



Performing Arts Education for University Students: Does Training in the Performing Arts Improve Self-Esteem and Self-Efficacy?

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Performing Arts Education for University Students: Does Training in the Performing Arts
Improve Self-Esteem and Self-Efficacy?

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A Thesis in the Field of Psychology
for the Degree of Master of Liberal Arts in Extension Studies

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Abstract

This study investigated the role of performing arts education on the self-construct values of self-esteem and self-efficacy. Given the lack of performing arts education for university aged students, the study aims to find potential correlation for improving those self-construct values through the performing arts, in terms of singing and dancing. The study hypothesized that the performing arts education program would improve self-esteem and self-efficacy scores for the participants, assessed before, midway, and after the program. Participants were recruited through a performing arts program. The General Self-Efficacy Scale and the Rosenberg Self-Esteem Scale were used in order to assess self-efficacy and self-esteem, respectively. The results showed a positive correlation that was statistically significant between the performing arts program and self-efficacy, but not a statistically significant result for self-esteem. Various limitations should be taken into consideration, such as how performing arts are defined, and the socio-cultural limitations in which the study is conducted. As this relationship has not been heavily studied, future research should be conducted in order to better understand self-efficacy and self-esteem in the context of performing arts programs.

Dedication

I dedicate this thesis to my parents, Nichra & Surachai Manorothkul, and to Dr. Setsuko Ohashi for their unconditional guidance, support, and encouragement.

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I would like to express the deepest gratitude to my thesis advisor Dr. Randolph Nesta, my research advisor Dr. Adrienne Tierney, as well as Dr. Kathryn Megan Bean for their passion, patience, and guidance throughout this process.

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Chapter 1

Introduction

Research Problem

Current research purports that the performing arts, in the context of singing, dancing, and instrumentation, is an integral part of a person's learning experience. Foster and Jenkins (2017) found that engagement in the performing arts had a positive interaction with "performance, persistence, and overall well-being across the life stages." (p. 435) This interaction between performing arts and wellness has been documented in elementary school-aged children (Clift, 2012) and older adults (Clift, Skingley, & Rodriguez, 2015; Hankir, Kirkcaldy, Carrick, Sadiq, & Zaman, 2017).

Beyond general wellness, two self-constructs that have been associated with the performing arts are self-esteem and self-efficacy. In elementary school children, there was a positive relationship between self-esteem and the performing arts (Steinberg & Steinberg, 2016). Specifically, through the usage of interviews, students disclosed that they were able to form strategies to resist threats to their self-esteem. According to Rosenberg (1965) self-esteem refers to an individual's evaluation of one's self-worth and self-respect. Subsequently, self-efficacy was seen to positively interact with body posture through cognitive-behavioral therapy to enhance self-efficacy (Fodoreanu, 2017). Although body posture is not the same as performing arts, the awareness of the body is essential in singing and dancing. According to Bandura (1977) self-efficacy refers to an individual's belief in their own capacity to execute behaviors necessary to produce specific performance attainments, in the general context of achieving a particular skill—

not specific to the performing arts. In this respect, understanding the relationship between performing arts and self-efficacy as well as self-esteem may also bolster our understanding of how these self-constructs may potentially affect mental resilience. This study will attempt to answer the question, to what extent does performing arts education influence self-esteem and self-efficacy for university students?

I will conduct a 15-week performing arts education program using choral singing (with simple harmonies) and dancing (with simple choreography) with the intent that the participants express themselves vocally and physically. I will evaluate the students on self-esteem and self-efficacy before, midway, and after the program. In this performing arts education program, participants will learn a variety of songs and dances of different styles, culminating in a small showcase where participants will perform for each other. Within the performing arts education program there will also be a strong focus on creating a supportive environment. This supportive environment seems to be an important component of the performing arts that encourages participants to try different ways of expressing themselves vocally and physically through various styles of singing and dancing without fear of judgement or ridicule from their peers (Sitar, Cerne, Alecksic, & Mihelic, 2016, Chua, 2015; Hallam 2010; Steinberg & Steinberg 2016).

Definition of Terms

Performing Arts Education (Dancing): refers to choreographed movement to music, specifically in the context of popular music at the time of the performing arts education administration. Although there is an endless variety of dance styles, the focal point would be the enjoyment of music as opposed to the technical aspects of movement.

Performing Arts Education (Singing): refers to vocal arrangements to music, specifically in the context of popular music at the time of the performing arts education administration. Although there is an endless variety of singing styles, the focal point would be the enjoyment of music as opposed to technical aspects of vocal training.

Self-Efficacy: refers to an individual's belief in their own capacity to execute behaviors necessary to produce specific performance attainments, in the general context of achieving a particular skill— not specific to the performing arts (Bandura, 1977).

Self-Esteem: refers to an individual's evaluation of one's self-worth and self-respect (Rosenberg, 1965).

Background of the Problem

There is something intrinsic and powerful about music and dance that transcends different cultures and eras. It is an extremely important part of modern society, apparent in almost every aspect of everyday life; in music in stores and public transportation, to the naturally produced sounds of nature and the intonation of our voices. Coordinating movement sequences (dancing), as well as directing vocal and musical intonations (singing and instrumentation) have historic roots in ancient civilizations as a means to pass down culture and history, as well as for enjoyment, war motivation, and relaxation purposes (Sachs, 2008). Performing arts, in the context of song and dance, are an intrinsic part of the human experience in shaping mood and cognition and have been shown to promote overall wellness. Examples of this interaction between performing arts and wellness was seen in older individuals (Coulton et al., 2015; Poulos et al. 2018; Skingley et al., 2016), young-adult women (Clift et al., 2016; Muro and Artero, 2017), and elementary-school-aged children (Cabedo-Mas and Díaz-Gómez, 2013; Clift, 2012). The following review of the current literature will look into contemporary research concerning performing arts education and its effects on self-esteem and self-efficacy.

Performing Arts Education

The effects of music and dance education in schools has also been extensively studied in the past. Anvari et al. (2002) studied the interaction between using musical skills for phonological processing and reading ability and found that the development of musical skills are related to increased phonological awareness and reading development

for elementary-school-age children. Additionally, in terms of academic outcomes, Schellenberg (2011) uncovered that music lessons led to higher mathematical achievement for elementary-school-age children. In looking beyond childhood, Foster and Marcus Jenkins (2017) reported that engagement in music education boosted “performance, persistence, and overall well-being across the life stages” (p. 435). These life stages were defined in three waves when the participants were zero to 12 years-of-age, five to 18 years-of-age, and 18 to 24 years-of-age. The music education was defined in three ways for this study, lessons in the musical arts, lessons in the performing arts, and instrumentation. These studies are significant insofar as they establish a basis for the positive interaction between music education and academic, cognitive, and developmental outcomes.

The positive outcomes of music and the performing arts have also extended to personal and social development as well. Hallam (2010) found that engagement with music benefited individuals in both personal and social development—mediated by the context of an enjoyable and rewarding experience. In a series of studies by Cabedo-Mas & Díaz-Gómez (2015), music has been shown to be socio-culturally beneficial. They found that musical experiences led to higher rates of social interactions in elementary school-aged children. They also found that music education led to improved interpersonal skills, fostered cultural exchanges, and assisted in forming cross-cultural relationships for elementary school-aged children. Beyond a general social context, the performing arts was also seen to have a positive interaction with social and emotional health for individuals with social and emotional trauma (Faulkner, 2017). Collectively, these positive interactions have provided a more holistic conceptualization of music education

and the potential that can be drawn from incorporating these techniques into academic and personal domains. These positive interactions with performing arts education and social interactions/interpersonal skills may follow through to a university setting as well, which will be addressed in this study.

For university students, Fodoreanu (2017) found that using body posture in cognitive-behavioral therapy led to higher values of self-efficacy and also reduced anxiety. Although body posture is not the performing arts, the awareness of the body is essential in singing and dancing. This research base has established positive relationships between the performing arts and individuals' academic, wellness, and social outcomes—primarily for women, children, and older individuals.

There is also a considerable amount of research purporting that a supportive environment is an integral part of making a performing arts education program successful. The potential for creativity and expressiveness is fostered when students are provided with safe, supportive environments in which to explore that creativity (Chua, 2015; Sitar et al., 2016). Steinberg and Steinberg (2016) found higher self-esteem values led to higher rates of expressiveness, also mediated by safe, supportive environments. In contrast, the lack of this supportive environment led to lower values of self-efficacy (Marchant, 2018). This research shows a supportive environment may be an important component of the performing arts. Because of this, this study will employ a safe supportive environment for performing arts training, in order to maximize the benefits of the training and allow participants to develop their creativity and confidence. Bolstering creativity in students may also have the potential to improve and/or build flexibility into

their individual learning styles, which may also positively contribute to furthering the development of self-confidence.

Self-Efficacy and Performing Arts

In regard to this study, the connection between performing arts and two self-construct traits, self-efficacy and self-esteem, will be assessed. This first trait, self-efficacy stems from Bandura's (1977) theory of self-efficacy, where he defines the trait as the belief in one's capacity to handle tasks. As seen in the following studies, the connection between self-efficacy and the performing arts is a popular topic in the current literature. This research base has looked into finding positive correlations across various age groups and through different types of music/performing arts education.

MacAulay et al. (2019) developed a music training program for older adults. In their study, their participants found improvements in cognition, self-efficacy and emotional well-being. Participants in this study also universally reported that the music training program provided valuable socialization and camaraderie. Even though these relationships were found in older adults, there is potential to see these same effects in a performing arts program within a university setting, in which this study was conducted.

With respect to looking into contemporary research that encompasses a university setting, Wiedenhofer et al. (2017) looked into two different types of dance interventions. The first being goal-oriented movement, in which participants were instructed how to move, and the second, non-goal-oriented movement allowed participants to move freely to music. They found that the self-reported values of stress and well-being improved significantly in the non-goal-oriented condition compared to the goal-oriented group, but

values of body self-efficacy improved in both groups. The researchers addressed that any type of movement conditioning could be helpful for feeling strength and control over one's own body.

From a general sense, music education encompasses a vast range of performing art techniques (singing, dancing, instrumentation, and music theory) and a vast range of styles varying by society and culture. Despite this broad range, Zelenak (2014) found that music aptitude levels corresponded respectively with self-efficacy values, despite the type of music education, for middle and high school-aged students in the United States of America. Within the design of my study, focusing on aptitude, in terms of being able to successfully execute singing harmonies, and dancing the choreography, will be more focused upon than the type or format of the performing arts education utilized.

