Bridging the Gap: Self-Efficacy and the Desire to Continue in Music Education

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Concordia University–Portland

College of Education

Doctorate of Education Program

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Bridging the Gap: Self-Efficacy and the Desire to Continue in Music Education

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Concordia University–Portland
College of Education

Dissertation submitted to the Faculty of the College of Education
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Doctor of Education in
Transformative Learning

Belle B. Booker-Zorigian, Ph.D., Faculty Chair Dissertation Committee
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Concordia University–Portland

2019
Abstract

This study sought to explore the problem of student retention in music, specifically between eighth and ninth grade. The purpose of this study was to investigate whether there is a relationship between eighth-grade band students’ self-efficacy beliefs and their desire to participate in band. Bandura’s (1977) four sources of self-efficacy (mastery experiences, vicarious experiences, verbal/social persuasions, and students’ physiological state) were the theoretical framework that guided this study. The participants in this study consisted of 68 eighth grade band students who had at least one year of band experience. This quantitative study used the Music Performance Self-Efficacy Scale, specially designed by Zelenak (2010), to measure Bandura’s (1977) four sources of self-efficacy and examine whether there is a relationship between self-efficacy belief and students’ desire to continue in band. A qualitative component of post survey interviews was added to gain deeper understanding of middle school band students and their self-efficacy beliefs. The quantitative results of this study indicated there is no statistically significant relationship between students’ self-efficacy beliefs and their desire to participate in band. However, the qualitative results did indicate that students’ self-efficacy beliefs did influence their decision to continue in band. This study may help music educators understand student self-efficacy beliefs, adding to the body of knowledge.

Keywords: music education, student self-efficacy beliefs, quantitative study, middle school, band, student retention, Music Performance Self-Efficacy Scale
Dedication

I would like to dedicate this study to all the band directors out there who are cheerleaders, counselors, moms and dads, fundraisers, paper pushers, money fighters, and everything else that falls under our umbrella. We put countless hours of heart and soul into our programs so we can reach students and give them the gift of music. We often give every cell of our bodies to our programs in the hope of giving our students the best we can offer. I hope that my study helps you understand there are things we simply cannot control. May this study add to your tools of understanding to help your music programs grow beyond your expectations. Also, to my fantastic students, thank you for your support and letting me share this journey with you. I appreciate your flexibility and patience.

I also dedicate this dissertation to my young daughter, Grace; you kept me going when I wanted to quit. I started this journey when you were just a dream in my heart, and my dream came true when you started growing in my belly, and before I knew it, I was holding your tiny body in my arms. From that moment, I knew I had to finish this journey; I wanted to show you that you can overcome self-doubt and any challenges that come your way. I love you sweet baby girl; you are my light that shines brightly, thank you!
Acknowledgments

This has been a personal journey that started with the desire to move forward out of stillness. This journey has taught me resilience at my lowest. I have overcome self-doubt and learned the true meaning of grit. I did not partake in this journey alone; the support and encouragement from friends and family near and far has been light when I have felt darkness.

My Mom, you are amazing; you never once doubted my abilities when I did. You believed in me when I did not, and your gentle push of encouragement was the motivation I needed to finish this journey. My brother Mikey, you sparked this journey; if I never attended your college graduation, I might not have started this journey. My sister Dawn, thank you for being so supportive; I now can watch all those movies you have recommended. My little brother Jeff, it is now your turn; thank you for being there for me when I needed it the most. Jenny, my best friend, you opened my mind when it was closed; you were a sounding board that helped me sort through everything that was going on in my brain. You listened to me vent about every brick wall I hit, and you gave me understanding to my confusion. McGill, your encouragement throughout this progress, gave me hope. You were the voice to let me know this journey was only temporary when I felt it would never end. Grace and Sarah, I appreciated your support through this doctoral program, and I hope I can continue to set a strong example for you. Grace, my daughter, who is a gift from God, you have kept me accountable to finish this journey, and I cannot wait to hold your little hand at commencement; a vision that I have had since I committed to this program. Dad, I know you will be watching me from heaven.

To Dr. Booker, Dr. Gilmore, and Dr. Goss, thank you for pushing me to new limits and shaping me into something more than I ever thought I could be. Dr. Klockman, thank you for sharing your knowledge and making this document shine. Dr. Pickle, thank you for your support.
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Chapter 1: Introduction

Introduction to the Problem

An overarching problem of the high school music programs in the United States is a school’s ability to retain music students, specifically in band. The specific problem exists in the retention of students between the eighth and ninth grades; this is a major transition between middle school and high school. Rising first-year high school students have several course enrollment choices to make in their academic programming, and in many instances, they choose not to continue in band. Analyzing self-efficacy may clarify some of the reasons students make the choices they do as they transition into high school. This quantitative study seeks to understand whether self-efficacy is associated with the retention of middle school music students’ desire to continue with music education in high school, specifically band.

History, Background, Context, and Conceptual Framework for the Problem

For over a decade music education scholars have researched the conjecturing power of students’ self-efficacy beliefs and music performance (McCormick & McPherson, 2003; McPherson & McCormick, 2006). Past studies examining music self-efficacy has shown that there is a relationship between self-belief and achievement (Hendricks, 2016). However, little research has been conducted regarding self-efficacy and music education (McCormick & McPherson, 2003). Specifically, there is little research regarding Bandura’s (1977, 1994) four sources of self-efficacy and how “ability-based beliefs can be fostered” (Hendricks, 2016, p. 32). This study aims to analyze whether there is a relationship between self-efficacy and students' desire to continue in band.

The conceptual framework for the problem uses self-efficacy to understand the internal beliefs that influence students’ desire to pursue music education. There is a gap in research that
warrants study on music self-efficacy and the sources of influences that relate to students’ desire to continue in music education. Research on self-efficacy is necessary to understand how complex self-beliefs can contribute to students’ ability beliefs in music classroom settings.

Albert Bandura’s four sources of self-efficacy guided this research study. This study explored how mastery experience, vicarious experience, verbal/social persuasion, and physiological states affect student self-judgments that can influence their retention in music. Students are influenced by outcomes of performance and comparison of self to peers (Stewart, 2005). McPherson (2009) supported this claim by stating, “self-efficacy judgments of this type are defined in terms of what a person thinks he or she can do and have consistently been shown to be powerful predictors of student achievement across a number of domains” (p. 100).

**Statement of the Problem**

Retaining music students between eighth and ninth grade as they transition to high school is a problem across schools (Boyle, DeCarbo, & Jordan, 1995). Although there is no national data to understand the magnitude of the problem, the loss of students is a problem—one that many music programs experience. Gibson (2016) explored the problem of music student retention, and through his research, he found that almost half of the eighth-grade music population dropped band as they transitioned to high school. Consequently, this study will investigate whether self-efficacy beliefs are associated with student retention in band programs as music students’ transition from middle school to high school.

