

Exploration of Music Preferences among the Socioeconomic Stereotypes: A Cross-Sectional Study

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ABSTRACT

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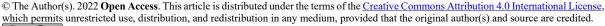
Music preference is being influenced by various sociological factors. This study was undertaken to investigate music preferences across five different socio-economic classes in selected urban and suburban areas of Sri Lanka. Ten music tracks representing the correspondent musical genres were selected. The single most preferred and the weighted hedonic mean score for the genres in each class were obtained as upper class: jazz, upper middle class: nature music, middle class: popular instrumental, working class: popular instrumental and poor class: rock. The interaction between socio-economic classes and genres was significant (p<0.05). Compelling associations for folk, jazz, and popular instrumental genres were found with the upper-middle class while the upper class has shown a significant association for popular instrumental music. Despite the socio-economic status, the highest preference and the highest weighted hedonic mean score were recorded with popular instrumental. Thus, understanding music preference behaviour is vital for music education and research.

1. Introduction

Music has been associated with human beings for over 35 000 years (d'Errico, et al., 2003). Music is a mediator as well as a method to enhance emotions, feelings, mood, and relaxation. The preference for music can be defined as "the favorable or unfavorable, permanent or

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discontinuous affinity towards different types and styles of music" (Hargreaves et al., 2015). The preferred type and styles of chosen music could be a genre, or else a preference dimension like mellow, reflective, urban, sophisticated, intense, and campestral of an individual (Rentfrow et al., 2011). Some common examples for music genres include Pop, Rock, Gypsy music, Jazz, classical and the new age. Various studies across the world have published useful findings on music preferences and choices related to these music genres interrelating with various demographic variables (Reeves et al., 2015). The music preference dimensions are being identified and based upon the attributes and characteristics of music (i.e., lyrical content, energy levels, vocal content, and level of emotional arousal). The preference and music choice encompasses a diverse range of factors. This can be broadly categorized into three major attributes namely the listener related, music stimuli related and socio-environment related factors (Bonneville-Roussy et al., 2013).

The listener related factors include individual differences, familiarity, cognitive, emotional functions, psychological, and physiological arousal. For example, the correlations among the relaxation, familiarity, and listeners' preference for music were studied and the results have exhibited a positive correlation with relaxation and preference, along with a weak correlation between familiarity and relaxation (Tan et al., 2012). The functions of music are also identified as crucial elements of music preference. The functions can be simply defined as the contexts in which people consume music with their personal lives, situations, goals and purposes. Furthermore, emotional expression, aesthetic enjoyment, entertainment, communication, social events and religious rituals can be considered as common applications of preferred chosen music (Sloboda et al., 2001). Additionally, mood is also identified as a factor that affects music preference and choice. Studies have shown that people choose music as a method to perk up the mood (Koduri & Indurkhya, 2010; Marik & Stegemann, 2016; Xue et al., 2018). Additionally, some studies have shown that people engaged in mentally exhausting professions use music as a relaxation technique to improve their mood and emotions (Dias, 2014; Krout, 2007).

The music stimuli related factors include musicological aspects like the properties and characteristics of music genres, styles of shared traditions and conventions. For example, rock music is traditionally composed of simple non-syncopated rhythms in a 4/4 meter, accompanied by a repetitive snare drumbeat backed up. Dissonant harmonic progressions ranged from the common triad to parallel perfect fourths and fifths. Melodies comprise aged musical modes (i.e., Mixolydian and Dorian) along with minor and major modes but the musicological characteristics cannot be precisely elaborated due to the vagueness of traditions and conventions (Ammer, 2004).

The socio-economic status of a society can be defined as "the relative position of individuals, families, or groups in stratified social systems where some societal values (e.g., profession, financial capability, educational level, literacy) are not uniformly distributed" (Bornstein & Bradley, 2003). Concerning the social systems and population demographics of the island nation, Sri Lanka is a lower middle-income country accommodated to diverse cultural, religious and ethnic communities. The population of Sri Lanka is about 21.9 million comprising 53.1% females and 46.8% males. Among the 5.4 million households in Sri Lanka, 74.1% of the households are being headed by males with 3-4 average members in a unit. The mean household income of an average Sri Lankan is 323.54 USD (62,237 LKR) where the urban and estate populations sharing the higher incomes (Department of Census and Statistics of Sri Lanka, 2018).

The history of Sri Lanka has always been associated with agricultural and irrigation civilizations. Environmental conditions have directly influenced the unitary spread of agro-

irrigation civilization. This civilization is characterized by climatic and geographical conditions such as the nature of rainfall patterns and tropical climate surrounded by the sea. Paddy cultivation, *chena* cultivation, plantation cultivation, fisheries, *Yala-Maha* season cultivation, tank water and animal husbandry were some of the factors that influenced the determination of the traditional socio-economic base. Land ownership, ancestry or family influence, agriculturally based caste basis, marriage and kinship were the factors that determined social relations and productive force ownership. The result was that society became a social hierarchy based on wealth, power and prestige. After 1948, 1956 and 1977, Sri Lankan society was experiencing many different and complex experiences. Based on factors such as global trade, technological exchange, and international political hegemony, the lives of Sri Lankans have undergone many changes and challenges (Gunasinghe, 1990; Jayawardena, 2009; Silva, 1997)

The impact and influence of the sociodemographic variables on contemporary music preference are meagerly addressed in Sri Lanka. Yet studies on traditional music have shown that the changing socioeconomic conditions, cast, religious and political events resulted in disintegrations of traditional music forms (Laade, 1993). For example, traditional music was linked with three main institutions namely 1) The Peasants - folk music (i.e., *Pal kavi*; watch hut verses, *Nelunkavi*; Weeding verses, *Iullabies* and *Viridu*) 2) Temple - Buddhism and music (i.e., *Pirith chanting and paththini rituals*) 3) and music and dancing at the King's Court (i.e., *Kavikara maduwa, vannam and Prasashthi*) (Ranathunga, 2018). The prominent instruments of stringed, wind and percussion were extensively used (Ranathunga, 2018). However, with the gradual influence of western and Indian subcontinent cultures followed by the industrial revolution and globalization, the music consumption and preference among the Sri Lankans have changed drastically (Laade, 1993; Ranathunga, 2018). Today various music genres like popular, rock, hip-hop, classical, new age, folk and jazz music are being consumed by the listeners and composed by the music artists in Sri Lanka.