Research has also found that less traditional forms of the performing arts are correlated with self-efficacy (as opposed to classical dance/vocal training, and instrumentation in school bands). Regehr (2011) found that engaging in recreational burlesque dancing improved values of empowerment and self-efficacy for women between the ages of 21 and 49. She addresses a population similar in age to that of my own study in an overlap with women in their 20s, but this study looked only at women, and did not have the context of a university setting. Additionally for women, Van Puyvelde et al. (2014) found that, for mothers and their infants, the development of musical characteristics (music improvisation techniques, group processes, and intersubjective development) led to higher self-efficacy values, in the context of post-natal depression. This study looks at the implications of using music in-general in the context of post-natal depression. Van Puyvelde et al. (2014) provides an underlying

concept of involving performing arts education for intersubjective development and self-efficacy values for university students, in the same way that it had for mothers with postnatal depression (despite the lack of focus on the technicality of traditional performing arts education).

Addressing the concept of self-efficacy for university students of all genders and ages, as opposed to focusing primarily on women or children, may further promote external validity. Self-efficacy in university students may provide useful in pertinent situations related to being in a university (i.e. new jobs, internship opportunities, or in giving presentations).

Self-Esteem and Performing Arts

An additional self-construct significant to this study is self-esteem. This term originates from Rosenberg (1969), where he defines self-esteem as the general feeling of self-worth/value. Steinberg and Steinberg (2016) found that performing arts led to higher values of self-esteem for elementary-school-aged children. The participants in their study were able to recognize situations which threatened their self-esteem and as a result, they were able to navigate away from the situation as a protective factor in resisting threats to their self-esteem. Similar to self-efficacy, the role of the performing arts in current research can also be seen across a range of different ages and different musical contexts.

As mentioned above, body posture was shown to increase self-esteem values in university students (Fodoreanu, 2017). This study looked into a Body Language Focused Therapy (BLFT), which is a cognitive-behavioral therapy including a motivational script and body language posture modifications. Within the dance aspect of performing arts,

body posture and orientation is an integral part of goal-oriented movement particularly in the way that individuals need to be aware of the way they are moving and holding their bodies. Each movement and posture associated with those movements are purposeful and have intent.

In performing arts education, music selection is a core factor in creating the ambiance. Similar to self-efficacy effects found in Zelenak (2014), self-esteem may also not be limited to specifically orient toward a specific style or format. Miranda et al. (2019) found that for elementary school-aged children, an ethnocultural formation of identity through music led to higher self-reported values of happiness, and self-esteem. The children participating in this study also showed fewer internalizing symptoms comparatively to the control group. These studies provide the basis for different cultures affecting self-esteem values.

The performing arts were also seen to have a positive effect on life satisfaction across different life stages. Behera et al., (2017) found a positive interaction between emotional maturity, self-esteem, and age as significant predictors toward life satisfaction. Additionally, this can be seen more specifically in Hős (2005) where performing arts, in the form of aerobic dance, led to improvements in self-perceived body image for middle-aged women. Exploring different sample populations may allow the performing arts to apply to more directly to practical situations — such as the self-perceived improvement of body image (Hős, 2005), and as a predictor of life satisfaction (Behera et al., 2017).

Because the range of performing arts education is vast, exploring different populations, age groups, and different types of music will be necessary in exploring the existence of these relationships. Despite this foundation, positive effects have been found

across a vast range of population samples between the performing arts education and self-esteem, future research will need to focus on the context and extent of this effect.

Study Aims and Hypotheses

This study will explore if these same effects exist on self-esteem and self-efficacy, specifically for university students in Japan taking part in performing arts education. With a low rate of individuals expressing themselves in Japan (Tobin, 1995), there seems to be a need for developing these self-construct values of self-esteem and self-efficacy. The relationship between the performing arts and each of these two self-constructs will be evaluated through a performing arts program in which the students will be encouraged to express themselves through singing and dancing similarly to Steinberg and Steinberg (2016). The context of the program will also be sure to implement a supportive environment in order to try to maximize the potential benefits of the performing arts (Chua, 2015; Hallam 2010; Sitar et al., 2016; Steinberg & Steinberg 2016).

My prediction is that both self-efficacy and self-esteem will be positively affected by the performing arts program. However, it is possible that only one of these traits will increase. In the potential outcome that participants interpret the performing arts training a success only in terms of singing and dancing, their self-esteem may increase, but there may also be the potential that they do not find the external validity in the training. If this validity is not found to apply to other aspects or practical tasks, self-efficacy scores may not rise. Alternatively, if participants interpret the performing arts training as a new challenge and but do not find self-worth or the value of the training, their perception of

succeeding in new tasks may arise, but there may not be an interaction with self-esteem. Finally, there is also the potential for the null hypothesis that neither self-efficacy or self-esteem will increase as a result of the performing arts program.

I predict that participation in the performing arts program will lead to higher levels of self-esteem and self-efficacy because the exploration of their own voices and bodies will allow for individuals to explore different facets of themselves while challenging them to perform in front of others. The performing arts utilization of the individual's own voices and bodies allows the participants to think about, explore, and challenge themselves through the course of the experience. Feeling successful in this training should give participants the experience of finding performance techniques that work for themselves that they may also be able to use in other situations. In particular, taking part in a 15-week performing arts program once a week likely leads to changes that correlate with improved self-perceived values of self-esteem and self-efficacy for university students. I also predict that self-esteem and self-efficacy values will have a positive, linear trend, in that if one value rises, the other value will respectively rise.

The distinction between these self-constructs lie is between how participants interpret the performing arts education program. Self-esteem refers to general feelings of self-worth/value (Rosenberg, 1965) whereas self-efficacy is a person's belief in their capacity to handle tasks (Bandura, 1977). As opposed to a general sense of self-esteem and self-efficacy, there may also be potential for these self-constructs to be limited to a specific task or topic. In this context, an individual may feel accomplished in a specific skill, such as playing an instrument or dancing, but may not feel like these skills would be externally valid or applicable to their lives in a pragmatic way. Should participants feel

successful in the performing arts training, there is potential that could lead to individuals feeling that they can handle new tasks, which may encourage their self-esteem— or inversely their self-esteem will rise as a result of repeatedly performing in front of others during the training, which may encourage their self-efficacy in feeling that they can handle new tasks.

Significance of Study

Although there have been studies conducted in the past in regards to performing arts and self-esteem for children and older individuals, there have not been any studies specifically looking into the university students. Complementary, in the case of self-efficacy, even though some research addresses young adults, it looked into the relationship between body posture and self-efficacy, rather than the performing arts and self-efficacy (Fodoreanu, 2017).

As seen in this review of current literature, performing arts education is primarily oriented towards three different groups; children (elementary, secondary, and high school students), women, and older individuals. Despite the benefits identified by the current literature, the U.S. Department of Education notes that as of 2009, dance programs are only available in 3% of elementary schools and 12% of secondary schools (Parsad, 2012). Provided that there are a vast range of contexts and age groups that have potential for these relationships between the performing arts and self-esteem/self-efficacy, there is potential for performing arts education to be used for a specific age group and purpose. Although increasing these self-construct values is necessary and is beneficial for providing assistance and insight into the involved groups, there is also potential for

performing arts education to continue to help individuals past childhood and may continue to provide psychological buffers as well as augment the traits of self-esteem and self-efficacy in university students.

By understanding the interaction between performing arts and self-esteem, researchers may be able to find a way for young adults to incorporate performing arts techniques into developing self-esteem and self-efficacy. In looking at the potential connection between performing arts education on self-esteem and self-efficacy, if a positive interaction effect is found, university students may be able to use this performing arts education as a resource to increase values of how they feel about themselves, new challenges, and potentially boost performance with presentations, interviews, and other social performance situations. These interaction effects can be further fostered and sustained in young adulthood and should they be able to consolidate into the performing arts they may be beneficial in forming strategies to protect self-esteem in new job, internship, or presentation experiences and in maintaining and promoting overall health and well-being.

Chapter II

Method

The study was conducted using an online-based format that included two questionnaires (explicit measures). The target sample was 34 participants (based on the projections from G*Power) from the International Pacific University in Okayama, Japan, who were participating in the performing arts program that was already established at the university. These participants were estimated to be between the ages of 17-23, with an equal representation of males and females, they were also estimated to be of native Japanese descent or Vietnamese descent (there is a large population of students from Vietnam attending this particular university). Participants were recruited through that performing arts program.

Participants

A total of 56 participants (39.3% Female) completed the study with 45 Japanese participants (28.6% Female), 7 Vietnamese participants (8% Female), 1 Pilipino/a participants (0% Female), 1 Brazilian participant (0% Female), 1 Chinese participant (0% Female), and 1 Korean participant (100% Female). Inclusion criterion for the participation was participation in the performing arts program. Since there were three rounds of data collection (before, midway, and after the program), those who dropped out of the program, did not fully complete all three rounds of surveys, or uploaded more than one response were excluded from the study. Participants had their assessment tracked by

student identification numbers (identifying department program), sex, nationality, and age.

In the first round of data collection, the week the program began, there were 113 surveys collected. Of these 113, after cleaning, 73 participants were recorded for the first round of surveys. For the second survey after cleaning, there were a total of 66 participants. For the third and final round of surveys there were a total of 56 participants remaining after the data was cleaned.

From the enrolled sample, a total of 57 participants were excluded. Participants were excluded for the following reasons: did not complete the pre, mid, and/or post surveys fully (41 individuals), left the program before completion (10 individuals), and those who submitted more than one survey (6 individuals had their second submission omitted). The excluded sample consisted of 24 females and 32 males. Of the excluded participants there were 44 Japanese, 12 Vietnamese, 1 Pilipino. The average age of the excluded sample was 19 years old.

Materials

The materials required for this study were the online-based implicit surveys administered before, midway, and after the performing arts program (Rosenberg Self-Esteem Scale (Rosenberg, 1965) and The General Self-Esteem Scale (Jerusalem & Schwarzer, 1992)), as well as the performing arts program itself. The materials required for the performing arts education program include; a sound system (speakers, microphones, music sources, and a mixing board), a program to be taught (dance choreography and music sheets), and a space large enough for each of the participants in

the program to be able to move freely. A general format of the performing arts program schedule (Appendix 3) included 7 dances, 5 songs, and 2 mixed numbers (which had both singing and dancing). Additionally, due to COVID-19 extra materials were required in order to properly sanitize the environment including; alcohol wipes, alcohol spray, paper towels, ventilation in the forms of fans, and tape to mark off socially-distanced sections for the participants.

Measures

Participants in the study were evaluated on both assessments of The General Self-Efficacy Scale (Jerusalem & Schwarzer, 1992) and the Rosenberg Self-Esteem Scale (Rosenberg, 1965) (Appendix 1 and 2). Translations of these assessments were also found in the Japanese language, since the primary language of the students is Japanese by Ito et al. (2005) for The General Self-Efficacy Scale and Mimura and Griffiths (2007) for the Rosenberg Self-Esteem Scale. These two assessments were administered at three timepoints: before, midway through, and after the program. Although there are also participants of Vietnamese nationality, and a few other international participants, expected to take part in the program, all of these participants had to have passed a Japanese literacy test before being officially admitted to the University.

