Music Genres and Associated Determinants in Selected Fitness Centres, Eldoret Town, Kenya

Albert Burudi Wakoli[1], Jessee Wanderi Wariuko[2] & Jackton Jonathan Oyiengo[3]

Abstract

Music is used widely during workouts and can increase motivation and positive affect among exercisers. It may be played over a sound system during exercise. The study's intent was to investigate music genres played and to explore on associated determinants in selected fitness centres, Eldoret Town, Kenya. It employed an explorative research design. Four (4) fitness centres located in Eldoret town were purposively selected. All the instructors at those centres were studied. A key informant interview (KII) guide was used. One-way ANOVA and Tukey post hoc tests were used to determine significant differences. From the study findings, classical music was played most with a mean of 5.16±7.05 while twist was played least with a mean of 0.74±0.81. Generally, there were no significant differences across the fitness centres with only classical music being significantly (p<0.05) different between fitness centres A and B. Key determinants found were: type of exercise, age and religion of clients. Other determinants included personal interest, aspirations, goals and role models, and clients' health status as well as request, time of the day and sex of the instructor.

Key words: music, genre, playlist, exercise, determinant

1.0 Introduction

It is well established that exercise has physical benefits, reducing the risk of premature mortality (Warburton, et al., 2010) and chronic conditions such as cardiovascular disease (Myers, 2008). Exercise improves general well-being, addresses symptoms of depression and acts as a preventative measure in mental health (Stanton, Happell& Raeburn, 2014). However, many people struggle with exercising regularly due to lack of motivation hence exercise less. Music is used widely during workouts and can increase motivation and positive affect among exercisers (Hutchinson, et al., 2011; Laukka& Quick, 2013). It may be played over a sound system during exercise in a fitness centre.

There is much research regarding music use in everyday life. Its main application is to manage mood and affect (Juslin & Sloboda, 2010; Skånland, 2013). Research has explored music use as a motivational device in sports and exercise, primarily to enhance performance. Studies have considered its effects on intensity (Edworthy & Waring, 2006; Waterhouse, Hudson & Edwards, 2010) and rate of perceived exertion (RPE) (Dyrland & Wininger, 2008; Terry, et al., 2012), as well as affect (Bird, et al., 2016; Edworthy & Waring, 2006; Terry et al., 2012) and strength (Biagini, et al., 2012; Razon, et al., 2009), with favorable results. Karageorghis and Priest, in their review of the field (2012a), note that listening to music during repetitive-movement endurance exercise reduces perceived exertion, increases output and improves affect. In the second part of their review (2012b), they suggest that motivation and affect are linked, proposing that motivational music's capacity to increase positive affect leads to an effect on psychological states, even at high intensities, and that this may increase adherence to exercise, although this is speculative.

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[1] School of Science and Technology, University of Eastern Africa - Baraton, Kenya E-mail: albur89ke@yahoo.com
[2] School of Music and Performing Arts, Kabarak University, Kenya E-mail: jesseejeff@gmail.com
[3] School of Education, Humanities and Social Sciences, University of Eastern Africa - Baraton, Kenya E-mail: jackoyiengo@gmail.com

Moreover, Clark, Baker and Taylor (2016) in their systematic review of music use in physical activity present a meta-theory of possible factors. They outline interactions of cultural background, entrainment (synchronization with music of physiological characteristics such as heartbeat or motor activities), subjective experience and physiological arousal with psychological, neurophysiological and behavioral responses. This suggests that a range of physical and psychological outcomes are relevant to music use in exercise. According to Clark, Baker & Taylor (2016), it is this interplay which may lead to adherence.

Evidence shows much research conducted with respect to music and physical activity. However, little is known with regard to specific music genres utilised and what underpins their selection. This study intended to investigate the music genres played and explore on associated determinants in selected fitness centres, Eldoret Town, Kenya.

2.0 Materials and methods

The study employed an explorative research design. Four (4) fitness centres located in Eldoret town were purposively selected for the study. The 4 centres were labelled A, B, C and D for anonymity. Eldoret town forms one of the biggest cities in Kenya which places it at an ideal position for the study. It is inhabited with a diverse populace which cuts across several strata that include cultural, educational and economic backgrounds among others. With such population, fitness centres are of necessity to offer services to those in need of physical exercises yet lack places to fulfil their desires.

The study utilised instructors in the selected fitness centres as respondents since they are usually in charge of the fitness programmes including selection and playing of tracks during exercises. Therefore, they were the key informants. Permission to conduct the study was sought from administrators of the fitness centres. All the instructors at the respective centres who consented to participate in the research were studied. A key informant interview (KII) guide was used. It incorporated a quantitative component to find out the number of times a particular music genre is played as well as a qualitative part which allowed for exploration of determinants associated with the choice of music genres. It was pretested in 2 different fitness centres but similar to the ones under study in their characteristics. Thereafter, it was adjusted accordingly for actual data collection. A total of 19 instructors in the 4 study sites were interviewed.

