



Music Preference as a Predictor of Cognitive Reappraisal and Expressive Suppression: The Moderating Role of Loneliness in Young Adulthood

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Abstract: The wide usage of music is to regulate affect but its effectiveness might differ depending on personal music preferences and social emotional context in general. This is a quantitative study on a cross-sectional basis that analysed the relationship between music preferences and emotion regulation strategies among young adults and the possibility of loneliness moderating this association. The participants ($N = 211$; ages 17-27) were offered to complete the Short Test of Music Preferences (STOMP), Emotion Regulation Questionnaire (ERQ), as well as the Three-Item UCLA Loneliness Scale. The results showed that the preference to energetic and rebellious music had a positive correlation with cognitive reappraisal and expressive suppression. Energetic/rebellious music was also a strong predictor of cognitive reappraisal even after accounting for other preferences of music. Cognitive reappraisal was negatively correlated with loneliness and expressive suppression was positively discovered. Nevertheless, loneliness failed to mediate between music preference and cognitive reappraisal; that is, the two variables alone both yielded to emotion regulation variability. The implications of these findings include: although the preferences of energetic music can make adaptive emotion regulation possible, loneliness alone impairs affective flexibility, which highlights the importance of considering the preferences of music and the social-emotional context of music in wellbeing interventions.

Keywords: *Music Liking, Affective Control, Cognitive Re-Appraisal, Affective, Suppression, Loneliness, Young Adults, STOMP*

1. Introduction

Music is not just the background sound; people have used songs, beats, and tunes to express mood, discover their ways through the transformation, and build relationships within various cultures and time periods. The modern society is characterised by regular use of music to relax, party, think or work through tough emotions. The popularity of streaming platforms and smartphones has increased the accessibility, allowing people to pick the songs, which reflect or change their emotional mood (Groarke and Hogan, 2016; Dubey and Cherian, 2024). The use of music as a means of controlling emotions entails the identification of affective experience and the effective use of listening as a moderator and maintaining quotidian commitments like education, work, or relationship commitments. This procedure does not involve the prevention of negative affect, but, it deals with handling the emotions without disrupting day-to-day functioning. Emotional regulation is a problem that is likely to contribute to emotional distress and increase the risk of developing a clinical condition, like anxiety or depression (Patrichi et al., 2024). Music may prove to be quite beneficial within this framework as it is personalized, inexpensive, and easily available.

Experimental research data show that there is a close nexus between music preferences and personality traits and aspects of personal identity (Hernandez-Ruiz et al., 2025). Tastes are not fixed, but can change according to mood, stress, or situational factors. Most of them choose non-conformist musical genres depending on their current emotional requirements. The studies show that the emotional effect of music is often more affected by individual liking of music than by the genre (Vella et al., 2025). Equally, preferred music has been found to reduce stress more efficiently as compared to unfamiliar and neutral music (Jiang et al., 2016). Choices of music work in varied mechanisms to fulfill the needs of emotions. Fast-paced and percussion-focused songs can be selected to boost either motivation or energy, and slower and calmer songs are usually selected to assist in relaxation or concentration. Autotelic selection has generally stronger affective results compared to externally imposed music (Groarke and Hogan, 2016; Groarke and Hogan, 2019). Music can have an effect on affect through various ways: it can take attentional resources and distract from maladaptive cognitions, help reinterpret situations through the lyrics and semantic content, and makes people feel socially connected through evoking shared experiences or relationships (Särkkmo, 2018; Schaefer et al., 2020). However, music is not always effective in improving emotional well-being. People sometimes choose the music that reflects their present negative mood. Although this will possibly create a temporary relief, recurring exposure to depressive or gloomy music during

distress can strengthen rumination and extend an unfavorable affect (Ter Bogt et al., 2017). In that regard, the results of musical interaction depend on the deliberateness.