Table 1

Assessments Overview

Assessment	
Self-Efficacy	The General Self-Efficacy Scale (Jerusalem & Schwarzer, 1992)
Self-Esteem	Rosenberg Self-Esteem Scale (Rosenberg, 1965)

Implicit Measure of Self-Efficacy

Self-efficacy will be evaluated using The General Self-Efficacy Scale (Jerusalem & Schwarzer, 1992). This Likert-scale is an assessment of ten items in which participants will rate themselves from one to four in how accurately each statement describes them (one representing not true at all; two representing hardly true; three representing moderately true; and four representing exactly true). The ten items of this measure are then averaged out as a representative self-efficacy score (between one and four). A value closer to four represents a high-sense of self-efficacy whereas a value closer to one represents a low-sense of self-efficacy. Psychometric properties of this scale have been examined and verified in Luszczynska (2003).

Implicit Measure of Self-Esteem

Self-esteem will be evaluated using the Rosenberg Self-Esteem Scale (Rosenberg, 1965). This assessment is also a Likert-scale of ten items in which participants will rate themselves from one to four in how accurately each statement describes them (one being strongly agreeing with the statement; two being agreeing; three being disagreeing; and four being strongly disagreeing). The ten items of this measure are then averaged out as

a representative self-esteem score (between one and four) similarly to the self-efficacy scale. A value closer to four represents a high-sense of self-esteem, whereas a value closer to one represents a low-sense of self-esteem. Psychometric properties of this scale have been examined and verified across a variety of different studies and context (Chao et al., 2017; Classen et al., 2007; Sheasby et al., 2000; Vispoel et al., 2001), but through a cultural perspective (Martin et al., 2006; Wu, 2008) it may be best to look at self-esteem as a bifactorial construct (Hyland et al., 2014; Reise et al., 2016).

Procedure

The study was conducted using three main protocols— data collection protocol, study protocol, and the data cleaning protocol.

Data Collection

Data was collected via online means at the International Pacific University, Okayama, Japan Campus. The two assessments were online-based and took approximately five to ten-minutes to complete. These assessments were administered on the first week, midway, and after the 15-week performance education program (week 1, after week 7, and after week 15).

Study Protocol

The participants in the study were collected from an existing performing arts education program at the International Pacific University, Okayama, Japan campus. The researcher provided online-based copies of both The General Self-Efficacy Scale

(Jerusalem & Schwarzer, 1992) and the Rosenberg Self-Esteem Scale (Rosenberg, 1965). These assessments were consolidated into a single 20-item questionnaire. Potential participants were first informed about the research and what would be required of them, as well as their option to drop out of the research at any point without penalty. Afterward, they were asked for their consent in an online-based consent form administered before the assessment, which reiterated, as well as further explained to individuals, in a visual representation, the general purpose of the study, the tasks they would complete in the surveys, the duration of the surveys, the duration of the performing arts program, and the confidentiality of their responses. Since the researcher was also the instructor of the course, the participants in the study were informed that there is a risk of “undue influence” as the students may feel obligated to take the surveys or worry non-participant would impact their academic standing, it was reiterated that participation, or lack-there-of, would not have a bearing on their academic standing, the results of the course, nor anything outside of the study. Additionally, the surveys were initially coded by student identification numbers so that results would not be directly associable with the participants, yet participant mortality could be tracked throughout the program. Participants were given the option to leave the study, or if they choose to, to not fill out the survey at any time without any negative repercussions. Following consent, participants who were willing and had given their consent to participate were given access to the surveys to complete. If the participant declined consent, the online-based form would end, thanking them for their time, and they were free to take part in the performing arts program without being a part of the study. For those who did choose to take part in the study, after completing the survey, they proceeded to take part in the

program. Midway through the program, on the seventh week after the initial survey rounds were completed, they were asked to fill out these surveys for a second time. On this second instance of the survey administration, the participants were once again reminded that they were free to not take part, or drop out at any time, again, without any negative repercussions. Finally, after the program finished on the 15th week, the participants were administered these same surveys once again as the third and final instance. After completing these tasks, they were orally debriefed providing them the information about the study objectives as well as who to contact and how, if they should have any follow-up questions. The participants took about five to ten-minutes to complete the surveys at each of the three instances that these surveys were administered. The participants were not compensated for the completion of the study protocol in any shape or form, whether it was monetary nor course/credit related.

Data Cleaning Protocol

After data collection was complete, the following procedures were followed for cleaning the data. Since the inclusion criteria was that participants in the research were already participating in the performing arts education program (with no exclusion criteria), the only data that was removed was from either: 1. those who did not fully fill out the pre, mid, or post surveys; 2. those who left the program before completion; 3. duplicate submissions; 4. submissions with all of the same answers. The participants pre, mid, and post program data was associated with identification numbers in order to check for participant mortality and consistency. If any of the questionnaires were not fully filled out, the entry was immediately removed from the sample. If any of the participants left

the performing arts program, or chose to leave the study at any point during the program, the participant was removed from the sample (i.e. the participant filled out the first instance of the study, but chose to drop out from the second instance, the participant was removed from the sample). If more than one submission was received from the same student identification number, the submission that was fully filled out was received. In the case that both submissions were fully filled out, the second submission was kept, and the first submission was removed from the sample. Finally, in the case that there was a submission where every answer was the same (e.g. the participant filled out all 1's, 2's, 3's, or 4's for every item in the questionnaire) the participant was removed from the sample. The data was also checked after the third and final instance to make sure that each participant had fully filled out all three

Data Analysis

Data Analysis was conducted separately for self-efficacy and self-esteem. Each participant was coded through their student IDs and was asked for demographic information in regards to their sex, school year, department, and nationality. Additionally, the ten measures from self-efficacy and self-esteem were averaged for each of the participants. Questions with reverse questions from the Rosenberg Self-Esteem were also properly switched to positive values before the averages were taken, for before the program, midway through the program, and after the program's completion. The data for these demographics as well as these averages pre, mid, and post program were then run through the SPSS software as a general linear regression model, for repeated measures.

Self-Efficacy

Differences in self-efficacy scores were investigated by running a general linear model regression for repeated-measures with the within-subject factors being the administered surveys pre-, mid-, and post-program for both self-efficacy scores based on the General Self-Efficacy Scale.

Self-Esteem

Differences in self-esteem scores were also investigated in the same way by running a general linear model regression for repeated-measures with the within-subject factors being the administered surveys pre-, mid-, and post-program for self-esteem scores based on the Rosenberg Self-Esteem Scale.

Self-Efficacy and Self-Esteem Collectively

The strength of the association between self-efficacy and self-esteem scores were then further investigated by running a Pearson Correlation Coefficient for each of the three instances that the survey was administered (pre-program self-efficacy and self-esteem means, the mid-program self-efficacy and self-esteem means, and the post-program self-efficacy and self-esteem means).

Chapter III

Results

The first round of data collection yielded a total of 113 responses. This sample was cleaned to remove participants who either did not fully fill out the survey, those who dropped the program after the first class, and those who uploaded more than one response. As a result of cleaning the first round of data, there were a total of 73 participants. The second round of data collection yielded a total of 80 responses. This sample was also cleaned in the same fashion as the first round, and in addition, in order for the second round of data to be included, participants must have fully completed the first round of data. As a result of this cleaning there were a total of 66 participants. Finally, the third round yielded a total of 68 responses, which was also cleaned in the same way as the second round. As a result of this cleaning there were a total of 56 participants.

This final sample of 56 participants had 34 males and 22 females. Further demographic details of this sample are shown in Table 2 which differentiate participants between school year, age, nationality, and department. Sex differences between participants showed that there was a higher distribution of male participants with 60.7%. As a result of this disproportionate ratio of males, in addition to the means for self-efficacy and self-esteem in Figures 1 and 3, there are additional Figures 2 and 4 showing the means separately for males and females in order to see the differences more clearly.

Table 2*Demographic Analysis*

Variables		Total	Male	Female
Sample Size		56	34 (60.7%)	22 (39.3%)
School Year:	1	49 (87.5%)	29 (59.2%)	20 (40.8%)
	2	5 (8.9%)	3 (5.4%)	2 (3.6%)
	3	2 (3.6%)	2 (3.6%)	0
Age:	18	25 (39%)	16 (28.6%)	9 (16.1%)
	19	26 (52%)	13 (23.2%)	13 (23.2%)
	20	5 (8%)	5 (8%)	0
Nationality:	Japanese	45 (80.4%)	29 (59.2%)	16 (28.6%)
	Vietnamese	7 (12.5%)	2 (3.6%)	5 (8%)
	Chinese	1 (1.8%)	1 (1.8%)	0
	Korean	1 (1.8%)	0	1 (1.8%)
	Pilipino/a	1 (1.8%)	1 (1.8%)	0
	Brazilian	1 (1.8%)	1 (1.8%)	0
Department:	Business Department	24 (42.9%)	17 (30.4%)	7 (12.5%)
	Early Childhood Education	1 (1.8%)	0	1 (1.8%)
	Education Department	30 (53.6%)	17 (30.4%)	13 (23.2%)
	Sports Department	1 (5%)	0	1 (1.8%)

Note. This table presents the demographic break down of the sample

Sphericity

For self-efficacy Mauchly's Test of Sphericity indicated that the assumption of sphericity had not been violated, $\chi^2(2) = 3.249, p = .197$ (Table 3). For self-esteem Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated, $\chi^2(2) = 3.343, p = .006$ (Table 3). Due to the violation of sphericity with an epsilon of .891, the Huynh-Feldt correction was used to adjust for the degrees of freedom for the *F*-statistic.

Table 3

Mauchly's Test of Sphericity

Self-Construct	χ^2	<i>p</i>	Mauchly's W	Epsilon	
				Greenhouse- Geisser	Huynh- Feldt
Self-Efficacy	3.249	.197	.941		
Self-Esteem	10.317	.006	.944	.850	.891

Self-Efficacy

Detailed changes in self-efficacy over the 15-week program are shown in Table 4. Between the first to the second instance, the difference between the means is not statistically significant: $F(1,54) = .342$, $p = .561$. Between the second to the third instance, the difference between the means is statistically significant: $F(1,54) = 7.184$, $p = .010$. Between the first to the third instance, the difference between the means is statistically significant: $F(1,54) = 7.492$, $p = .008$. Figure 1 displays these average self-esteem scores across the program through a bar graph and, additionally Figure 2 displays these same averages but with sex differences added, also through a bar graph (since there was a much higher distribution of males taking part in the study).