Several studies found value in music education, students playing music, and music appreciation (Kaschub & Smith, 2016; McCormick & McPherson, 2003; Zelenak, 2010; Zimmerman, 2000). This study examined questions that will help music educators understand whether self-efficacy is associated with music education retention. Research on self-efficacy is
necessary to understand how complex self-beliefs can contribute to students’ ability beliefs in music classroom settings. Bandura’s (1977) theory was useful in understanding the influencing factors used in deciding to continue one’s music education. Bandura’s (1977) theory was useful in understanding how experiences in the classroom, peers, and teachers influence students’ self-beliefs. Further, Bandura’s (1977) theory will help music educators understand how the four sources can affect student self-judgment that can influence their retention in music.

**Purpose of the Study**

The purpose of this study was to develop a better understanding of the potential relationship between music self-efficacy and student retention during the transition from middle to high school. The four sources of self-efficacy that were studied included mastery experiences, vicarious experiences, verbal/social persuasions, and physiological state in music (Bandura, 1977). This study examined music self-efficacy and whether there is an association between student self-efficacy beliefs and their desire to continue in band.

**Research Questions**

Current research warrants further study as to why students quit band. Understanding why students drop out of band includes exploring the following research questions.

RQ1: What, if any, relationship exists between students’ overall self-efficacy and the desire to continue in band?

H10: There is no relationship between students’ overall self-efficacy and the desire to continue in band.

H1a: There is a relationship between students’ overall self-efficacy and the desire to continue in band.
RQ2: What sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) are associated with students’ desire to continue in band?

H02: There is no relationship between the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

H2a: There is a relationship between each of the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

Rationale, Relevance, and Significance of the Study

There is little research regarding self-efficacy in music (Hewitt, 2014). To measure self-efficacy in music, researchers such as McCormick and McPherson (2003) and McPherson and McCormick (2006) modified existing scales that tested the subject of music. These studies did not, however, provide insight on how to develop self-efficacy in music, which would be useful to provide the necessary feedback to improve instructional practices (Zelenak, 2010). Previous research examined the relationship between self-belief and achievements but did not focus on Bandura’s (1977, 1994) four sources of self-efficacy (Hendricks, 2016). The Music Performance Self-Efficacy Scale (MPSES) was specially designed by Zelenak (2010) to measure Bandura’s (1977) four sources of self-efficacy.

Zelenak’s (2010) MPSES will be used to investigate music students’ self-efficacy beliefs in music. The questionnaire was a 24-item instrument designed specifically to measure self-efficacy in music performance. The four sources of self-efficacy that were studied included mastery experiences, vicarious experiences, verbal and social persuasions, and students’
physiological states in music. This study examined music self-efficacy and whether there is a relationship between students’ self-efficacy beliefs and their desire to pursue music education in high school. According to Zelenak, Bandura’s (1986) social cognitive theory was used as the framework for the self-efficacy scale. The MPSES was designed by Zelenak to examine music performance self-efficacy in a secondary music classroom setting to understand student needs in the classroom better.

The MPSES provided general conclusions about students’ self-efficacy beliefs. However, a qualitative component in the form of a post survey interview added significance to this study by providing students the opportunity to share their self-efficacy beliefs in face-to-face, one-on-one interviews. Post survey interviews were used to shed light on the quantitative findings and research questions. The results of this study may help music educators understand students’ self-efficacy beliefs that associate with student retention in music education, adding to the body of knowledge.

**Definition of Terms**

The following terms were used operationally within this study.

*Mastery experience.* Mastery experience is defined as having a successful performance (Bandura, 1994).

*Physiological state.* Physiological state is defined as the emotional state a student experiences while performing a task (Bandura, 1994).

*Self-efficacy.* Self-efficacy is defined as a student’s self-beliefs that are shaped by the feedback they receive (Bandura, 1994).
**Social cognitive theory.** Social cognitive theory is defined as the relationship between individual behaviors, personal factors (such as efficacy or the belief that one can complete a task) and environment; contribute to student motivation and performance (Bandura, 1994).

**Verbal/social persuasion.** Verbal/social persuasion is defined as building confidence through encouragement and constructive criticism (Bandura, 1994).

**Vicarious experience.** Vicarious experience is defined as watching others perform successfully, encouraging students to believe that they, too, can master the skills necessary to succeed (Bandura, 1994).

**Assumptions. Delimitations, and Limitations**

**Assumptions.** The following assumptions inspired this study. First is that students’ proclivity to quit the band is frustrating to band directors as students transition from middle school to high school. Investigating the relationship between self-efficacy and student retention is what drove this study. The second assumption for this study is related to the instrument.

Zelenak’s (2010) MPSES was used to measure Bandura’s four sources of self-efficacy beliefs. The assumption is that the four sources (mastery experiences, vicarious experiences, verbal/social persuasions, and physiological state) are significant to retaining eighth-grade band students as they transition to high school. Understanding whether there is a relationship between students’ self-efficacy beliefs and their desire to continue in band is what drove this study.

**Delimitations.** Most research studies have limitations and boundaries within the study; this is true with this research study as well. Only having three middle schools participate in this study created a delimitation. The target population created boundaries by only using eighth-grade students enrolled in band for at least one year at thee middle schools located in a small town on
the west coast. Further, this study used convenience sampling, creating delimitations based on the convenience of the researcher’s availability and access to students.

**Limitations.** There are limitations to this study. The population size is limited the study because of the availability of the researcher’s time and resources. Concerns of potential biases in the study are a limitation because of the past involvement the researcher has with the music programs that are being used in the study. Random sampling will not be used to avoid sampling error. However, this can be a limitation to the study because it does not allow the researcher to determine the probability of the members being selected for the sample (Mills & Gay, 2016).

**Summary**

This quantitative study was inspired by the ongoing problem of retaining music students. This research examined music self-efficacy and explored sources of influence that may help retain students. The qualitative component of post survey interviews contributed thick and rich details that shed light on eighth-grade music student self-efficacy beliefs. The theoretical framework of self-efficacy investigated Bandura’s (1977) four sources of self-efficacy (mastery experiences, vicarious experiences, verbal/social persuasions, and physiological state) and whether or not there is an association between eighth-grade music students and the desire to continue in band. The research examined the importance of developing self-efficacy beliefs nurtured through musical experiences. The significance of this study is the understanding of eighth-grade music students’ self-efficacy beliefs and if there is a relationship to their desire to continue in band.