Another factor that might mediate the use of music to cope with affective factors is loneliness. Loneliness is the feeling of not having the support or intended significance in the social relations. It is not like isolated presence. Time-period loneliness is linked to a dysregulation of emotions and worse mental health (Patrichi et al., 2024). Music can be used by many people as a kind of comfort or companion, as it creates a sense of understanding due to the lyrics and familiarity of voices (Ayyildiz et al., 2025; Redmond, 2024). In times of social isolation, like the COVID-19 pandemic, a substantial number of people maintained the sense of connectedness and emotional stability in music (Persson, 2022; Martin et al., 2021; Granot et al., 2021). At the same time, loneliness might have an impact on the role of music in the affective experiences. Lonely people can selectively be attracted to music that indicates the mood, which can lead to emotional processing or, conversely, rumination depending on the application (Ter Bogt et al., 2017; Ayyildiz et al., 2025). These processes become especially topical in young adulthood a stage of development in which the identity is formed, the social network is diverse, and the problems of affections are observed. Here, music often plays an important role in the self-expression, the social bonding, and emotion regulation, among the adolescents and young adults (Vasileiou et al., 2019; Cook et al., 2019). The interrelation between music preferences and loneliness thus has potentials of informing the affective well-being of this group.

Overall, music can be viewed as a multi-purpose tool that is influenced by individual preferences, social environment, and the reasons to listen. Whereas music has the capability of regulating affect, other factors like loneliness can mediate its efficacy. The exploration of these relations can be used to make music-based interventions aimed at improving emotional state in young adults.

2. Methodology

2.1 Aim

The purpose of the study was to investigate the association between preference of music and emotion regulation in young adults and also to explore the moderating effect of loneliness on this relationship.

2.2 Objectives of the Study

1. To investigate the connection between music preference and emotion regulation.
2. To investigate the connection between emotion regulation and loneliness.

3. To examine the relationship between music liking and loneliness.
4. To find out, is there a moderating effect of loneliness between music preference and emotion regulation

2.3 Hypotheses

H1: There will be a significant relationship between music preference and emotion regulation among young adults.

H2: There will be a significant relationship between loneliness and emotion regulation among young adults.

H3: There will be a significant relationship between music preference and loneliness among young adults.

H4: Loneliness will significantly moderate the relationship between music preference and emotion regulation.

2.4 Rationale of the Study

Listening to music is a common practice that is used to handle emotions, as it assists people to minimize stress, negative affect, and positive moods. There is empirical evidence that music of personal preference has a stronger emotional influence as compared to music that is not liked. Psychological wellbeing depends on emotion regulation, especially the application of cognitive reappraisal, though the effectiveness of emotion regulation can be different in the individuals. The role of loneliness can also moderate this effect, with lonely people often having to use internal coping acts like listening to music, when social support is lacking. Although the study on music preference, emotion regulation, and loneliness has been carried out on an independent basis, there is scarcity of literature that examines the role of loneliness on the relationship between music preference and emotion regulation. This paper attempts to fill that empirical gap.

2.5 Research Design

The research design used was quantitative, correlational and cross-sectional. Music preference, emotion regulation and loneliness were measured by use of standardized questionnaires. It was a one point time collection of data, which allowed studying the nature of variables in a group of young adults. There was no manipulation done in the experimental sense; individual differences that are natural were investigated. Correlational design was considered suitable as the aim was to clarify the relationships and not to make a cause-effect. The loneliness as a mediating variable was evaluated with hierarchical multiple regression.

2.6 Variables of the Study

Independent Variable: Music Preference

Dependent Variable: Emotion Regulation

Moderating Variable: Loneliness

2.7 Sample and Participants

The sample consisted of 211 young adults aged 17–27 years. Participants were selected using convenience sampling. Individuals were eligible to participate if they fell within the specified age range and reported listening to music regularly.

2.8 Measures

Short Test of Music Preferences (STOMP): The STOMP scale was used to measure music preference, and can assess liking of different genres on four dimensions, reflective/complex, Intense/ rebellious, Upbeat/ conventional, and Energetic/ rhythmic. The greater the score, the greater the preference.

Emotion Regulation Questionnaire (ERQ): Emotion regulation was assessed using the Emotion Regulation Questionnaire (ERQ) which assesses two strategies, Cognitive Reappraisal (assessing a situation differently to change the way it affects us) and Expressive Suppression (stifling emotional expression).

Three-Item UCLA Loneliness Scale: This short scale was used to measure loneliness and included the feelings of social isolation and absence of companionship, the higher the score the more loneliness.

2.9 Scoring

The STOMP consists of 14 genre items and they are rated on a 7-point scale and scores are summed with the four preference dimensions.

The ERQ items use a 7-point Likert measurement scale of strongly disagree to strongly agree. Cognitive reappraisal and expressive suppression are assessed separately as separate composite scores.