Table 4

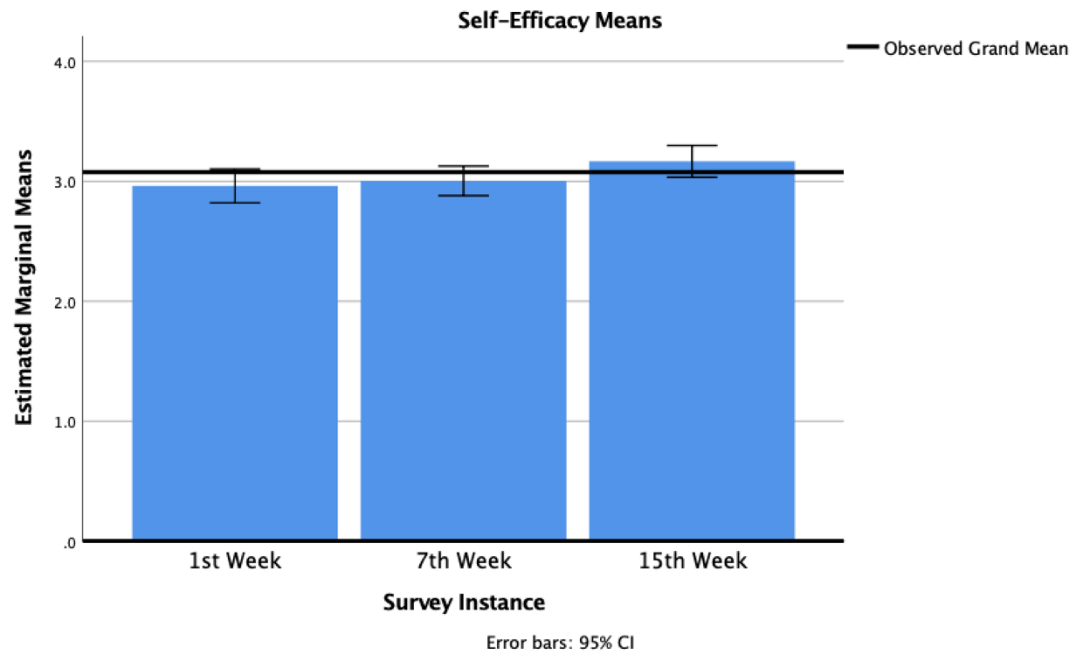
Changes in Self-Efficacy

Instance	Mean	<i>SD</i>	<i>F</i>	η^2
Sphericity Assumed	3.076	.5030	4.834**	.082
1st to 2nd time	3.0205	.5097	.342	.006
2nd to 3rd time	3.118	.4903	7.184**	.117
1st to 3rd time	3.0905	.5090	7.492**	.122

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 1

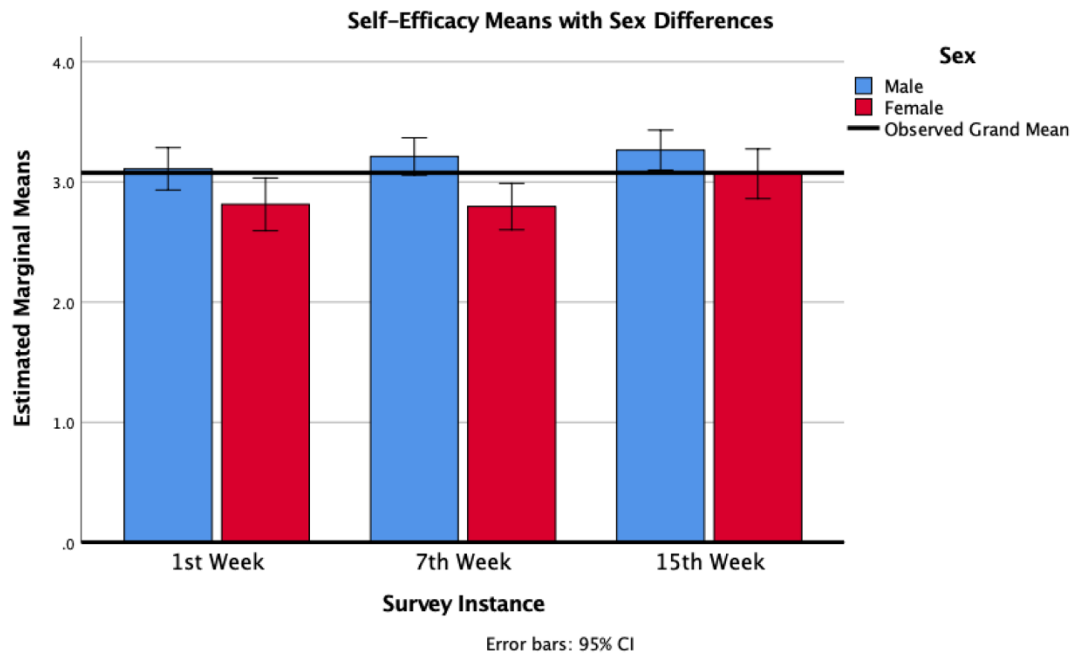
Mean Self-Efficacy Scores



Note. This figure displays the difference in mean self-efficacy scores at each time the measurement was administered (before the program began— 1st week, midway through the program— 7th week, and after the program finished 15th week).

Figure 2

Mean Self-Efficacy Scores by Sex



Note. This figure displays the difference in mean self-efficacy scores at each time the measurement was administered (before the program began— 1st week, midway through the program— 7th week, and after the program finished 15th week).

Self-Esteem

Detailed changes in self-esteem over the 15-week period are shown in Table 5. Between the first to the second instance, the difference between the means is not statistically significant: $F(1,54) = .765$, $p = .386$. . Between the second to the third instance, the difference between the means is not statistically significant: $F(1,54) = 1.101$, $p = .299$. Between the first to the third instance, the difference between the means is not statistically significant: $F(1,54) = 2.289$, $p = .136$. Figure 3 displays these average self-esteem scores across the program through a bar graph and, additionally Figure 4 displays these same averages but with sex differences added, also through a bar graph (since there was a much higher distribution of males taking part in the study).

Table 5

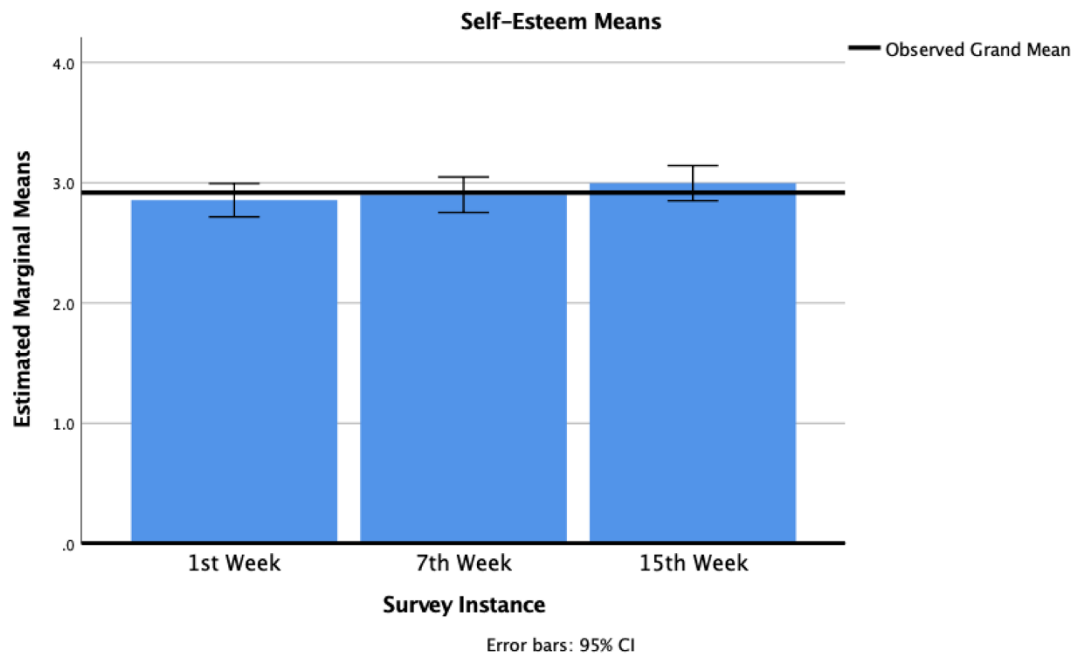
Changes in Self-Esteem

Instance	Mean	<i>SD</i>	<i>F</i>	η^2
Huynh-Feldt	2.917	.5386	1.564	.028
1st to 2nd time	2.878	.5347	.765	.014
2nd to 3rd time	2.948	.5491	1.101	.020
1st to 3rd time	2.926	.5321	2.289	.041

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 3

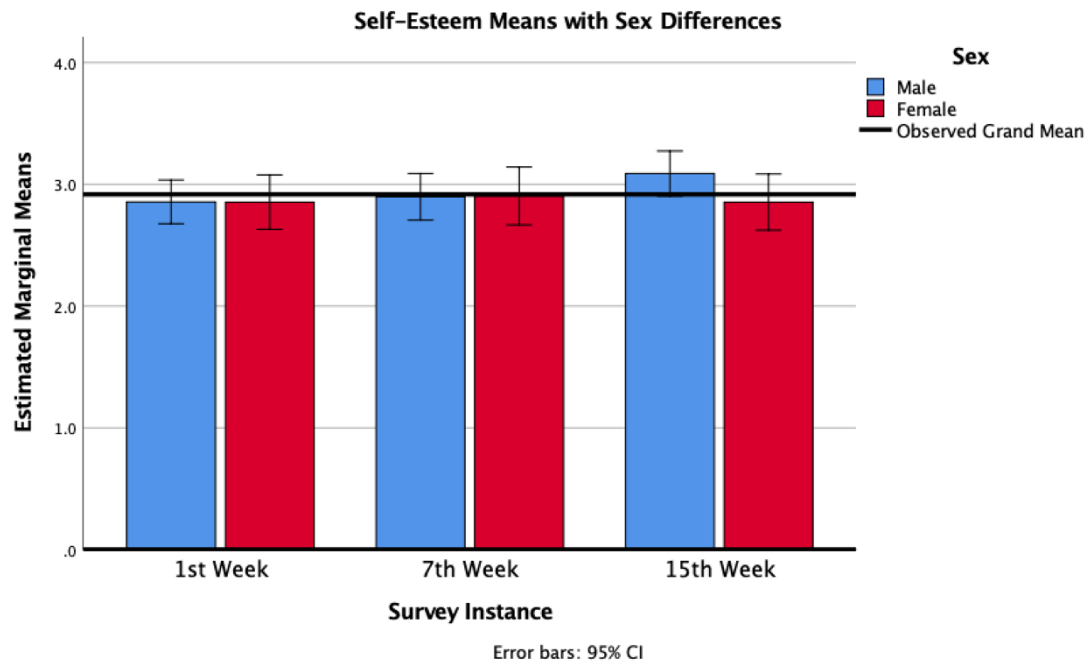
Mean Self-Esteem Scores



Note. This figure displaces the difference in mean self-esteem scores at each time the measurement was administered (before the program began— 1st week, midway through the program— 7th week, and after the program finished 15th week).

Figure 4

Mean Self-Esteem Scores by Sex



Note. This figure displaces the difference in mean self-esteem scores at each time the measurement was administered (before the program began— 1st week, midway through the program— 7th week, and after the program finished 15th week).

