THE INFLUENCE OF A MUSIC INTERVENTION PROGRAMME ON SELF-ESTEEM AND ENHANCING STUDENTS’ EXPERIENCES IN AN URBAN SCHOOL WITHIN AN UNDER-RESOURCED COMMUNITY (A Pilot Study)

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This study sought to investigate the impact of engagement in music activities on students’ self-esteem. The 42 students who participated attended a remedial school for adolescents, located in an inner-city community. They were exposed to a music intervention programme for one semester. The study utilized a multi-method approach, in that students were observed and interviewed during the intervention programme; and, in addition, pre- and post-tests were carried out using Rosenberg’s self-esteem instruments. The findings so far suggest that students and teachers felt that the music experience enhanced their academic experience.

Introduction

This study sought to examine the effect of a music intervention programme on the self-esteem of a selected group of students from an inner-city community in Jamaica, and to describe their experiences during the intervention. Self-esteem is an individual’s evaluation of his or her self (Woolfolk, 2010). It is one’s attitude towards self. Individuals can be classified as having a positive (high) self-esteem or a negative (low) self-esteem. A positive self-esteem generally has beneficial consequences for an individual, and includes high self-efficacy, healthy self-concept, high academic performance, and greater physical activities (exercise-driven) (Lane, Lane, & Kyprianou, 2004; Tremblay, Inman, & Willms, 2000). Tremblay et al. found that students with high levels of self-esteem were engaged more intently in physical activity, and the authors noted that “for some children, physical activity (physical education) may be indirectly related to enhanced academic performance by improving health and self-esteem” (p. 312). Low self-esteem is sometimes associated with various mental health problems. Individuals’

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evaluation of self is usual lowered the more depressed and anxious they become, and these dispositions are reinforced as such individuals have a tendency to avoid activities that could help to address their anxieties and build their self-esteem (Crocker & Wolfe, 2001; Kort-Butler & Hagewen, 2011; Tighe, 2011; Trzesniewski, Donnellan, & Robins, 2003). Negative self-esteem among students can create anxiety, stress, and depression, and seriously impair academic performance (Szabo & Marian, 2012; Tighe, 2011).

Self-Esteem and Poverty
Poverty can have an isolating and profoundly damaging impact on a person’s life. Society’s low expectations for the health, employment, and family stability of people living in poverty generally seeps into the mentality of low-income individuals and cause them to have negative perceptions of themselves, thus making it difficult to build their self-esteem and psychological well-being (Batty & Flint, 2010). Poverty is sometimes conceptualized as arising from personal inadequacies rather than the inadequacies of societies to provide for their inhabitants (Batty & Flint, 2010). Such perceptions are held not only by members of society at large, but also by individuals living within lower-income communities. Mooney (2009) noted that people experiencing poverty in disadvantaged places are informed by ideas of “individual inadequacy, dependency and disorder” (p. 437). Studies by Orton (2009) and Blokland (2008) revealed that deprived individuals were highly critical of self and viewed themselves as “not trying hard enough” (Blokland, 2008, p. 43).

Poverty among Jamaican youth is a major cause for concern both in and out of schools. For example, while the 2012 Report Card on Education in Jamaica (Partnership for Educational Revitalization in the Americas & Caribbean Policy Research Institute [PREAL & CAPRI], 2012) noted that Jamaicans produce low test scores at all levels of the education system, this seemed especially true for poor children who “are particularly ill-served” (p. 6). The report noted that children from middle- and upper-income families who attend privately run schools at the primary level usually outperformed children in the public schools (lower income) in all five Grade Six Achievement Test (GSAT) subjects by as much as 30 percentage points. The report further revealed that “approximately 90% of the poorest persons have no secondary or post-secondary certification” (PREAL & CAPRI, 2012, p. 6). In addition, many of the crimes in Jamaica seem to be carried out by young persons from the inner city. In Jamaica, the perpetrators and victims involved and affected by violent crime are usually the lower-income males, who are
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the unskilled, unemployed, and undereducated, and aged 15–29 years (Jamaica. Ministry of National Security, 2010).