With regards to societal values, the accomplishment of a good education generally leads to a good profession with considerable financial stability (Dotson et al., 2009; Wolla & Sullivan, 2017). However, all financially stable personnel neither educated nor engaged in good professions (Cagney & Lauderdale, 2002; Glewwe & Jacoby, 2004; Hartog & Oosterbeek, 1998). Studies have conducted to find the influence of literacy and education on cognitive abilities as a function of socioeconomic status and found positive associations (Biesta, 2017). Importantly, cognitive abilities and emotional engagement are considered key determinants of music preference (Schäfer & Sedlmeier, 2010). Moreover, education, lifestyle, financial capability and employment have found positive associations with music preferences in the United Kingdom. Accordingly, many research studies have been conducted across different countries and cultures to identify the relationships among the sociological factors and music preferences. Even with all published data, a study incorporating all the influential factors of music preference would not be feasible to conduct. However, research on selected variables across cultural and communal studies would be useful to address composite preference dimensions. One can argue that the subjectivity of music-related pleasure, degree of preference and perceived relaxation are inherent across different demographics, socio-cultural and psychophysical properties of music (Hemming, 2013; Moreno, 1988; Schäfer & Sedlmeier, 2010). Thus, exploration of the music preferences owing to different cognitive functions dispensed across socioeconomic variables representing age stratum is vital for the music industry and stakeholders in Sri Lanka. Further, it intrigues researchers to explore the void spaces of music preference dimensions in South Asia. Employing unique findings and application on communal and cultural identities, music can be used as a specific method to communicate effectively across diverse populations. The contemporary music consumptions which are dispensed across these sociodemographic variables are useful in the context of preserving, designing and exploring the existing music affinities in Sri Lanka. However, there are no strict consensuses about the preferred music acquired relaxation factors (Burns et al., 2002; Iwanaga & Moroki, 1999). But in general, the familiar music addressing the majority of the sociological variables of music preference is a vital aspect for successful music creation (Moreno, 1988; Lingham and Theorell, 2009; Stige, 2016). For example, the music composed in South Asian countries is based on 'rags' which are inherent to Indian music culture (Shetty & Achary, 2009). Thus, identification of contemporary music preferences using music genres concerning professions and economic status representing age spectrums are imperative in humanities and social science studies as it elicits communal and cultural identities of different nations. The research aims to explore the preferred music choices among different economic categories in urban and suburban dwellers.

1.1. Objectives

Therefore, this study was conducted to evaluate the preferred music choices among the selected Sri Lankans representing various economic classes in selected urban and suburban areas. Furthermore, we have analyzed the associations of preferred music choice with the selected music genres across the five economic classes.

2. Methodology

This study has two phases. This study was the first and basic research that was conducted to reveal basic statistics on the economic status of selecting the music choice. The ontology was objectivism and the epistemology were positivism. The research was based on quantitative data.

2.1. Sampling and study design

This study was conducted in three selected districts in Sri Lanka, namely Colombo, Kalutara, Kurunegala which comprises urban and suburban areas. The purposive sampling technique was used to collect data. A total of 75 subjects who have met the inclusion criteria were selected for the study and equally divided within the five economic classes (see Table 1). The average household income per month in Sri Lankan rupees (LKR) was used as the tool to classify subjects into economic classes. The average household incomes less than 23,518 LKR were categorized into the lower class, 23,519-36,445 LKR (working class), 36,446-51,862 LKR (middle class), 51,863 -81,371LKR (upper-middle class), and 81,372 LKR or above was assigned to the upper class (Department of Census and Statistics of Sri Lanka, 2018). Further, profession/occupation and educational levels were considered as a supportive fact to the economic status. Within each economic class, the assigned participants were categorized into three age categories, namely Millennials or Gen-Y (age 23-38), Gen-X (age 39-54) and Baby Boomers (age 55-73) (Michael, 2019). The three age categories have ensured the wide age distribution of age spectrums equally among representative social classes.

Table 1. Study design

	Age 23-38 (Millennials or Gen-Y)	Age 39-54 (Gen-X)	55-73 (Baby Boomers)	Total
Upper-Class	5	5	5	15
Upper-Middle Class	5	5	5	15
Middle Class	5	5	5	15
Lower-Middle Class	5	5	5	15
Lower Class	5	5	5	15
Total	25	25	25	75

2.2. Selection criteria

The participants were briefed about the study and were provided with the information sheets and consenting forms. The participants who had hearing impairments were excluded from the study. The participants who have provided their consent were included in the study. (See Figure 1).

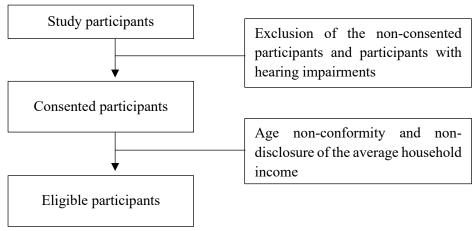


Figure 1. Study inclusion and exclusion criteria

2.3. Study materials

2.3.1. Music tracks

The preferred music choices were identified concerning ten selected music genres namely new age music, popular instrumental music (pop-music), gypsy music, jazz music, folk music, nature music, Indian classical music, western classical music, rock music, and hip-hop music. Representative music tracks of each genre were used to assess the preferred music choices. The duration of each track was one minute.

2.3.2. Questionnaire

The demographic data was collected using a judgmentally assed questionnaire (supplement 1). A nine-point visual analogue hedonic scale was used to assess the music preference. The mean scores obtained from the scale were utilized to determine the weighted music preference of each track with the representative music genres. The rating scores of '1-dislike extremely', '2-dislike very much', '3- dislike moderately', '4- dislike slightly', '5- neither like nor dislike', '6- like slightly', '7- like moderately', '8- like very much' and '9- like extremely' have represented the respective preference weights. Further, the participants were asked to choose the single most preferred track to assess the most preferred music genre from the ten selected music genres.

2.4. Ethics approval

The ethical clearance was obtained to conduct the study from the Ethics Review Committee of the Faculty of Medicine, University of Colombo, Sri Lanka, under the reference protocol number EC-19-106. The consent and adequate information were provided for the participants. The study was carried out from July 2019 to September 2019.

