Correlation Between Music Preference and Emotional Intelligence Development

Susan Xu[1,*]

[1] Moonshot Academy
*Corresponding author. Email:18010017@stu.moonshotacademy.cn

1.INTRODUCTION

Listening to music plays an important role in our daily life. During this process, music can have considerable effects on cognition, emotion, and behavior (Rentfrow). Also, we chose the excerpt we listen everyday based on our own tastes and cultural backgrounds. Therefore, most researchers believe that music preference was an indicator of one's explicit traits, like personality (Brown), political orientation(Redhead), and altruistic tendency(Hippler). These conclusions has been cross-cultural examined. For example, a preference on R&B music may indicate a higher possibility of being "left-winged."

However, the credibility of these studies can be debatable. In a 2014 study, after examining 98 emotion-induced German participants' big-five test score and compare it to general statistics, it was concluded that sadness (induced by music) may result in higher score on neuroticism but slower score on extraversion. This research shows us that self-reported questionnaire can be easily manipulated by the participant's current mood.

Also, all the explicit traits mentioned above are highly related with other factors. For example, one's political orientation can be highly effective by one's educational background and socio-economic status (Brown-Iannuzzi et al.). Therefore, some researchers aimed to find intermediate factors inside this process.

In a 2015 study, big five personality test result was found to be significantly correlated with one's emotional intelligence development (Assoc et al.). More specifically, agreeableness and extraversion was found to be positively correlated with one's overall emotional intelligence level. This research drew a connection between emotional intelligence with music preference, where they were all related with personality trait.

This research aims to provide another perspective-which is the correlation between emotional intelligence development and music preference.

1.1 EMOTIONAL INTELLIGENCE

Emotional Intelligence, first named by two researchers at 1990, is an ability to "monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey and Mayer).

Accordingly, Daniel Goleman proposed a model in his 1998 book "What Makes a Good Leader" that described emotional intelligence into 5 sub-genres: self-awareness, self-regulation (emotion control), social skill empathy, and motivation.

In a 2015 study, the researcher discovered the underlying connection between level of empathy and music preference (Greenberg et al.). For example, people who prefer mellow songs (generally pop / R&B songs) generally contain a higher empathy level. This suggests that emotional intelligence as a whole may be also predicted by music preference.

In the follow-up studies, emotional intelligence was found to be a crucial predictor of one's future success, including academic success (Chapin), work space performance (Khanra), and leadership process (George). Accordingly, researchers are mainly studying how emotional interpretation training may help one's emotional intelligence development (Nelis et al.).

Therefore, this research may provide a new perspective on how music education or music therapy may help to cultivate one's emotional intelligence growth. This study aimed to answer four research questions as follows:

1. Do people with a preference on Mellow and Unpretentious music have higher emotional intelligence development in general?

Hypothesis 1: People with a preference on Mellow and Unpretentious music have higher emotional intelligence development in general?

2. Do people with a preference on sophisticated music better at empathizing with others?

Hypothesis 2: People with a preference on Sophisticated music is better at empathizing with others.

3. Do people with a preference on intense music better at empathizing with others?

Hypothesis 3: people with a preference on intense music are deficient in empathizing with others.

4. Do people with a preference on unpretentious music better at managing their emotions?

People with a preference on unpretentious music better at managing their emotions.

2.METHOD

2.1. PARTICIPANTS

A total of 37 Chinese (Mage = 34.54, SD = 27.9) participated in the present study. An online questionnaire was used in this study, so participants were from different areas. The average of time finishing the questionnaire is 1079 seconds.

2.2. PROCEDURES AND MEASURES

A questionnaire was used to examine participants' emotional intelligent development and music preference. The data were collected through online questionnaire.

The online questionnaire mainly contained three parts:

The first part was a homepage with an introduction to the study and the instruction for participants. The online questionnaire began with a homepage introduction included describing the purpose of this research. Participants are informed that their responses should be authentic, and the data they provided will be used in a study focusing on the correlation between one's emotional intelligence development and music preference. Participants were also asked to provide their personal information, including age and gender.