There has been an increase in both the number of male children on the streets and the incidence of teenage pregnancy in urban Jamaica (Smith & Green, 2007). The rise in crime and unemployment has resulted in an increase in the number of fatherless children, and a chronic absence of fathers in households within lower-income families (Smith & Green, 2007). The authors also assert that Jamaican urban youth have little hope for the future and suffer from acute feelings of unworthiness.

Self-Esteem and Music Interventions

In 2004, Costa-Giomi conducted a study in which 117 fourth grade children participated. Sixty-three children in the experimental group received piano instruction weekly, while those in the control group (54 children) did not. Self-esteem was measured using the Coopersmith Self-Esteem Inventories (long form) test. Self-esteem scores in the experimental group increased significantly over the three years, while there was no increase in that of the control group. In essence, piano instruction had a positive effect on the self-esteem of the students, although it did not affect their academic achievement in mathematics and language.

Tyson (2002) used a pre- and post-test design to assess the influence of hip-hop therapy on at-risk youth in the USA. The intervention involved the discussion of rap lyrics emphasizing positive themes. Their quantitative results were inconclusive, but the qualitative interviews revealed that participants thought highly of the intervention. Choi, Lee, and Lee (2010) also investigated the effect of a music intervention programme on children’s self-esteem and aggressive behaviours. Their research revealed that children who participated in the music intervention experienced improvements in self-esteem and a reduction in aggressiveness after 15 weeks. The researchers therefore concluded that music intervention improved self-esteem and reduced aggression.

Daykin, de Viggiani, Pilkington, and Moriarty (2012), in their review of 50 studies concerning music intervention, suggested that “future studies should involve larger samples and extended follow-up in order to support conclusions about longer-term outcomes of music intervention” (p. 10). Daykin et al. identified the following themes as emerging from the qualitative studies: identity; empowerment; role of rap music and hip-hop; cultural relevance; expression; and sustainability and resources. The authors define these themes as follows:
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- **Identity**: Music intervention helped participants to shape positive identities by diverting attention away from negative influences.

- **Empowerment**: Identity was connected with empowerment. Music intervention must address participants’ felt needs while maintaining a focus on individual change and social reform.

- **Role of rap music and hip-hop culture**: Daykin et al. (2012) noted that several authors had suggested that the use of hip-hop acknowledges the adolescents’ background and shows respect for their music. This approach provided avenues for educating participants about their culture and history.

- **Cultural relevance**: Daykin et al. (2012) cited Baker and Homan (2007), who reported that their participants rejected activities that did not fit with their perceptions of cultural and gender relevance.

- **Expression**: Music provided young people with valuable opportunities for emotional release, as well as resources for coping with difficult feelings.

- **Sustainability and resources**: Daykin et al. (2012) noted “some authors drawing attention to the short term nature of projects and the frustration and disappointment that some young people may feel at the end of projects” (p. 10).

Self-esteem is not developed in isolation from our environment, but the development of self-esteem is embedded in our social relationships and experiences. Being liked by others influences positive self-esteem (Srivastava & Beer, 2005). It has been argued that working together in a group influences positive social self-esteem. Group work provides the environment, through collaboration and cooperation, to develop trust and a sense of belonging. Despite this, the individual can get lost in the process of rehearsal and performance (Reynolds, n.d.). Reynolds therefore advised that music teachers should guard against building social esteem at the expense of individual self-esteem.

**Literacy and Music Intervention**

Research has established relationships between music programmes and literacy. Music and language have been seen to share a close relationship, especially at the cognitive level, and music is seen to improve and shape language processing (Moreno, 2009). Colwell (1994) explored the effects of a music programme on the development of global word recognition abilities in kindergarten classes in the United States. In this study, it was found that participants exposed to a music programme...
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In which stories were sung, or sung and read, had a better understanding of the text, and omitted and substituted fewer words than those who were exposed to stories that were only read. In a later study, Gromko (2005) investigated the effects of music education on the development of phonemic awareness. Her study included 103 kindergartners in the United States over a four-month period, participating in a weekly 30-minute music programme, with a control group receiving equivalent teaching time in an emergent literacy programme. Throughout the study there was a more significant improvement in phonemic awareness abilities in the experimental group compared to the control group. Bolduc (2009) also examined the effects of an experimental music programme on the development of phonological awareness and word recognition in 104 kindergarten children in Quebec. It involved weekly 60-minute sessions, over 15 weeks. Results showed that children in the experimental music programme were more effective in the emergence of writing abilities such as the manipulation of certain phonological units. Furthermore, these children saw improvement in complex syllable recognition.