The Three-Item UCLA Loneliness Scale is based on a 3 item scale (hardly ever, some of the time, often). The total scores are between 3 and 9 with higher scores meaning the individual is more lonely.

2.10 Procedure

The information was obtained through an online survey. Respondents were informed about the purpose of the study and guaranteed the confidentiality and anonymity. The importance of voluntary participation was stressed and informed consent was taken before the questionnaires were filled. The study scales were administered to the participants after demographic items. The survey took around 10 15 minutes. Data sets which were not

completely filled were discarded, and 211 valid datasets were obtained. The analyzing was done using SPSS.

3. Statistical Analysis

The analysis of data was done in SPSS. Each variable was described by descriptive statistics (mean, standard deviation, minimum, and maximum). The correlation of Pearson tested the relationships between music preference, emotion regulation and loneliness. To examine the moderating role of loneliness, hierarchical multiple regression was conducted: the first step involved the prediction of music preference and loneliness, then the second step involved the addition of the interaction term between music preference and loneliness to examine the moderating role.

3.1 Results

Descriptive Statistics

Table 1 presents the descriptive statistics for all study variables, including the four dimensions of music preference, the two emotion regulation strategies (cognitive reappraisal and expressive suppression), and loneliness. Results showed moderate to high preferences across music dimensions, with the highest mean for energetic and rhythmic music, followed by upbeat and conventional music.

Table 1. *Descriptive Statistics*

	N	Mean	Std. Deviation
Reflective complex	211	3.8464	1.30716
Intense and Rebellios	211	3.9258	1.42549
Upbeat and Rebellious	211	4.4727	1.16554
Energetic and Rhythmic	211	4.6445	1.39861
Reappraisal	211	4.8349	.90968
Suppression	211	4.6600	1.17623
Loneliness	211	2.000	.5434

Correlation Analysis

Table 2 shows that music preference dimensions were positively correlated. Cognitive reappraisal was positively related to some music preferences, while expressive suppression showed weaker links. Loneliness was negatively related to cognitive reappraisal and positively related to expressive suppression.

Table 2. Correlation

Variable	1	2	3	4	5	6	7
Reflective/Complex	—						
Intense/Rebellious	.53***	—					
Upbeat/Conventional	.63***	.63***	—				
Energetic/Rhythmic	.48***	.61***	.60***	—			
Reappraisal	.09	.23**	.30***	.21**	—		
Suppression	.09	.14*	.17*	.13	.27***	—	
Loneliness	.03	.01	-.09	.04	-.22**	.20**	—

Multiple Regression Analysis

Table 3 shows that music preference and loneliness significantly predicted cognitive reappraisal. Preference for energetic and rebellious music was a positive predictor, while loneliness was a negative predictor. Other music preferences were not significant predictors.

Table 3: Multiple Regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.467	.336		13.290	.000
	Reflective complex	-.115	.060	-.165	-1.921	.056
	Intense and Rebellios	.058	.058	.092	1.008	.315
	Upbeat and Rebellious	.221	.077	.283	2.885	.004
	Energetic and Rhythmic	.048	.057	.074	.841	.401
	Loneliness	-.316	.110	-.189	-2.881	.004
a. Dependent Variable: Reappraisal						

Multiple Regression Analysis (Suppression)

Table 4 shows that music preference and loneliness significantly predicted expressive suppression, explaining 8.1% of the variance. Loneliness and preference for energetic and rebellious music were significant positive predictors, while other music preferences were not significant.

Table 4. Multiple Regression Analysis (Suppression)

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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	B	Std. Error	Beta		
(Constant)	2.863	.451		6.348	.000
Reflective complex	-.068	.080	-.076	-.849	.397
Intense and Rebellios	.039	.078	.047	.502	.616
Upbeat and Rebellious	.210	.103	.209	2.046	.042
Energetic and Rhythmic	.000	.077	.000	.004	.996
Loneliness	.481	.147	.222	3.268	.001

Moderation Analysis

Table 5 shows that energetic and rebellious music preference positively predicted cognitive reappraisal, while loneliness negatively predicted it. The interaction between music preference and loneliness was not significant, indicating that loneliness did not moderate the relationship.