Quantitative data were entered, verified and cleaned in statistical package for social sciences (SPSS) version 23.0. Qualitative data were recorded by the interviewer and analysed thematically. Analysis of quantitative data entailed use of descriptive and inferential statistics at a significance level of 0.05. Descriptive statistics included means, standard deviations, frequencies and percentages. One-way ANOVA and Tukey post hoc tests were used to determine the difference in means across the 4 fitness centres.

3.0   Results

3.1 Distribution of respondents by the fitness centres

Table 3.1 shows the distribution of respondents in the four study centres at the time of the study. The number of instructors varied from one fitness centre to another depending on its size in terms of clientele.

Table 3.1: Distribution of respondents based on fitness centres (n=19)

Centre	Number (No.)	Percent (%)
Fitness centre A	3	15.8
Fitness centre B	7	36.8
Fitness centre C	4	21.1
Fitness centre D	5	26.3
Total	**19**	**100.0**

3.2 Music genres played in the fitness centres

As shown in Table 3.2, it was found that classical music was most played with a mean of 5.16±7.05, followed by pop music 4.37±9.88. The music genre least played was twist with a mean of 0.74±0.81 and gospel with mean of 1.00±1.80 being second least played.

Table 3.2: Average number of times music genre played (n=19)

Music genre	Mean	Standard deviation
Bongo	1.47	2.57
Pop	4.37	9.88
Rock	1.16	1.38
Hiphop	3.53	6.20
R n B	2.37	4.49
Classical	5.16	7.05
Gospel	1.00	1.80
Afrobeat	5.73	8.50
Regae (lovers rock & roots)	2.21	3.38
Dancehall/riddim	3.32	7.67
Gengetone	1.32	2.26
Rhumba	1.16	2.22
Lingala	1.16	2.22
Twist	0.74	0.81

3.3 Difference in means of the number of times music genres played

A one-way ANOVA test was conducted to determine significant difference in means of the number of times music genres played across the fitness centres (Table 3.3).

Table 3.3: Difference in means of the number of times music genres played

Music genre	Statistical test
Bongo	$F_{(3,15)}=1.665$, $p=0.217$
Pop	$F_{(3,15)}=1.509$, $p=0.253$
Rock	$F_{(3,15)}=0.573$, $p=0.642$
Hiphop	**$F_{(3,15)}=3.805$, $p=0.033$**
R n B	$F_{(3,15)}=2.612$, $p=0.090$
Classical	**$F_{(3,15)}=10.007$, $p=0.001$**
Gospel	$F_{(3,15)}=1.221$, $p=0.336$
Afrobeat	$F_{(3,15)}=2.217$, $p=0.128$
Regae (lovers rock & roots)	$F_{(3,15)}=0.777$, $p=0.525$
Dancehall/riddim	$F_{(3,15)}=0.989$, $p=0.424$
Gengetone	$F_{(3,15)}=0.214$, $p=0.885$
Rhumba	$F_{(3,15)}=0.072$, $p=0.974$
Lingala	$F_{(3,15)}=0.151$, $p=0.927$
Twist	$F_{(3,15)}=0.883$, $p=0.472$

From the one-way ANOVA test results, there was a significant- $F_{(3,15)}=3.805$, $p=0.033$- difference in the mean number of times hiphop music played. Further, the mean number of times classical music played was significantly- $F_{(3,15)}=10.007$, $p=0.001$- different.

A Tukey post hoc test was conducted to determine which fitness centres had significant differences in means the number of times hiphop and classical music played (Table 3.4).

Table 3.4: Significance levels of hip and classical music across fitness centres

First fitness centre	Second fitness centre	Significance	
		Hiphop	Classical
Fitness centre A	Fitness centre B	0.173	**0.000**
	Fitness centre C	0.997	0.062
	Fitness centre D	0.998	0.005
Fitness centre B	Fitness centre A	0.173	**0.000**
	Fitness centre C	0.079	0.102
	Fitness centre D	0.061	0.640
Fitness centre C	Fitness centre A	0.997	0.62
	Fitness centre B	0.079	0.102
	Fitness centre D	1.000	0.584
Fitness centre D	Fitness centre A	0.998	0.005
	Fitness centre B	0.061	0.640
	Fitness centre C	1.000	0.584

From the analysis, a comparison of specific centres showed no significant ($p > 0.05$) difference for hiphop music played despite ANOVA test showing significance results. On the other hand, a significant ($p < 0.05$) difference was found between fitness centre A and fitness centre B with regard to classical music played.

3.4 Determinants associated with the choice of music genre

Findings from KIIs revealed a number of factors that determine the choice of music genre played in the fitness centres studied. Type of exercise was found to be a major determinant across all the fitness centres. Instructors reported that they changed the tempo of music played for the same music genre and/or the music genre played with type of exercise or workout in training sessions. In most cases classical music is played from the beginning to the end and for those who prefer other music genre the same applies. Each session begins with warm-ups such as jogging, running in a circular motion among others. At the start there is no music played until during the fourth lap of running during which music is introduced by first playing beats followed by melody and finally melody with light accompaniments which increases gradually. Thereafter, aerobics follows with full blown music, then other exercises such as squads, press-ups and finally cool-down. As the participants change from other aerobics to other exercises there is diminuendo (gradually decreasing in volume) and finally the beats are played last. This required varying of music as the exercisers progressed from one level to another.

