



## Music education context as determinant of students' participation in high school music programs: Basis for a music

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### Abstract

The aim of this study was to investigate the determinants of students' participation in high school music programs as a basis for proposing a music program framework. This study was done in order to confirm the observed general low participation in music programs and suggest a solution thereof. A total of  $n = 289$  participants, 128 males and 161 females, aged 15 to 19 years, sampled through stratified random sampling, drawn from three purposively selected public Zambian high schools were used in this study. Predictive-correlational research design was used for aligning the study. The study was influenced by the activity and socio-cognitive theory. The results indicate: low use of music technology, high quality of music programs, strong peer influence in music, strong family support, strong perceived benefits of music and a low participation in music programs. Peer influence, music technology, family income and age predicted participation in music programs ( $p < 0.001$ ). The implications of the findings suggest that advocacy towards increased use of music technology would greatly improve students' participation. A music program framework is suggested which encompasses activities and strategies for indoor and outdoor music activities aimed at enhancing participation.

**Keywords:** music education, music technology, music programs, peer influence

### Introduction

The issue of low participation in school music programs persists despite the popularity of music among students. Many teenagers can be seen constantly listening to music with earphones, yet they lack motivation to engage in school music activities such as band, choir, folk dance, and music classes (William, 2011; Emielu, 2011; Leung & Xie, 2011) [39, 9, 22]. This lack of motivation has led to a decline in music enrolment worldwide (Emielu, 2011) [9]. Factors such as peer influence, family support, family income, and school size have been found to influence participation (Falconer, 2013) [10]. Studies have also shown that parental perception of music as a viable career choice and the influence of religious teachings, particularly in Zambia, contribute to the low participation rates in music programs (Mumpuka, 2009) [28].

In Canada, a decline in the music program in secondary schools was observed despite strong government support (Fitzpatrick, 2013) [11]. However, the role of peer influence, family support, and family income in this decline was not explored. Similarly, in Australian high schools, there was a perceived decline in music enrolment, particularly in classroom and instrumental music (Hartwig & Ng, 2011) [13]. Parental support and the availability of quality music programs were identified as key motivators for participation. In Nigeria, the perception of musicians, especially traditional ones, as belonging to the lower strata of society deterred parents from allowing their children to participate in school music programs (Olusoji, 2013) [30]. In Zambia, a lack of resources, willing teachers, and objections from parents and school authorities hindered participation in music programs at both high school and college levels (Mumpuka, 2009; Musakula, 2014) [28, 29].

This study highlights the need to understand the factors influencing high school students' participation in school

music programs, particularly in Zambian high schools. It investigated the influence of parental support, music technology, peer influence and the availability of music programs in schools. By addressing these factors, it aimed at shedding light on the reasons behind the lack of participation and provide insights for improving music education and engagement among students.

### Statement of the problem

Despite the widespread love for music among high school students worldwide, the participation rates in school music programs, including choir, band, folk dance, and music classes, remain low. It is anticipated that a majority of high school students would enjoy engaging in these music activities. However, in Zambia, while studies have been conducted on the status of music education, there is a notable absence of research focused on understanding the determinants of students' participation in music programs. This knowledge gap poses a significant challenge for developing a curriculum that effectively caters to the contemporary needs of pupils and may lead to a continued decline in student participation, potentially resulting in the eventual extinction of the subject in Zambian schools.

### Objectives

1. To determine the respondents' perception of music context in terms of use of music technology and quality of music programs.
2. To find out the level of participation of the respondents in high school music programs.
3. To determine the variables that significantly predict students' participation in high school music programs?
4. To formulate a school-based curriculum output from findings.

### Research questions

1. How do the respondents perceive music education context in terms of level of use of music technology and quality of music programs.
2. What is the level of participation of the respondents in high school music programs?
3. Which of the variables significantly predict students' participation in high school music programs?
4. What output can be developed from the findings of the study?

### Theoretical framework

This study was based on two theories the activity and socio-cognitive theories. The activity theory was formulated by Aleksei Leontiev a Russian Psychologist in the 70's as a reaction to reformation informed by socio-cultural demand of Marxism. The foundational pillar of the theory is activity involving socio-cultural interaction of the subject (people or ideas) and the object (the immediate world) deemed to be transformative, purposeful and developing within the interactive structure.

