

A Study of influence of Music on Mood in Relation to Personality **Himani Mendiratta*and Sohinee Ganguly****

Abstract

The aim of the study was to investigate the effect of different types of music on mood and the relation between music, personality and mood. A sample of 204 participants of age range 18-30 yrs took part in the study which was conducted online. Results showed that neuroticism is positively associated with negative affect whereas openness, conscientiousness and extraversion are positively related to positive affect. Further openness was found to be associated with classical music preference. Extraversion and electronic music preference were found to be related. And significant difference between pre and post-tests of mood was reported.

Keywords: Music; Mood; Heavy Metal; Classical; Pop; Electronic; Religious; Music Preference; Positive Affect; Negative Affect; Personality

Music seems to be an important element in almost all human societies. Music listening, voluntarily or otherwise, utilizes a major part of many people's daily lives, adolescents specifically. It is also an important toll in creating identities. Therefore, it is evident that music has the ability to affect people's lives in various ways. (Brown, 2012). It works like a stimulant and conveys our emotions and feelings. It acts as an expression of sadness, love, joy and dramatic situations across all cultures (Khan & Ajmal. 2017).

A vast body of research has revealed that music has the ability to affect people's mood in positive as well as negative ways depending on the type of music. It has been supported by the established links between music listening and the physiological correlates. Various studies have reported that music influences our respiration rate, heart rate, galvanic skin response, vasoconstriction, muscle tension as well as the level of hormones in our body thereby affecting our emotional states, performance and behaviour (McCraty et al., 1998).

Music is also shown to have sedative and therapeutic effect. And hence is also used in the form of therapy to improve conditions of anxiety, stress, depression, insomnia and high blood pressure (Khan & Ajmal, 2017). For example, anxious people can be made to reduce their anxiety levels by exposing them to their choice of music (Walworth, 2003). Music preference can be measured in variety of ways. It is commonly measured in terms of music genre preference or music attribute preference (Fricke & Herzberg, 2017). In this study we measured the music genre preference by using the short test of music preference (STOMP) developed by Rentfrow and colleagues(2003). It can assess preference for fourteen different music styles by self-reporting. It is based on four factor structure. The four factors are namely reflective and complex (R&C), intense and rebellious (I&R), upbeat and conventional (U&C), energetic and rhythmic (E&R) (Fricke & Herzberg, 2017). Music genres jazz, blues, classical and folk comprise the reflective and complex factor (R&C). Genres full of energy like rock, alternative and heavy metal comprise intense and rebellious factor (I&R). Upbeat and

conventional was defined by genres like country, religious, pop and soundtrack. Factor comprising of dance, rap and funk is named as energetic and rhythmic (E&R) (Rentfrow & Gosling, 2003).

Music Preference and Personality

According to Cattell and his colleagues, music preferences were thought to reflect people's hidden desires, urges and motives however the contemporary view is that psychological traits of people particularly in interaction with situational experiences leads to the formation of music preference (Cattell & Anderson, 1953; Cattell & Sanders, 1954). It is now hypothesized that people prefer music that reflect their personalities and help them regulate their emotions and attitudes (Buss, 1987; Swann, Rentfrow & Guinn, 2002).

Recently a lot of research has been done on effects of music, music preference and its uses. Most of the studies measured music preference and related them to various personality constructs. People choose to listen to different type of music suggesting that there is an association between individual difference variables and music preference. For instance, Rentfrow and Gosling (2003) in their study establishes a link between different music genres and various personality types. Openness to experience trait of the big five personality measure is seen to have positive significant relationship with heavy metal music genre. Music genre like blues, jazz, classical, folk music and rebellious music (rock, alternative and heavy metal) was preferred by people high in openness trait. People scoring high on extraversion, agreeableness and conscientiousness traits showed preference to country, soundtrack, religious and pop music. Happy music is said to be preferred by adults but people enjoy listening sad music more commonly. It is seen from the studies that sad sounding music is preferred by people scoring high on traits of empathy (Garrido & Schubert, 2011; Krentz, Schubert, & Mitchell, 2008) or openness to experience (Ladinig & Schellenberg, 2012; Vuoskoski, Thompson, McIllovin, & Eerola, 2012) as well as introverts (Ladinig & Schellenberg, 2012)

