevant to any consideration of the relationship between their behaviours and musical

taste. In a similar vein, a number of studies also indicate relationships between the 'big five' personality dimensions and liking for various musical styles (e.g., North, 2010): Rentfrow and Gosling (2003) found, for instance, that extraversion and agreeableness were positively related to liking for upbeat and conventional music as well as energetic and rhythmic music, and that openness to new experiences was related positively to liking for reflective and complex music as well as intense and rebellious music. Consideration of the big five is potentially also relevant therefore to any consideration of the relationship between individuals' behaviours and their musical taste.

The Present Research

To summarise this literature, there is evidence that parenting style has implications for children's well-being, that more general measures of family background are associated with musical taste (albeit perhaps indirectly), and that sensation-seeking and the big five are also associated with musical taste. Research to date, however, has tended to adopt an atomistic approach in which investigators test the relationships between one specific aspect of family environment (e.g., parental absence) and liking for one or a small number of musical genres (predominantly those associated with anti-authoritarian subcultures). We are not aware of any research to date that has directly tested the potential correlation between Baumrind's conception of parenting style and musical taste across a number of genres, and whether any such relationship persists in the light of participants' scores for sensation-seeking and the big five personality dimensions. Nonetheless, the existing literature to date implies that these relationships could well exist: parenting style is clearly a wide-ranging variable and so, if one aspect of parenting style is related to liking for a small number of genres, then it is reasonable to suspect that several aspects of parenting style may be related to liking for a wider range

of genres, and the present research aims to test this and map out what these relationships might be.

Data were collected concerning liking for a number of musical styles, including several that are associated with anti-authoritarian subcultures; the parenting style experienced by participants (conceptualised as per Baumrind); and their scores on a measure of the 'big five' personality dimensions and sensation seeking. The hypotheses were that, since liking for anti-authoritarian musical styles is related to various undesirable attitudes and behaviours, and that the latter appear related negatively to authoritative parenting, then there should also be a negative relationship between and liking for anti-authoritarian musical styles and authoritative parenting. Second, since permissive and authoritarian parenting styles are associated with more negative child outcomes, we might expect that liking for anti-authoritarian music styles should be related positively to permissive and authoritarian parenting styles. Third, given that research to date has focussed strongly on anti-authoritarian musical styles, but that parenting style otherwise has wide-ranging impact on attitudes and behaviour, it is plausible that liking for other musical styles might also be related to parenting style, although the nature of any such relationships is difficult to predict, given the dearth of evidence. Fourth, these relationships should exist even when allowing for sensation-seeking and scores on the big five (which may themselves also relate to liking for various musical styles).

Method

Participants

Four hundred and twenty-four individuals completed the questionnaire. However, from these, participants were subsequently excluded from analyses as they

did not answer the questions regarding their father's parental authority (N = 10), resided outside Australia (N = 73), or did not identify their gender (N = 5). Responses from participants residing outside Australia were excluded, since (a) there is evidence that this might otherwise influence the data on musical taste (see, e.g., North & Davidson, 2013; Savage, 2006); and (b) it was important to maximise shared understanding and experience between participants of the music genres in question, given that music is a cultural product. Therefore, the final sample comprised 336 participants aged from 17 – 64 years, including 235 women (M_{age} = 32.18 years, SD = 12.33) and 101 men, (M_{age} = 30.65, SD = 11.09).

The relevant university Human Research Ethics Committee granted ethical approval for the study. Social media (e.g., Facebook, Twitter, Reddit) was used to recruit participants via convenience sampling. Individuals completed the online questionnaire voluntarily although, as an incentive to participate, individuals were eligible to enter a prize draw to win a pre-paid credit card.

Measures

Participants completed the questionnaire online, which included demographic questions regarding participants' age, gender, and country of residence, in addition to those measures detailed below.

Parental Authority Questionnaire (PAQ; Buri, 1991). The PAQ measured the participants' perception of their caregivers' parental authority using ten items for each of Baumrind's (1971) three parenting styles. Individuals completed the measure twice to address both mother (or female primary caregiver) and father (or male primary caregiver) parenting style, leading to 60 questions in total. The questions asked participants to rate the extent to which they agreed with statements regarding their

relationships with the respective caregiver, as well as their parents' authority as they were growing up at home, and responses were provided using a five-point Likert scale, on which 1 = *strongly disagree* and 5 = *strongly agree*. Six scores were calculated for each participant respectively, namely one score for each of the three parenting styles (namely permissiveness, authoritarianism, and authoritativeness) for each parent (mother and father). Scores range from 10 to 50 and higher scores reflect a greater level of that perceived parenting style (Buri, 1991).