The purpose of this study was to explore the influence of a music intervention programme on students’ self esteem in an under-resourced remedial school within an urban community, and to describe the experiences of the students in the programme from their perspective and that of their teachers. Based on previous studies by Costa-Giomi (2004) and Choi, Lee, and Lee (2010), it was hypothesized that the music intervention programme had a positive influence on student’s self-esteem. To this end, the following questions were asked:

1. Did the music intervention programme influence students’ self-esteem?
2. What were the experiences of students during the intervention programme?
3. What are researchers’ and teachers’ views of the impact of the music intervention on the students?

Method

Research Context

The participating school is a remedial school located in an under-resourced urban community in Jamaica. The school originated in 1994 out of an after-school programme, and over the years has morphed into a full-time remedial education school. The motivation for developing this
remedial school came from the observation that a high percentage of children attending traditional schools were unable to read and write. Presently, the school targets “out-of school” youngsters aged between 12 and 17 years who are unable to spell their names or even say the alphabet. The student population of the school is generally about 48 students, with 73% being boys. At the time of the implementation of the music intervention programme, the population of the school was 42. Prior to the intervention, the school had acquired musical instruments as donations from various individuals and agencies. These instruments had been locked away as there was no music teacher to implement a music programme in the curriculum. As university lecturers, we approached the principal and discussed with her how we could enrich the curriculum by offering music classes to the school. One of the lecturers, who is an expert musician, implemented the music intervention along with two other colleagues—one also an expert musician from another university, and the other an experienced music performer.

Participants
The participants consisted of 42 students, aged between 12 and 16 years, who attended the school in the inner city of Kingston, Jamaica. The school was designed for children in need of remedial work and the 35 boys and 7 girls at this institution all operated below grade level. They all lived within the inner city and within walking distance from the school. Due to the small size of the school population, all students participated in the intervention. However, at different points of the core section of the intervention, one or two students missed school sporadically due to illness. Also, for the musical excursion outside of the community, only a limited number of students (18) were able to perform due to the transportation cost for 42 students. Students who went on this excursion were volunteers who were prepared to attend an intense period of after-school music practice for the performance.

Measurement of Self-Esteem
Self-esteem was measured through the use of the Rosenberg Self-Esteem Scale (RSES). There are 10 items in this instrument, all addressing a person’s general belief about his or herself. The items elicit responses on a four-point scale ranging from: strongly agree to strongly disagree. The instrument includes five items that are reversed scored. A higher score suggests higher self-esteem. At the onset of the intervention, a pre-test was administered using the RSES instrument, and a post-test was administered after the 12-week period, using the same instrument. The
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instrument was administered by the classroom teachers and 72% of the
returned questionnaires had completed responses. The Cronbach Alpha
for the instrument revealed an acceptable level of internal consistency
(0.717). Studies using Rosenberg have also recorded .71 to .73 (Schmitt

At the end of the first phase of the intervention, interviews were
carried out mostly by the university lecturer who was not directly
involved in the programme. The sample of students for this stage
included all seven girls in attendance at the school, and five of the boys
randomly chosen. The interviews enquired into their previous musical
experiences, disposition, and reaction to the music programme, and
perceptions regarding possible impact on their other subjects and general
school work.

Intervention Programme

The music intervention programme was delivered in two phases: the first
phase involved formal and structured music classes for a 12-week period,
while the second phase involved coordinating performance opportunities
for the students for the remainder of the academic year. During the initial
12 weeks, sessions were held, on average, twice per week. The sessions
were delivered by two expert/trained music educators and one female
musician with music performance experience. On the first day of the
programme, boys were taken separately from girls, and the session
consisted of activity geared toward determining music abilities and skills.
This process included children singing songs that they already knew (in
the presence of their peers), individually or as duets or trios. For the next
few weeks, the classes involved all children meeting in the same room
under instruction from the three programme facilitators, with support
from regular classroom teachers in terms of maintaining discipline.
These large-group sessions were geared towards ensemble singing, and
focused on compositional activities along the mode of extemporization
around current topics affecting the lives of the students, for example, a
period of heavy rains. Within the context of specific musical parameters,
they took turns ‘DJ-ing’ and rapping about the subject in question.