However, it is very likely that environmental and cultural factors play an important role in individual's

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liking of music as individuals growing in different parts of the world would be exposed to different type of music thus influencing their music choice and also the music preference might vary across different age groups as initially children may take up their parents' choices, later being influenced by peers and finally developing autonomy. Association between gender differences and music preference have been sparsely reported. Langmeyer et al. (2012) stated that upbeat and conventional music was preferred more by women as compared to men. Men were found to be more mutually exclusive in their music preference, while women allowed more overlap (Fricke et al., 2017).

Music and Mood

Hunter, Schellenberg & Griffith, (2011) conducted a study to measure the influence of music. Sad sounding music is liked more by people when they are in sad mood and also there are increased chances of neutral sound music to be perceived as sad. Also, people are observed to show increase in sorrow after listening to depressing music and increase in happiness is reported after listening to upbeat music (McCraty et al., 1998). Every genre of music shows varying effects. McCraty et al. (1998) conducted a study which yielded that pop music led to an increase in positive mood and level of happiness while mood became low and level of happiness decreased in response to classical music. Music is also said to induce emotions which can be positive or negative (Statton & Zalanowski, (1997). In a study by Arnett (1991) it was seen that heavy metal music was seen to be related to reckless behaviour however no causal relationship was supported. Also, classical music and positive affect were found to be positively correlated. People experiencing more negative affect are found to show high level of music listening. Music is said to have varying effects on different demographic groups (Stratton & Zalanowski, 1997). Classical music produced lowering in fatigue, sadness and tension amongst people who preferred classical music. And people who liked classical music, listening to it led to a short-term increment in their positive affect (McCraty et al., 1998). It is seen that positive affect is produced in people after listening to their preferred music type. Thus, listener's perceptual appraisal process plays an important role in evaluating the effect of music. Moreover, several studies reported that there are other variables which mediate the relationship between music and mood. No direct link between music and mood have been suggested (Stratton & Zalanowski, 1991).

Personality and mood

Subjective well-being comprises of two major components that are emotional and cognitive where positive and negative affect constitutes the emotional component. It has been widely studied that personality can be a great predictor of positive and negative affect. People tend to feel their affect in a very stable way meaning that people go through

mood changes over a period of time but have a tendency to return back to their normal affective states. It does not state that people who experience greater positive affect will not feel negative affect and vice versa rather stable affect is seen most of the time (Zanon et al., 2013). Personality is found to be rather stable over time but it is influenced by various factors like genetics, environment and well-being. Thus, personality and affects are found to be associated. People high in positive affect are found to be more cheerful, greater life satisfaction, better physical and mental health. On the other hand, people who experience greater negative affect are linked to depression, anxiety and poor life satisfaction.

It has been acknowledged from various studies that different personality dimensions are linked to positive and negative affect. Extraversion is found to be personality correlate of positive affect and neuroticism to be related to negative affect. (Costa & McCrae, 1983). One might speculate that personality is said to be critical of well-being. Personality dimensions neuroticism, extraversion and conscientiousness are said to be greater predictors of well-being and in turn of positive and negative affect. Other personality traits like agreeableness and conscientiousness are also found to play indirect roles in predicting well-being of an individual (Deneve & Cooper, 1998). Study by Costa & McCrae (1980, 1991) showed that neurotics have a temperament that led them to experience more negative affect and less subjective well-being whereas being extrovert predisposes a person to feel greater positive affect.

Rationale and Hypotheses

The existing literature shows that personality influences music preference of people and different types of music have varying effects on individual ranging from emotional, physiological and psychological. In this study we aim to study the effect of different genres of music on mood and along with this, the personality predictors of positive and negative affect were also studied and thus following hypotheses were formulated.