It endeavours to understand human interactions in terms of the use of tools and artefacts especially where these tools are in the cultural context and in constant rapid change. In music education, use of technology has been one of its focus.

Furthermore, the theory has also been used as an intervention model for shaping and increasing student participation in activity engaged. Other fields of use are the psychology realm and most often in the technology world especially to do with computers and production. (Hashim & Jones, 2007; Kaptelinin, 2014; Thomas, 2014) [14, 18, 38].

The Socio-cognitive theory was modelled and popularized by Albert Bandura in 1977. It is a motivation theory which is premised on the belief that behaviour is as a result of the interplay between the individual and social- environmental factors. Its pillars are the three constructs personal factors, behaviours and socio-environmental influences. It recognizes self-efficacy as a prime motivation that affect a student's task choice, persistence and achievement. It is commonly used in areas of career choices (subjects), manipulative skills and health (Schunk, Meece, & Pintrich, 2014) [34].

### Significance of the study

The study was significant in its undertaking in the sense that findings revealed the level of participation of high school students in music classroom. Also what determines their push into participating in the music programs was part of the findings. These findings are cardinal due to the fact that they helped to formulate a school based indoor and outdoor music programs that would enhance participation. Findings here would be used by stakeholders such as curriculum development centre and ministry of education on a larger scale to draw national curricular that would aim at producing a quality music program.

### Literature review

#### Music education context

Among many, the definition considered here is from the perspective of an envisaged good music education program which is, "one that improves a student's ability to discriminate, understand and respond meaningfully to music expressive of worthy human feelings" (Mark, 2013:246) [23].

Therefore, music education context would be understood in terms of the environment that supports the learning of music, the quality of the program, use of technology and the facilities that go along with it. These would involve the nature of the music classrooms and their proximity to other buildings as well as the stock of music instruments and their condition (Abril & Gault, 2008) [1]. Furthermore, school size would be an important contextual aspect of music education in determining students' participation in high school music programs (Falconer, 2013) [10]. From school facilities as part of music education context, technology is the greatest influence on the choices that students in high school now make to study music (Williams & Dammers, 2014).

#### Music technology

Music technology here will be considered to imply gadgets like electronic keyboards, external sound modules (microphones), multi-track recording software and equipment (desktop), synthesizers, hardware sequencers and a wide range of software applications like Finale, Cubase, Sibelius, Fruit loops, that allow the sequencing, notation, editing and recording of audio (Mattson, 2012) [24]. Music technology also embrace other forms of musical instruments like brass, wind, electric guitars and a wide variety of western instruments. It also includes interface gadgets which would help other forms be plugged in like computers, tablets, phones and laptops.

Music technology has the power to improve music enrolment in a high school if used properly (MC Curddy, n.d.). As Mattson (2012) [24] suggests that, "Notation and sequencing software can aid students in the study of composition, aural skills and sight reading. Additionally, accompaniment software aids students in the study of improvisation, practice and performance techniques" (p. 5). This portrait of music technology is quite impressive and desirous as an aid to improving music class enrolment.

However there is usually a challenge. This challenge is what Crawford (2009) [5] observed when she studied Information and Communication Technology (ICT) resource limitations in Australian high schools. The survey revealed that despite schools planning for what to procure for various departments, these resources were usually unequally distributed. Art and music were usually excluded from the list of beneficiaries. Eventually this led to a poor status of music education which gave administrators a strong reason to deny them further support.

The main ICT gadget used for Internet or Intranet connections today is a desktop computer. Many schools have computer laboratories which, on many occasions, may be used by all disciplines of the school. The most common problem which often discourage learners of music is the computer pupil ratio. In most cases one computer maybe shared by two or more pupils. In cases as these, tasks may take time to complete. Maintenance and quality of these gadgets also play a major role in influencing pupils to participate in music. Crashing of hard disk is most often the common problem while most schools never have contingency funds aimed at maintenance and repair works (Kvajargah & Saadattlab, 2014) [21]. Therefore, ICT sustenance and appreciation remains a challenge for schools and students.