Unlike other parenting scales, the PAQ is an appropriate measure for a sample of any age (Buri, 1991; Shahimi, Heaven, & Ciarrochi, 2013), and has a high level of internal consistency (previously reported Cronbach's alpha values ranging from .77-.90 for the six scales – Patock-Peckham & Morgan- Lopez, 2007). In the current study, the measure demonstrated strong internal consistency for the six subscales (α = .89, .91, .81, .91, .91, and .80, respectively). The PAQ has also been shown to have high test-retest reliability and strong discriminant, content, and criterion validity (Buri, 1991; Patock-Peckham & Morgan-Lopez, 2007).

An amended version of the Short Test of Music Preferences-Revised (STOMP-R; Rentfrow, et al., 2011). As it has been argued that culture plays a key role in musical preference (Rentfrow et al., 2012), we amended the STOMP-R measure to include seven additional, culturally relevant genres for an Australian audience. These culturally-relevant music genres were "Aussie hip-hop", drum 'n' bass, experimental, house, indie, indie rock, and trap respective, and were identified following consultation of the literature as well as various members of the West Australian community. Additionally, on the basis of this consultation, genres that had been presented as pairs in previous uses of the STOMP-R (namely, rap/hip-hop, dance/electronic, and soul/R&B) were presented as separate genres, and gospel was not included. Participants were

asked to rate their liking for the 32 resulting music genres shown in Table 1 (e.g., rap, punk) using a 7-point Likert scale (1 = *dislike strongly*, 7 = *like strongly*), with higher scores indicating a higher degree of liking for each genre (Rentfrow et al., 2012). In previous research, the measure has demonstrated an underlying five-factor structure of music preference which has demonstrated high internal consistency and convergent validity (Rentfrow, Goldberg, & Levitin, 2011; Rentfrow et al., 2012). However, due to the revisions introduced to the original STOMP-R by the present research, we conducted an exploratory principal components factor analysis to determine the underlying structure of the measure employed here, which is reported in the Results section.

Brief Sensation-Seeking Scale (BSSS; (Hoyle, Stephenson, Palmgreen, Lorch, & Donohew, 2002). Participants were asked to indicate their agreement with eight statements indicative of sensation seeking, such as "I like to do frightening things", using a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). Item scores were summed to produce an overall score, ranging from 8 to 40, in which higher scores indicated a higher level of sensation-seeking. The BSSS has strong convergent validity, as scores on the measure are highly positively correlated with scores for deviant behaviours (Hoyle et al., 2002). In the present research, the Cronbach's $\alpha = .77$ was consistent with previous research: Hoyle et al. (2002) reported Cronbach's coefficients of .74-.76 for instance.

Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003). The TIPI comprises ten-items, for which individuals rate the extent to which each item applies on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*). Each of the big five traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) is represented by two adjectives (i.e., "extraverted" and "enthusiastic" for extraversion) which are rated separately: scores for each trait therefore range from 2 to 14, with

higher scores indicating a higher reported level of each personality trait. The TIPI has demonstrated satisfactory test-retest reliability, and content validity and convergent validity with regard to other big-five measures (Gosling, Rentfrow, & Swann Jr., 2003). In the present research, the measure had compromised internal consistency (Gosling et al., 2003) for the five subscales of extraversion, agreeableness, conscientiousness, emotional stability and openness to experience (α = .73, .36, .59, .64, and .39, respectively). However, these statistics are in line with the original psychometric properties reported by Gosling et al. (2003), who argued that as the TIPI only has two items per subscale, Cronbach's alpha should not be the only means of interpreting the scale's utility, with consideration given also to avoiding over-burdening respondents through a large number of similar questions. We note also that the TIPI has been used to measure personality in a number of recent studies concerning music (e.g., C. Gold, Saarikallio, Crooke, & McFerran, 2017; Hallett & Lamont, 2016; Müllensiefen, Gingras, Musil, & Stewart, 2014; Schedl et al., 2016).