H₁: Openness to experience measure of personality will show a preference to classical and heavy metal music condition.

H₂: Extraversion will show a preference to pop, electronic/dance and religious music condition.

H₃: Openness to experience, conscientiousness, and extraversion traits will be positively related to positive affect.

H₄: Neuroticism will be positively related to negative affect.

H₅: There will be difference in mood before and after listening to different genres of music.

Method

Sample

A total of 204 students participated in the study out of which 84 were males and 120 were females. The age range was 18-30 years. Convenience sampling was used. Participants were natives of Punjab.

Tools

Mini IPIP scale: It is a 20-item scale, short form of the 50 item international personality item pool- five factor model measure by Goldberg, (1999) which was used to measure the big five personality factors. It has four items per big five trait. It has been shown to have good internal consistency and Cronbach alpha value being greater than 0.6.

PANAS: Mood was assessed using positive and negative affect schedule. It is a 20-item scale which consist of two 10 items scale to measure both positive and negative affect. It has good internal consistency and validity. Internal consistency for positive affect range between 0.86-0.90 and for negative affect 0.84-0.87.

STOMP: Short test of music preference is a 7-point likert scale test which measures the music preference for 14 music genres. It assesses four broad music dimensions. However, we used only 5 items from this scale in this study- pop, devotional, hard metal, classical and electronic as considering 14 genres would involve a far greater sample, large time duration and a complicated design.

Music: Music was presented for approximately five minutes. Music songs used for each genre were:

Pop: It isa common type of popular musicoften

Devotional: A devotional song is a hymn which accompanies religious observances and rituals

Amazing grace by Darlene Zschech

Hard metal: is a loud, aggressive style of rock music. The bands who play heavy metal music usually have one or two guitars, a bass guitar and drums.

Fuel by metallica

Procedure:

An online survey was conducted in which different participants were first provided with a consent form and demographic form after which they were presented with mini IPIP personality questionnaire, short test of music preference (STOMP), PANAS and then they were exposed to a music clip for 5 minutes and then once again PANAS was completed. The procedure followed here is in accordance with the study of Rea et al., (2010).Descriptive statistics (mean and standard deviation), correlation, regression and paired sample t test were computed using the statistical package for social sciences.

Results

Openness was found to have a significant positive relationship with positive affect ($r = 0.21, p < 0.01$) and significant negative relationship with negative affect ($r = -0.27, p < 0.01$). Conscientiousness was found to have a significant positive relationship with positive

Table 1: Correlation between dimensions of personality, initial positive affect and initial negative affect

Variables	Open.	Consc.	Extra.	Agre.	Neurotic.	PA initial	NA initial
Openness	1						
Conscientiousness	0.14*	1					
Extraversion	0.20*	0.08	1				
Agreeableness	0.23*	0.10	0.17*	1			
Neuroticism	-0.12	-0.04	-0.08	0.08	1		
PA initial	0.21**	0.19**	0.18**	0.13	-0.16	1	
NA initial	-0.27**	-0.21**	-0.11	-0.00	0.31**	-0.18**	1

** $p < 0.01$, * $p < 0.05$

distinguished from other subgenres by stylistic traits such as a danceable rhythm or beat, simple melodies and a repeating structure which are reminiscent of the songs of vocalists.

Beautiful people by Ed Sheeran

Classical: It is art music that emphasize homophonic melodies, meaning that there was a single melody that all the instruments played, instead of the layered melodies.

Fur elise by Bethoven

Electronic: also known as dance music, club music, or simply dance, is a broad range of percussive electronic music genres made largely for nightclubs, raves and festivals.

Gold skies original mix by Sander van Doorn, Martin Garrix, DVBBS

affect ($r = 0.19, p < 0.01$) and significant negative relationship with negative affect($r = 0.21, p < 0.01$). Extraversion was found to have a significant positive relationship with positive affect ($r = 0.18, p < 0.01$). Agreeableness was found to have a positive relationship with positive affect ($r = 0.13$) and negative relationship with negative affect ($r = -0.008$) but it was not found to be significant. Neuroticism was found to have a significant positive relationship with negative affect ($r = 0.317, p < 0.01$) and significant negative relationship with positive affect ($r = -0.16, p < 0.05$).