The second part mainly contained the measures of participants' emotional intelligence through a questionnaire published by NHS in 2014. (NHS) Participants were asked to read the instructions and rate how strongly the statement applies to their personal situation.

The third part mainly contained the measures of participants'music preference using the MUSIC model. Participants were asked to listen to 11 songs separately and report their feelings of each songs using MUSIC dimensions. They were also asked to rate their preference of each excerpts after hearing them.

2.3. MEASURES

Emotional Intelligence. In this study, a self-report questionnaire was used to measure the Emotional Intelligence level of each participants (NHS). Especially, the result of this questionnaire divided emotional intelligence into five subgenres: *Self-Awareness*, *Managing Emotion*, *Motivating Oneself*, *Empathy*, and *Social Skill*. The whole questionnaire contained 50 questions, and each question directly point to a subgenre.

Music Preference. In this study, no genre-based music preference assessment would be conducted, because there are many different classifications. Instead, by using a MUSIC model, music preference is defined based on participants' instant feelings toward the excerpts they heard (Rentfrow et al.). The feelings are summarized as 5 dimensions (Mellow, Unpretentious, Sophisticated, Intense, Contemporary). After collecting participants' rating on each excerpt in five dimensions and their preference, the following calculation was conducted (take Mellow as an example):

$$Mellow = \frac{\left(\begin{array}{c}\text{Mellow score on} \\ \text{Excerpt 1*} \\ \text{Rate of} \\ \text{likeness on Excerpt 1}\end{array}\right) + \left(\begin{array}{c}\text{Mellow 2*} \\ \text{Rate 2}\end{array}\right) + \ldots}{\begin{array}{c}\text{Sum of all the rates of likeness} \\ \text{on all Excerpts}\end{array}}$$

3.RESULTS

Of the 37 participants completing the online questionnaire, no data were removed after a data check.

Pearson Correlation

		Self-Awareness	Managing Emotions	Motivating Oneself	Empathy	Social Skill	total
Mellow	Correlation coefficient	0.269	0.301	0.035	0.082	0.355*	0.285
	p-value	0.107	0.070	0.839	0.628	0.031	0.088
Unpretentious	Correlation coefficient	0.215	0.333*	0.236	-0.018	0.190	0.255
	p-value	0.201	0.044	0.160	0.914	0.260	0.127
Sophisticated	Correlation coefficient	0.437**	0.370*	0.110	0.343*	0.497**	0.475**
	p-value	0.007	0.024	0.516	0.037	0.002	0.003

Pearson Correlation

		Self-Awareness	Managing Emotions	Motivating Oneself	Empathy	Social Skill	total
Intense	Correlation coefficient	-0.013	0.170	-0.166	-0.035	0.061	0.009
	p-value	0.939	0.314	0.326	0.837	0.721	0.959
Contemporary	Correlation coefficient	0.371*	0.189	0.149	0.246	0.211	0.312
	p-value	0.024	0.264	0.378	0.142	0.210	0.060

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

A Pearson correlation test was conducted on 5 subgenres of participants' emotional intelligence and 5 factors in music preference.

The result showed no significant correlation between preference on Mellow and Unpretentious music and emotional intelligence development in general, r (37) = .285, p = .088, r (37) = .255, p = .127. Hypothesis 1 was rejected.

Instead, preference on sophisticated excerpt was indicated to be positively correlated with emotional intelligence in general, r (37) = . 475, p = .003.

Also, a significant correlation was found between empathy development and preference on sophisticated music, r (37) = .437, p = .007, hypothesis 2 was proved. This suggests a significant positive relationship between listening

to sophisticated music and one's development on empathy.

No significant correlation was found between one's preference on intense music and empathy development, p = .721, hypothesis 3 was rejected.

Furthermore, the development of Managing Emotion was found to be positively correlated with preference on Unpretentious and Sophisticated music, hypothesis 4 was proved.

Besides, the development of social skill was found to be positively correlated with preference on Mellow music.

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