Secondly, age of the clients was found to be a key determinant. According to instructors, age affects flexibility. The young clients are more flexible hence execute fast movements with ease compared to the old clients who are less flexible. To cater for this, the instructor would play music genres and play them at a tempo suitable for the most age group present in a particular session.

Another key determinant found was religion. The instructors said that it is important to appreciate everyone's religion. They cited that respect should be accorded to all with regard to religion. In the event there arose a need to play sacred music, the playlist would cut across several religions to accommodate everyone. In addition, they reported that fairness was to ensure that no one feels superior to another person because of his/her religion.

Some of the respondents cited that, sometimes, personal interest, aspirations, goals and role models were reported to play a role when selecting a music genre to be played. Instructor's preference influenced his choice of music. For instance, an instructor said, *"I love pop and I can't imagine listening to other genres and actually enjoy them. So regardless of whatever am doing, pop is the best and first choice for me."* Other instructors said they played music depending on their aspirations or role models. *"I like to listen to songs that portray what I want to be and I feel like hiphop is what I relate with the most,"* a respondent said. Another respondent said this, *"I listen to music of people I wanna become and I find that dancehall talks about what am leaving behind and what am becoming.*

It makes me wanna dance and that is just all the energy I need to lose a few kilos." Similarly, another respondent had this to say, "*I will listen to music that I can relate to and in my times of struggle or immense efforts, I will need to feel like am capable of being what I meant to do, embracing myself and changing for better, and afrobeat makes me feel in touch with roots, my personality and everything.*"

Other determinants that were found, though received less emphasis, were health status of the clients, request by the clients, time of the day and sex of the instructor. On health concerns, in case a client had health problem such as fractures, the instructor played music at a slower tempo in order not to contribute to aggravating the condition. On request by the clients, the instructors reported that clients had to consume what is offered unless in exceptional cases. They postulated that it is difficult to please everyone hence reverting to clients' requests would bring disorder. Moreover, some of the instructors said that time of the day, depending on whether he is fresh or fatigued would affect his/her motivation and eventually the choice of playlists. About sex of the instructor, only one respondent said that gender had an influence on the choice of music. "*Different male and female hormones affect the individual's moods thus influencing personal choice/taste in music, hobbies among others,*" said the respondent.

Finally, the instructors reported that though they didn't have musical backgrounds, they received training on how to conduct the sessions. They cited that the training package covered several aspects including exercise physiology, monitoring of clients when exercising, injuries, and music among others. This enhanced their competence in handling of the sessions during exercise.

4.0 Discussion

From the study findings, classical music was found to the most played in fitness centres. This can be attributed to positive effects classical music has especially the psychological benefits. This is in harmony with studies by Juslin&Sloboda (2010) and Skånland (2013) where they affirmed that music manages mood and affect. Further, this agrees with the suggestion by Clark, Baker and Taylor (2016) on neurophysiological responses to music. In addition, the choice of classical music could be attributed to the fact that instructors underwent trainings that were comprehensive and recommended the kinds of music to be used during exercises.

The study findings showed that the type of exercise was a key determinant to the choice of playlist for an exercise. This is due to the kind of movements to be executed need to suit the type of music being played in a particular exercise. These would be majorly contributed by the rhythm and tempo within the music. Similarly, Edworthy and Waring (2006) found that tempo affected speed of walking or running on a treadmill. Waterhouse, Hudson & Edwards (2010) found that participants increased their intensity on a stationary bike when tempo was increased by a small amount and that faster music was enjoyed more.

Other studies had similar findings. Razon et al. (2009) found that rate of perceived exertion (RPE) in strength exercise was moderated by music through a dissociative strategy, and Hutchinson and Karageorghis (2013) found that individual differences in dominant attentional style affected RPE: dissociative styles were associated with lower RPE at higher intensity activity than associative styles. Clark, Baker and Taylor (2016) and Juslin, Harmat&Eerola, (2013) agreed on rhythmic elements relevant to exercise.

Further, in order to achieve the desired results, variation of music played in relation to the type of exercise is critical. Varying music brings about a new experience that will reinforce continuity on the part of the exerciser thus sustaining the motivation. This tends to be in tandem with Chamorro-Premuzic and Furnham (2007) who proposed that music may be useful to overcome the monotony of activities such as housework and jogging, particularly for those with high levels of extraversion who thrive in highly stimulating environments.

Other determinants such as personal interest, aspirations, goals and role models found in the study are more inclined on the personality of the instructor which subsequently contribute to his/her motivation. This is due to the fact that irrespective of external factors, personal factors play a major role to one's choice/preference and eventually in making a decision on what course of action to undertake.

5.0 Conclusion

From the study findings, classical music was found to be the one played most in the fitness centres while twist music was the least played. Key determinants associated with the music genres played were: type of exercise, age and religion of clients.

Other determinants found included personal interest, aspirations, goals and role models which were more pegged on the instructor's personality. The health status of the clients, request by the clients, time of the day and sex of the instructor were reported to be considered, though not with a lot of emphasis, when deciding on the playlist.

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