2.5. Data analysis

Microsoft Excel 2013 software was used to conduct a descriptive statistical analysis. The analyzed data are presented in percentages (%), sample means, along with the respective

standard deviations of the sample means. The inferential statistical analysis was conducted using SAS software. The statistical significance of the associations was tested using the Aligned ranks transformation ANOVA (ART-ANOVA) test at the $p \le 0.05$ significant level. ART-ANOVA is a nonparametric test that can be used for multiple independent variables, interactions, and repeated measures. Tukey's Pairwise Comparison test was conducted to identify the most significant associations of the socio-economic class and the music genres (p<0.05).

3. Results

3.1. Overall preferred music choices

The results are presented corresponding to the hedonic scale weighted mean scores and frequency percentages of the most chosen track. Among the eligible subjects, there were 56% male and 44% female respondents in the sample population. The overall weighted mean scores of the sample concerning the ten music genres are presented in Table 2 irrespective of the economic classes (n=75). The highest weighted mean score was recorded in the popular instrumental music genre track with a mean score of 7.06±1.28 while the lowest was recorded in the gypsy music track 4.48±2.33 (Table 2). The overall mean score for the ten selected music tracks representing the genres was recorded as 5.72±1.12.

Table 2. Weighted mean scores of the music tracks obtained from the nine-point hedonic scale

Genre/track	Mean score	Standard Deviation	Level of preference	Significance (p<0.05)
New Age	5.81	1.87	like slightly	0.000
Popular instrumental music	7.02	1.27	like moderately	
Gypsy music	4.48	2.33	dislike slightly	
Jazz music	6.77	1.84	like moderately	
Folk music	6.17	2.22	like slightly	
Nature music	6.16	2.03	like slightly	
Indian classical music	5.45	2.23	neither like nor dislike	
Western classical music	4.93	1.82	neither like nor dislike	
Rock music	4.57	2.55	neither like nor dislike	
Hip-hop music	5.82	1.89	like slightly	

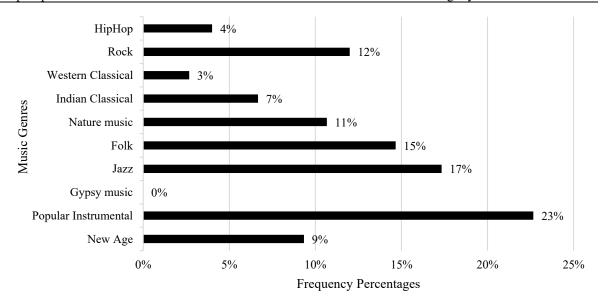


Figure 2. Overall frequency percentages of the single most chosen music genres

The single most chosen music genre was recorded as the popular instrumental music genre with a frequency percentage of 23% (Figure 2). Both the mean scores of the weighted hedonic scale and the single most chosen music genre within the sample population have corresponded with the popular instrumental (pop-music). Similarly, the second-highest mean score and the single most chosen music genre was reported as jazz music (6.77 \pm 1.84; 17%) followed by folk music (6.17 \pm 2.22; 14%) and nature music (6.16 \pm 2.03; 11%) (Table 2 and Figure 2). The overall preference for the music tracks irrespective of the genres is presented in Table 3. The highest preference for the selected music tracks was recorded in the upper-middle class while the lowest was recorded in the working class.

Table 3.

Music preferences across the economic classes irrespective of music genres

Social class	Social class Weighted hedonic Standard Le		Social class		Level of preference	Significance (p<0.05)
Upper class	5.73	0.90	Like slightly	0.00		
Upper-middle class	6.33	1.24	Like slightly			
Middle class	5.77	1.01	Like slightly			
Working-class	5.18	1.18	Like slightly			
Lower class	5.61	0.83	Like slightly			

3.2. Music preferences within economic classes

3.2.1. Lower class

The overall weighted mean score for music tracks corresponding to the ten music genres in the lower class was recorded as 5.61 ± 0.83 . Among the ten music genres, the highest weighted hedonic mean score was recorded as the popular instrumental genre with 6.93 ± 1.49 . But the highest single most chosen frequency percentage of 40% was obtained for the rock music genre with a hedonic mean score of 6.53 ± 2.34 . The hip-hop and folk music genres had equal frequency percentages of 13% each. The lowest mean scores were obtained in gypsy (4.73 ± 2.52) and Indian classical (4.73 ± 1.94) music genres. The overall hedonic mean scores in the lower class for the ten selected music genres and the single most chosen music genre frequency percentages are shown in Table 4 and Figure 3.

Table 4. Weighted mean scores obtained for music tracks within the lower class

Genre/track	Genre/track Mean Standard score Deviation		Level of preference	Significance (p<0.05)
New Age	5.20	2.24	neither like nor dislike	0.000
Popular instrumental music	6.93	1.49	like moderately	
Gypsy music	4.73	2.52	neither like nor dislike	
Jazz music	6.27	1.94	like slightly	
Folk music	5.13	2.72	neither like nor dislike	
Nature music	5.20	2.62	neither like nor dislike	
Indian classical music	4.73	1.94	neither like nor dislike	
Western classical music	4.93	2.28	neither like nor dislike	
Rock music	6.53	2.34	like moderately	
Hip-hop music	6.40	2.39	like slightly	

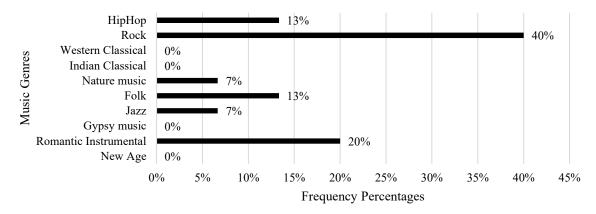


Figure 3. Frequency percentages of the single most chosen music genre within the lower class

3.2.2. Working class

The overall weighted mean score for the ten genres in the working class was recorded as 5.18±1.18. Among the ten music genres, the highest weighted mean score was obtained for the popular instrumental music (Pop-music) genre (6.80±1.42) together with the highest selected frequency percentage of 33%. The lowest weighted mean scores were reported in the gypsy music (3.60±2.16). Nature music, Indian classical music, Western classical music, and rock music genres have chosen evenly of 7% each by the working-class people. The all-inclusive weighted mean scores are presented in Table 5 and the frequency percentages of the single most chosen music genres are presented in Figure 4.