Openness was found to have a significant positive relationship with positive affect ($r = 0.14, p < 0.01$) and significant negative relationship with negative affect ($r = -0.28, p < 0.01$). Conscientiousness was found to

have a significant positive relationship with positive affect ($r = 0.19, p < 0.01$) and significant negative relationship with negative affect ($r = 0.21, p < 0.01$).

positive relationship with music preference for electronic ($r = .146, p < 0.05$). The mean value for initial and final positive affect

Table 2: Correlation between dimensions of personality, final positive affect and final negative affect

Variables	Open.	Cons.	Extra.	Agree.	Neurotic.	PA final	NA final
Openness	1						
Conscientiousness	0.12*	1					
Extraversion	0.20*	0.08	1				
Agreeableness	0.23*	0.10	0.17*	1			
Neuroticism	-0.12	-0.04	-0.08	0.08	1		
PA final	0.21**	0.19**	0.18**	0.13	-0.16	1	
NA final	-0.27**	-0.21**	-0.11	-0.00	0.31**	-0.13	1

** $p < 0.01$, * $p < 0.05$

Extraversion was found to have a significant positive relationship with positive affect ($r = 0.19, p < 0.01$). Neuroticism was found to have a negative

were 34.12 and 35.21 respectively. Standard deviation for initial and final positive affect were 7.03 and 6.97 respectively. The mean value for initial and

Table 3: Correlation between dimensions of personality and music preference

Variables	Open.	Consc.	Extr.	Agr.	Neur.	classical	Pop	Heavy metal	Devotional	electronic
Openness	1									
Consc.	.14*	1								
Extraversion	.20*	.08	1							
Agreeableness	.23*	.10	.17*	1						
Neuroticism	-.12	-.04	-.08	.08	1					
Classical	.20**	.02	.08	.08	.04	1				
Pop	.13	.07	.09	.09	-.05	.07	1			
Hard metal	.05	.03	.10	.07	-.12	.15*	.35**	1		
Devotional	-.08	-.02	.06	.01	.07	.27**	-.02	.15*	1	
Electronic	.06	.081	.14*	.10	-.00	-.02	.32**	.14*	.05	1

** $p < 0.01$, * $p < 0.05$

relationship with positive affect ($r = -0.11$) and significant positive relationship with negative affect ($r = 0.24, p < 0.01$).

final negative affect were 25.41 and 23.43 respectively. Standard deviation for initial and final negative affect were 8.97 and 9.78 respectively. t-

Table 4: Comparison of Affect before and after listening to devotional music on the basis of t-ratio

Variables	Mean	Standard deviation	t-score
PA initial	34.12	7.03	-1.10
PA final	35.21	6.97	
NA initial	25.41	8.97	3.21**
NA final	23.43	9.78	

** $p < 0.01$, * $p < 0.05$

Openness was found to have a positive significant relationship with music preference for classical ($r = .202, p < 0.01$). Extraversion was found to have a

score was found to be 3.21 which was significant. Effect size of 0.50 was obtained. The mean value for initial and final positive affect were 35.48 and 35.05 respectively. Standard

deviation for initial and final positive affect were 6.78 and 8.01 respectively. The mean value for initial and final positive affect were 7.29 and 9.58 respectively. Standard deviation for initial and final negative affect were 7.29 and 9.58 respectively.

Table 5: Comparison of Affect before and after listening to hard metal music on the basis of t-ratio

Variables	Mean	Standard deviation	t-score
PA initial	35.48	6.78	0.531
PA final	35.05	8.01	
NA initial	21.56	9.15	2.01*
NA final	19.74	7.55	

**p<0.01, *p<0.05

final negative affect were 21.56 and 19.74 respectively. Standard deviation for initial and final negative affect were 9.15 and 7.55 respectively. t-score was found to be 2.01 which was significant. Effect size of 0.32 was obtained.