Chapter 2 provides an extensive investigation of self-efficacy in music education. The literature review investigated self-efficacy and how it is comprised of direct experiences. The review of methodological literature examined how researchers have examined self-efficacy using
qualitative, quantitative, or mixed methods in the form of questionnaires, interviews, observations, focus groups, and formal and informal conversations. Chapter 2 concludes with a critique of previous research that highlights areas that need further research to strengthen claims or further investigate gaps in research. Chapter 3 discusses the methodology used in this research to examine music self-efficacy and whether there is a relationship between self-efficacy and eighth-grade music students’ desires to continue in band. Chapter 4 presents the results of the quantitative research process and how the MPSES was used to measure eighth-grade music students' self-efficacy beliefs. In addition, qualitative data collected from post survey interviews are analyzed to dig deeper into the findings of the MPSES survey. Chapter 5 explains the results of MPSES and post survey interviews. Explanations to misalignments in the literature and quantitative findings are discussed. The results of this study may help music educators understand student self-efficacy beliefs that associate with student retention in music education, adding to their body of knowledge to retain music students.
Chapter 2: Literature Review

Introduction

Music is important because it engages students—physically and mentally—stimulating their emotions and cognitive thinking (Kokotsaki, 2017). Music also motivates students to be successful in school, increases self-discipline, morals, and leadership skills (Kuntz, 2011). Music also fosters a sense of pride and nourishes student accomplishments, both individually and as a part of groups (Kuntz, 2011). Students who continue with music education in high school also improve their academic performance (Kinney, 2010). Kokotsaki (2017) found that students are socially and academically more successful when engaged in learning and performing music. According to Stewart (2005), there is a strong correlation between music retention and academic performance. Musicians use cognitive strategies—judgment and effort—to control learning. Musicians can apply the same learning strategies in content areas such as math and science, thus increasing academic achievement (McCormick & McPherson, 2003; Pintrich & DeGroot, 1990).

Several researchers have identified that there is value in music education, students playing music, and music appreciation (Kaschub & Smith, 2016; McCormick & McPherson, 2003; Zelenak, 2010; Zimmerman, 2000). Gouzouasis and Henderson (2012) found that performing in a concert band has many positive effects, including the promotion of teamwork, healthy social skills, and engagement of students in shared experiences. These experiences create lasting memories of performing for large audiences and encouragement toward a sense of community and lifelong engagement with music.

First-year high school students have several choices to make regarding academics and electives as they enroll in high school. One choice middle school band students must make is whether to continue music education (band) in high school. Understanding whether their self-
efficacy beliefs play a role in this choice may clarify some of the choices that students make in music education as they transition to high school. The challenge for students when they enter high school is that they must figure out how to incorporate music classes with academic classes and other activities. Task value plays a key role in determining the activities in which students choose to participate (Bong, 2001; Wigfield & Eccles, 2000; Wigfield et al., 1997). Students tend to avoid tasks in which they feel inadequate and focus on tasks that they feel are achievable (McCormick & McPherson, 2003; Pintrich & Schunk, 1996). Thus, values and competence play a key role in activity selection as students continue music education in high school (McCormick & McPherson, 2003).

In addition to task values, research has shown that when middle school students transition into high school, several other factors influence their decision to pursue music education. According to Gouzouasis and Henderson (2012), “Music-making in school is one of a wide variety of curriculum choices that adolescents now have at the secondary school level” (p. 495). In addition to the variety of course options, socioeconomics within the community and parent financial responsibilities may also contribute to student decisions. Stewart (2005) suggested that students who come from families that value music are more likely to remain in music classes. Alternatively, students from families who view music as less important tend to drop out of music.

Additionally, some students may discontinue their music education because it is difficult for lower socioeconomic students to acquire instruments and private instruction. The music program itself can also have limitations such as instrument availability and funds to support additional staff to meet student needs. In this study, music self-efficacy beliefs were analyzed to
understand whether these beliefs drive a middle school student to continue music education in high school.

Previous research examining music self-efficacy has shown that there is a relationship between self-belief and achievement (Hendricks, 2016). However, little research has been conducted regarding self-efficacy and music education (McCormick & McPherson, 2003). Specifically, there is little research regarding Bandura’s (1977, 1994) four sources of self-efficacy and how “ability-based beliefs can be fostered” (Hendricks, 2016, p. 32). Research has suggested that teachers can help students understand their self-efficacy beliefs by giving them tools to manage their beliefs. These cognitive tools, such as positive feedback, can motivate students to accomplish specific tasks and foster persistence, despite setbacks (Hendricks, 2016). Establishing meaningful connections between students, peers, and teachers can enhance these cognitive tools and strengthen student self-efficacy beliefs, although more study is needed.

The study topic. The purpose of this study was to examine self-efficacy beliefs and whether there is an association between middle school band students and the desire to continue their music education as they transition to high school. Middle school students often lack the motivation to learn music because of low confidence, social pressures, and poor instrumental skills (Hendricks, 2016). These issues likely affect their choices to pursue music education in high school. Specifically, this study will explore the complexity of whether there is a relationship between student self-efficacy beliefs and their desire to continue in band. This study aims to examine self-efficacy in music to increase the retention of music students as they transition to high school.

The context. This study took place in California. It examined eighth-grade music students’ efficacy for performing music before transitioning into high school. The middle school
sites for this study were Title I schools. Title I schools have a majority of English Second Language Learners and lower- to middle-class students that need government funding to help ensure academic achievement. In the school districts where this study was conducted, 71% of the middle school students are Hispanic (California Department of Education, 2019). The schools include a large population of Hispanic children whose parents are migrant workers. Many of these migrant families work in the fields harvesting local crops. Some family backgrounds include working for local dairies and performing difficult labor to earn income for their families. In many cases, the students are expected to work in the fields with their parents to provide more income for their families. The majority (80%) of the school’s population derives from low-income households (California Department of Education, 2019). The demographic average of the three schools include 66% are Hispanic and 60% are socioeconomically disadvantaged.

**The significance.** There is value in learning music as it allows students to think and create expressively and improves their academic and music performance (Hendricks, 2016). This research will be relevant to music programs and band directors who face the challenges and frustrations of losing music students in the transition from middle school to high school. For example, Mazzocchi (2015) found that over 50% of young elementary music students quit two years later. Gibson (2016) also found that the transition from middle school to high school is the second-highest year of attrition, behind the transition from sixth and seventh grade being the highest. The value of researching this problem is that it may help generate solutions to retain music students (Gibson, 2016). Band directors may use this knowledge to strengthen student self-efficacy beliefs associated with student retention in the study of music (Hendricks, 2016). This study sought to help small music programs grow into larger music programs and result in further developing students’ music abilities and self-efficacy beliefs. This study focused on
understanding music self-efficacy, to identify potential influences to retain middle school music students.

Zimmerman (2000) suggested that music supports learning in the academic context by encouraging students to develop self-regulation skills by generating thoughts and feelings driven toward personal goals. For example, a student will practice his or her instrument, to prepare for a competition. These goals incorporate three sequential phases that include forethought, performance, and self-reflection (Zimmerman, 2000). Further, the framework posed by Zimmerman is closely related to Bandura's (1994) social cognitive theory because students judge their skills in producing outcomes that motivate core competencies in performance (Bandura, 1977). Bandura explained the relationship between individual behaviors, personal factors (such as efficacy or the belief that one can complete a task), and environment; contribute to student motivation and performance. Students can reflect on their performance, how well they executed the music, and if there were more the student could have done to improve performance. Music helps students grow in many ways, including self-regulation, goal setting, and self-reflection (Zimmerman, 2000).