### Quality music programs

A quality music program is characterized by its ability to cater to the diverse needs of students, receiving high value and support from the school principal. It should have dedicated and uninterrupted time on the schedule, ensuring minimal conflicts with other subjects. The program should establish a strong connection between music classes and instrumental instruction, allowing students to further develop their skills. Adequate resources and support from administrators, staff, and the community are essential to the success of the program. It should be offered consistently from the first year of school until the final grade of secondary school, encompassing a wide range of activities to cater to students' interests and talents. The program should include performances such as orchestra, jazz band, and choral groups, and should be well-funded to support external performances and opportunities for students to showcase their talents (Pearson, 2015) [31]. Furthermore, the quality of instruction alone can also determine the quality of music program (Falconer, 2013) [10].

In 2013, Falconer's study on perceptions of teachers and administrators revealed that the quality of music programs was a factor in addressing low participation. From interviews conducted, it was noted that government budget cuts were a hindrance to most schools to establish a good music program. It was noted especially that this problem was evident at elementary and middle schools. The problem here is that, this has a spilling effect in the sense that, secondary school enrolment depends on the feeder elementary and middle schools. If these feeder schools have a poor music program, there would be firstly, no students to enrol at secondary school and therefore continuity suffers. Secondly, secondary schools depend on building from the foundation laid at elementary and middle school. Without students from this level this build up is impossible.

The above findings were consistent with what Ng and Hartwig (2011) [13] found out in Australia when studying the teachers' perception about the declining enrolment of students in high schools. The revelation was that parental support and the quality of music program were high predictors of enrolment.

### Students' participation in high school music program

Kratus (2007) [20] contends that the problem of participation has nothing to do with budget cuts for music education as others have suggested. He rather states that music education has disconnected itself from the current culture. Students are made to perform music which they rarely hear on the radio, home and so on. The teachers also base their curricular on their goals than the students' needs. Classical music also puts an emphasis on group ensembles while pop music which is readily available can be done in their rooms on a guitar or simply a keyboard.

Montgomery (2012) [27] in his study in the US, reveals that participation in band was highly affected by the price of the music instruments which were too high for students to afford as compared to joining sports. Many opted to stay away from music programs and joined others that were less expensive.

### Material and methods

The study used quantitative methodology embedded in a Predictive-correlational research design. The design focuses on identifying from the given variables the one that would positively predict the outcomes (Al-Mahmood, 2011; Rippy,

2014) [2, 32]. Music context and socio-cultural factors are predictor variables. Prediction correlation design was used to observe the relationships these predictor variables have among themselves, and whether there is one which highly predict students' participation in high school music programs.

### Sample size

Respondents of the main study were by May 2015 enrolled students in their respective schools. One high school each from Kalomo, Monze and Livingstone districts were purposively selected and used for this study. A total of 289 respondents were used distributed as follows: Kalomo high (99), Monze high (91) and Linda high (99).

### Sampling procedure

Schools were sampled using Purposive Sampling based on a criteria that, they offer relatively good music programs. Stratified Random Sampling was used to sample the respondents with grade levels 10, 11 and 12 used as strata. The formula  $nh = (Nh/N) n$  (Berman, 2015) [4] was utilized to calculate the sample sizes for the pilot and final studies based on the gender proportions. The formula involves dividing the total number of girls or boys (Nh) by the grand total (N) and then multiplying it by the desired sample size (n). Using this formula, individual total numbers of girls and boys were computed for each grade level. A sample size of 50 was determined for the pilot study, and a sample size of 100 was determined for the final study. To ensure representation from each gender in each grade level, Simple Random Sampling was employed. This involved randomly selecting 50 participants for the pilot study and 100 participants for the final study from each gender group across the different grade levels. The sampling process was conducted within each school, considering the strata defined by gender.

### Data collection procedure

This study was conducted using questionnaires as an instrument for collecting data. It was purely a quantitative study using self-constructed closed ended questions. Close ended questions were chosen because they are convenient and do not waste time (Battay, 2015) [3].