Table 6: Comparison of Affect before and after listening to classical music on the basis of t-ratio

Variables	Mean	Standard deviation	t-score
PA initial	36.51	7.98	-0.02
PA final	36.53	8.36	
NA initial	21.41	7.29	-0.21
NA final	21.63	9.58	

*p<0.05, **p<0.01

and 7.77 respectively. The mean value for initial and final negative affect were 23.95 and 20.87 respectively. Standard deviation for initial and final negative affect were 9.03 and 10.12 respectively. T-score was found to be 3.82 which was significant. Effect size of 0.58 was obtained.

Table 7: Comparison of Affect before and after listening to electronic music on the basis of t-ratio

Variables	Mean	Standard deviation	t-score
PA initial	35.30	7.21	-0.34
PA final	35.59	7.77	
NA initial	23.95	9.03	3.82**
NA final	20.87	10.12	

**p<0.01, *p<0.05

The mean value for initial and final positive affect were 35.30 and 35.59 respectively. Standard deviation for initial and final positive affect were 7.21 and 7.77 respectively. The mean value for initial and final negative affect were 23.95 and 20.87 respectively. Standard deviation for initial and final negative affect were 9.03 and 10.12 respectively. T-score was found to be 3.82 which was significant. Effect size of 0.58 was obtained.

Table 8: Comparison of Affect before and after listening to pop music on the basis of t-ratio

Variables	Mean	Standard deviation	t-score
PA initial	35.68	7.26	-2.97
PA final	37.51	7.86	
NA initial	20.51	7.82	3.35**
NA final	17.87	7.70	

**p<0.01, *p<0.05

deviation for initial and final positive affect were 7.98 and 8.36 respectively. The mean value for initial and final negative affect were 21.41 and 21.63 respectively. Standard deviation for initial and final positive affect were 7.26 and 7.86 respectively. The mean value for initial and final positive affect were 35.68 and 37.51 respectively. Standard deviation for initial and final positive affect were 7.26 and 7.86 respectively. The mean value for initial and final negative affect were 20.51 and 17.87 respectively. Standard deviation for initial and final negative affect were 7.82 and 7.70 respectively. T-score was found to be 3.35 which was significant. Effect size of 0.58 was obtained.

deviation for initial and final positive affect were 7.26 and 7.86 respectively. The mean value for initial and final negative affect were 20.51 and 17.87 respectively. Standard deviation for initial and final negative affect were 7.82 and 7.70 respectively. T-score was found to be 3.21 which was significant. Effect size of 0.52 was obtained.

Discussion

In this study we tried to find out the relationship between music preference, mood and personality and the difference in mood before end after listening to music. Most of the studies focus on a particular genre of music, here in this study we tried to evaluate the relationships with five major genres of music that are

Table 9: Linear regression analysis of personality, mood and music preference

Dependent variable	Independent variable	B	Standard error	Beta	t-value	Adjusted R ²
PA initial	Neuroticism	-8.39	7.16	-.16	-2.30*	.02
	Openness	10.34	7.09	.21	3.05*	.03
	Extraversion	7.691	7.15	.17	2.49*	.02
	Conscientiousness	9.41	7.12	.18	2.72*	.03
NA initial	Neuroticism	19.01	8.20	.30	4.60*	.09
	Openness	-16.13	8.28	-.27	-4.08*	.07
	Conscientiousness	-13.61	8.39	-.23	-3.35*	.04
PA final	Openness	7.93	3.67	.15	2.15*	.01
	Extraversion	9.24	3.31	.13	2.79*	.03
	Conscientiousness	10.87	3.69	.20	2.94*	.03
NA final	Neuroticism	15.03	4.48	0.23	3.35*	.04
	Openness	-17.18	4.19	-.27	-4.09*	.07
	Conscientiousness	-13.79	4.32	-.21	-3.18*	.04
Electronic music preference	Extraversion	1.07	1.09	.15	2.26*	.02
Classical music preference	Openness	1.60	1.22	.18	2.73*	.03