For the ensuing weeks, children were placed in three groups: boys
with the expert music educators, while the girls were placed with the
female musician. The more disruptive students were placed in one group
and were engaged by one music educator, while the other group of boys
was assigned to the other music educator. The programme of singing,
accompanying movement, and other musical engagement such as drum
accompaniment remained generally uniform across groups, and the
second half of each session was characterized by a regrouping of all for a recap and combining of voices and skills.

In the second phase, the music programme was continued largely through one of the facilitators meeting regularly with the students at the school. Though not a trained music teacher, she possessed music abilities, being particularly experienced in singing; and had other skills such as drama, dance, and group-singing. In addition, the educators from the university coordinated opportunities for the students to do live performances in their school and immediate community. The children were also exposed to environments outside their community, and a high point for them was getting the opportunity to perform for a group of university lecturers on retreat at a hotel. Eighteen students volunteered to participate in this segment of the intervention. These students were committed to practice outside of regular school time. Only seven of these self-selected students had been to a hotel before this event. The remaining 11 students indicated that before this event they had never been to a hotel.

**Analytical Procedure**

The quantitative outcome was compared using the Paired sample t-tests; this facilitated the comparison of the pre- and post-test of students’ self-esteem. The interview transcripts were read and analysed by the two researchers. Phrases and sentences were assigned themes reflecting the meanings that were garnered from the responses.

**Findings**

**Impact of Intervention on Students’ Self-Esteem**

The intervention did not impact the students’ self-esteem scores as there was no statistical significant difference between the pre-test and the post-test of students’ self-esteem scores using the modified Rosenberg scale ($t=.668, p>.05$; see Tables 1 and 2).

**Students’ Views on Their Experiences**

An analysis of responses to the students’ interviews resulted in the emergence of five themes: an increased awareness of their environment; improved reading skills; developing creativity; validation of the individual; and gaps in the programme. Students felt that the music intervention made them more aware of their environment, improved their reading skills, challenged their creativity, and improved their self-confidence. There was concern about the music teachers’ attitude
towards homework, in that they felt the teachers rarely checked on their homework.

Table 1. Intervention Results: Descriptive Statistics

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<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
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<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
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<tr>
<td>Pre-test Results</td>
<td>26.57</td>
<td>30</td>
<td>5.328</td>
<td>.973</td>
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<tr>
<td>Post-test Results</td>
<td>25.40</td>
<td>30</td>
<td>6.951</td>
<td>1.269</td>
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Table 2. Intervention Results: T-Tests

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<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Sig. (2-tailed)</th>
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<tr>
<td>Pair 1</td>
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<td>Post-test Results</td>
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Increased awareness of their environment. The students felt that the music intervention increased their awareness of their social and geographical environment. Through the folk songs, they were able to understand the seasons. Also, the lyrics of some songs allowed them to understand their social structure and empowered them to want to bring about change when they become adults. For example, Sandra and Neil reflected these consequences from the intervention when they voiced the following:

*I like the songs that wi [we] sing. Some talk about Jamaicans, some talk about the seasons; and some talk about people. Dem [the songs] talk about your country and help yu [you] to understand it.* (Sandra, 14 years)

*Mek yu [make you] understand things... For example, people poor, ghetto people song. Song for di [the] poor –mek [make] yu [you] want to help poor people when you grow big.* (Neil, 14 years)

Perceived improvement in reading skills. All the students were struggling readers. They were between ages 12 and 16 years and
struggled to read beyond the Grade 1 level. During the intervention, copies of the lyrics of songs were given to the students. The music teachers guided the students in reading the lyrics; this effort was usually reinforced by the classroom teachers. Kim’s response is representative of several of the participants:

*The music programme help mi [me] to read more when the teacher print the words and give to mi [me]. Wi [We] have to read the words.* (Kim, 14 years)

**Developing creativity.** The students said that they enjoyed the musical extemporization sessions. It was during these sessions that the music teachers would set melodic and rhythmic parameters and stimuli while allowing students to create their own lyrics based on their everyday experiences. There were several stories to be heard. For example, one student sang about a rainy day when he took shelter under a mango tree and a mango fell and hit him in his head. Another student sang a story about a friend who stole from him and how he confronted the friend. They enjoyed composing and listening to each other’s stories. Michael’s statement reflects the students’ enjoyment of the sessions, which they viewed as a cultural experience.