Self-efficacy can affect retention in music. Hendricks (2016) identified the importance of self-efficacy and how students’ self-belief in their abilities is needed to accomplish a task in music or other academic content areas. Students who have strong self-efficacy are likely to work harder and longer toward achievement and mastery, despite setbacks (Bandura, 1994; Hendricks, 2016). For example, if a student with high self-efficacy practices and prepares for a music performance but has a poor performance, the result suggests to the student a need to continue to work toward mastering the task in a performance setting. Students with low self-efficacy in the same situation would give up and eventually quit.
Music has significant value in education by empowering students with skills that cultivate confidence and motivation to improve performance (Hendricks, 2016). This finding gave credence to the value of this study, which sought to understand motivation through examining the self-efficacy beliefs of middle school music students. This study explored self-efficacy and whether it plays a role in retaining music students. This knowledge may help music programs discover why some students continue with music education while others do not. Understanding the self-efficacy beliefs of middle school music students may help music educators base their actions on that knowledge to improve performance, academic achievement, and student retention.

The problem statement. Retaining music students between eighth and ninth grade as they transition to high school is a problem. Although there is no national data to understand the magnitude of the problem, Gibson (2016) conducted a study which surveyed 169 eighth-grade music students and their intentions to continue with band. The study showed that 60% of eighth-grade music students had intentions to continue with band, 31% specified they did not want to continue with band in high school, and 9% were undecided. While 60% expressed an interest in continuing in band, the four school districts in the southeastern United States that participated in the study lost almost half of the eighth-grade music population as they transitioned to high school (Gibson, 2016). The loss of students is a problem, one that many music programs experience. Consequently, this study investigated self-efficacy and whether it associates with eighth-grade music students dropping out of music upon entering high school.

The theoretical framework of self-efficacy was used for this study. There is a gap in research that warrants study on music self-efficacy and whether or not it relates to students’ desires to continue in music education. According to Hendricks (2016), although there has been
research on self-efficacy, there is a gap that warrants further study examining the relationship between self-belief and student achievement using Bandura's (1977) four sources of self-efficacy where ability-based beliefs can be examined. For example, how well students believe in their ability to play fundamentals on their instrument and their belief on how well they perform their music during a performance. Ability-based beliefs helped explain whether self-efficacy plays a significant role in the decision to continue music education as students’ transition from eighth to ninth grade. Research on self-efficacy is necessary to understand how complex self-beliefs can be associated with students’ ability beliefs in music classroom settings. Bandura’s (1977) theory was also useful in understanding how self-efficacy impacts middle school students’ decision to continue in music education.

Viewing this topic through middle school music students' perceptions might be useful in identifying the changes needed to foster self-efficacy beliefs and motivating students to continue music education in high school. This study examined whether a relationship exists between self-efficacy and music retention. Questions analyzed how self-efficacy predicts retention in music education, specifically band, providing knowledge that will nourish student self-efficacy beliefs. Current research warrants further study as to why students quit band. Understanding why students drop out of band includes exploring the following research questions:

RQ1: What, if any, relationship exists between students’ overall self-efficacy and the desire to continue in band?

RQ2: What sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) are associated with students’ desire to continue in band?
Organization. Self-efficacy is the construct that was used to understand the internal beliefs that influence students’ desire to pursue music. By examining young music students’ self-beliefs, music educators can gain perspective on the importance of self-efficacy and whether it impacts students’ choices to pursue music as they transition into high school. The literature review includes multiple research studies that examine student self-efficacy in music and other motivational constructs that are related to self-efficacy beliefs.

The literature review opens with examining the importance of each contributing factor of self-efficacy beliefs (Bandura, 1977). This section reviews the work of Albert Bandura (1977) and the research that supports his findings on how self-efficacy influences student's choices and experiences. The section explores how mastery experiences, vicarious experiences, verbal/ social persuasions, and understanding students' physiological states affect student self-judgments that can influence their retention in music.

The next section of the literature review discusses various research studies that examine self-efficacy in music. Research supports ways self-efficacy beliefs are fostered in the classroom and through experience. Flow theory, expectancy-value theory, and attribution theory are also briefly discussed as they have guided related studies on student motivation to learn music.

The conclusion of the literature review examines the methodological tools that researchers have used in their studies to collect data about student motivation and self-efficacy beliefs. This section examines the researcher's methods used in the literature review. Studies examined students’ musical experiences, student demographics, music teachers, and family and peer influences that relate to student self-efficacy beliefs.

A summary of the review of methodological issues follow the examination of methodological tools. This section identifies areas of research that require more study to help
understand the gaps in the research and areas that warrant further research. Following the Review of Methodological Issues, Chapter 2 concludes with a synthesis, critique, and summary to further justify this study.

Theoretical Framework: Self-Efficacy

As students connect with those around them and gain more experience in the music classroom, their self-efficacy in music and beliefs in their abilities develop (Kokotsaki, 2017). A meaningful social connection between the student and teacher in the classroom is important when developing young musicians (Kokotsaki, 2017). Literature supports that one’s environment and social influences are involved in developing music students’ self-efficacy beliefs (Hendricks, 2016). These beliefs, in turn, influence a student’s experiences. However, many middle school students drop band when they transition to high school. It is important to understand whether self-efficacy is associated with music education attrition, specifically participation in band.

Self-efficacy is closely related to self-concept, and it is difficult to identify what distinguishes them. However, the two constructs are different (Bong & Skaalvik, 2003). Similarities include that both self-beliefs are influenced by mastery experiences, social aspects, and appraisal as significant information sources (Bong & Skaalvik, 2003). Similarly, self-concept is defined as the view of oneself, formed through experiences, and it is influenced by the environment (Bong & Skaalvik, 2003). Further, Bong and Skaalvik (2003) stated, “Like self-concept, self-efficacy is presumed to explain and predict one’s thought, emotion, and action” (p. 5). The difference is that self-efficacy is task-specific, and self-concept is more global, focusing on students’ self-beliefs and confidence levels (Bong & Skaalvik, 2003). In the context of music, student self-efficacy judges how well they can perform their music (specific task) versus self-concept of how competent they are in playing their instrument (general beliefs).
Using the theoretical framework of self-efficacy, Bandura (1994) suggested a need to learn could motivate young music students to continue with music education. Students are influenced by outcomes of performance and comparison of self to peers (Stewart, 2005). McPherson (2009) supported this claim by stating, “self-efficacy judgments of this type are defined in terms of what a person thinks he or she can do and have consistently been shown to be powerful predictors of student achievement across a number of domains” (p. 100). Creating music involves self-efficacy in several areas, some of which include music theory, fundamental instrument technique, and understanding how individual specific parts contribute to the music. For example, students must be mindful of their individual parts to understand how to balance chords and whether they have the melody or harmony to keep the integrity of the music.

Bong and Skaalvik (2003) clarified that self-efficacy “emphasizes the role played by specific contexts in efficacy appraisals” (p. 5). This means that students’ self-beliefs may be high in a classroom setting, but they may feel differently if they were asked to play in a community band. Assessing the performance shapes self-efficacy beliefs. The four major sources working in unison that contribute to an individual’s overall self-efficacy belief are mastery experiences, vicarious experiences, verbal/social persuasions, and physiological state (Bandura, 1977, 1986). This research study will examine how these four sources shape students’ beliefs and their desire to pursue music education.