Table 5. Weighted mean scores obtained for music tracks within the working class

Genre/track	Mean score	Standard Deviation	Level of preference	Significance (p<0.05)
New Age	4.93	2.22	neither like nor dislike	0.000
Popular instrumental music	6.80	1.37	like moderately	
Gypsy music	3.60	2.16	dislike slightly	
Jazz music	6.67	1.29	like moderately	
Folk music	5.87	2.39	like slightly	
Nature music	5.80	1.21	like slightly	
Indian classical music	4.07	2.19	dislike slightly	
Western classical music	4.47	1.85	dislike slightly	
Rock music	3.73	2.43	dislike slightly	
Hip-hop music	5.87	1.46	like slightly	

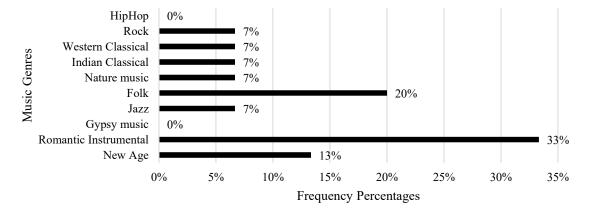


Figure 4. Frequency percentages of the single most chosen music genre within the working class

3.2.3. Middle class

The overall mean score for all ten music genres across the middle class was recorded as 5.7 ± 1.01 . The highest weighted mean score of $6.87~(\pm1.64)$ was obtained for the popular instrumental music (Pop-music) while the lowest weighted mean scores were reported for gypsy music (4.13 ± 2.39). The highest single most chosen music genre was shared by both the popular instrumental music (Pop-music) and jazz music genres with 27% each. The respective weighted mean scores and the frequency percentages of the single most chosen genres of the middle class are shown in Table 6 and Figure 5.

Table 6. Weighted mean scores obtained for music tracks within the Middle class

Genre/track	Mean score	Standard Deviation	Level of preference	Significance (p<0.05)
New Age	5.93	2.22	like slightly	0.000
Popular instrumental music	6.87	1.37	like moderately	
Gypsy music	4.13	2.16	dislike slightly	
Jazz music	6.67	1.29	like moderately	
Folk music	6.33	2.39	like slightly	
Nature music	6.40	1.21	like slightly	
Indian classical music	6.27	2.19	like slightly	
Western classical music	4.80	1.85	neither like nor dislike	
Rock music	4.20	2.43	dislike slightly	
Hip-hop music	6.13	1.46	like slightly	

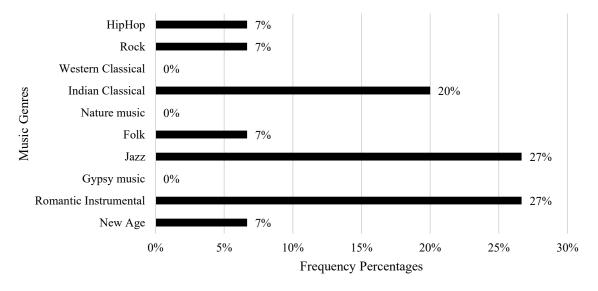


Figure 5. Frequency percentages of the single most chosen music genre within the Middle class

3.2.4. Upper-middle class

The overall weighted mean score for the ten music genres in the upper-middle class was reported as 6.33 ± 1.24 . The highest mean score was reported in the folk music genre with a mean score of 7.53 ± 1.30 while the lowest mean scores were reported with rock music (4.07 ± 2.15) and gypsy music (5.07 ± 2.19) . The weighted mean scores for the ten music tracks in the upper-class are shown in Table 7. Figure 6 illustrates the frequency percentages of the single most chosen genres in the upper-middle class.

Table 7.

Weighted mean scores obtained for music tracks within Upper-middle class

Genre/track	Mean	Standard	Level of preference	Significance
	score	Deviation		(p < 0.05)
New Age	7.00	0.65	like moderately	0.000
Popular instrumental music	7.40	1.06	like moderately	
Gypsy music	5.07	2.19	neither like nor dislike	
Jazz music	7.40	1.55	like moderately	
Folk music	7.53	1.3	like very much	
Nature music	7.20	1.7	like moderately	
Indian classical music	6.93	1.75	like moderately	
Western classical music	5.20	1.57	neither like nor dislike	
Rock music	4.07	2.15	dislike slightly	
Hip-hop music	5.53	1.88	like slightly	

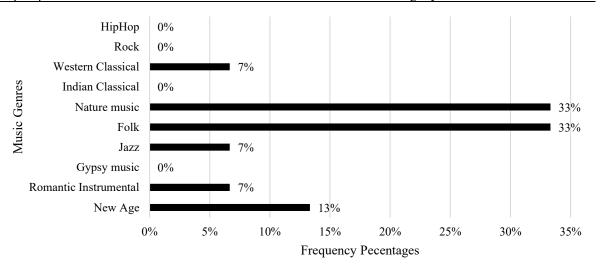


Figure 6. Frequency percentages of the single most chosen music genre within Upper-middle class

3.2.5. Upper class

The overall weighted mean score for the ten music genres in the upper class was recorded as 5.73±0.9. The lowest mean score was reported in the rock music genre with a mean score of 4.47±2.29. Table 8 represents the overall weighted mean scores reported for each music genres. The highest frequency percentage of the single most chosen music genre in the upper class was jazz, with 40% followed by the popular instrumental music genre with 27%. The overall frequency percentages of the single most chosen music genres are shown in Figure 7.