Table 5. Moderation Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.835	.059		82.118	.000
	Z score (Upbeat and Rebellious)	.255	.059	.281	4.311	.000
	Z score (Loneliness)	-.173	.059	-.190	-2.918	.004
2	(Constant)	4.831	.059		81.585	.000
	Z score (Upbeat and Rebellious)	.258	.059	.283	4.338	.000
	Z score (Loneliness)	-.178	.060	-.196	-2.975	.003
	INTERACTION	-.041	.062	-.043	-.660	.510
a. Dependent Variable: Reappraisal						

4. Discussion

The current research has analysed the connections between music preferences, emotion management strategies and loneliness among young adults. The correlation findings achieved were shown to be positive indicating a major interrelationship of the different dimensions of music preference, meaning that those who preferred a certain musical genre tended to show interest in the other styles. The cognitive reappraisal was found to have significant and positive

correlations with some music preferences with significant correlations with enthusiastic and rebellious music and expressive suppression was found to have rather weaker and affirmative correlations with specific music preferences. Loneliness was found to have a negative relationship with cognitive reappraisal and a positive relationship with expressive suppression which is that the higher individuals become lonelier, the less adaptive, emotion regulation strategies are employed.

Hypothesis 1 that suggested that there is a significant correlation between music preference and emotion regulation was partly supported. The findings showed that the liking of energetic and rebellious music was a strong predictor of the use of cognitive re-appraisal process which mean that people who listen to energetic music are likely to re-frame emotional events. On the other hand, validity of reflective and complex music preferences failed to turn out as important predictors suggesting that different musical styles can perform different functions of emotions.

Hypothesis 2 that assumed the existence of a relationship between emotion regulation and loneliness was proven. The results showed that loneliness had a negative predictive correlation with cognitive reappraisal and a positive predictive relationship with expressive suppression, which reflected that high levels of loneliness correlate with the lack of emotional flexibility and the need to use emotion suppression more.

Hypothesis 3 that established a connection between music preference and loneliness was not acceptable as loneliness did not show a significant association with most of the music preference dimensions. There was also no support of hypothesis 4 that posited that loneliness would mediate the relationship between music preference and emotion regulation. Moderation analysis showed that the relationship between music preference and loneliness did not have a significant value thus showing that music preference and loneliness do not affect emotion regulation interdependently. The findings, in general, indicate that the tendency towards energetic music can help some of the emotion regulation strategies but loneliness alone influences the emotions coping mechanism of an individual. These results highlight the need to include music preference together with emotional background in the study of emotional well-being among young adults.

5. Conclusion

The current study examined the relationship between musical preferences, emotion-regulation strategies and loneliness among a group of adolescents. The findings show that taste in music causes a salient effect on the utilization of emotion-regulation processes. Those

individuals who preferred energetic and rebellious music showed an increased tendency towards cognitive reappraisal which indicates that listening to such music can be useful to reinterpret difficult situations in more beneficial ways. The observation is supported by previously existing studies that show the mood-enhancing as well as coping-supportive effects of preferred music. On the other hand, expressive suppression was positively correlated with the same taste towards energetic and rebellious music and this finding suggested that this type of music can be used to selectively adopt adaptive and maladaptive regulatory approaches depending on the use of the music type. Loneliness was also another substantial point, as higher loneliness scores were linked to lower levels of cognitive reappraisal and greater utilization of expressive suppression, which is a symptom of less affective flexibility. However, loneliness did not mediate between musical preference and cognitive reappraisal, which indicated that music preference and loneliness have independent influence on emotion- regulation. The findings combined suggest the potential of music as a source of emotion, which depends on the personal preferences and the emotional atmosphere.

6. Limitations

There are a number of limitations in the generalisability of such findings. To start with, the researcher used self-report measures only, which is prone to error of recall and the social desirability bias. Second, the study is cross-sectional and thus cannot be used to draw a causal conclusion about the relationship between musical preference, loneliness, and emotion-regulation. Third, the preference to music was operationalised through broad genre categories with no attention paid to situational listening and the motivation to consume music. Lastly, loneliness was assessed as a unitary construct, which did not allow the distinction of emotional and social loneliness.

6.1 Future Research Directions

Future research needs longitudinal or experimental designs to clarify the time dynamics of the effect of musical preferences on emotion-regulation. Scholars should investigate the reasons and situations that influence music choice, since affect is likely to be influenced by the purpose of listening. The theoretical knowledge would be enhanced by broadening the scope towards different forms of loneliness including emotional and social loneliness, as well as a broader range of regulation strategies other than reappraisal and suppression. External validity would be improved through sampling of different cultures, age groups and musical backgrounds.

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