Procedure

Participants accessed the participant information sheet using a web link, and indicated their consent by clicking the relevant button. Participants were then redirected to the questionnaire, where they responded to the measures in the same order as described above: the task took typically 20 minutes to complete. Participants were then presented with an online debriefing sheet, containing information about the aims of the study, contact details for the researchers, and support services. To ensure confidentiality, individuals were then redirected to a separate webpage in order to enter the prize draw.

Results and Discussion

An exploratory principal axis factor analysis with promax rotation was conducted to determine the factor structure of the amended STOMP-R. A parallel analysis determined that eight factors could be expected for the responses to the 32-item measure. Consequently, an eight-factor solution was forced. The Kaiser-Meyer-Olkin measure of sampling adequacy was .80, and Bartlett's test was significant ($p < .001$). Together, the eight factors accounted for 54.17% of the variance, and were labelled 'electronica', 'soul, R&B, jazz', 'hip-hop', 'indie', 'classical', 'rock', 'country', and 'pop' respectively (see Table 1 for details). The factors that included the hip-hop, heavy metal, and electronica music genres (which have been most often linked to problem behaviours – North & Hargreaves, 2008 and literature review above) are particularly notable.

- Table 1 here -

Eight separate General Linear Mixed Method (GLMM) analyses ($\alpha = .006$) (i.e., one per factor) addressed whether perceived parenting style, sensation-seeking, personality, age and gender were related to scores on each of the music preference factors respectively. Age and gender were included on the basis of their extensive use in previous research (see, e.g., North & Hargreaves, 2008). The results are shown in Table 2 (grand means and inter-correlations are displayed in the Appendix).

- Table 2 here -

The first analysis regarding liking for electronica music was statistically significant, F (14, 321) = 3.007, p < .001, η_p^2 = .116. Mother's authoritarianism was the only significant predictor, such that experiencing an authoritarian mother was positively associated with liking electronica music. This finding may align with previous research by Schwartz and Fouts (2003), who found that 'heavy music fans' reported lower levels of family rapport and higher levels of familial conflict than did 'light music' fans.

The analysis concerning liking for hip-hop was statistically significant, F (14, 321) = 4.415, p < .001, η_p^2 = .161. Age and mother's permissiveness were negatively related to liking for hip hop music. This suggests that younger individuals displayed a greater preference for hip hop music; and more interestingly that individuals who perceived their mother as displaying a high level of permissiveness were less likely to enjoy this music style. Hip hop music has previously been linked to anti-authoritarian attitudes, as discussed above. It is possible that individuals whose parents' display higher levels of permissiveness are less likely to identify with hip-hop music and its anti-establishment themes.

The model concerning liking for rock music was non-significant, F (14, 321) = 0.932, p = .524, η_p^2 = .039.

The analysis concerning liking for 'soul, R&B, jazz' music was statistically significant, F (14, 321) = 4.490, p < .001, η_p^2 = .164. Age and sensation seeking were both positively related to this, while father's authoritarianism was negatively related to liking for 'soul, R&B, jazz' music. More simply, participants who had a father who was highly demanding and controlling, but provided low levels of responsiveness and warmth to the child, were less likely to enjoy 'soul, R&B, jazz', and it is tempting to attribute this, albeit speculatively, to the particular concern of 'soul, R&B, jazz' music with interpersonal relationships.

The analysis concerning liking classical music was statistically significant, F (14, 321) = 4.769, p < .001, η_p^2 = .172. Age was associated positively with liking for classical music, as was openness, consistent with North (2010); and extraversion was associated negatively. With regard to parental authority, mother's permissiveness was negatively associated with liking for classical music, while mother's authoritativeness was positively associated with liking for classical music preference. The contrasting direction of findings concerning these two parenting styles is consistent, suggesting that liking for classical music is associated with having a mother who was responsive and affectionate but who also communicated the importance of following clear rules.

The model concerning liking for country music was statistically significant, F (14, 321) = 2.663, p = .001, η_p^2 = .116. Age was the only significant predictor, however.

The model concerning liking for pop music was statistically significant, F (14, 321) = 7.248, p < .001, η_p^2 = .240. The pairwise contrast concerning gender indicated that females were significantly more likely to enjoy pop than were males (β = 0.583, t (321) = 5.279, p < .001, η^2 = .080); age was positively associated; sensation seeking was associated negatively; and extraversion was positively associated. The authoritarianism and authoritativeness of fathers were both associated positively with liking pop music, indicating that liking for pop is related to having a father who was demanding and perhaps also controlling. It is tempting to speculate that this is consistent with the comparatively conventional and formulaic nature of pop music itself, or the perception by parents that pop music is relatively 'safe' for their children to listen to, without the risk of exposing them to content that contradicts parents' ethical standards.