Table 8. Weighted mean scores obtained for music tracks within Upper class

Genre/track	Mean score	Standard Deviation	Level of preference	Significance (p<0.05)
New Age	6.00	1.51	like slightly	0.000
Popular instrumental music	7.33	0.62	like moderately	
Gypsy music	4.87	2.39	neither like nor dislike	
Jazz music	6.87	2.07	like moderately	
Folk music	6.00	1.89	like slightly	
Nature music	6.20	2.01	like slightly	
Indian classical music	5.27	2.15	neither like nor dislike	
Western classical music	5.27	1.33	neither like nor dislike	
Rock music	4.47	2.29	dislike slightly	
Hip-hop music	5.07	1.49	neither like nor dislike	

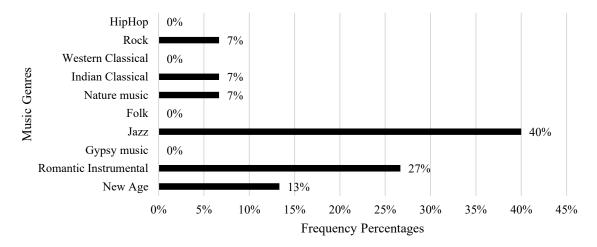


Figure 7. Frequency percentages of the single most chosen music genre within Upper class

3.3. Association of Music Genre Preferences with Economic Classes

The results of the ART-ANOVA test suggest that there is a significant interaction between the economic classes and the chosen music tracks representing the respective music genres with a P(>F) value of 0.0036 (p<0.05). A Tukey Pairwise Comparison test was performed to identify the most significant associations of the economic class and the music genres (p<0.05). The results have shown significant association for popular instrumental music with the upper and upper-middle classes while the folk and jazz genres have shown a significant association with the upper-middle class (see Table 9).

Table 9. *Tukey's Pairwise comparison for the economic classes and music tracks*

Economic class	Track	N	Mean	Grouping
Upper middle class	Folk	15	7.53333	A
Upper middle class	Jazz	15	7.40000	A
Upper middle class	Popular instrumental	15	7.40000	A
Upper class	Popular instrumental	15	7.33333	A
Upper middle class	Nature music	15	7.20000	AB
Upper middle class	New Age	15	7.00000	ABC
Upper middle class	Indian classical	15	6.93333	ABCD
Lower	Popular instrumental	15	6.93333	ABCD
Middle class	Popular instrumental	15	6.86667	ABCDE
Upper class	Jazz	15	6.86667	ABCDE
Working class	Popular instrumental	15	6.80000	ABCDE
Middle class	Jazz	15	6.66667	ABCDE
Working class	Jazz	15	6.66667	ABCDE
Lower	Hip-hop	15	6.53333	ABCDEF
Lower	Rock	15	6.40000	ABCDEFG
Middle class	Nature music	15	6.40000	ABCDEFG
Middle class	Folk	15	6.33333	ABCDEFG
Middle class	Indian classical	15	6.26667	ABCDEFG
Lower	Jazz	15	6.26667	ABCDEFG
Upper class	Nature music	15	6.20000	ABCDEFG

Middle class	Hip-hop	15	6.13333	ABCDEFG
Upper class	Folk	15	6.00000	ABCDEFG
Upper class	New Age	15	6.00000	ABCDEFG
Middle class	New Age	15	5.93333	ABCDEFG
Working class	Folk	15	5.86667	ABCDEFG
Working class	Hip-hop	15	5.86667	ABCDEFG
Working class	Nature music	15	5.80000	ABCDEFG
Upper middle class	Hip-hop	15	5.53333	ABCDEFG
Upper class	Western classical	15	5.26667	ABCDEFG
Upper class	Indian classical	15	5.26667	ABCDEFG
Lower	Nature music	15	5.20000	ABCDEFG
Lower	New Age	15	5.20000	ABCDEFG
Upper middle class	Western classical	15	5.20000	ABCDEFG
Lower	Folk	15	5.13333	ABCDEFG
Upper middle class	Gypsy music	15	5.06667	ABCDEFG
Upper class	Hip-hop	15	5.06667	ABCDEFG
Lower	Western classical	15	4.93333	ABCDEFG
Working class	New Age	15	4.93333	ABCDEFG
Upper class	Gypsy music	15	4.86667	ABCDEFG
Middle class	Western classical	15	4.80000	ABCDEFG
Lower	Gypsy music	15	4.73333	ABCDEFG
Lower	Indian classical	15	4.73333	ABCDEFG
Upper class	Rock	15	4.46667	BCDEFG
Working class	Western classical	15	4.46667	BCDEFG
Middle class	Rock	15	4.20000	CDEFG
Middle class	Gypsy music	15	4.13333	DEFG
Upper middle class	Rock	15	4.06667	E F G
Working class	Indian classical	15	4.06667	EFG
Working class	Rock	15	3.73333	F G
Working class	Gypsy music	15	3.60000	G
	nors a latter are significantly different			

^{*}Note: Means that do not share a letter are significantly different.

4. Discussion

The music choice and preferences of people have been influenced by various factors adhered with the listener, music stimuli and the environment (Bonneville-Roussy et al., 2013). The listener related factors include psychological factors (i.e., emotional state, mood, and cognition), biological factors (i.e., stress, anxiety, hormone levels), and demographic factors (i.e., age, gender, annual income, and education level) (Bonneville-Roussy et al., 2013; Jiang et al., 2013; Schäfer & Sedlmeier, 2010). The music stimuli related factors comprise the music styles, genres (Pop, rock, folk, and new age), and elements of music (i.e., melody, tempo, rhythm, harmony). The environment-related factors include the social and cultural factors and geographic factors (i.e., African, Asian, Western, and Indian). The influence of these variables on music choice and preference would be very useful when designing, composing, playing and application of music (Labbé et al., 2007; Moreno, 1988; Tan et al., 2012). In addition, the interactions and associations of these factors are also vital when conducting music-related interventions, and therapies in music-specific and culture-specific context. Based on these important aspects, our purpose of the study was to explore the preferred music choices across the economic classes in urban and suburban areas of Sri Lanka. Further, the interaction of music genres with the five economic classes has also been assessed. This is the first cross-sectional

study which was conducted to assess music preferences and choices in urban and suburb areas of Sri Lanka.