### Data collection instruments

In order to gather data involving quite a big number of 289 respondents, a self-constructed questionnaire containing closed ended questions was used.

### Validity and reliability

The self-constructed questionnaire was subjected to content validation using seven experts. Reliability was achieved by subjecting the instrument to a pilot test using respondents outside the target sample (Kimberlin & Winterstein, 2008) [19].

### Data analysis

The gathered data was analysed using Statistical Package for the Social Sciences (SPSS) version 22. The data consisted of both descriptive and inferential statistics. Descriptive analysis involved calculating common measures of central tendency such as the mean, standard deviation, and frequency distribution to describe the extent and perception of the participants. Inferential aspects aimed to identify a significant predictor among the variables for students' participation in high school music programs, was determined through regression analysis. To assess errors and

significance, a level of significance of 5% was utilized, assuming a normal distribution of the sample (Kalla, 2009) [17]. The analysis allowed for a comprehensive examination of the data, providing insights into the factors influencing students' participation in music programs at the high school level.

**Ethical consideration**

Permission from school authorities were sought before conducting the study. Respondents were informed that their participation was merely on voluntary basis and could pull out at any point of the research. Their identities were also kept anonymous to maintain confidentiality.

**Findings and discussion**

This section is about the findings of the study and the interpretation of the collected data.

**Determine the respondents' perception of music context in terms of use of music technology and quality of music programs.**

This was the first objective which aimed at ascertaining the respondents' perception of music education context in terms

of the level of use of music technology and the quality of their music programs.

Music education context refers to the environment that supports music learning which embraces use of music technology and the quality of music programs offered. To adequately measure it as regards how respondents perceive it in terms of level of use and quality, two dimensions were used that is, music technology and quality of music programs. The questions were assigned a scaled response of strongly agree, agree, disagree and strongly disagree.

**Level of music technology use**

Under this dimension, a total of 10 questions were assigned. The result is that level of music technology use is low ( $M = 1.77, SD = 0.52$ ). This implies that, the respondents have little or no exposure at all in music technology in their classes and outdoor music programs. This is not a positive indicator in the sense that the world is moving fast and trying to catch up with available technology which is being updated every now and then. See table below for detailed data on the mean and standard deviations of the responses arranged from high to low.

**Table 1:** Level of music technology use (N=289)

No.	Items	Mean	SD	Scaled response	Interpretation
1.	I use keyboards to learn music in class	2.53	1.03	Agree	High
2.	The computers available are used to help teach music in class	1.86	0.87	Disagree	Low
8.	I record music meant for music class using recording and editing software	1.81	0.84	Disagree	Low
7.	I compose songs meant for our music class using finale software	1.75	0.84	Disagree	Low
9.	I use recording or editing software in music class	1.71	0.76	Disagree	Low
3.	I use my phone to download music meant for our music class	1.69	0.84	Disagree	Low
5.	I download music videos from YouTube or other sites for use in a music class	1.66	0.79	Disagree	Low
6.	I use computers to arrange and rearrange music in a music class	1.62	0.78	Disagree	Low
10.	I use microphones in our music class	1.58	0.72	Disagree	Low
4.	I use my computer to record my voice in a music class	1.47	0.63	Strongly disagree	Very low
Music technology overall		1.77	0.52	Disagree	Low

Note: Mean scores are interpreted as follows: 3.5-4.0=Very high, 2.5-3.49=High, 1.5-2.49=Low and 1.0-1.49=Very low.

Table 1 above, manifests that the highest mean of respondents agreed that the musical keyboard was prevalently used in their music class lessons ( $M = 2.53$ ). In contrast, the results show that respondents disagreed that the available computers were used to help teach music in class ( $M = 1.86$ ). Further, respondents disagreed using recording and editing software to record music meant for music class ( $M = 1.81$ ). It is also evident from the findings that respondents disagreed on using microphones during music lessons ( $M = 1.6$ ). The lowest mean recorded showed that the respondents disagreed on using computer to record voice in music class ( $M = 1.47$ ).