*p<0.05, **p<0.01

Positive affect was initially predicted from neuroticism (B =-8.39, SE= 7.16, β= -.16, t=-2.30) Adjusted R²=.02, openness (o) (B =10.34, SE= 7.09, β=.21, t=3.05) Adjusted R²=.03, extraversion (e) (B =7.69, SE= 7.15, β= .17, t=2.49 Adjusted R²=.02 and conscientiousness (c) (B =9.41, SE= 7.12, β= .18, t=2.72 Adjusted R²=.03. Negative affect was initially predicted from neuroticism (B=19.01, SE= 8.20, β= .30, t=4.60) Adjusted R²=.09, openness to experience (B=-16.13, SE= 8.28, β= .27, t=-4.08) Adjusted R²=.07 and conscientiousness (c) (B=-13.61, SE= 8.39, β= -.23, t=-3.35) Adjusted R² =.04.

Positive affect was finally predicted from openness (B=7.93, SE= 3.67, β= .15, t=2.15) Adjusted R²=.01, extraversion (B=9.24, SE= 3.31 β= .13, t=2.79) Adjusted R²=.03, conscientiousness(B=10.87, SE= 3.69, β= .20, t=2.94) Adjusted R²=.03. Negative affect was finally predicted from neuroticism (B=15.03, SE= 4.48, β= .23, t=3.35) Adjusted R²=.04, openness (B=-17.18, SE= 4.19, β=-.27, t=-4.09) Adjusted R²=.07, conscientiousness (B=-13.79, SE= 4.32, β= -.21, t=-3.18) Adjusted R²=.04.

Music preference for electronic was predicted from extraversion (B=1.07, SE= 1.09, β= .15, t=2.26) Adjusted R²=.02. Music preference for classical was predicted from openness to experience (o) (B=1.60, SE=1.22, β= .18, t=2.73) Adjusted R²=.03.

classical, religious, pop, electronic or dance and heavy metal.

Personality and music preference

Hypothesis 1 stated that Openness to experience measure of personality will show a preference to classical and heavy metal music condition. Results of the study suggest that those scoring high on openness to experience are drawn to classical music, thus hypothesis 1 was partially accepted. Similar results were found in the study by Rentfrow & Gosling (2003) which was conducted on undergraduate students to study the structure and personality correlates of music preference, using STOMP and battery of personality measures. It was concluded that energetic and rhythmic music like electronic (dance), rap, funk was positively related to extraversion and agreeableness. Also, Brown (2012) conducted a study to find the relationship between music preferences and personality among Japanese university students and found that openness to experience was related to the preference for reflective music like jazz, classical, opera, and gospel.

Hypothesis 2 stated that Extraversion will show a preference to pop, electronic/dance and religious music condition.

Findings of this study indicated that individuals scoring high in extraversion trait have greater

preference for electronic music thus hypothesis 2 was partially accepted. As suggested by Eysenck (1967) that people scoring high in extraversion needs greater level of arousal and are thus found to prefer music with high stimulation like music with enhanced bass which means that they are not just engaged to a particular genre but to the energetic and rhythmic music which can include other genres like rap and funk. Findings by Rentfrow & Gosling (2003) also stated that reflective and complex dimension of music like classical, blues, folk and jazz was positively related to openness to experience trait of big five. Hypothesis 2 is thus partially accepted.

However, the other dimensions of big five are not found to be linked with any music preference in our study. Whereas agreeableness and conscientiousness were found to be positively related to Upbeat and conventional music like country, religious, pop and soundtracks in the study by Rentfrow & Gosling (2003). But our findings were similar to those of Brown, (2012) where openness to experience and extraversion were found to be related to music preference and other dimensions of bug five did not correlated with any music preference.