The findings from the literature have suggested that that the preferred music and self-chosen music can be utilized as a method to induce emotions, feelings, mood, and generate relaxation (Chlan et al., 2013; Jiang et al., 2013). Hence, we aimed to discover the music choices and preferences among the economic classes in Sri Lanka and to disseminate the findings among the music researchers, composers, and practitioners in the music field. The findings of our study have suggested that the weighted hedonic mean scores across all genres ranged from 4.48-7.08 representing 'dislike slightly' to 'like moderately' categories within the sample population. The overall weighted mean score for the music tracks representing genres was recorded as 5.72±1.14. The results have suggested that there is a slight affinity towards the overall selected music tracks within the sample population. Regardless of the music genres, the highest weighted hedonic mean score for music preference was recorded among upper-middle class participants followed by middle class and lower class. The majority of the people in upper-middle, middle and lower classes have adhered to numerous economic burdens, responsibilities and commitments related to work and professions (Siyambalapitiya & Sachitra, 2019). Accompanying work-life balance and stress, people tend to seek relaxation and recreational methods like music listening. We can argue that these higher music fifties are encountered due the lifestyles, work stress, money, and other socioeconomic factors (i.e., social status and ignorance). Supporting our claims, previous studies have also shown that music preferences are being correlated with lifestyle, education and economic status (North & Hargreaves, 2007). Furthermore, studies have shown that personality has been identified as a vital determinant of music preference (Delsing et al., 2008; Dollinger, 1993; Tiihonen et al., 2017). Thus, we can suggest that music can be used as a vehicle to alleviate work stress and to induce relaxation through music, especially in the upper-middle class as they prefer music more than other classes.

The music preferences across economic classes concerning the selected genres have shown similar trends. Despite the upper-middle class, all the other economic classes have obtained the highest mean score for the popular instrumental music genre. This high preference could be due to the familiarity of popular music and musicological properties of romantic music (i.e., nocturne, harmonic structure, emphasis on melody, wide range of dynamics and tonal range). Similarly, studies have shown that popular music can induce moods and performance (Khan & Ajmal, 2017). Furthermore, romantic symphonies have also contributed to elicit and evoke emotions (Robinson & Hatten, 2012). In contrast, gypsy music had the lowest mean scores across the five economic classes. This could be due to the unfamiliarity of gypsy music within the Sri Lankan community. Supporting this claim, studies on music interventions have shown that familiar and preferred music could alleviate stress, anxiety, and distress (Lingham & Theorell, 2009). Thus, people appreciate and attracted to music that is more close to the respective cultures, linguistics, and associated socio-demographics (Colley, 2008; Elias et al., 2011; Hemming, 2013). In lower single most chosen music genre was identified as rock music genre while in upper class it was with jazz music. Both music genres encompass contrasting music properties like loudness, rhythm, tempo, and melody. This study suggests that most lower-class people have an affinity towards more engaging, loud, fast tempo, strong beats, and shuffling rhythmic music styles and genres. Contradictorily, the upper-class people have the attraction towards music composed with moderate to slow tempos, various rhythmic patterns, and harmonic practices with musical improvisations. Supporting this claim, a similar study in the United Kingdom have shown the importance of social hierarchies and cultural impact on music appreciation and preference concerning the music genres (Reeves et al., 2015). In middle and working classes, the music preferences have shown similar results with high preferences

to popular instrumental music (Pop-music), jazz music, nature music, and folk music which could be associated with similar social backgrounds shared by two classes. The findings of this study revealed that there is a significant interaction between the ten music genres and economic classes (p<0.05). The associations were significant for the upper class and upper-middle class with popular instrumental music while jazz and folk music genres reported significant associations with only the upper-middle class. Similarly, previous studies have shown that socioeconomic status influenced the engagement of popular instrumental music (Albert, 2006). Furthermore, the interaction of the social classes and the cultural stereotypes have influenced music preference. The upper-class communities have shown a significant affinity towards the highbrow music genres (jazz, pop, and folk) (Eijck, 2016; Reeves et al., 2015). Thus, we argue that economic factors are required to be considered important when designing, composing, and conducting music interventions in the Sri Lankan context. The music choice and preference encompass a vast area comprising composite dimensions. The representation of music with limited selected genres with time limitations of tracks would not be enough to represent music and discover the overall preference dimensions of the target audience. Therefore, this study suggests conducting further studies with other wider array of music genres to widen the preference scope. Research focusing on music preference conducted by selecting people randomly who are normally distributed within economic groups would be capable of generalizing the finding in the focus population of the Gypsy music. Further, we suggest conducting more studies on these socio-demographic variables with other auxiliary music styles and genres to address the diversity and subjectivity of music preference.

5. Conclusion

Popular instrumental, jazz, folk and nature music genres have shown overall higher preferences among the sample population. The highest weighted mean score and the most chosen genre across the economic classes were reported as lower class; popular instrumental and rock, working class; popular instrumental only, middle class; popular instrumental and jazz, uppermiddle class; folk and nature, upper class; popular instrumental and jazz music genres respectively. There was a compelling interaction for music preference across the economic classes. The top three economic classes (upper, upper-middle, and middle) have shown a more prominent preference for music. Both the upper and upper-middle class have shown a significant preference for the popular instrumental music genre. The folk and jazz music genres have shown a significant association with the upper-middle class.

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References

Albert, D. J. (2006). Socioeconomic Status and Instrumental Music: What Does the Research Say about the Relationship and Its Implications? Update: Applications of Research in Music Education, 25(1), 39–45. https://doi.org/10.1177/87551233060250010105

Ammer, C. (2004). The Facts on File Dictionary of Music (4th ed.). Infobase Publishing.

Biesta, G. (2017). Education, Measurement and the Professions: Reclaiming a space for democratic professionality in education. Educational Philosophy and Theory, 49(4), 312–314. https://doi.org/10.1080/00131857.2015.1084128