Self-Esteem and Self-Efficacy Correlations

Pearson correlations were used to examine the association between self-esteem and self-efficacy at each of the three instances (before the program, midway through the program, and after the program). Table 6 shows the data from these correlations. In the first week there was a trend correlation of ($r = .434, p = 0.001$). Figure 5 displays this correlation through a scatter plot with the trend correlation being represented by a Fit Line. Midway through the program, in the seventh week the correlation was not statistically significant at ($r = 0.213, p = 0.114$). Figure 6 displays this through a scatter plot with the trend correlation being represented by a Fit Line. After the program in the 15th week there was a trend correlation of ($r = 0.358, p = 0.005$). Figure 7 displays this correlation through a scatter plot with the trend correlation being represented by a Fit Line.

Table 6

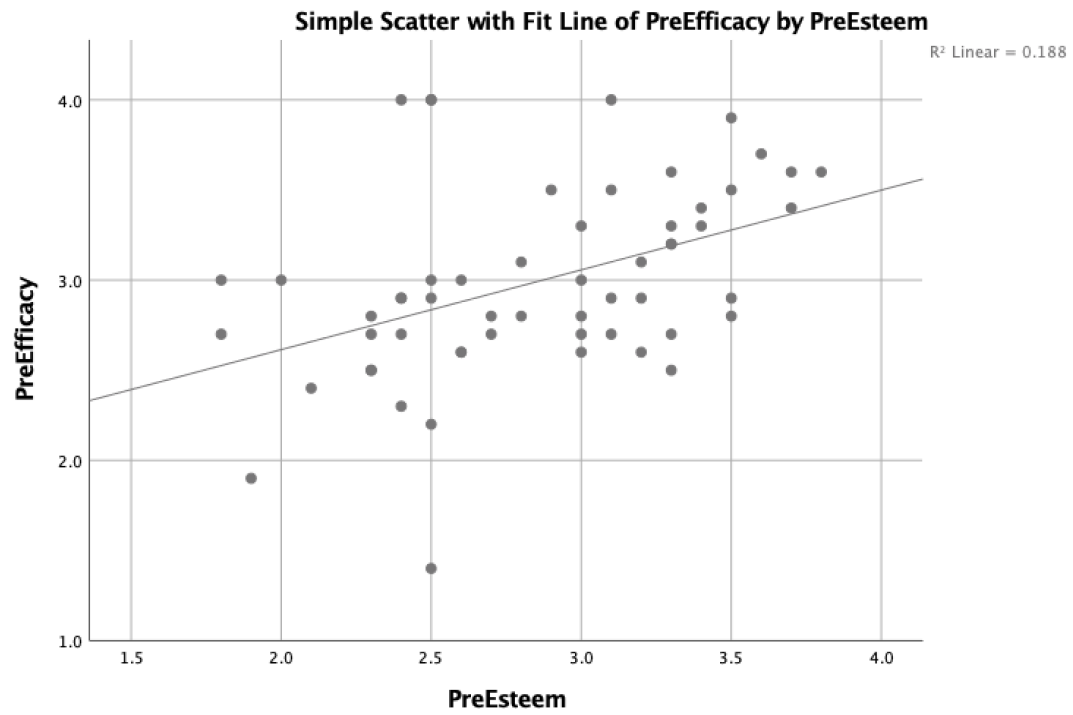
Correlations Between Self-Efficacy and Self-Esteem

Instance	r	r^2	p
1st week	.434***	.1883	.001
7th week	.213	.0454	.114
15th week	.368**	.1354	.005

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 5

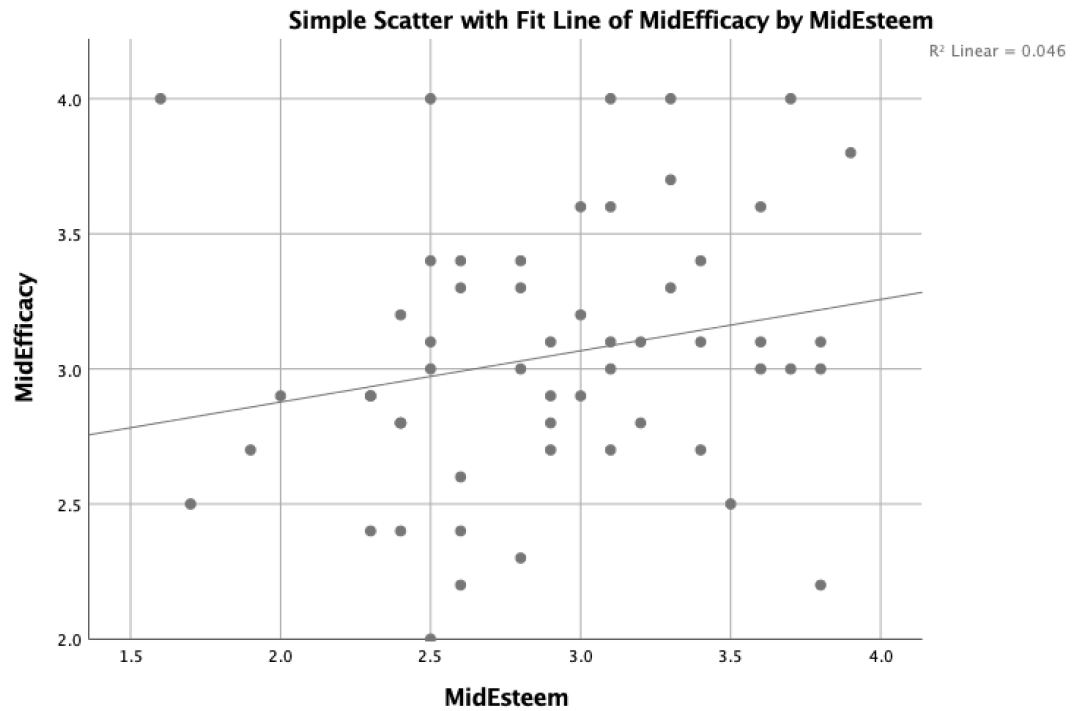
Self-Efficacy and Self-Efficacy Correlation (1st Instance)



Note. This figure displaces the correlation between self-esteem and self-efficacy with a Fit Line, at the first instance, on the 1st week, before the program began.

Figure 6

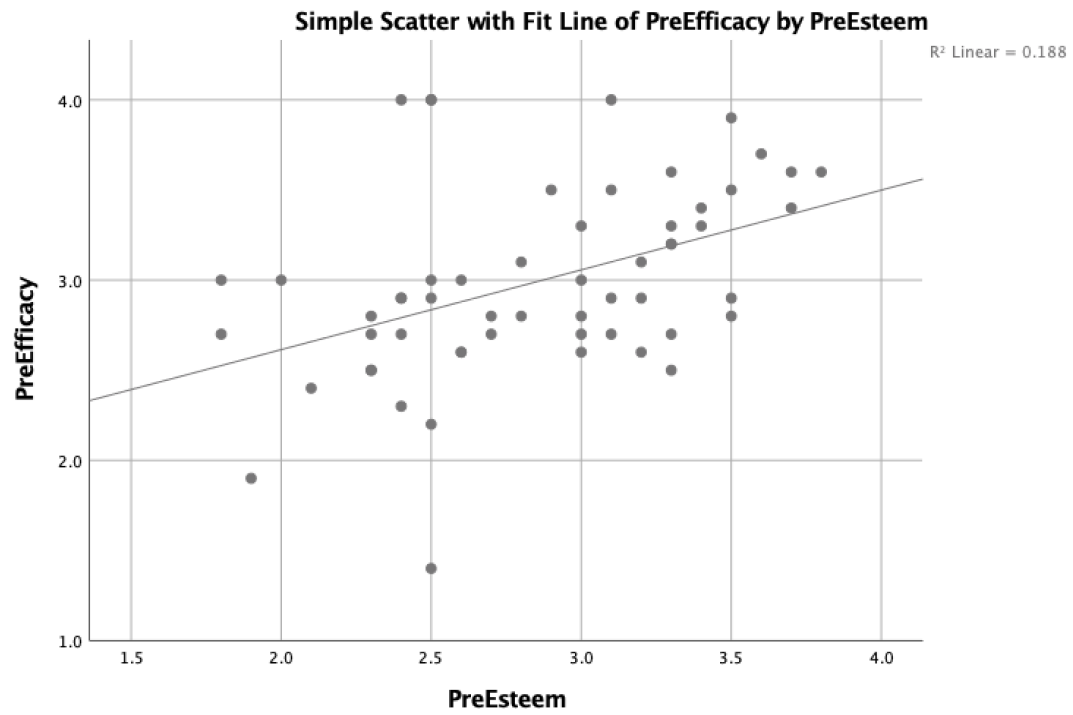
Self-Efficacy and Self-Efficacy Correlation (2nd Instance)



Note. This figure displaces the correlation between self-esteem and self-efficacy with a Fit Line, at the second instance, on the 7th week, midway through the program began.

Figure 7

Self-Efficacy and Self-Efficacy Correlation (3rd Instance)



Note. This figure displaces the correlation between self-esteem and self-efficacy with a Fit Line, at the third instance, on the 15th week, after the program finished.

Chapter IV

Discussion

The purpose of this study was to look into the potential implications of the performing arts in a young adult demographic. The study compared data collected online from before, midway, and after a performing arts program that was administered in-person for self-construct values of self-efficacy and self-esteem. It was originally hypothesized that there would be a statistically significant change in self-esteem and self-efficacy values from the first instance to the third instance in correlation with the progression of a performing arts program. Additionally, it was also hypothesized that there would be a positive, linear trend between self-esteem and self-efficacy at each of the instances.

The analysis of the data shows that there was ultimately a statistically significant change in the self-efficacy values for the participants, whereas there was no statistically significant change in the self-esteem values of the participants. More specifically for self-efficacy, over the course of the 15-week program, between the first and the second instance there was no statistically significant difference, but from the second to the third instance, as well as between the first and the third instance there was a statistically significant difference with $p < .01$. As a result of this lack of statistical significance between the first and second instance, it may be necessary to keep the program on a 15-week basis, since there was not a statistically significant result by the 7th week.

Sphericity was able to be assumed for self-efficacy as well, whereas the Huynh-Feldt correction was used to correct for the degrees of freedom in self-esteem.

In terms of the correlations between self-esteem and self-efficacy between each of the instances, there was a statistically significant positive relationship between these self-construct values at the first and third instances, but not at the second instance. Due to these factors; of having a significant correlation between self-efficacy and self-esteem, and having a statistically significant self-efficacy relationship with performing arts, there seems to still be potential in the relationship between the performing arts program and self-esteem.

Finally, due to the disproportionate balance between males and females, in looking at the self-efficacy means in Figure 2, there was a much greater increase in female self-efficacy from the second to the third instance, while the male self-efficacy scores were more consistent across the three instances. Concurrently, the self-esteem means in Figure 4 showed that the female means actually decreased from the second to the third instance, whereas the male means consistently increased as they did with their self-efficacy scores. These findings should be taken into consideration in future studies to check for discrepancies or consistencies.