The implications of the findings above are that despite having many forms of music technology at their disposal,

teachers are comfortable to use a keyboard and neglect other forms. This is because in Zambia the most available and cheap music instrument is a keyboard. It is hard to find a piano and those available are way far beyond what most schools can afford. This finding in this study, is contrary to studies of Watson (2011) and Crawford (2009) [5] who found synth pads common and lack of keyboards in schools sampled respectively.

**Quality of music programs**

This section presents a component of music education context above, which focus on an envisaged good music program. The measure of the quality of music programs was done through the use of 20 items.

**Table 2:** Quality of Music Programs (N=289)

No	Items	Mean	SD	Scaled response	Interpretation
5.	Our teachers of music are all trained to teach music	3.29	0.77	Agree	High
3.	The school administration provides instruments for the music class	3.16	0.80	Agree	High
13.	The school music program comprise of choir, band, folk dance and music class	3.13	0.84	Agree	High
2.	Our school music programs encourage creativity	3.10	0.75	Agree	High
6.	Lessons learnt are usually put into practice by playing music instruments in and outside class	2.90	0.88	Agree	High
20.	The large part of activities in our music programs is dedicated to dancing, singing and playing	2.83	0.90	Agree	High
8.	Music resource books are readily available	2.79	0.88	Agree	High

14.	The school sponsors in campus music performances like choir, band and folk dance	2.75	0.93	Agree	High
4.	The administration allows those who have done music at junior secondary school to continue with it at high school	2.62	0.97	Agree	High
15.	The school sponsors off campus music performances like choir, band and folk dance	2.61	0.96	Agree	High
18.	Activities in music programs are usually hands on	2.56	0.82	Agree	High
10.	All teachers speak positively about our music programs	2.54	0.90	Agree	High
11.	People in the community attend school music competitions	2.49	1.00	Disagree	Low
12.	The school offers music in all grade levels	2.48	0.97	Disagree	Low
9.	Score sheets are enough for all music students	2.47	0.86	Disagree	Low
1.	Our school music programs are designed for the able bodied and the physically challenged students	2.43	0.95	Disagree	Low
7.	There is a well-planned schedule for each student on learning an instrument after music class	2.39	0.88	Disagree	Low
17.	There are enough music teachers	2.19	0.91	Disagree	Low
19.	We go on field trips to watch actual bands and choirs singing and playing	1.98	0.99	Disagree	Low
16.	The school music programs in terms of band, choir, folk dance and music class do not need to be improved	1.72	0.78	Disagree	Low

Quality music program Overall 2.62 0.39 Agree High

Note: Mean scores are interpreted as follows 3.5-4.0= Very High,2.5-3.49=High,1.5-2.49=Low and 1.0-1.49= Very Low.

The respondents’ perception of the level of quality of music programs in their schools is *high* ( $M = 2.62, SD = 0.39$ ). This implies that music programs from these schools have met above average the yardstick for a quality or envisaged music programs as stated in the definition of terms.

Collated information from Table 2, reveal that the respondents affirmed that their music teachers were trained to teach music ( $M = 3.29$ ). They agreed also that their school administration provides instruments and equipment for learning music with a response rate with mean score of 3.16 interpreted as *high*. Results also show that schools sampled had choir, band, folk dance and music class in their music programs ( $M = 3.13$ ).

Furthermore, scores with disagree as response, indicate that though the available teachers are trained, they are few in number and therefore likely not to meet students’ musical needs ( $M = 2.19$ ). This is very much related also to a lack of well-planned schedule for each student on learning an instrument after music class, as shown in the results ( $M = 2.39$ ).

In the three schools sampled, results designate that all music teachers in those schools are trained and qualified to teach. This finding is supported by studies done in Australia involving primary and secondary schools (Hoeg-Guldborg, 2013) [15]. In the study it came out that of the ten schools that were sampled, nine had teachers who were highly trained and qualified. The percentage of these secondary school teachers was 89% from a sample of 141 which is a significant number to warrant a generalization.

Respondents agreed that the school administration provides instruments and equipment for learning music ( $M = 3.16$ ). This gesture is an indicator that administrators in the sampled schools are ready to support the learning environment of music. Though it may not be clear whether this equipment is usually new or donated or adequate to balance the ratios as well as the frequency of provision. This finding is corroborated by the findings of (Abril & Gault, 2008; Crawford, 2009) [1, 5] who recognized government and administrative support in terms of equipment in United States and Australian high schools. However, their findings bring a question of preferential budgeting when music and art is viewed in the light of other subjects, this was not so in the current study.