- Bonneville-Roussy, A., Rentfrow, P. J., Xu, M. K., & Potter, J. (2013). Music Through the Ages: Trends in Musical Engagement and Preferences From Adolescence Through Middle Adulthood. In Journal of Personality and Social Psychology (Vol. 105, Issue 4).
- Bornstein, M. . ., & Bradley, R. . . (2003). Socioeconomic status, parenting, and child development. In Socioeconomic status, parenting, and child development (1st ed.). Taylor & Francis. https://doi.org/10.4324/9781410607027
- Burns, J. L., Labbé, E., Arke, B., Capeless, K., Cooksey, B., Steadman, A., & Gonzales, C. (2002). The effects of different types of music on perceived and physiological measures of stress. Journal of Music Therapy, 39(2), 101–116. https://doi.org/10.1093/jmt/39
 https://doi.org/10.1093/jmt/39
 https://doi.org/10.1093/jmt/39
 https://doi.org/10.1093/jmt/39
- Cagney, K. A., & Lauderdale, D. S. (2002). Education, wealth, and cognitive function in later life. Journals of Gerontology Series B Psychological Sciences and Social Sciences, 57(2), 163–172. https://doi.org/10.1093/geronb/57.2.P163
- Chlan, L. L., Weinert, C. R., Heiderscheit, A., Tracy, M. F., Skaar, D. J., Guttormson, J. L., & Savik, K. (2013). Effects of patient-directed music intervention on anxiety and sedative exposure in critically Ill patients receiving mechanical ventilatory support: A randomized clinical trial. JAMA Journal of the American Medical Association, 309(22), 2335–2344. https://doi.org/10.1001/jama.2013.5670
- Colley, A. (2008). Young people's musical taste: Relationship with gender and gender-related traits. Journal of Applied Social Psychology, 38(8), 2039–2055. https://doi.org/10.1111/j.1559-1816.2008.00379.x
- d'Errico, Francesco, Henshilwood, Christopher, Lawson, G., Vanhaeren, M., Tillier, A.-M., Soressi, M., Bresson, F., Maureille, B., Nowell, A., Lakarra, Joseba, Lakarra, J., Backwell, L., & Julien, M. ele. (2003). Archaeological Evidence for the Emergence of Language, Symbolism, and Music—An Alternative Multidisciplinary Perspective. Journal of World Prehistory, 17(1), 84. <a href="http://books.google.com/books?id=jqeceksZPXcC&printsec=frontcover&dq=structured+clinical+interview+dsm&hl=&cd=3&source=gbs_api%0Ahttp://books.google.com/books?id=jqeceksZPXcC&printsec=frontcover&dq=structured+clinical+interview+dsm&hl=&cd="mailto:defable.com/books?id=jqeceksZPXcC&printsec=frontcover&dq=structured+clinical+interview+dsm&hl=&cd="mailto:defable.com/books?id=jqeceksZPXcC&printsec=frontcover&dq=structured+clinical+interview+dsm&hl=&cd="mailto:defable.com/books?id=jqeceksZPXcC&printsec=frontcover&dq=structured+clinical+interview+dsm&hl=&cd="mailto:defable.com/books?id=jqeceksZPXcC&printsec=frontcover&dq=structured+clinical+interview+dsm&hl=&cd="mailto:defable.com/books?id=jqeceksZPXcC&printsec=frontcover&dq=structured+clinical+interview+dsm&hl=&cd="mailto:defable.com/books?id=jqeceksZPXcC&printsec=frontcover&dq=structured+clinical+interview+dsm&hl=&cd="mailto:defable.com/books?id=jqeceksZPXcC&printsec=frontcover&dq=structured+clinical+interview+dsm&hl=&d="mailto:defable.com/books?id=jqeceksZPXcC&printsec=frontcover&d=structured+clinical+interview+dsm&hl=&d=structured+clinical+interview+dsm&hl=&d=structured+clinical+interview+dsm&hl=structured+clinical+interview+dsm&hl=structured+clinical+interview+dsm&hl=structured+clinical+interview+dsm&hl=structured+clinical+interview+dsm&hl=structured+clinical+interview+dsm&hl=structured+clinical+interview+dsm&hl=structured+clinical+interview+dsm&hl=structured+clinical+interview+dsm&hl=structured+clinic
- Delsing, M. J. M. H., Ter Bogt, T. F. M., Engels, R. C. M., & Meeus, W. H. J. (2008). Adolescents' Music Preferences and Personality Characteristics. European Journal of Personality, 22(1), 109–130. https://doi.org/10.1002/per.665
- Department of Census and Statistics of Sri Lanka. (2018). Household Income and Expenditure Survey 2016 Final Report. http://www.statistics.gov.lk/HIES/HIES2016/HIES2016 FinalReport.pdf
- Dias, R. R. (2014). Music Relaxation for Music Teachers. In UPM Book Series on Music Research (Issue 6).
- Dollinger, S. J. (1993). Research Note: Personality and Music Preference: Extraversion and Excitement Seeking or Openness to Experience? Psychology of Music, 21(1), 73–77. https://doi.org/10.1177/030573569302100105
- Dotson, V. M., Kitner-Triolo, M. H., Evans, M. K., & Zonderman, A. B. (2009). Effects of race and socioeconomic status on the relative influence of education and literacy on cognitive functioning. Journal of the International Neuropsychological Society, 15(4), 580–589. https://doi.org/10.1017/S1355617709090821

- Eijck, K. Van. (2016). Social Differentiation in Musical Taste Patterns. Social Forces, 79(3), 1163–1184. https://doi.org/10.1353/sof.2001.0017
- Elias, N., Lemish, D., & Khvorostianov, N. (2011). Britney spears remained in Russia: Dynamics of musical preferences in the integration of immigrant adolescents. Journal of Ethnic and Migration Studies, 37(1), 61–77. https://doi.org/10.1080/1369183X.2011.521360
- Glewwe, P., & Jacoby, H. G. (2004). Economic growth and the demand for education: Is there a wealth effect? Journal of Development Economics, 74(1), 33–51. https://doi.org/10.1016/j.jdeveco.2003.12.003
- Gunasinghe, N. (1990). Changing socio-economic relations in the Kandyan countryside. Social Scientists' Association.
- Hargreaves, D., North, A., & Tarrant, M. (2015). How and why do musical preferences change in childhood and adolescence? In G. McPherson (Ed.), The child as musician: a handbook of musical development. (pp. 303–322). Oxford University Press.
- Hartog, J., & Oosterbeek, H. (1998). Health, wealth and happiness: Why pursue a higher education? Economics of Education Review, 17(3), 245–256. https://doi.org/10.1016/s0272-7757(97)00064-2
- Hemming, J. (2013). Is there a peak in popular music preference at a certain song-specific age? A replication of Holbrook & Schindler's 1989 study. Musicae Scientiae, 17(3), 293–304. https://doi.org/10.1177/1029864913493800
- Iwanaga, M., & Moroki, Y. (1999). Subjective and physiological responses to music stimuli controlled over activity and preference. Journal of Music Therapy, 36(1), 26–38. https://doi.org/10.1093/jmt/36.1.26
- Jayawardena, K. (2009). Nobodies to somebodies: the rise of the colonial bourgeoisie in Sri Lanka. Colombo: Social scientists' Association. http://localhost:8080/xmlui/handle/123456789/268
- Jiang, J., Zhou, L., Rickson, D., & Jiang, C. (2013). The effects of sedative and stimulative music on stress reduction depend on music preference. Arts in Psychotherapy, 40(2), 201–205. https://doi.org/10.1016/j.aip.2013.02.002
- Khan, M., & Ajmal, A. (2017). Effect of Classical and Pop Music on Mood and Performance. International Journal of Scientific and Research Publications, 7(12), 905–911.
- Koduri, G. K., & Indurkhya, B. (2010). A behavioral study of emotions in South Indian classical music and its implications in music recommendation systems. SAPMIA'10 Proceedings of the 2010 ACM Workshop on Social, Adaptive and Personalized Multimedia Interaction and Access, Co-Located with ACM Multimedia 2010, February, 55–60. https://doi.org/10.1145/1878061.1878079
- Krout, R. E. (2007). Music listening to facilitate relaxation and promote wellness: Integrated aspects of our neurophysiological responses to music. Arts in Psychotherapy, 34(2), 134–141. https://doi.org/10.1016/j.aip.2006.11.001
- Laade, W. (1993). The Influence of Buddhism on the Singhalese Music of Sri Lanka. Asian Music, 25(1–2), 51–68.
- Labbé, E., Schmidt, N., Babin, J., & Pharr, M. (2007). Coping with stress: The effectiveness of different types of music. Applied Psychophysiology Biofeedback, 32(3–4), 163–168. https://doi.org/10.1007/s10484-007-9043-9