Personality and mood

Personality factors are found to be critical of predicting the subjective well-being. In this study the big five personality factors were found to be correlated with and great predictors of the positive and negative affect. Hypothesis 3 stated that Extraversion, Openness to experience and conscientiousness traits will be positively related to positive affect. Extraversion was found to be a significantly correlated with positive affect and no association with negative affect was observed. The way people interpret their surroundings depends on their traits. Extraversion implies an energetic approach towards the social and material world and is composition of traits like sociability, activity, assertiveness, and positive emotionality (John et al., 2008), therefore it can be said that people high in extraversion perceive world in a positive and favourable way which led to be perceived as happy by themselves (Zanon et al., 2013).

Openness to experience is linked with the values of depth, originality and complexity. Openness trait have a temperament of feeling both good and bad deeply therefore positive relationship with both positive and negative affect (Costa & McCrae, 1991). Findings of our study indicate that there is a positive relationship between positive affect and openness trait whereas negative relationship with negative affect. But there are also studies which indicate that there is no association between openness, positive and negative trait, for example the results of study conducted by Zanon et al., (2013) indicated that openness has no relationship with either positive or the negative affect. Further findings of this study indicates that conscientiousness exhibit a positive relationship with positive affect and negative

relationship with negative affect suggesting that individuals who are hardworking, have goal-directed behaviour and focused on planning, organizing and prioritizing tasks have number of stressors reduced for them and it is also seen that they are positively linked to healthy behaviour and negatively linked to unhealthy behaviour (Saklofske et al., 2007) therefore they experience greater positive affect. Hence hypothesis 3 was accepted.

Agreeableness was found to have no relationship with either positive or negative affect implying that tendencies of modesty, altruism, empathy and care does not necessarily leads to positive rewards thus presenting no relationship with positive affect. Hypothesis 4 stated that Neuroticism will be positively related to negative affect. Neuroticism was found to be positively correlated with negative affect and an inverse relationship with positive affect was observed. This might owe to the neurotic traits of low emotional stability, feeling anxious, nervous, sad and tense. Neuroticism is linked with the negative emotional and behavioural traits (DeNeve & Cooper, 1998) therefore implying its association with negative affect. Our results are supported by the study of Costa & McCrae, (1980) which concluded that neuroticism was related to negative affect or dissatisfaction and extraversion was linked to positive affect or satisfaction. Hypothesis 4 was thus accepted.

Music and mood

Hypothesis 5 stated that there will be difference in mood before and after listening to different genres of music. According to previous researches different types of music was found to have varying effects on mood. The results of this study indicate that after listening to Pop, Devotional, Electronic, Heavy metal genres of music, negative affect of people decreased significantly. No significant difference was observed in positive affect before and after listening to music. The study by Groarke & Hogan, (2019) led to the findings that after exposure to music participants were found to report greater reduction in negative affect as compared to those who were not exposed to music. Rea et al., (2010) studied the effects of different types of music on mood and founded that after listening to classical music people reported feeling more at ease while tension and nervousness was increased after listening to heavy metal. Results of listening pop music were similar to that of classical music leading to increased feeling of ease and decrease in moods related to worry and tension. Hypothesis 5 is hence accepted. Findings of this study indicate that hard metal music condition also led to reduction in negative affect which is different from most of the studies which indicates that listening to heavy metal music led to increase in positive emotions of the people who prefer listening it otherwise negative emotions are increased (Bodner & Bensimon, 2015; Wooten, 1992).

Conclusion

The findings of the study indicate that personality influences music preference. People high in extraversion prefer energetic music like dance or electronic, and those high in openness are drawn to classical music, no other traits were found to be linked with any type of music. Negative affect was found to decrease significantly after exposure to pop, devotional, electrical and heavy metal music. Another important finding suggest that positive and negative affect can be predicted from the big five traits of personality, neuroticism being a predictive of negative affect and extraversion, openness and conscientiousness of positive affect. Openness and conscientiousness are also found to be inversely related to negative affect, and neuroticism being inversely related to positive affect. Future work could look into gender differences and inclusion of wider range of ages may also be worth exploring.

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