The study reveal that respondents agreed that music programs in their schools included choir, band, folk dance and music class ( $M = 3.16$ ). This is another indicator for a quality music program. However, availability is not a guarantee that students will participate, but it offers a better chance that they will if certain conditions and enhancers are put in place than when not.

This finding above was in part consistent with Fitzpatrick (2013) [11] who studied factors affecting music education in Ontario Canada and found that band was most prevalent. It was further supported by a study conducted by Abril and Gault (2008) [1] on secondary schools in United States and found band, choir, music class being prevalent except for folk dance.

Furthermore, the results posits a view that, there are few trained teachers of music and consequently, individualized instrumental program after class is non-existent. This finding has the potential to influence participation negatively. The situation is as a result of firstly few training institutions that offer specialized music knowledge. Secondly, that there are very few people who are willing to take up studies in music as a career since the perception is that, it is a preserve for the talented and gifted. Thirdly, the confidence of the trainees come into play. It appears their training is not adequate and so there is phobia to teach the subject. So in most cases they would rather switch to other subjects usually English language (Digolo, Andan'go, & Katuli, 2011; Gove & Vaizey, 2011; Eckeskog, 2010) [7, 12, 8]. Surprisingly Fine Arts is not affected by this apathy exhibited by teachers.

A particular note is made on the lowest rung response where respondents disagreed that the current music programs should be left as they are. This implies that they are aware that though the program rating is high and are available, there is still room to make them better to hit the very high mark by increasing the use of upto date music technology.

**Find out the level of participation of the respondents in high school music programs.**

This was the second objective which refers to high school students’ level of involvement in music programs such as band, choir, folk dance and music class.

using: *Always* (5), *Often* (4), *Sometimes* (3), *Rarely* (2) and *Almost never* (1). A total of 12 items were used after knocking off 29 to regulate redundancy noticed during

reliability test. The respondents' level of participation in music programs is *low* ( $M = 1.91, SD = 0.74$ ).

**Table 3:** Students' Participation in High School Music Program (N=289)

No.	Item	Mean	SD	Scaled Response	Interpretation
9.	I attend my music class lessons	3.52	1.80	Often	High
11.	I attend recitals as a requirement for my music class	2.29	1.57	Rarely	Low
12.	I take part in dancing in the music class	2.21	1.52	Rarely	Low
10.	I take part in the music class field trips	1.99	1.50	Rarely	Low
1.	I play an instrument in the school band	1.78	1.05	Rarely	Low
3.	I sing in the school choir	1.70	1.25	Rarely	Low
2.	I play with the school band in the school programs	1.69	1.07	Rarely	Low
6.	I dance in music festivals organized by the school	1.68	1.22	Rarely	Low
5.	I sing with the choir in political functions like a visit by the minister of education	1.55	1.11	Rarely	Low
8.	I play drums or instruments for the dancers	1.53	0.95	Rarely	Low
4.	I sing in choral competitions in school.	1.52	1.14	Rarely	Low
7.	I dance in folk dance competitions in the school	1.44	1.00	Almost never	Very low

Participation overall 1.91 0.74 rarely low

Note:4.5-5.0=Always,3.5-4.49=Often,2.5-3.49=Sometimes,1.5-2.49=Rarely,1.0-1.49 Never

Data from Table 3 show that, the highest score confirms that respondents often attend their music class ( $M = 3.52$ ), but rarely attend recitals as a music class requirement ( $M = 2.29$ ). They also rarely take part in dancing in the music class ( $M = 2.21$ ). The implication is that the highest participation is in music class than other programs despite others being available too. However, essential ingredients of a good music class are non-existent as can be seen in rare attendance to recitals and dancing. It is not clear whether this is because they are non-existent or it is a choice respondents make.