- Lingham, J., & Theorell, T. (2009). Self-selected "favourite" stimulative and sedative music listening how does familiar and preferred music listening affect the body? Nordic Journal of Music Therapy, 18(2), 150–166. https://doi.org/10.1080/08098130903062363
- Marik, M., & Stegemann, T. (2016). Introducing a new model of emotion dysregulation with implications for everyday use of music and music therapy. Musicae Scientiae, 20(1), 53–67. https://doi.org/10.1177/1029864915622055
- Michael, D. (2019). Where Millennials end and Generation Z begins | Pew Research Center. Pew Research Center, 1–7. https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/
- Moreno, J. (1988). Multicultural music therapy: The world music connection. Journal of Music Therapy, 25(1), 17–27. https://doi.org/10.1093/jmt/25.1.17
- North, A. C., & Hargreaves, D. J. (2007). Lifestyle correlates of musical preference: 3. Travel, money, education, employment and health. Psychology of Music, 35(3), 473–497. https://doi.org/10.1177/0305735607072656
- Ranathunga, G. M. (2018). Art And Tradition Of Sri Lanka-Volume 1 (Vol. 01). S. Godage & Brothers (Pvt) Ltd.
- Reeves, A., Gilbert, E., & Holman, D. (2015). Class dis-identification, cultural stereotypes, and music preferences: Experimental evidence from the UK. Poetics, 50, 44–61. https://doi.org/10.1016/j.poetic.2015.01.002
- Rentfrow, P. J., Goldberg, L. R., & Levitin, D. J. (2011). The structure of musical preferences: A five-factor model. Journal of Personality and Social Psychology, 100(6), 1139–1157. https://doi.org/10.1037/a0022406
- Robinson, J., & Hatten, R. S. (2012). Emotions in music. Music Theory Spectrum, 34(2), 71–106. https://doi.org/10.1525/mts.2012.34.2.71
- Schäfer, T., & Sedlmeier, P. (2010). What Makes Us Like Music? Determinants of Music Preference. Psychology of Aesthetics, Creativity, and the Arts, 4(4), 223–234. https://doi.org/10.1037/a0018374
- Shetty, S., & Achary, K. K. (2009). Raga Mining of Indian Music by Extracting Arohana-Avarohana Pattern. International Journal of Recent Trends in Engineering, 1(1). http://ijrte.academypublisher.com/vol01/no01/ijrte0101362366.pdf
- Silva, K. T. (1997). (1997). Caste and class Changing Sri Lankan society. Community Education centre.
- Siyambalapitiya, P., & Sachitra, V. (2019). Role of Occupational Stress and Organizational Stress towards Job Satisfaction: A Study Based on Banking Sector Employees in Sri Lanka. Asian Journal of Education and Social Studies, 3(3), 1–12. https://doi.org/10.9734/ajess/2019/v3i330100
- Sloboda, J. A., O'neill, S. A., & Ivaldi, A. (2001). Functions of music in everyday life: An exploratory study using the experience sampling method. Musicae Scientiae, 5(1), 9–32. https://doi.org/10.1177/102986490100500102
- Stige, B. (2016). Culture-Centered Music Therapy. In J. Edwards (Ed.), Oxford Handbook of Music Therapy (1st ed., Issue April 2018, pp. 1–25). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199639755.013.1

- Tan, X., Yowler, C. J., Super, D. M., & Fratianne, R. B. (2012). The Interplay of Preference, Familiarity and Psychophysical Properties in Defining Relaxation Music The Music Settlement. Journal of Music Therapy, 49(2), 150–179. http://jmt.oxfordjournals.org/
- Tiihonen, M., Brattico, E., Maksimainen, J., Wikgren, J., & Saarikallio, S. (2017). Constituents of music and visual-art related pleasure A critical integrative literature review. Frontiers in Psychology, 8(JUL), 1–12. https://doi.org/10.3389/fpsyg.2017.01218
- Wakim, J. H., Smith, S., Guinn, C., Thoma, M. V., La Marca, R., Brönnimann, R., Finkel, L., Ehlert, U., Nater, U. M., McEwen, B. S., Fink, G., Labbé, E., Schmidt, N., Babin, J., Pharr, M., Davis, W. B., Thaut, M. H., W.E., K., N.S., R. P., ... Knight, W. E. J. (2015). Emotional responses to music: The need to consider underlying mechanisms. Journal of Music Therapy, 8(3), 1–12. https://doi.org/10.1017/S0140525X08005293
- Wolla, S. A., & Sullivan, J. (2017). Education, Income, and Wealth. Choice Reviews Online, 51(02), 51-1007-51–1007.
- Xue, C., Li, T., Yin, S., Zhu, X., & Tan, Y. (2018). The influence of induced mood on music preference. Cognitive Processing, 19(4), 517–525. https://doi.org/10.1007/s10339-018-0872-7