The study supported the hypothesis that self-efficacy would rise as a result of the performing arts program, but did not support that self-esteem would rise. Concurrently, the study also supported the hypothesis that there would be a positive, linear trend between self-efficacy, and self-esteem (despite the second instance).

General Discussion

Studies have shown interaction effects between the performing arts and self-efficacy and self-esteem, but not in the context of university students. Most of the current research focuses on women, children, older individuals, and those suffering from trauma, yet there is not much recent research into how the performing arts interacts with university age individuals. This gap in the research with this age demographic of young adults, as well as conducting this performing arts program online, will provide further insight into the future of performing arts education— since there is potential for using the performing arts as an aid in order to help individuals transition from the academic environment into the workforce environment at the university age.

It was predicted that a performing arts program would have a positive, linear relationship with both self-esteem and self-efficacy, and that these two self-construct values would have a positive, linear correlation between each other as well. With respect to this thesis, it was shown that self-efficacy did have a statistically significant result over the course of the program, but self-esteem did not. Additionally, the self-construct values did have positive, linear trends, but in the second instance, that trend was not shown to be statistically significant.

Although the results showed that there was only a statistically significant result for self-efficacy, there are various factors to take into consideration. These limitations can be broken down into three subcategories being design (based on how this study specifically was designed and implemented), socio-cultural (based on when, where and to whom this study was conducted), and program based (based on the conditions that constituted the performing arts program). Additionally, it may be beneficial to examine

self-efficacy and self-esteem correlations across other studies in order to try to find trend relationships between these self-construct values with and without the condition of a performing arts program. There is still much work to be done, as future research conducted for each of these limitations will be beneficial in solidifying the extent of this external validity as well as define where there is significance between the interaction between performing arts and self-efficacy/ self-esteem.

Limitations and Future Directions

While the findings of this study suggest that there was only a statistically significant result for self-efficacy across the 15-week performing arts program, there are limitations associated with these findings that should be taken into consideration. These limitations and the basis for future research are broken down into the following three sections; design of the study, socio-cultural context, and the design of the performing arts program in which this study evaluated. There may also be further potential in examining how self-efficacy and self-esteem interact across different conditions, as well as looking into how other wellness and self-construct values interact with performing arts programs in the university context. Although these limitations may exist, there is great potential in reiterating this study. Understanding how these limitations may interact with the findings provides the necessary context in working to reduce the impact of these limitations through internal and external validity and consistency.

Design of the Study

The first of these limitation criteria, being based on the design of the study, have to do with the structure of the study and the format in which it was conducted. To begin with, the design of this study being quasi-experimental, created a limitation in specifying the population to be studied. Since the population sample was based on a performing arts program that the participants willingly signed up for (the class was an elective course offered at a university, and any students of any year from any department could take part in the course) the population sample was not random. As a result, there is a high chance for a volunteer bias, which is the systematic error due to differences between those who choose to participate and those who do not, to occur. Since the participants in this study are more willing to participate in the performing arts education, there is potential for already high values of self-esteem— but there may be considerations to see if high values of self-esteem can be further perpetuated as a result of the performing arts education program. These participants who willingly took part in the program could also have been influenced beforehand or motivated to increase these values of self-esteem and self-efficacy before the program started. The results could be heightened as a result of those participants' expectancy bias for themselves.

Finally, there may also be a bias in the participants who chose to remain in the program across the 15-week program. Those with inconsistent results, as well as participants who did not find the program to be particularly useful for their own lives may have dropped from the program. Due to the lack of these participants, the results may be skewed in a positive light, reflecting only increasingly positive trends as the program progressed. These values will be difficult to control, since participants who

chose to drop out of the program also did not continue in the study as well, which gives a lack of representation. Perhaps, a feedback or output option at the beginning and end of the program (or when participants chose to drop out) could be beneficial in coding for both positive and negative cues in participants. Future research can look into how self-construct values from a mandatory performing arts program, or a performing arts program that is taken by all individuals within a population, differ from this study's results.

Additionally, undue influence of the researcher being both the researcher and the instructor may also exist, in which the researcher could not deidentify with the data because they are actively part of the teaching process. This limitation is similar, and also exists in the Steinberg and Steinberg (2016) study in terms of design. In order to control for this limitation on the research side, the participants were coded for confidentiality as well as reminded that there were no implications for not taking part in the study. It is a bit more difficult to control for this limitation on the instructor side, since there could always be subtle hints in encouraging self-efficacy and self-esteem in aiming for a confirmation bias within the study. Future research could use data from different performing art programs that the researcher does not take a part in teaching in order to look for external validity across different contexts and different instructors as well.

Finally, within the context of the study's design, there was no control group to compare with the experimental group. Although this research is geared toward using the performing arts to help university students increase self-esteem and self-efficacy, looking at students of the same age range who are not in university may provide significant insight into the potential for the performing arts and these self-constructs. Socio-

economic constraints may play into the formation of self-construct values and the context of what individuals prioritize in their lives may exemplify the results (more specifically-- if individuals are working as opposed to studying, or if individuals are both working and studying at the same time).

Arts in general are a means of enhancing the quality of life, yet should the basic needs of Maslow's Hierarchy of Needs not be met, individuals may not benefit as greatly or find the significance of the arts (Clark, 1978). Whether this control group is a part of the university, or just a part of the performing arts group could provide insight into how the performing arts program works within the dynamic of the university as well as how the performing arts program works within the dynamic of the community (since there may be the potential of the values to remain consistent across either all students within the university, or all students of the same age group regardless of higher education).

Socio-Cultural Context

The socio-cultural context in terms of developmental timing, location, the global context could have also impacted the results of this study. Without too many extraneous factors, introducing individuals into a new environment, specifically with many of the participants entering university and leaving home for the first time, has been shown to negatively correlate with self-construct and the formation of identity (Avalon, 2007; Fung, 2017)— as well as positively correlate with a general influx of stress, anxiety, and depression (Lambert et al., 2020; Pitt et al., 2018). These correlations could potentially influence these construct values based on when the optimal timing would be for these individuals to benefit the most from a performing arts program (whether to introduce this

program right away, or to wait a year, for example). Future research could include a larger representative sample of second, third, and fourth year students in order to see if there is a potential for a higher correlation within a sample that is more adjusted to the environment. Similarly, this study may also benefit from a replication at a different university, since this study's sample was limited to only one university in Japan. The environmental and societal context or a big city, or even in a different country could help define the relationship of these self-construct values and the performing arts.

Additionally, as seen in Figure 2 and Figure 4, there were interesting trends in terms of how males and females interpreted and reacted to the performing arts program. Whereas males had a generally consistent positive, linear relationship, the female average for self-efficacy in Figure 2 dropped in the second instance and increased to a higher average than the first instance. Concurrently, for self-esteem in Figure 4 the female average increased from the first to the second instance, but dropped in the third instance. Although it is unclear what caused these sex differences, this factor should be taken into consideration when replicating this study or doing a similar study. Future research can be done in order to examine how these sex differences came about, or a replication of the study can be done in order to see if there is consistency in these results—since it may be a socio-cultural limited factor as well).

The emergence of COVID-19 at the end of 2019, its prevalence across 2020 (when the performing arts program and this study were being conducted), and the psychological effects and affects that come along with it in a contemporary society have barely begun to be published and understood. Many preliminary studies have introduced findings of diminishing mental health in the United States of America— more

specifically in terms of anxiety and depression (Fitzpatrick et al., 2020; Hoerger, et al., 2020; Rettie & Daniels, 2020). Should further research be published on self-construct values during or as a repercussion of COVID-19, the context for this study and the environmental implications may be further understood.

Because this research was conducted in the context of a global pandemic and participants' expectations of a "normal" academic career setting being shifted into a semi-online format (with the first semester of courses at this university being completely online, and the second semester, when this study was conducted, being in an in-person format) there may have had a significant impact on self-construct and the formation of identity. Repeating this research will give insight in how individuals and these self-construct values were affected during the pandemic (if participants become habituated to living in the pandemic), or after the pandemic ends (though effects of wariness may linger after the pandemic is declared "over" for any particular region). The emergence of COVID-19 before this study began, and the consequences of the global pandemic while the study was taking place, shifted and will continue to shift how individuals will live their lives.

Design of the Performing Arts Program

Finally the design of the performing arts program can also be controlled through various factors in order to more clearly define the parameters of these self-construct values. Taking into consideration the instructors of the program, the aspects that define the performing arts program itself, and the environment in which the program is

conducted will help identify conditions that promote the correlation between the performing arts and self-efficacy/self-esteem.

As seen in the background of the performing arts education and through past studies, the context of the performing arts widely varied from focusing on specific types of music, dance styles, or instrumentation. There was also a large variety of how much material was to be used from program to program, based on their respective lengths. In further replications and in exploring different contexts, it may also be beneficial to see if certain types of music, or only singing, or only dancing affect these or other self-construct values differently for varying subgroups, minorities, or different points in the university career.

The current research for the performing arts had also shown that the performing arts has the vast potential to affect individuals across social, academic, and psychological outcomes (Anvari et al., 2002; Hallam, 2010; Hös, 2005; MacAulay et al., 2019; Miranda et al., 2019; Van Puyvelde et al., 2014; Steinberg & Steinberg, 2016). Within each of these studies, the type of performing arts varied greatly, and the respective study populations also varied greatly. The definition of what a performing arts program should entail, and if those effects are beneficial to a specific population are difficult to discern, as a result. Further research through replication in various contexts and follow-ups may provide more insight into how each of these performing arts styles interact with different population groups. Although this criterion may seem vague, the reception of different types of music in different cultures and societies will vary— only in conducting these studies in respective regions can researchers understand if the external validity of these correlations exists.

Beyond the content of the performing arts program, as seen in the background of the problem, the instructors of the course also contribute to the effectiveness of their respective programs (Chua, 2015; Hallam 2010; Sitar et al., 2016; Steinberg & Steinberg 2016). Since the researcher, who was the instructor of the program was not able to speak Japanese natively, there may also be cultural limitations and language barriers that could have potentially impacted the success rate of the performing arts program. Even though there are translations available with their psychometric properties validated for both assessments, there may be discrepancies in the way the program itself is being taught due to the delivery of the language. It may be of interest to see if there are discrepancies with the results of this program, and with the same program, but taught in Japan by only Japanese native speakers, or in a natively English-speaking country with native English speakers.

Additionally, as seen in Wenn et al., (2018), looking at the instructors' values of self-efficacy when teaching performing arts might prove to be insightful. As opposed to the students taking part in a performing arts education, these researchers found a positive interaction between the act of teaching the performing arts program and increased values of self-efficacy for the teachers. This study may be significant in not only learning the performing arts, but perpetuating and teaching it as well. Future research may also take into consideration a pairwise correlation between how teachers' and students' self-construct values rise in order to see if there is a correlation between the two.