This finding is different with the studies of (McDaniel, 2011; McPherson & O'neill, 2010; Sahin & Jale, 2011) [25, 26, 33] who found low participation in music class due to the respondents' view of music as not being important compared to other subjects. As a consequence, some states in California phased out music classes.

Rare attendance to dancing in music class confirms the observations of Tembo (2012) [36] that, majority of people in Zambia are embarrassed to dance partly because of their church beliefs or teaching and colonial influence.

**Determine the variables that significantly predict students' participation in high school music programs.**

This was the third objective which sought to find out the variable that highly predict students' participation in high school music. Regression analysis was used to test if music education context and personal profiles are significant predictors of participation in music. Results indicate that there are four factors that are significant predictors: Peer influence, music technology, family income and age. Together they explain 21.3% of the variance in participation in music programs ( $R^2 = .213, F = 15.053, p < .001$ ). See table below

**Table 4:** Predictors of Students' Participation in High School Music Programs

Variables	Unstd. Coefficients		Std Coefficients	T	Sig.	R <sup>2</sup> Change
	B	Std. Error	Beta			
Constant	.350	.285				
Peer Influence	.392	.080	.299	4.897	.000	.120
Music Technology	.347	.085	.248	4.063	.000	.054
Family Income	-.134	.052	-.153	-2.571	.011	.022
Age	.076	.035	.128	2.156	.032	.016

R = .461, R<sup>2</sup> = .213, F = 15.053, p < .001

Peer influence explains 12% of the variance in participation in music that is fitted by the regression model. Meaning participation is likely to increase slightly if peer influence is increased by one unit due to the small explained percentage above. Music technology explains 5.4% of variance. Meaning that there would be a slight increase in participation when use of technology is increased. Family income explains 2.2% of the variance. Implying that, the higher the income of parents the lower the participation in music. Age explains 1.6% of the variance. Hence, the higher the age the more likely students are to increase their participation in music programs. This is corroborated by the

studies of Theorell, Lennartsson, Madison, Mosing, & Ullén (2015) [37] as well as (Siebenaler, 2006) [35]. It aligns well with the Socio-Cognitive theory which (Schunk, Meece, & Pintrich, 2014) [34].

**Formulate a school-based curriculum output from findings.**

This served as the fourth objective of the study. The study indicated low participation in band, choir and folkdance in sampled schools. Therefore a framework meant to act as a basis on which current curriculum, can be modified at school level to encourage participation by students was suggested.

## Conclusion and recommendations

### Conclusion

This study aimed to examine the impact of music education context on students' participation in high school music programs. The findings indicate that the use of music technology in the context of music education was generally low, leading to a lack of engagement and participation. Although the quality of the music programs was perceived as high, there was a desire for improvement. Overall, the level of participation in high school music programs was low, with varying levels of involvement in band, choir, folk dance, and music class. Peer influence, music technology, family income, and age were strong predictors of participation, with peer influence having the highest contribution. Increasing peer influence, music technology, and age were found to positively impact participation, while a decrease in family income was associated with increased participation due to high-income families' aspirations for more prestigious careers not related to music.

### Recommendations

To summarize the recommendations, administrators should collaborate with music teachers, provide necessary technology and budgets, promote the use of online resources, and create policies that allow the use of individual phones in music classes. They should ensure equal access to computers, prioritize budgets for music programs, and promote participation through school-wide announcements. Teachers should advocate for student participation, consider students' cultural backgrounds, incorporate technology, organize performances, and align repertoire with students' churches. The proposed music program framework should be tested and used as a supplement to existing programs.

Students should be informed about the benefits of music, including improved communication, association, appreciation, and critical thinking skills. They should be encouraged to continue their involvement in music programs and inspire others to join by highlighting these advantages. Families should support their children by participating in music activities at home, attending school events, providing instruments, and arranging private lessons. They should collaborate with teachers and administrators to improve music programs and motivate students. Parents with knowledge and skills in music should share their experiences and perform to inspire student participation and enhance their musical abilities.

Further research is recommended to explore factors influencing low participation in music programs, such as the influence of churches and the relationship between music programs and participation. In-depth investigations using different research techniques and a larger sample size, possibly encompassing multiple schools nationwide, would contribute to a more comprehensive understanding of the issue.

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