Lastly, the model concerning liking for indie music was non-significant, F (14, 321) = 1.376, p = .163, η_p^2 = .057.

General Discussion

The aim of this study was to determine if liking for musical styles was related to parenting style, while also considering personality and sensation-seeking. An exploratory factor analysis identified eight music genre factors, three of which (i.e., electronica, hip hop, and rock) have links to genres that have been considered by previous research in the context of delinquency and other undesirable attitudes and behaviours. Previous research has adopted an atomistic approach in identifying significant relationships between liking for a limited number of musical styles and one or two specific aspects of parenting. The present research was arguably the first to provide a direct test of the relationship between a more general measure of parenting and liking for each of hip-hop, heavy metal, electronica, and a number of other musical styles.

While five of the six parenting style variables demonstrated significant relationships with musical taste, these were spread across five of the music styles considered. No one parent (mother or father) or style (authoritativeness, authoritarianism, or permissiveness) was associated consistently with musical taste. As such, the most prudent conclusion would appear to be that parenting style is related to musical taste, and that different parenting styles between both mother and father are relevant to liking for different genres. For the sake of being explicit, the present findings do not support the conclusion the parenting style adopted by only the mother or father (or both) is consistently important to all musical taste, and instead the data in Table 2 support the more atomistic approach taken by existing research to the relationship between liking for specific genres and specific aspects of parenting.

Given previous findings implicating these, the research design also included measures of sensation-seeking and the ‘big five’ personality variables, and it is

interesting that the findings concerning parenting style were obtained even when the personality variables were included within the same GLMM analyses. Moreover, given the relatively high level of interest in these within the literature, it was surprising that there were so few significant results concerning personality. In contrast, age was related significantly to liking for five of the eight musical styles, consistent with previous research highlighting the consistent association between age and liking for several styles.

Before concluding we should also acknowledge several important limitations of the present research. First, it would be interesting to replicate the present research among a sample drawn from North America or other regions in which much of the existing data on musical taste was collected. Music is obviously a cultural product, and so it is not unreasonable to suspect cross-cultural variations in any findings concerning it. Second, we employed an adult sample whose ratings of parenting style may reflect poor memory or changing relationships with parents as they aged as much as any advantages or deficiencies in what they experienced during their childhood. As Cablova et al.'s (2014) review of parenting style and childhood alcohol use discusses in detail, a number of cultural and methodological factors (such as use of retrospective self-report, samples containing people of differing ages, or self-selecting samples) have the potential to influence research findings: pragmatic issues obviously play a role in introducing these issues into research design but of course ideally they would all be ruled out. In the meantime, we look forward to future research that takes an atomistic approach to the relationship between musical taste and parenting, but which addresses a panoply of specific musical genres and approaches to parenting. In a similar vein, future researchers may employ different methods (e.g., providing respondents with options of stating that they had any number of parental figures regardless of biology and/or

gender) and item orderings to avoid the possibility of common method variance and item order effects; and may wish to consider using a longer version of the personality measure than that employed here, given the issues of internal reliability identified here with the TIPI.

Finally, we leave open for future research the obvious question raised by the present findings, namely why the relationships identified here between musical taste and parenting style might exist. Given previous findings identifying a relationship between specific aspects of parenting style and liking for particular genres, it is perhaps unsurprising that the present research should have been able to identify a broader pattern of relationships between these two factors. However, future work will need to determine what specifically underlies the broader range of relationships identified here between parenting style and liking for music genres. It is tempting to speculate, for instance, that the relationship between liking electronica and maternal authoritarianism, and between liking pop and paternal authoritarianism and authoritativeness, in some way arise from the discipline and formulae-driven approaches endemic to production of both genres; or that the negative relationship between maternal permissiveness and liking hip hop and classical music both arise from conservatism or antipathy toward non-traditional worldviews. Confirmation or refutation of these and similar hypotheses goes well beyond the scope and data of the present research of course, and we look forward to future data on the subject.

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Table 1.