Finally, as well as with the socio-cultural context, the influence of COVID-19 on the actual facilities that were used could also have considerable impact on this study's results. Despite the program being held in-person as per-usual, there were many

regulations set in place by the university, staff, and researchers to ensure that individuals were safe while taking part in the performing arts program— social distancing and protective measures were enforced. This included providing students with two-meter spaces, limiting physical interaction between students (in terms of staging, and activities), controlling the entrances and exits to the room (before and after class), and the usage of protective masks when students were singing or speaking to one another. These restrictions may have had an impact on how effective the program felt to the participants as well as how the participants felt about themselves during the process of the program or their surroundings at the time.

With these restrictions requiring a large amount of space, the studio that was regularly used for the performing arts program was not able to be used, and a large gym was used instead. Differences between these spaces included the lack of mirrors. Interestingly, mirrors were shown to correlate with low self-perceived body image as well low acquisition for technical skill for ballet dancers (Radell et al., 2002, Radell et al., 2003; Radell et al., 2014)— the lack of mirrors in the program could have potentially been an asset to self-esteem and self-efficacy scores, despite the lack of a statistically significant result. Replication of this study in a future study may look into how mirrors and the studio environment may impact the formation of these self-construct values.

Self-Efficacy and Self-Esteem Correlations

Through this study, it was originally predicted that self-efficacy and self-esteem would have a positive relationship between each other due to the concept that if individuals felt that if their belief in their own capacity to execute behaviors necessary to

produce specific performance attainments, then they would also have a high self-evaluation of their own self-worth and self-respect. To look at this correlation, a Pearson correlation was run for each of the three instances and it was found that there was a statistically significant positive, linear relationship for the first and the third instance (although there was a positive, linear relationship in the second instance, there was no statistical significance). The lack of a statistically significant second instance, as well as the lack of a statically significant change in self-esteem over the course of the program, despite a statically significant self-efficacy change, should be taken into consideration in future replications and further research.

It seems strange that despite the positive, linear relationship, only self-efficacy was shown to have a statistically significant change in participants, while self-esteem was not. Additionally, future research can also continue to look at this relationship consistency through different conditions in order to enforce this external validity. Furthermore, it may also be interesting to look at how different self-construct values interact with either self-esteem or self-efficacy, or if other holistic values can also be correlated through performing arts programs (such as wellness, resilience, etc.). This study took into consideration test fatigue and time constraints when administering the surveys to participants, but with a more extensive test, more factors can be examined concurrently with these values.

Conclusion

Although research can continually test the extent of how the performing arts and music has on self-construct and hard values, there is so much that is not currently

explainable as to why they have such an impact and resonates so strongly with the human experience. There is still a vast amount of research that can be conducted to begin to understand such an enormous topic in what causes this impact and resonance. As the definition of performing arts greatly differs socio-culturally in what music is “normal” for each area, and how each respective population interprets different types of music, the interpretation of performing arts concurrently will greatly vary.

As for this study, with respect to the original hypothesis, although a statistically significant result was only found in self-efficacy in this study, from the future research and directions there is great potential in understanding this relationship between performing arts and self-efficacy and self-esteem. The positive, linear relationships that were found in the first and third instance sets up a precedence for these self-construct values, and holds a basis for continuing to examine how these values interact with one another—yet there is still so much to examine since the results were unable to show a statistically significant result for self-esteem.

These results are beneficial in contributing to the research base in order to help establish parameters to define how the performing arts can be beneficial for a university age population in increasing self-construct values. If more evidence can be found to develop this relationship, there may be even further potential benefits in starting performing arts education, from a younger age into university age students, as a continuous core part of education. As the American dancer, Isadora Duncan, once said, “If I could tell you what it meant, there would be no point in dancing it”. It may not be easy to define the feeling of the performing arts, but there is potential in establishing some of the pragmatic and logistic benefits for greater society.

Appendix 1

The General Self-Efficacy Scale (Jerusalem & Schwarzer, 1992) Translation by Ito,

Schwarzer, and Jerusalem (2005)

	Strongly Disagree いいえ	Disagree どちらか といえは いい	Agree どちらか とえいえ ばはい	Strongly Agree はい
1. I can always manage to solve difficult problems if I try hard enough. 私は、一生懸命がんばれば、困難な問題でもいつも解決することができる	1	2	3	4
2. If someone opposes me, I can find the means and ways to get what I want. 私は、誰かが私に反対しても、自分が欲しいものを手にするための手段や道を探すことができる	1	2	3	4
3. It is easy for me to stick to my aims and accomplish my goals. 目的を見失わず、ゴールを達成することは私にとって難しいことではない	1	2	3	4
4. I am confident that I could deal efficiently with unexpected events. 予期せぬ出来事に遭遇しても、私は効率よく対処できる自信がある	1	2	3	4
5. Thanks to my resourcefulness, I know how to handle unforeseen situations. 私は色々な才略に長けているので、思いがけない場面に出くわしても、どうやってきりぬけばよいのか分かる	1	2	3	4
6. I can solve most problems if I invest the necessary effort. 必要な努力さえ惜しまなければ、私はだいたいの問題を解決することができる	1	2	3	4
7. I can remain calm when facing difficulties because I can rely on my coping abilities. 自分の物事に対処する能力を信じているので、困難なことに立ち向かってでも取り乱したりしない	1	2	3	4
8. When I am confronted with a problem, I can usually find several solutions. 問題に直面しても、いつもいくつかの解決策を見つけることができる	1	2	3	4
9. If I am in trouble, I can usually think of a solution. 苦境に陥っても、いつも解決策を考えつく	1	2	3	4
10. I can usually handle whatever comes my way. どんなことが起ころうとも、私はいつもその事に対処することができる	1	2	3	4

Appendix 2

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) Translation by Mimura & Griffiths

(2007)

	Strongly Disagree いいえ	Disagree どちらか といえは いい	Agree どちらか とえいえ ばはい	Strongly Agree はい
1. On the whole, I am satisfied with myself. 私は自分に満足している。	1	2	3	4
2. At times I think I am no good at all. 私は自分がだめな人間だと思う。	1	2	3	4
3. I feel that I have a number of good qualities. 私は自分には見どころがあるあると思う。	1	2	3	4
4. I am able to do things as well as most other people. 私は、たいていの人がやれる程度には物事ができる。	1	2	3	4
5. I feel I do not have much to be proud of. 私には得意に思うことがない。	1	2	3	4
6. I certainly feel useless at times. 私は自分が役立たずだと感じる。	1	2	3	4
7. I feel that I'm a person of worth, at least on an equal plane with others. 私は自分が、少なくとも他人と同じくらいの価値がある人間だと思う。	1	2	3	4
8. I wish I could have more respect for myself. もう少し自分を尊敬できたらと思う。	1	2	3	4
9. All in all, I am inclined to feel that I am a failure. 自分を失敗者だと思いがちである。	1	2	3	4
10. I take a positive attitude toward myself. 私配分に対して、前向きな態度をとっている。	1	2	3	4

Scoring: Items 2, 5, 6, 8, 9 are reverse scored. Give “Strongly Disagree” 1 point, “Disagree” 2 points, “Agree” 3 points, and “Strongly Agree” 4 points. Sum scores for all ten items. Keep scores on a continuous scale. Higher scores indicate higher self-esteem.

Appendix 3

Performing Arts Program Layout

- Week 1: Song 1 & Dance 1
- Week 2: Song 1 & Dance 1 Review
- Week 3: Dance 2 & Dance 3
- Week 4: Dance 2 & Dance 3 Review
- Week 5: Dance 4 & Dance 5
- Week 6: Dance 4 & Dance 5 Review
- Week 7: Song 2 & Song 3
- Week 8: Song 2 & Song 3 Review
- Week 9: Dance 6 & Song 4 (Mixed)
- Week 10: Dance 7 & Song 5 (Mixed)
- Week 11: (Dance 6 & Song 4) & (Dance 7 & Song 5) Review
- Week 12: Review of all material
- Week 13: Review of all material
- Week 14: Review of all material
- Week 15: Show Day

References

- Anvari, S. H., Trainor, L. J., Woodside, J., & Levy, B. A. (2002). Relations among musical skills, phonological processing and early reading ability in preschool children. *Journal of Experimental Child Psychology*, 83(2), 111–130. [https://doi-org/10.1016/S0022-0965\(02\)00124-8](https://doi-org/10.1016/S0022-0965(02)00124-8)
- Avalon, A. (2007). *Arts in new directions: The development and application of a construct that uses the arts to promote transformation and self-actualization in health care and education/therapy* (Publication No. 04194209) [Doctoral dissertation, University of South Florida]. ProQuest Dissertations Publishing.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- Behera, S., Rangaiah, B., & Duregger, C. (2017). Relationship between emotional maturity, self-esteem and Life-satisfaction: A study on traditional dancers of Odisha region. *Cogent Psychology*, 4(1). <https://doi-org/10.1080/23311908.2017.1355504>
- Cabedo-Mas, A., & Díaz-Gómez, M. (2013). Positive musical experiences in education: Music as a social praxis. *Music Education Research*, 15(4), 455-470. <https://doi-org/10.1080/14613808.2013.763780>
- Cabedo-Mas, A., & Díaz-Gómez, M. (2015). Music education for the improvement of coexistence in and beyond the classroom: A study based on the consultation of experts. *Teachers and Teaching*, 22(3), 368-386. <https://doi-org/10.1080/13540602.2015.1058593>
- Chao, R. C.-L., Vidacovich, C., & Green, K. E. (2017). Rasch analysis of the Rosenberg Self-Esteem Scale with African Americans. *Psychological Assessment*, 29(3), 329–342. <https://doi-org/10.1037/pas0000347>
- Chua, J. (2015). The role of social support in dance talent development. *Journal for the Education of the Gifted*, 38(2), 169–195. <https://doi-org/10.1177/0162353215578281>
- Clark, H. D. (1978). *The descriptive analysis of the utilization of the creative arts as a strategy for school involvement in an urban school setting related to Maslow's needs hierarchy* (Publication No. 04194209) [Doctoral dissertation, University of Pittsburgh]. ProQuest Dissertations Publishing.
- Classen, S., Velozo, C. A., & Mann, W. C. (2007). The Rosenberg Self-Esteem Scale as a measure of self-esteem for the noninstitutionalized elderly. *Clinical Gerontologist: The Journal of Aging and Mental Health*, 31(1), 77–93. https://doi-org/10.1300/J018v31n01_06