The largest contributor to an individual’s self-efficacy beliefs is mastery experiences, defined as having a successful performance (Bandura, 1994). Success is a key factor in building efficacy. However, failures can undermine efficacy, especially when efficacy is not fully developed within students (Bandura, 1994). Music educators help students establish mastery experiences through performances, allowing students to showcase their musical skills and
knowledge to an audience. When students practice rigorously and then have a successful performance, the success builds confidence and supports students’ desire to perform again.

The second contributor to students’ self-efficacy is vicarious experiences provided by social models (Bandura, 1994). Vicarious experiences can be defined as watching others perform successfully; this encourages students to believe that they, too, can master the skills necessary to succeed. Modeling helps students achieve proficiency and the competency they strive to achieve (Bandura, 1994). Modeling impacts student development through the sharing of knowledge, by showing the student an example of how the skill should be performed and what rewards they may receive for doing so (Bandura, 1994). Students are influenced by vicarious experiences when they observe or listen to other musicians who play their specific instrument, especially those who are their same age and of similar background. Students not only observe what is being modeled, but they are also watching to see the consequences of the behavior as well. Further, students learn vicariously because they have an example of what they can achieve.

Social or verbal persuasion is the third contributor to building student self-efficacy. Verbal persuasion concerns building confidence through encouragement and constructive criticism. Students who are verbally persuaded that they are capable of the task are likely to put forth greater effort and harbor less self-doubt when personal deficiencies arise (Bandura, 1994). Verbal persuasion builds self-efficacy by motivating students to try hard enough to succeed, thus developing skills to promote confidence. For example, often in music rehearsal settings, there are opportunities for corrective feedback and praise. Constant corrections can overwhelm students, while constant praise can lead to students settling at their current level of performance. Applying constructive criticism and encouraging students to continue to work hard will strengthen self-
efficacy and foster a positive learning environment (Bandura, 1994). Finding a balance between encouragement and corrections can contribute to building student self-efficacy.

The last contributing factor in building self-efficacy beliefs is the emotional or physiological state of students as they perform a task, which influences how they judge their capabilities (Bandura, 1994). For example, while completing a challenging task, students with low self-efficacy can interpret stress and tension as anxiety and may deduce that they are stupid or incapable of achieving the task. However, students with high self-efficacy will interpret anxiety as a signal to execute more effort to be prepared. In the case of a physical task, students with low self-efficacy can interpret those physical limitations as signs of debility, whereas students with high self-efficacy can view it as a challenge to get stronger (Bandura, 1994). Music educators can modify self-beliefs by reducing student stress and redirecting negative emotions, improving students’ self-beliefs (Bandura, 1994). According to Bong and Skaalvik (2003), teachers can heighten students’ self-efficacy beliefs by strengthening efficacy perceptions, redirecting students’ preoccupation to compare abilities, and reducing the encroachment of self-concept on students’ self-worth.

**Review of Research Literature and Methodological Literature**

Understanding self-efficacy in music education can shape students’ self-beliefs as they gain musical experience. The following literature review examines research studies and other methods that explore self-efficacy and student motivation in various music classroom settings. The review of literature is broken into three parts: (a) the review of literature, which discusses several research studies highlighting researchers’ claims and findings; (b) the review of methodological literature, which identifies various research methods and tools used to examine
self-efficacy in music; and (c) the critique of methodological issues, which examines the quality of body of literature presented and explores areas that warrant further research.

To master tasks and develop skill sets needed for performance, students draw motivation from several sources. According to Bandura (1977), self-efficacy is comprised of direct experiences known as mastery experiences; indirect experience known as vicarious experiences; verbal persuasion, triggered by social environments; and students’ physiological state. This study employs a theoretical framework based on the construct of self-efficacy. However, researchers have used several theoretical frameworks in examining student beliefs about music and the motivation to learn to perform music. It is important to view research conducted using other theoretical frameworks because a variety of factors beyond self-efficacy influence a student’s desire to pursue music education (Nicholls, 1984). There are a variety of models, which contribute to our understanding of this complex construct. Prominent theories of achievement motivation include expectancy-value theory, flow theory, and attribution theory (Nicholls, 1984). These theories will be discussed briefly to understand how these theoretical frameworks influence self-efficacy, student motivation, and success. This literature review will also discuss motivational constructs such as intrinsic motivation, extrinsic motivation, and self-motivation, and how these types of motivation influence student self-efficacy beliefs and experience. The literature review concludes with an examination of the main theoretical framework of self-efficacy in music and other content areas and discusses how confidence influences middle school students’ desire to continue music education in high school.

**Connecting other constructs of self-efficacy.** Bandura (1986) expressed the idea that knowledge consists of many things. However, according to his theory, it is self-efficacy that is most influential. Bandura (1986) suggested that self-efficacy beliefs influence how people
behave, react emotionally, and how their thought patterns shape various situations. 

Csikszentmihalyi (1975) developed the flow theory, which supports Bandura's construct of self-efficacy. When students are fully engaged in the classroom and engrossed in what they are doing, they are in a state of flow (Hallowell, 2011). Flow is achieved when students are challenged to their full capacities. Thus, they continue to grow by accepting new challenges (Csikszentmihalyi, 2014). Hendricks (2016) interpreted “flow” as a student’s need to increase levels of challenge while staying engaged, allowing them to feel enjoyment as they achieve successful performance due to the increase in their skill level while being challenged. When the opposite occurs, and the student feels overwhelmed and overly challenged, they may experience anxiety. Anxiety is thought to diminish the motivation to learn music (Cogdill, 2015). Creating a balanced learning environment prevents students from feeling anxiety.

Bandura (1994) also noted that through verbal persuasion, the environment affects student motivation. Examination of the motivational and social factors associated with Csikszentmihalyi’s (1975, 1994) flow theory, helps in understanding the development of young musicians and how their performance skills align with motivation in the classroom (O’Neill, 1999). Creating an environment that is intrinsically matching between skill and task will allow “flow” to happen in the classroom, producing high achieving musicians (O’Neill, 1999). Music teachers can help students overcome many fears and foster levels of flow by monitoring student’s self-perception, achievements, and abilities (Hendricks, 2016). Finally, by paying attention to students’ perceptions and guiding them through their fears and self-perceptions, music teachers can help students gain confidence, learn time management, and other domains that contribute to day-to-day experiences (McPherson, 2009; Miksza, 2015; Zimmerman, 2000).
Flow theory connects to the construct of self-efficacy, as does the expectancy-value theory. Several researchers discussed the importance of task value and its position as a major factor in students choosing to participate in specific activities (Bong, 2001; Wigfield & Eccles, 2000). Cogdill (2015) suggested students that are motivated in a specific activity must have positive self-beliefs to pursue the activity and believe it will bring them success in their future, explaining why many students both pursue and persist in music, whereas others do not. The expectancy-value theory states that students’ perceptions of their ability and the extent to which they value it will contribute to their choice of activity, persistence, and performance. Researchers also expressed the importance of what students’ value to be accurate predictors of future music education enrollment decisions (Eccles, 2005; Lowe, 2012; Wigfield, 1994; Wigfield & Eccles, 1992; Wigfield & Eccles, 2000). Expectancy-value theory describes motivation concerning how much value students put on an activity. Values are self-beliefs of the importance of an activity (Lowe, 2012). This knowledge is useful to music educators to help predict their student’s attentiveness and preferences to maintain student participation (Lehmann, Sloboda, & Woody, 2007).