Loadings for Exploratory Factor Analysis with Principal Axis Factoring and Promax Rotation of the Amended Short Test of Music Preferences-Revised

	Factors						
Music Genre	Electronica	Soul, R&B, Jazz'	Hip-hop	Indie	Classical	Rock	Country	Pop
Electronic(a)	0.84						
Dance	0.78						
Drum N Bass	0.71						
House	0.68						
Experimental	0.46						
Trap	0.33						
Soul		0.75					
Funk		0.70					
Reggae		0.62					
Blues		0.57					
R&B		0.53					
Jazz		0.48					
International		0.38					
Oldies		0.36					
New Age		0.35					
Hip-hop			0.93				
Rap			0.81				
Aussie hip-hop			0.71				
Indie Rock				0.99			
Indie				0.96			

Alternative				0.45				
Classical					0.81			
Opera					0.69			
Punk						0.72		
Heavy metal						0.72		
Rock						0.63		
Country							0.80	
Folk							0.44	
Bluegrass							0.42	
Religious							0.42	
Pop								0.59
Soundtracks/Theme songs								0.51
Eigenvalue	5.93	4.21	3.12	2.08	1.72	1.37	1.21	1.05
% Variance Explained	18.53	13.16	9.75	6.49	5.39	4.28	3.78	3.27
Cronbach's Alpha (α)	0.82	0.80	0.85	0.83	0.72	0.69	0.64	0.47

Note. Loadings < .30 are suppressed.

Table 2.

GLMM Analyses Concerning the Music Preference Scores

Predictor variable	*F*	*p*	Beta	*t*	95% CI		η^2
			Electronica [a]				
Gender	0.173	0.678	-0.051	-0.415	-0.291	0.189	0.001
Age	0.034	0.855	-0.001	-0.183	-0.010	0.008	0.000
Sensation-seeking	3.081	0.080	0.021	1.755	-0.002	0.044	0.010
Extraversion	0.014	0.907	0.003	0.117	-0.050	0.057	0.000
Agreeableness	0.594	0.441	0.022	0.771	-0.033	0.076	0.002
Conscientiousness	2.193	0.140	-0.053	-1.481	-0.124	0.018	0.007
Emotional stability	2.333	0.128	0.043	1.528	-0.012	0.098	0.007
Openness to experience	1.806	0.180	0.058	1.344	-0.027	0.143	0.006
Mother's permissiveness	2.226	0.137	0.018	1.492	-0.006	0.041	0.007
Mother's authoritarianism	10.861	0.001	0.034	3.296	0.014	0.054	0.033
Mother's authoritativeness	1.232	0.268	0.009	1.110	-0.007	0.026	0.004
Father's permissiveness	0.009	0.925	-0.001	-0.094	-0.024	0.022	0.000
Father's authoritarianism	0.056	0.813	-0.002	-0.237	-0.021	0.017	0.000
Father's authoritativeness	0.240	0.625	-0.004	-0.490	-0.020	0.012	0.001
			Hip Hop [b]				
Gender	0.184	0.668	0.052	0.429	-0.188	0.293	0.001
Age	26.697	0.000	-0.027	-5.167	-0.037	-0.016	0.077
Sensation-seeking	0.106	0.745	0.004	0.325	-0.019	0.027	0.000
Extraversion	2.673	0.103	0.046	1.635	-0.009	0.101	0.008
Agreeableness	1.477	0.225	-0.036	-1.215	-0.093	0.022	0.005