- Clift, S. (2012). Singing, wellbeing, and health. In R. A. R. MacDonald, G. Kreutz, & L. Mitchell (Eds.), *Music, health, and wellbeing*. (pp. 113–124). Oxford University Press.
- Clift, S., Page, S., Daykin, N., & Peasgood, E. (2016). The perceived effects of singing on the health and well-being of wives and partners of members of the British armed forces: A cross-sectional survey. *Public Health*, 138(1), 93–100. <https://doi-org/10.1016/j.puhe.2016.03.022>
- Coulton, S., Clift, S., Skingley, A., & Rodriguez, J. (2015). Effectiveness and cost-effectiveness of community singing on mental health-related quality of life of older people: Randomised controlled trial. *The British Journal of Psychiatry*, 207(3), 250–255. <https://doi-org/10.1192/bjp.bp.113.129908>
- Faulkner, S. (2017). Rhythm2recovery: A model of practice combining rhythmic music with cognitive reflection for social and emotional health within trauma recovery. *Australian and New Zealand Journal of Family Therapy*, 38(4), 627–636. <https://doi-org/10.1002/anzf.1268>
- Fitzpatrick, K. M., Harris, C., & Drawve, G. (2020). Fear of COVID-19 and the mental health consequences in America. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S17–S21. <https://doi-org/10.1037/tra0000924>
- Fodoreanu, F. M. (2017). *Body posture and motivation: How they relate to anxiety, self-regulation, and self-efficacy among young adults* (Publication No. 04194217) [Doctoral dissertation, Alliant International University]. ProQuest Dissertations Publishing.
- Foster, E. M., & Marcus Jenkins, J. V. (2017). Does participation in music and performing arts influence child development? *American Educational Research Journal*, 54(3), 399–443. <https://doi-org/10.3102/0002831217701830>
- Fung, A. S. K. (2017). Music enables the holistic development and discovery of self: A phenomenological study of two Christian musicians. *Psychology of Music*, 45(3), 400–416. <https://doi-org/10.1177/0305735616665911>
- Hallam, S. (2010). The power of music: Its impact on the intellectual, social and personal development of children and young people. *International Journal of Music Education*, 28(3), 269–289. <https://doi-org/10.1177/0255761410370658>
- Hoerger, M., Alonzi, S., Perry, L. M., Voss, H. M., Easwar, S., & Gerhart, J. I. (2020). Impact of the COVID-19 pandemic on mental health: Real-time surveillance using Google Trends. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(6), 567–568. <https://doi-org/10.1037/tra0000872>

- Hős, Á. T. (2005). The effects of guided systematic aerobic dance programme on the self-esteem of adults. *Kinesiology*, 37(2), 141–150.
- Hyland, P., Boduszek, D., Dhingra, K., Shevlin, M., & Egan, A. (2014). A bifactor approach to modelling the Rosenberg Self Esteem Scale. *Personality and Individual Differences*, 66(1), 188–192. <https://doi-org/10.1016/j.paid.2014.03.034>
- Ito, K., Schwarzer, R., & Jerusalem, M. (2005). General Self-Efficacy Scale--Revised--Japanese Version. *PsycTESTS Dataset*.
- Jerusalem, M., & Schwarzer, R. (1992). Self-efficacy as a resource factor in stress appraisal processes. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action*. (pp. 195–213). Hemisphere Publishing Corp.
- Lambert, C. E., Troister, T., Ramadan, Z., Montemarano, V., Fekken, G. C., & Holden, R. R. (2020). Psychache predicts suicide attempter status change in students starting university. *Suicide and Life-Threatening Behavior*. 50(3), 668–678. <https://doi-org/10.1111/sltb.12624>
- Luszczynska, A. (2003). General Self-Efficacy Scale: Multicultural validation studies in 25 Countries. *PsycEXTRA Dataset*.
- MacAulay, R. K., Edelman, P., Boeve, A., Sprangers, N., & Halpin, A. (2019). Group music training as a multimodal cognitive intervention for older adults. *Psychomusicology: Music, Mind, and Brain*, 29(4), 180–187. <https://doi-org/10.1037/pmu0000239.supp>
- Marchant, R. (2018). *Relational bullying, gender, and interpersonal self-efficacy in young adults* (Publication No. 04194217) [Doctoral dissertation, William James College]. ProQuest Dissertations Publishing.
- Martin, C. R., Thompson, D. R., & Chan, D. S. (2006). An examination of the psychometric properties of the Rosenberg Self-Esteem Scale (RSES) in Chinese acute coronary syndrome (ACS) patients. *Psychology, Health & Medicine*, 11(4), 507–521. <https://doi-org/10.1080/13548500500407367>
- Mimura, C., & Griffiths, P. (2007). A Japanese version of the Rosenberg Self-Esteem Scale: Translation and equivalence assessment. *Journal of Psychosomatic Research*, 62(5), 589–594. <https://doi-org/10.1016/j.jpsychores.2006.11.004>
- Miranda, D., Osman, M., Blais-Rochette, C., Gaudreau, P., & Whitley, R. (2019). Musical ethnocultural identity, happiness, and internalizing symptoms in youth. *Psychology of Aesthetics, Creativity, and the Arts*. Advance online publication. <https://doi-org/10.1037/aca0000283>

- Muro, A., & Artero, N. (2017). Dance practice and well-being correlates in young women. *Women & Health*, 57(10), 1193–1203 <https://doi-org/10.1080/03630242.2016.1243607>
- Parsad, B., & Spiegelman, M. (2012). Arts Education in Public Elementary and Secondary Schools: 1999-2000 and 2009-10. Report NCES 2012-014. <http://nces.ed.gov/pubs2012/2012014rev.pdf>
- Pitt, A., Oprescu, F., Tapia, G., & Gray, M. (2018). An exploratory study of students' weekly stress levels and sources of stress during the semester. *Active Learning in Higher Education*, 19(1), 61–75. <https://doi-org/10.1177/1469787417731194>
- Poulos, R. G., Marwood, S., Harkin, D., Opher, S., Clift, S., Cole, A. M. D., Rhee, J., Beilharz, K., & Poulos, C. J. (2019). Arts on prescription for community-dwelling older people with a range of health and wellness needs. *Health & Social Care in the Community*, 27(2), 483–492. <https://doi-org/10.1111/hsc.12669>
- Van Puyvelde, M., Rodrigues, H., Loots, G., De Coster, L., Du Ville, K., Matthijs, L., Simcock, D., & Pattyn, N. (2014). Shall we dance? Music as a port of entrance to maternal–infant intersubjectivity in a context of postnatal depression. *Infant Mental Health Journal*, 35(3), 220–232. <https://doi-org/10.1002/imhj.21431>
- Radell, S. A., Adame, D. D., & Cole, S. P. (2002). Effect of teaching with mirrors on body image and locus of control in women college ballet dancers. *Perceptual and Motor Skills*, 95(3, Pt2), 1239–1247. <https://doi-org/10.2466/PMS.95.8.1239-1247>
- Radell, S. A., Adame, D. D., & Cole, S. P. (2003). Effect of teaching with mirrors on ballet dance performance. *Perceptual and Motor Skills*, 97(3, Pt 1), 960–964. <https://doi-org/10.2466/PMS.97.7.960-964>
- Radell, S. A., Keneman, M. L., Adame, D. D., & Cole, S. P. (2014). My body and its reflection: A case study of eight dance students and the mirror in the ballet classroom. *Research in Dance Education*, 15(2), 161–178. <https://doi-org/10.1080/14647893.2013.879256>
- Regehr, K. (2012). The rise of recreational burlesque: Bumping and grinding towards empowerment. *Sexuality & Culture: An Interdisciplinary Quarterly*, 16(2), 134–157. <https://doi-org/10.1007/s12119-011-9113-2>
- Reise, S. P., Kim, D. S., Mansolf, M., & Widaman, K. F. (2016). Is the bifactor model a better model or is it just better at modeling implausible responses? Application of iteratively reweighted least squares to the Rosenberg Self-Esteem Scale. *Multivariate Behavioral Research*, 51(6), 818–838.

- Rettie, H., & Daniels, J. (2020). Coping and tolerance of uncertainty: Predictors and mediators of mental health during the COVID-19 pandemic. *American Psychologist*. Advance online publication. <https://doi-org/10.1037/amp0000710.supp>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
- Sachs, C. (2008). *The rise of music in the ancient world, east and west*. Dover Publications.
- Schellenberg, E. G. (2011). Examining the association between music lessons and intelligence. *British Journal of Psychology*, 102(3), 283–302. <https://doi-org/10.1111/j.2044-8295.2010.02000.x>
- Sheasby, J. E., Barlow, J. H., Cullen, L. A., & Wright, C. C. (2000). Psychometric properties of the Rosenberg Self-Esteem Scale among people with arthritis. *Psychological Reports*, 86(3,Pt2), 1139–1146. <https://doi-org/10.2466/PRO.86.3.1139-1146>
- Sitar, A. S., Černe, M., Aleksić, D., & Mihelič, K. K. (2016). Individual learning styles and creativity. *Creativity Research Journal*, 28(3), 334–341. <https://doi-org/10.1080/10400419.2016.1195651>
- Skingley, A., Martin, A., & Clift, S. (2016). The contribution of community singing groups to the well-being of older people: Participant perspectives from the United Kingdom. *Journal of Applied Gerontology*, 35(12), 1302–1324. <https://doi-org/10.1177/0733464815577141>
- Steinberg, C., & Steinberg, F. (2016). Importance of students' views and the role of self-esteem in lessons of creative dance in physical education. *Research in Dance Education*, 17(3), 189–203. <https://doi-org/10.1080/14647893.2016.1208646>
- Tobin, J. (1995). The irony of self-expression. *American Journal of Education*, 103(3), 233–258. <https://doi-org/10.1086/444101>
- Vispoel, W. P., Boo, J., & Bleiler, T. (2001). Computerized and paper-and-pencil versions of the Rosenberg Self-Esteem Scale: A comparison of psychometric features and respondent preferences. *Educational and Psychological Measurement*, 61(3), 461–474. <https://doi-org/10.1177/00131640121971329>
- Wenn, B., Mulholland, R., Timmons, W., & Zanker, Y. (2018). Towards a developing construct in dance education-exploring the relation of emotional intelligence to teacher's sense of efficacy and teaching experience among dance education student teachers in the United Kingdom. *Research in Dance Education*, 19(1), 14–38. <https://doi-org/10.1080/14647893.2017.1354843>

- Wiedenhofer, S., Hofinger, S., Wagner, K., & Koch, S. C. (2017). Active factors in dance/movement therapy: Health effects of non-goal-orientation in movement. *American Journal of Dance Therapy*, 39(1), 113–125. <https://doi-org/10.1007/s10465-016-9240-2>
- Wu, C.-H. (2008). An examination of the wording effect in the Rosenberg Self-Esteem Scale among culturally Chinese people. *The Journal of Social Psychology*, 148(5), 535–551. <https://doi-org/10.3200/SOCP.148.5.535-552>
- Zelenak, M. S. (2015). Measuring the sources of self-efficacy among secondary school music students. *Journal of Research in Music Education*, 62(4), 389–404. <https://doi-org/10.1177/0022429414555018>