*Love to mek [make] a vibes [good feelings]...create a song. A culture time.* (Michael, 14 years)

**Validation of the individual (how they are viewed by others).** Students said that they felt validated by the audience response to their performance. The performances influenced the development of their self-confidence and several went from being shy to being confident performers. Michael and Sandra voiced their experiences in the music intervention:

*Mek [make] mi [me] feel good. Mi [I] like the performance and the applause ...mek [make] people rail for me [Love the exciting atmosphere & cheers from the crowd].* (Michael, 14 years)

*Mi [I] was shy but mi nuh shy again [I am not shy again]. Mi [I] was shy because too much crowd, mi no longer shy; I feel good. I like the songs that wi [we] sing.* (Sandra, 14 years)

**Gaps in the programme from a student’s perspective.** There was frustration among some students when the music teachers did not follow through in holding the students accountable for the homework. The teachers did not check on the homework to ensure that it was done. This
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was frustrating for the students since they put time and effort into doing the homework and apparently wanted to please the music teachers. This could have been the students’ way of expressing appreciation for the music intervention, and disappointment was expressed when the teachers did not follow up. Kaye Bart (a student) voiced the following:

They (music teachers) don’t practice the same songs. So dem [them] let wi [we] prepare the songs and don’t come back with the same songs. They keep coming with different songs. I feel bad. The students prepare the songs and they [the students] feel bad that after preparation dem [them] nuh [don’t] sing the songs. Dem [the music teachers] would a feel bad too [would also feel badly].

Researchers’ Reflection: Going from Shy to Confident

The progress between the first meeting and the end of the first phase of the intervention was noticeable, with improvement in the students’ confidence and willingness to perform, especially in the case of the girls. Initially the students, more so the girls, were noticeably shy and withdrawn. When they entered the room for the first music class, some of the girls had little eye contact with the adults, they were soft-spoken and refused to participate in the singing activities because they said they were scared that the others would ridicule them. By the end of the 12 weeks, lecturers observed considerable improvements in their confidence and willingness to participate in musical performance. The students appeared self-assured in their delivery and general attitude to the intervention process. This view was reinforced by the resident staff, who expressed their delight and amazement when they saw how well the students performed at a community event with an audience of approximately 150 persons; and at the University Staff Retreat before approximately 35 persons.

Reflection From the Acting Principal: Nurturing and Blossoming

It is important to note that Ms. D’s first encounter with the school was when she was invited to be one of the music teachers in the intervention. During this time she mentored the girls, listened to their pain and insecurities; and used music to inspire and connect with them. Ms. D., during and immediately following each music session, taught the students life lessons and used music to instil in them hope for the future. This specific music teacher had such an impact that when the principal for the school needed to go on sick leave, Ms. D. was invited to be acting
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principal. The following represents her thoughts on the music intervention:

_I must say that it was a culture shock for me when I entered the gates of the school. Coming to the inner-city I would expect to see a more assertive set of children, instead they were withdrawn (girls). The boys were more approachable. The music intervention implemented by the university has been very instrumental. I have seen growth, especially with the girls, so much that I was proud of them when they performed at the hotel in front of professors and lecturers. I was even more impressed when the children asked if we would do it again. I personally hope the program continues._

**Reflection From Classroom Teacher Dell**

This classroom teacher is a leader among the teachers and her views are representative of the other classroom teachers. She noted the following:

_The music programme has done a lot for the students, particularly those in the 9th grade. You can see great improvement with Kaye Bart. She isn’t so difficult and unresponsive as before. Their [students] self-esteem and confidence has risen and I know they are going to take it to their new schools in September. My student Ronnie Muir—everything has changed about him since his performance at the hotel, he is coming to school on time. His appearance is impeccable, homework is done and his behaviour has been changed. On a score from 1-10, I would give the programme an 8._

