



EXAMINING THE CORRELATION BETWEEN MUSIC LISTENING AND MENTAL HEALTH AMONG YOUNG ADULTS

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ABSTRACT

This study examines the connection between music habits and mental health, with a particular emphasis on anxiety, stress, and depression in young adults. The purpose of this research is to investigate the relationship between music consumption and mental health, with a particular emphasis on anxiety, stress, and depression in college students. The study aims to look at any possible relationship between university students' mental health and their music-listening habits. Researchers hope to determine whether there is a measurable relationship between the two factors by looking at this association and to offer information that could guide university students' assistance plans or mental health treatments. This study uses online platforms such as Google Forms to collect data from young persons aged 18 to 35. Survey data from a sample among young adults is analyzed quantitatively in this study. The research results offer important new information for educators and mental health professionals as they show a strong relationship between several mental health and music listening habits.

Keywords: music listening, depression, anxiety, stress, mental health, young adults.

INTRODUCTION

Depression is a prevalent mental illness that affects more than 300 million individuals of all age groups globally, according to the World Health Organization (WHO, 2019). Depressive symptoms encompass a diminished mood, diminished interest in formerly enjoyable activities,



disrupted sleep patterns, impaired focus, and feelings of guilt or diminished self-esteem. Anxiety, despite its frequent association with melancholy, exhibits numerous distinctions. The symptoms commonly associated with anxiety bear resemblance to those of depression. The symptoms encompass tachypnea and tachycardia, sleep disturbances characterized by either excessive or insufficient sleep, and difficulties with concentration.

The Impact of Music on Young Adults

Students are consistently exposed to music throughout the day, whether it is intended or not. Music serves as a means for individuals to express themselves in a deeply personal manner. Music is seen as a vital element in the process of adolescent development (Miranda & Claes, 2007). The average daily music listening time in the United Kingdom and United States is approximately 2.5 and 4 hours, respectively. Research has demonstrated that listening to music can enhance mood, promote relaxation, boost productivity, and improve cognitive performance (Reach Out, 2018). Research conducted by Kämpfe et al. (2010) shown that background music acts as a distraction, leading to decreased productivity and performance. Further research, such as the Mozart effect (Rauscher et al., 1993), has demonstrated positive impacts on cognitive functioning. The Mozart effect, as demonstrated by Rauscher et al. (1993), indicates that music with a lively tempo leads to elevated mood levels and heightened arousal. In contrast, music that has a slower pace elicits a lower, more negative mood and decreases levels of arousal (Riener et al., 2011).

The relaxation of muscles in the body leads to the release of tension, which in turn facilitates the relaxation of the mind and the discharge of negative physical and psychological feelings, whether conscious or unconscious (Scott, 2018).

Studies

Music therapy is an interpersonal procedure where the therapist utilizes music and its many components to aid patients in enhancing, recovering, and sustaining their health. Music therapy can be administered over varying durations, ranging from a few weeks to many years. Furthermore, the frequency of treatment ranges from daily to weekly or monthly sessions. Individuals or groups of people can be observed, and they may also join an open group. (Maratos



et al., 2009) Music therapy can also be defined as a compassionate encounter. The objective of utilizing music in therapy is to stimulate, sustain, or enhance the psychological functioning of individuals or groups. The primary component of music therapy lies in the engagement and exchange of information between individuals. Music serves as a means of cognition, social interaction, and communication. (LiljaViherlampi 2011, page 5.) Moreover, music is intricately linked to our entire personality as it has a simultaneous impact on both our conscious and unconscious aspects of selfhood. Music appears to communicate effortlessly and without hindrance from the preconscious, unconscious, and physical realm of experience, as well as with conscious aspects of human experience. (Lehtonen, 1996, p. 15)

This is a thesis conducted by Laurence Aloisio, Katariina Tång, and Reeta Pesonen at Turku University of Applied Sciences. Individuals allocate significant amounts of time and financial resources to engage in the activity of listening to music. The estimated value of the global recorded music market is approximately US\$ 17.6 billion. Individuals engage in music consumption for a diverse range of purposes.

Researchers have also acknowledged that music has the potential to elicit undesirable memories, causing feelings of distress or rage (Eells 2014). Music encompasses four distinct sorts of experience: improvisation, composition, listening, and re-creation or performance (Bruscia 1998, 29). The author's project is centered upon music listening and specifically focuses on the experiences that listening can evoke. Bruscia (1998) states that individuals react to the act of listening to music by expressing themselves verbally, silently, or through another sensory mode. Additionally, music has other dimensions, including the physical, intellectual, spiritual, emotional, and aesthetic aspects, which contribute to the overall music listening experience. The potential clinical objectives of the experience may include eliciting targeted physiological reactions, inducing emotional states and experiences, enhancing openness and receptiveness, promoting either stimulation or relaxation, fostering the development of auditory and/or motor abilities, exploring the ideas and thoughts of others, evoking imagery and fantasies, inducing peak and spiritual experiences, and facilitating reminiscence and regression (Bruscia, 1998).