Self-regulation connects to the construct of self-efficacy along with attribution theory. McPherson (2009) researched the role of parents in establishing children's self-efficacy. Studying parent interaction and how they shape their child’s sense of musical competency impacts student achievement and their desire to put their best efforts forward to overcome challenges (McPherson, 2009). Students are more influenced by their parent's expectations and how they value music compared with other content areas (McPherson, 2009). Researchers have stated that self-efficacy in music determines how students can perform in stressful situations including other academic contexts (McCormick & McPherson, 2003). This transference to other
academic contexts is because music students undergo cognitive strategy by using formal and informal practice, self-regulation, and self-efficacy to execute performance (McCormick & McPherson, 2003). However, when it comes to academic performance, the difference is that music students understand they only have one opportunity to perform to the best of their abilities versus taking the time to revise or reverse decisions that can be made in an academic setting (McCormick & McPherson, 2003). Music is difficult and taxing to learn; therefore, student self-doubt, or lack of parent support, can easily diminish student's beliefs in performance skills (Bandura, 1994).

Music teachers run into the challenging task of inspiring students when there is a decrease in motivation, and students are not willing to put forth the effort or practice. Schatt’s (2011) study examined students’ perceptions of practicing music using attribution theory to view students’ opinions regarding practicing their instrument. Students understood the connection between practicing and becoming better musicians and that their abilities could increase if they would practice. Music educators encourage musical practice. However, as students develop, especially during the high school years, the amount of time they practice music declines (Schatt, 2011). Students begin to choose between making music a career or come to the realization that music is not in their future and ultimately quit prematurely (Schatt, 2011). This study clarifies how students’ beliefs and attitudes can be viewed through attribution theory and provide music educators knowledge to formulate action plans to inspire music students to practice (Schatt, 2011). Action plans can include creating practice methods that closely align with students’ values and beliefs, therefore encouraging students to pursue further musical studies (Schatt, 2011).
Researchers have also examined student motivation after failure. Motivation is the eternal need to problem solve and determine what actions are necessary to fix the problem (Deci & Ryan, 1985). Austin and Vispoel (1992) and Legette (1998) researched student motivation after failure in music using different questionnaires that measured goal structure and outcome attribution. These studies examined how students respond to failure and how it contributes to their experience in music. Austin and Vispoel (1992) gave students a scenario in which there was a failure in a musical event and then asked the students to respond to a 53-item questionnaire concerning the scenario. The variables manipulated included goal structure and outcome attribution. Legette (1998) took a different approach and used Asmus’s (1986) Music Attribution Orientation Scale that had a broad range of casual attributions to measure. The scale used 35 questions that examined students’ experience measuring how effort, environment, and ability affected their failure in a musical event (Legette, 1998).

Both studies used scholarly models and research to support their arguments and claims. Austin and Vispoel (1992) found that there was no significant interaction regarding goal structure. However, there were significant effects in attribution feedback related to effort and expectations for improved performance. Feedback is tied directly into verbal and social persuasion (Bandura, 1994). Legette (1998) used other research studies to guide the questionnaire and provide concrete results when comparing the data against other studies. The data, presented through tables, revealed the results of the variables that were tested. Results showed that student perception towards motivation and achievement affects student progress (Legette, 1998). In general, these studies guide the understanding of the connection between how psychology and music impact student motivation.
Self-motivation includes self-evaluation, which requires students to reflect on their performance and highlight areas for personal improvement. Hewitt (2014) examined self-efficacy through self-evaluation and music performance in secondary-level bands to understand how performance affects student self-perception. Researchers have investigated the relationship between self-efficacy and self-evaluation and how self-efficacy can improve with self-evaluation (Hewitt, 2014). Self-evaluation is important to students who study music because it motivates students to practice their instruments, follow-through with commitments, and provide the dedication needed to achieve successful performances (Hewitt, 2014). Self-evaluation allows the students to reflect on experiences, self-belief, and explore areas of improvement, motivating students to master skills that need improvement.

After gaining an understanding of how self-efficacy is related to flow theory, expectancy-value theory, and self-evaluation, it is now necessary to examine how internal attributions (ability and effort), external attributes (luck and task difficulty), and attribution theory affect student self-efficacy beliefs and how they shape student motivation. Woody (2004) examined the idea that when music students are developing, they are motivated by internal and external sources, allowing them to draw connections to making music and have enjoyable experiences. For example, internal attributes are the achievement and pride the student feels when playing an instrument, and the external attributions are the circumstances that the student experiences while playing their instrument. Myers (2013) suggested that attribution theory describes the process by which the cause of success is attributed to strong permanent traits, dispositions, or an outcome that can be attributed to the nature of the situation. Attribution theory has also been used to define internal and external dynamics that contribute to success and failure in many academic achievement areas. Asmus (1985) applied attribution theory to music education. Music is
personal and innate to students individually. When students describe their reasoning as to why they are successful or unsuccessful in music, they describe natural musical abilities and technical proficiency of how they play their instrument (Chandler, Chiarella, & Auria, 1987). Asmus (1986) differed by identifying that music students’ link success and failure to effort more so than ability; this is complex because the effort is uncontrollable. Regarding attribution theory, Weiner (1979) determined that successful students are more likely to contribute success to internal variables and factors that can be controlled. In contrast, those who experience failures generally identify external and uncontrollable variables that contributed to their failure.

Viewing attribution theory through the lens of Bandura’s (1994) work might lead one to understand better how attributions could contribute to the student's psychological state, and ability and effort could influence student confidence levels. For example, mastery experiences, verbal persuasion, and vicarious experiences connect to internal and external attributions (achievement and circumstance), shaping the student desired performance. Schmidt (2005) examined attributions made among music students. Schmidt discussed that attribution theory is studied considerably in music and focuses on internal and external attributes along with several motivational variables associated with music achievement and experience. Some variables include commitment to band, self-concept, mastery orientation, competitive orientation, and achieving success (Schmidt, 2005).

Self-efficacy is greatly influenced by verbal and social persuasion and how experience in the environment can motivate students (Bandura, 1994). Researchers that study intrinsic and extrinsic motivation describes intrinsic motivators as joy that contributes to external motivators (West, 2013). Hong, Peng, and O'Neil (2014) studied intrinsic motivation through relationships between personalities and motivational attributes to investigate student intentions to continue
with the band program. Building from the framework of Bandura’s (1994) self-efficacy theory, creativity factors into performance and is necessary for innovation and creative expression (Bandura, 1986, 1994). Hong et al. (2014) found that students who were accomplished in music had higher intrinsic motivation. These students were confident in their creative expression and more likely to enjoy the activity. Studies have shown that as young students transition from elementary to middle school, they become less intrinsically motivated (Anderman & Maehr, 1994; Wigfield & Eccles, 1992). Therefore, to retain music students, teachers need to foster intrinsic motivation through the learning activities the students’ experience (West, 2013).