**Discussion of Findings**

In the present study, there was no statistically significant increase in the self-esteem scores at the end of the 12-week music intervention. This result differs from a relatively recent study by Choi, Lee, and Lee (2010), in which improvement in self-esteem was evident after 15 weeks. It is arguable that 12 weeks is too short a period for such an intervention to be most meaningful. Another possible explanation for failure of scores to improve relates to the frequency of occurrence of the intervention per week. The sessions were for the most part once per week, lasting approximately 75 minutes, although there were about two weeks of a greater intensity in the number of sessions as the Christmas performance occasion approached. The intervention contact time, however, did not amount to more than a total of 20 hours. The contact time in the
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The intervention used in this present study is clearly below other music intervention programmes, which were more intense in nature, such as Costa-Giomi’s 2004 study where children received individualized 30-minute and 45-minute piano lessons once per week for three years.

Notwithstanding the lack of improvement in the actual self-esteem scores, there were some important findings of a qualitative nature derived through interviews with the students, classroom teachers, and administrators at the school. The students were generally forthright in communicating their feelings regarding the programme. One highlight was an increased awareness of their community environment, largely derived through some of the songs that spoke to the inner-city realities. In fact, the creative engagement during extemporization sessions allowed the students to expand on existing musical stimuli and incorporate their own community experiences within such a context. For example, shortly after a recent flood experience, the students creatively wove their experiences into given musical patterns and phrases. In interviews, students reflected on these experiences and appeared to find them extremely rewarding.

In this present study, students expressed appreciation about the intervention’s focus on reading the words of the songs when preparing to perform. It is not surprising that such an activity being part of the programme was considered useful, since the school in this research is designed to accommodate children who are behind academically, particularly in the area of reading. The experiences of the children are supported by a body of research that establishes a relationship between literacy and music, and even suggest that music programmes enhance reading skills (Bolduc, 2009; Colwell, 1994; Gromko, 2005; Moreno, 2009).

The interviews revealed that students appreciated being validated as individuals. An important plank of the intervention related to the opportunity to perform the pieces, especially where such performances involved being before an audience. One student reported feeling good and liking when the crowd would “rail” up for him while he was on stage. It is important that members of a group are able to value their individual contribution to the success of the group work. By seeing the response of the audience as not only to the group presentation but also to the individual’s contribution to the performance, individual self-esteem will increase and thus stimulate individual growth (Reynolds, n.d.).

Despite the positive reflections about the intervention, there were, however, some criticisms made by participants regarding the structure of the programme. The practice of presenting varying songs and song-styles
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was viewed as a lack of continuity and was not always appreciated by the students, who preferred that the music teachers returned to the songs of the previous week. Some students reported preparing for returning to particular songs only to be disappointed when expectations were not met.

**Limitation of the Study**

We note that the small sample size influences the power of detection of strength of influence of the music intervention programme on the students’ self-esteem. The non-significant results between the pre- and post-tests should be viewed with caution, since a sample size of 30 (71% response rate) may be too small to detect the influence of the music intervention at a 0.05 level of significance.

Because the quantitative results by themselves are inadequate, the qualitative data facilitated a more comprehensible assessment of the influence of the music intervention by allowing for data collection from multiple perspectives.

The one group pre-test–post-test design helped to compute a contrast between the means. However, using this approach can be a threat to internal validity; Kirk (n.d.) pointed out that:

- a pre-test, for example, may sensitize participants to a topic, and, as a result of focusing attention on the topic, enhance the effectiveness of a treatment. The opposite effect also can occur.
- A pretest may diminish participants’ sensitivity to a topic and thereby reduce the effectiveness of a treatment. (p. 26)

The experiment design of control and treatment group would not be appropriate for this school. The children who participated in this study are a vulnerable group, and many have been rejected by the regular school system. Consequently, dividing the students into control and treatment groups could have further affected the individual student’s self-esteem.

The separation of the students into three groups for some of the sessions, with three different instructors, could have introduced some constraints on the study. It is, however, important to emphasize that students always regrouped into the bigger group for the second half of each music class time.

Future directions in this research would entail a longer period of intervention, with the intervention being standardized, and, where possible, greater intensity in the programme. An enquiry into the children’s self-efficacy in music is another direction possible in this
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intervention. Future research will explore relationships between this music programme and the literacy levels of the children.

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References


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