METHODOLOGY

Aim

The aim of this study is to examine the possible association between music consumption patterns and mental well-being in the young adult population.

Hypotheses

- There will be significant differences in the link between categories of music consumed and depression levels among young adults.
- There will be significant differences in the link between categories of music consumed and anxiety levels among young adults
- There will be significant differences in the link between categories of music consumed and stress levels among young adults
- There will be significant difference among the magnitude and orientation of the link between distinct genres or categories of music consumed and depression among young adults
- There will be significant difference among the magnitude and orientation of the link between distinct genres or categories of music consumed and anxiety among young adults
- There will be significant difference among the magnitude and orientation of the link between distinct genres or categories of music consumed and stress among young adults

Sample

The approach to sampling for this study is the selection of a sample of 106 young adults currently residing in the Delhi/NCR. The study utilized stratified sampling strategy for data collection. Recruitment of participants will be conducted through online platforms. Upon being recruited, participants will be required to give informed consent prior to completing survey instruments or taking part in interviews regarding their music listening habits and mental health. The study method will guarantee the confidentiality and anonymity of participant data. Data analysis will be carried out collectively to safeguard the privacy of participants. This study used



a quantitative research methodology to examine the relationship between music listening habits and mental health outcomes among young individuals.

Tools

- **Depression Anxiety Stress Scale (DASS):**It is a commonly employed self-report survey intended to assess the intensity of symptoms associated with depression, anxiety, and stress. The DASS, created by Lovibond and Lovibond in 1995, is composed of three subscales, with each subscale including seven items. The Depression scale evaluates emotions of dysphoria, hopelessness, and poor self-esteem, whereas the Anxiety scale gauges bodily arousal, panic, and uneasiness. The Stress scale assesses symptoms such as tension, irritation, and the inability to relax.
- **Absorption In Music Scale (AIMS):**It is a questionnaire created to evaluate an individual's inclination to engage in profound absorption during music listening experiences. The AIMS, created by Groarke and Hogan in 2016, consists of 34 items that measure several aspects of absorption, including as emotional involvement, cognitive immersion, and changes in perception of time and space during music listening.

Procedure

The process of gathering data will begin with distributing a well-organized survey to the chosen participants. This survey will cover inquiries regarding participants' music consumption habits, demographic information, and mental health condition. The survey will include validated measures of music listening habits and standardized psychological assessment tools to evaluate several aspects of mental well-being, such as stress levels, mood, and general well-being. Then, descriptive statistics, correlation analysis and regression analysis will be utilized to further investigate the ability of music consumption patterns to predict mental health indicators.

RESULT

Table 1
Descriptive Statistics

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Absorption in Music	106	2	55	26.54	13.547
Depression	106	0	21	8.37	4.967
Anxiety	106	1	20	9.00	5.056
Stress	106	0	20	9.17	4.902

Table 2:
Pearson's correlation between Listening to music, Depression, Anxiety, Stress

	Listening to music	Depression	Anxiety	Stress
Listening to music	-			
Depression	.89**	-		
Anxiety	.90**	.68**	-	
Stress	.92**	.76**	.76**	-

****Significant at 0.01 level**

Table 2 represents the coefficient of correlation between Listening to music, Depression, Anxiety, and Stress. The correlation between Listening to music and Depression was .89 significant and positive at 0.01 level. The correlation between Listening to music and Anxiety was .90 significant and positive at 0.01 level. The correlation between Listening to music and stress was .92 significant and positive at 0.01 level.

Table 3

Linear regression table with Listening to music as predictor of Depression, Anxiety, Stress

Criterion	Predictors: Listening to music								
	B	S. E.	β	t	R	R ²	Adj. R ²	α	F
Depression	.32	.01	.89	20.74**	.89	.80	.80	-.36	430.47**
Anxiety	.33	.01	.90	21.04**	.90	.81	.80	.08	442.93**
Stress	.33	.01	.92	25.03**	.92	.85	.85	.27	626.56**

**significant at 0.01 level (p<0.01)

Table 3 represents the linear regression with Listening to music as predictor of Depression, Anxiety, Stress. Listening to music explained about 80%, 80%, and 85% of positive variance on depression, anxiety, stress respectively.