Extrinsic motivation influences student self-efficacy mastery and vicarious experiences (Bandura, 1994). Motivational ideas for musicians using extrinsic motivation support values, and draws inspiration in the classroom (Fant, 1995; Kaschub & Smith, 2016; Woody, 2004). Fant (1995) focused on practices to motivate students that included merit charts, musicianship awards, and developing point systems. Students are motivated to master tasks so that they will be rewarded or physically see their developmental progress. Fant (1995) suggested specific ideas to reflect on in relation to personal experience and individual programs. Reward systems can measure different things. For example, rehearsal attendance, memorization of scales, and practice charts can be extrinsic motivation for students depending on the dynamics of the instrumental program. Woody (2004) examined highly skilled musicians and the factors that contribute to high achievement in music performance. Some of these factors include extrinsic motivation through performance. To understand the extrinsic motivation of highly skilled musicians, Woody (2004) interviewed talented young musicians and their parents to explore extrinsic motivation. From the musician’s standpoint, the three claims evaluated that foster an expert musician included; early musical exposure, musical peers, and sustained practice.
Exposure to music created vicarious experiences, and friendly peer competitions are inspiring students to want to master their musical skills like their peers. Engaging in these three areas will provide students a reliable formula for creating a successful musical experience and foster high achievement (Woody, 2004).

Successful music experiences motivate students to crave more successful experiences, supporting student retention. Kaschub and Smith (2016) examined musical capacities that help students clarify goals, expand expressivity, and strengthen technical skills as they develop as musicians. The study shared figures, charts, and guiding questions that educators can use to create meaningful experiences from which students can draw in the classroom. Kaschub and Smith’s (2016) study evaluated intrinsic and extrinsic motivation sharing knowledge that is designed to motivate students. These strategies are obtainable for music teachers to incorporate into the music classroom to nourish elevated levels of performance.

The literature supports environmental and social contributions that influence self-efficacy beliefs. Reviewing motivation theories, extrinsic motivation, self-evaluation, and failure in music through the lens of self-efficacy may not change students’ decisions to continue music education. However, it could shed light on supporting students’ self-efficacy beliefs that can support the retention of music students as they transition to high school. Understanding self-efficacy as student’s transition into high school music programs will contribute to the body of knowledge that may help music educators retain students. Teachers can connect with students by fostering a positive learning environment creating meaningful experiences and opportunities (e.g., mastery, vicarious, verbal persuasion, and physiological experiences) that strengthen students' self-efficacy beliefs.
Measuring self-efficacy. There is little research regarding self-efficacy in music (Hewitt, 2014). To measure self-efficacy in music, researchers such as McCormick and McPherson (2003) and McPherson and McCormick (2006) modified existing scales that tested the subject of music. These studies provided useful information about summative assessments that helped identify students’ levels of self-efficacy (Zelenak, 2015). These studies did not, however, provide insight on how to develop self-efficacy in music, which would be useful in order to improve instructional practices (Zelenak, 2015). Previous research examined the relationship between self-belief and achievements but did not focus on Bandura’s (1977, 1994) four sources of self-efficacy (Hendricks, 2016). The MPSES was specifically designed by Zelenak (2010) to measure Bandura’s (1977) four sources of self-efficacy. The results of the MPSES survey can provide music educators feedback to shape student self-efficacy beliefs and guide their instruction to nourish those beliefs (Zelenak, 2015).

Using the MPSES, Zelenak (2015) investigated music student attitudes, motivation, and self-efficacy in music. The questionnaire is a 24-item instrument designed specifically to measure self-efficacy in music performance. Advanced Measures of Music Audition was also used to observe student performance. In this study, teachers rated their students on levels of self-efficiency, and those scores were correlated with the MPSES scores to determine the relationship between the student's self-perception and self-efficacy (Zelenak, 2015). Survey scores were reliable, based on the internal consistency of item responses. The study showed validity in test content, student response process, and internal structure in relation to other variables. This study encouraged further examination of self-efficacy at different ages and also the measuring of the relationship between self-efficacy and music achievement. MPSES was also used to investigate other physiological constructions including self-identity and motivation (Zelenak, 2015).
**Incorporating the four sources of self-efficacy.** Bandura’s (1977) four sources of self-efficacy beliefs shape music students’ experience in the classroom. Mastery experience is built on successful performances and vicarious experience is built on watching others. Further, verbal and social persuasion is built on encouraging students and physiological experience is built on the emotions students experience while performing (Bandura, 1977). The following studies explore each component of self-efficacy beliefs and how it fosters music students experience in the classroom.

**Mastery experience.** McPherson and McCormick (2006) suggested that to improve self-efficacy beliefs, music education teachers should focus on students’ self-beliefs by paying attention to students’ perceptions of their competence. This attention allows music educators to understand what motivates the student to predict future decisions they make about their desires to improve (Zelenak, 2015). Self-efficacy is developed through beliefs and habits that music teachers can establish with students to develop mastery over time. This proactive approach helps students prepare for challenging tasks (McPherson & McCormick, 2006). Teachers can provide students’ sense of control over their learning to develop independence and confidence (Bandura, 1994; Zimmerman, 2000).

**Vicarious experience.** Research has shown music self-efficacy beliefs are also influenced and fostered by modeled instruction (Hendricks, 2016). Consequently, conductors promote mastery orientation by shared expressive performance (Matthews & Kitsantas, 2013). Modeled instruction can also influence self-efficacy beliefs that are fostered through vicarious experiences. Silvey and Koerner (2016) examined the effects of expressive (connection with the music) and unexpressive (no connection with the music) conducting and how it affects performance achievement and how the conductor impacts students. Significant findings
regarding conducting behaviors include influencing student perspectives and contributing to the student's enjoyment of the performance (Silvey & Koerner, 2016). Aligned with vicarious learning, students can be motivated by watching great conductors who inspire them to be a conductor or perform under a great conductor. Students use social comparison to perceive their abilities while observing others perform successfully. Students can also connect to the music through expression mirrored by their conductor. During this connection, students can interpret and feel musical expression as they perform the music. Students who are connected may engage in vicarious experiences when they can recognize a similar relationship between their abilities and the abilities of others. Exposing students to vicarious experiences by observing other students who play the same instrument and have similar playing abilities can increase self-efficacy beliefs (Hendricks, 2016).

**Verbal and social persuasion.** Another source of self-efficacy is verbal and social persuasion. MacIntyre, Potter, and Burns (2012) investigated the relationship between music and language and how it influences motivation in music. The relationships between music and language are that both are used for self-expression (MacIntyre et al., 2012). Music and language skills are partly developed through the encouragement of parents, teachers, and peers. Parent encouragement includes communicating praise, providing supervision while practicing, and showing support to the student while they are developing their skills (MacIntyre et al., 2012). Teachers encourage self-efficacy beliefs by providing feedback and using cooperative instructional techniques that boost student's attitudes toward learning (MacIntyre et al., 2012). Peers' encouragement is influential because shared experiences can foster social experiences and form friendships (MacIntyre et al., 2012). Nonmusical factors can influence the band programs and student retention (Kinney, 2010). Kinney (2010) examined predicting variables that impact
students’ decision to enroll and persist in middle school band programs. Investigating socioeconomic status, family structure, and ethnicity were some of the nonmusical factors that were tested (Kinney, 2010). Academic achievement and family structure were significant predictors of enrollment. Positive verbal persuasion and social persuasion by parents, teachers, and peers built confidence within students, nourishing students’ self-efficacy beliefs.