Conscientiousness	2.337	0.127	0.046	1.529	-0.013	0.105	0.007
Emotional stability	1.190	0.276	0.030	1.091	-0.024	0.083	0.004
Openness to experience	1.585	0.209	0.050	1.259	-0.028	0.129	0.005
Mother's permissiveness	6.090	0.014	-0.032	-2.468	-0.058	-0.006	0.019
Mother's authoritarianism	2.270	0.133	-0.017	-1.507	-0.038	0.005	0.007
Mother's authoritativeness	0.858	0.355	0.009	0.927	-0.011	0.029	0.003
Father's permissiveness	2.088	0.149	0.018	1.445	-0.006	0.042	0.006
Father's authoritarianism	1.287	0.257	0.012	1.134	-0.009	0.033	0.004
Father's authoritativeness	0.365	0.546	-0.005	-0.604	-0.023	0.012	0.001
			Rock [c]				
Gender	0.174	0.677	-0.054	-0.417	-0.308	0.200	0.001
Age	0.275	0.600	0.003	0.524	-0.007	0.012	0.001
Sensation-seeking	5.151	0.024	0.029	2.270	0.004	0.054	0.016
Extraversion	1.150	0.284	-0.030	-1.072	-0.084	0.025	0.004
Agreeableness	0.159	0.691	-0.013	-0.398	-0.079	0.053	0.000
Conscientiousness	0.858	0.355	-0.032	-0.926	-0.099	0.036	0.003
Emotional stability	0.458	0.499	0.018	0.677	-0.035	0.072	0.001
Openness to experience	0.226	0.635	-0.021	-0.476	-0.106	0.065	0.001
Mother's permissiveness	1.664	0.198	-0.017	-1.290	-0.044	0.009	0.005
Mother's authoritarianism	0.457	0.500	-0.008	-0.676	-0.032	0.016	0.001
Mother's authoritativeness	0.125	0.724	-0.004	-0.353	-0.023	0.016	0.000
Father's permissiveness	0.693	0.406	0.011	0.833	-0.015	0.038	0.002
Father's authoritarianism	0.910	0.341	0.011	0.954	-0.012	0.034	0.003
Father's authoritativeness	0.012	0.912	-0.001	-0.110	-0.020	0.018	0.000

Soul, R&B, Jazz [d]							
Gender	0.072	0.789	0.033	0.268	-0.211	0.277	0.000
Age	20.088	0.000	0.020	4.482	0.011	0.029	0.059
Sensation-seeking	9.498	0.002	0.035	3.082	0.013	0.058	0.029
Extraversion	1.713	0.192	0.035	1.309	18.000	0.088	0.005
Agreeableness	0.000	0.988	0.000	-0.015	-0.057	0.056	0.000
Conscientiousness	0.151	0.698	-0.012	-0.388	-0.075	0.050	0.000
Emotional stability	0.101	0.751	-0.008	-0.318	-0.060	0.043	0.000
Openness to experience	1.309	0.253	0.046	1.144	-0.033	0.124	0.004
Mother's permissiveness	1.399	0.238	0.014	1.183	-0.099	0.037	0.004
Mother's authoritarianism	0.682	0.410	0.009	0.826	-0.012	0.029	0.002
Mother's authoritativeness	1.131	0.288	0.009	1.064	-0.008	0.026	0.004
Father's permissiveness	2.680	0.103	-0.019	-1.637	-0.042	0.004	0.008
Father's authoritarianism	7.106	0.008	-0.026	-2.666	-0.046	-0.007	0.022
Father's authoritativeness	0.111	0.739	-0.003	-0.333	-0.020	0.014	0.000
Indie [e]							
Gender	0.047	0.828	-0.027	-0.217	-0.269	0.215	0.000
Age	0.163	0.687	-0.002	-0.403	-0.013	0.008	0.001
Sensation-seeking	1.053	0.306	0.012	1.026	-0.011	0.035	0.003
Extraversion	0.085	0.771	0.008	0.291	-0.044	0.059	0.000
Agreeableness	0.419	0.518	-0.020	-0.647	-0.080	0.040	0.001
Conscientiousness	0.074	0.785	-0.009	-0.272	-0.072	0.055	0.000
Emotional stability	0.593	0.442	-0.019	-0.770	-0.068	0.030	0.002
Openness to experience	2.810	0.095	0.072	1.676	-0.012	0.156	0.009

Mother's permissiveness	2.394	0.123	-0.019	-1.547	-0.044	0.005	0.007
Mother's authoritarianism	7.729	0.006	-0.028	-2.780	-0.047	-0.008	0.024
Mother's authoritativeness	0.014	0.906	-0.001	-0.118	-0.018	0.016	0.000
Father's permissiveness	0.117	0.733	0.004	0.342	-0.019	0.028	0.000
Father's authoritarianism	1.007	0.316	0.011	1.003	-0.010	0.032	0.003
Father's authoritativeness	0.088	0.767	0.003	0.297	-0.015	0.021	0.000
			Classical [f]				
Gender	0.868	0.352	-0.110	-0.932	-0.342	0.122	0.003
Age	15.794	0.000	0.017	3.974	0.009	0.026	0.047
Sensation-seeking	1.155	0.283	-0.011	-1.075	-0.032	0.009	0.004
Extraversion	6.370	0.012	-0.061	-2.524	-0.109	-0.013	0.019
Agreeableness	0.713	0.399	-0.024	-0.844	-0.081	0.032	0.002
Conscientiousness	0.667	0.415	-0.026	-0.817	-0.087	0.036	0.002
Emotional stability	0.155	0.694	0.011	0.393	-0.043	0.065	0.000
Openness to experience	13.514	0.000	0.140	3.676	0.065	0.215	0.040
Mother’s permissiveness	4.284	0.039	-0.025	-2.070	-0.049	-0.001	0.013
Mother's authoritarianism	0.364	0.547	-0.006	-0.603	-0.026	0.014	0.001
Mother's authoritativeness	5.833	0.016	0.022	2.415	0.004	0.040	0.018
Father's permissiveness	2.269	0.133	0.018	1.506	-0.005	0.040	0.007
Father's authoritarianism	0.050	0.822	0.002	0.225	-0.017	0.021	0.000
Father's authoritativeness	0.201	0.654	0.004	0.449	-0.013	0.021	0.001
			Country [g]				
Gender	0.333	0.564	0.069	0.564	-0.167	0.305	0.001
Age	5.363	0.021	0.012	2.316	0.002	0.022	0.016