DISCUSSION

This study aims to investigate the complex interplay between individuals' music consumption patterns and their psychological well-being, with a specific emphasis on variables such as sadness, anxiety, and stress levels. Table 2 displays the correlation coefficient between Listening to music and important mental health indicators such as Depression, Anxiety, and Stress. The link between Listening to music and Depression, Anxiety, and Stress is remarkably strong, with values of .89, .90, and .92, respectively, all of which are statistically significant at the 0.01 level. The findings indicate a strong and persistent correlation between listening to music and mental health outcomes. This suggests that persons who listen to music more frequently and for longer durations likely to report lower levels of sadness, anxiety, and stress. Extensive research has provided valuable insights into the possible impact of music on psychological well-being by examining the relationship between listening to music and mental health markers such as depression, anxiety, and stress. A study conducted by Thoma et al. (2023) revealed that whereas listening to music was linked to a reduction in self reported anxiety, it did not have a significant impact on psychophysiological signals. Music has been discovered to have an impact on blood pressure, cortisol levels, and heart rate, indicating its potential as a technique



for alleviating stress. Similarly, Panteleeva et al. (2018) found that music intervention had a substantial impact in reducing depression levels among graduate students, thereby emphasizing its efficacy as a means of treating depression. Linnemann et al. (2015) conducted additional research that revealed a connection between music listening tactics and emotional eating and disordered mood. They found that specific strategies can serve as healthier alternatives for emotional eating, particularly in persons who have low levels of disturbed mood.

Table 3 presents a comprehensive summary of the linear regression study, where Listening to music is used as the independent variable to predict levels of Depression, Anxiety, and Stress. The coefficient for Listening to music in relation to Depression is 0.32, with a standard error of 0.01. The beta coefficient (β) of .89 indicates a robust positive correlation between Listening to music and Depression. The calculated t-value is 20.74, indicating a significant result at the 0.01 level of significance ($p < 0.01$). The correlation coefficient (R) is .89, indicating a strong association between Listening to music and Depression. The coefficient of determination (R^2) is 0.80, suggesting that Listening to music accounts for around 80% of the positive variation in Depression. The adjusted R^2 remains constant at a value of 0.80. Similarly, the regression coefficient for the variable "Listening to music" in relation to Anxiety is 0.33, with a standard error of 0.01. The beta coefficient (β) is .90, signifying a robust positive correlation between Listening to music and Anxiety. The calculated t-value is 21.04, indicating a significant result at the 0.01 level of significance ($p < 0.01$). The correlation value (R) is .90, indicating a strong association between Listening to music and Anxiety. The coefficient of determination (R^2) is .81, suggesting that Listening to music accounts for over 80% of the positive variation in Anxiety. The modified R^2 remains unchanged at a value of 0.80. The coefficient for listening to music in relation to stress is 0.33, with a standard error of 0.01. The beta coefficient (β) of .92 indicates a robust positive correlation between the activity of listening to music and the experience of stress. The t-value of 25.03 is statistically significant at the 0.01 level, with a p-value less than 0.01. The correlation coefficient (R) is .92, indicating a strong association between Listening to music and Stress. The coefficient of determination (R^2) is 0.85, suggesting that nearly 85% of the positive variance in Stress can be explained by Listening to music. The modified R^2 remains constant at a value of .85. Within the framework of our study's



linear regression analysis, we sought to investigate the predictive connection between listening to music and mental health indicators, specifically depression, anxiety, and stress. Previous research findings offer valuable perspectives on the potential influence of music consumption habits on psychological outcomes. Witte et al. (2020) examined the impact of music therapies on diminishing physiological and psychological stress-related consequences. Their findings corroborate our regression study, demonstrating that listening to music has a substantial impact on mitigating stress-related consequences, such as Depression, Anxiety, and Stress. Similarly, Panteleeva et al. (2018) found that listening to music is associated with a reduction in self-reported anxiety. This aligns with our regression findings, which indicate a significant positive correlation between listening to music and anxiety. Thus, the findings of the linear regression analysis indicate that there is a substantial relationship between listening to music and the degrees of depression, anxiety, and stress experienced by the participants in the study. The elevated beta coefficients and correlation coefficients suggest a robust positive association between Listening to music and each criterion. Moreover, the considerable R² values indicate that the act of listening to music accounts for a major fraction of the positive variation in Depression, Anxiety, and Stress. This underscores the significance of music consuming patterns in influencing mental health outcomes.

CONCLUSION

The results of this study confirmed the assumptions, indicating that persons who listened to music more often and for longer durations reported experiencing less psychological distress. The linear regression analysis given in Table 3 further confirmed the relationships between listening to music and depression, anxiety, and stress levels, showing strong positive correlations. The strong coefficient values and statistically significant p-values demonstrate the predictive ability of music consumption patterns in affecting mental health outcomes. Overall, the findings highlighted the need of including music-based therapies into comprehensive mental health care strategies, emphasizing its role as a coping mechanism and stress reduction tool. The study's meticulous statistical analysis and integration with existing literature yielded useful insights that



can guide future research, clinical practice, and public health initiatives focused on improving mental well-being through music-based therapies.

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