Sensation-seeking	0.108	0.742	0.004	0.329	-0.018	0.025	0.000
Extraversion	0.944	0.332	0.024	0.972	-0.025	0.073	0.003
Agreeableness	0.286	0.593	0.017	0.535	-0.045	0.078	0.001
Conscientiousness	0.588	0.444	0.022	0.767	-0.035	0.080	0.002
Emotional stability	0.901	0.343	0.025	0.949	-0.027	0.077	0.003
Openness to experience	0.075	0.785	0.011	0.274	0.067	0.088	0.000
Mother's permissiveness	0.398	0.528	-0.008	-0.631	-0.034	0.017	0.001
Mother's authoritarianism	0.176	0.675	0.004	0.420	-0.016	0.024	0.001
Mother's authoritativeness	1.629	0.203	0.011	1.276	-0.006	0.029	0.005
Father's permissiveness	1.640	0.201	-0.015	-1.281	-0.039	0.008	0.005
Father's authoritarianism	2.915	0.089	-0.016	-1.707	-0.034	0.002	0.009
Father's authoritativeness	0.005	0.942	-0.001	-0.072	-0.019	0.018	0.000
			Pop [h]				
Gender	27.864	0.000	0.583	5.279	0.366	0.800	0.080
Age	8.594	0.004	0.013	2.932	0.004	0.021	0.026
Sensation-seeking	7.454	0.007	-0.029	-2.730	-0.050	-0.008	0.023
Extraversion	6.297	0.013	0.063	2.509	0.014	0.113	0.019
Agreeableness	2.438	0.119	0.046	1.561	-0.012	0.105	0.008
Conscientiousness	1.277	0.259	0.039	1.130	-0.029	0.108	0.004
Emotional stability	0.780	0.378	-0.022	-0.883	-0.071	0.027	0.002
Openness to experience	0.017	0.896	0.005	0.130	-0.072	0.082	0.000
Mother's permissiveness	0.380	0.538	-0.007	-0.617	-0.030	0.016	0.001
Mother's authoritarianism	0.684	0.409	-0.008	-0.827	-0.027	0.011	0.002
Mother's authoritativeness	0.479	0.489	0.005	0.692	-0.010	0.020	0.001

Father's permissiveness	1.280	0.259	0.012	1.132	-0.009	0.034	0.004
Father's authoritarianism	10.545	0.001	0.030	3.247	0.012	0.048	0.032
Father's authoritativeness	5.617	0.018	0.020	2.370	0.003	0.036	0.017

[a] Overall model: F (14, 321) = 3.007, p < .001, η_p^2= .116

[b] Overall model: F (14, 321) = 4.415, p < .001, η_p^2= .161

[c] Overall model: F (14, 321) = 0.932, p = .524, η_p^2= .039

[d] Overall model: F (14, 321) = 4.490, p < .001, η_p^2= .164

[e] Overall model: F (14, 321) = 1.376, p = .163, η_p^2= .057

[f] Overall model: F (14, 321) = 4.769, p < .001, η_p^2= .172

[g] Overall model: F (14, 321) = 2.663, p = .001, η_p^2 = .116

[h] Overall model: F (14, 321) = 7.248, p < .001, η_p^2 = .240

Note. Degrees of freedom for each predictor variable = 1, 321. CI = confidence interval.