**Physiological beliefs.** Self-efficacy beliefs in music are also developed through physiological beliefs. Gouzouasis and Henderson (2012) researched the impact that students experience by participating in band festivals. This study showed that band festivals have a positive physiological impact on students and provide motivation to practice so students can perform to their best abilities. Band festivals allow the opportunity to impact students emotionally, creating personal pride and feelings of accomplishment, which all contribute to a positive experience that nurtures self-efficacy beliefs (Gouzouasis, & Henderson, 2012). Students’ perceptions of music and parent support also bring awareness of physical and emotional reactions that contribute to certain situations (Bandura, 1994).

Performing music can heighten emotions, and the physiological state within students can be positive or negative. Performance anxiety can lead to a lower sense of self-efficacy, yet teachers can help students work through fears to reduce anxiety (Bandura, 1994). Studies have examined why students drop out of the band, but few offer the physiological or motivational explanation as to why students make that choice (Evans, McPherson, & Davidson, 2013). Results from these studies concluded that students felt fulfillment when physiological needs were being met while learning music, and those who dropped band had greater feelings toward inhibition (Evans et al., 2013). Warnock (2009) examined the attraction/prediction of why students participate in school music ensembles. The study determined that students are attracted
to middle school band because of developed friendships between peers. Self-esteem was also a significant predictor of participating in the band as well as teachers’ influences when developing music attitudes (Warnock, 2009). Other attractions to the band include attitudes toward a musical instrument, student views on music, views of music classes, views on performing, parent support, and musical enjoyment.

**Review of Methodological Literature**

Researchers have examined self-efficacy in music education using qualitative, quantitative, or mixed methods in the form of questionnaires, interviews, observations, focus groups, and formal and informal conversations. These mythological tools were used to examine master experience, vicarious experience, verbal and social persuasion, and physiological beliefs that are being investigated in the study. Creswell (2014) stated that variables are measured so that data can be statistically analyzed. Data collected can be compared with other studies to see if it can support theories or claims. According to Creswell (2014), data sources are considered credible because they support other scholarly research. Further, new information that is found in studies can shed light on future research. The following will discuss several research methods using a quantitative, qualitative, and mixed methods methodology to understand how self-efficacy is associated with students’ beliefs.

**Qualitative research.** Qualitative research examines the meaning given to a social or human problem through the process of exploring questions collected in the research study setting (Creswell, 2014). The next two studies are examples of qualitative studies of motivation to perform music. Ebie (2005) studied self-efficacy using qualitative research through opened-ended questions in a free-response questionnaire. Self-efficacy in music and sports was examined by investigating secondary students and their self-reported reasons for participating in
extracurricular music and sports. This study used qualitative research because it was a strong method to determine what factors students felt most contributed to making extracurricular activities meaningful. Gorlow and Schroeder (1968), Farrell (1972), and Hylton (1981) designed research studies using open-ended survey questions, and Ebie (2005) was guided by their research. The qualitative research approach was used for coding both sports and music, measuring variables such as social/integrative (the need to be involved), kinesthetic (the need for physical movement), self-esteem (intrinsic fulfillment), and self-efficacy (one’s belief in their task-specific; Ebie, 2005).

The findings suggested that musicians and athletes shared similar reasons for participating in extracurricular activities. A majority of the responses related to the social/integrative theme, indicating “musicians and athletes need to experience teamwork, sharing goals, performing well in front of others, and for friendship/socialization” (Ebie, 2005, p. 6). The study suggested both musicians and athletes enjoyed sharing sports or music and that students valued physical expression through either sports or music. Students expressed positive feelings of validation and self-worth, gaining the confidence needed to perform successfully in their sport or musical activities. Ebie’s (2005) research concluded that students had high self-efficacy beliefs and that both musicians and athletes believe that they have the necessary skills needed to participate in sports or music successfully.

O’Neill (1999) also took a qualitative approach to study self-efficacy and collected data by using the Experience Sampling Method, which was developed by Csikszentmihalyi (1994) to record random thoughts and activities of young musicians throughout the day. This qualitative method involved participants carrying a booklet of self-report forms that were filled out every two hours to observe thoughts and activities at random moments during a typical week (O’Neill,
In this case study, the qualitative method was necessary to determine flow experiences when engaged in musical and nonmusical activities. The study sampled three groups of students that included young musicians, moderate achieving musicians, and high achieving music students. Using a qualitative approach O’Neill (1999) found that Csikszentmihalyi’s (1994) flow theory is achieved when individuals are engaging their skills while being challenged. Observation revealed how musical activities are compared with nonmusical activities and how high achieving specialists are compared to non-specialists.

Implications regarding music education suggested that music educators might need to find better ways to incorporate ways to motivate low performing music students. This action will encourage a better musical experience and increase opportunities to balance challenges and skills for flow experience. The study utilized innovative techniques and sampled students from both high school and middle school to investigate the relationships between flow theory and performance skills. By using the qualitative method, this study was able to explore the relationship between flow theory and the musician’s development of performance skills. Using observation forms allowed the researchers to examine day-to-day activities and the relationship between the environment and student experiences and how it can influence motivation to learn music (O’Neill, 1999). Through observation, results indicated that moderate achievers tend to look at other students as competition, whereas high achievers look to peers to be supportive and encouraging. Further, moderate achievers tend to reach flow more so than high achievers. Music educators can use moderate achieving students to foster motivation (flow) and improve musical experiences (O’Neill, 1999).

**Quantitative research.** Using quantitative approaches, such as questionnaires, allows researchers to investigate numeric descriptions of opinions and attitudes of a sample population
to collect data to draw a conclusion or generalize the population that is being sampled (Babbie, 2015). The following two studies are quantitative studies specific to self-efficacy and music education. Zelenak (2015) used a quantitative approach by administering the 24-item MPSES, which was found to be a valid and reliable instrument for assessing self-efficacy in music performance. Zelenak (2015) sampled secondary school music students participating in large ensembles, measuring their four sources of self-efficacy. Findings included that students were encouraged to pursue music from music teachers, private teachers, family members, and due to early experiences with music. Rehearsing and engaging in private instruction can foster positive experiences that students feel while making music or sharing music (Zelenak, 2015).

Henry (2015) also used a 21-question survey to collect data on music self-efficacy to study what variables influenced students to pursue music. He questioned students about their demographic information and musical experiences that contributed to student motivation. Henry used a survey based on Royer's (2005) survey. However, some questions were altered to meet the needs of the study. Henry concluded that students liked making and sharing music together, and supportive music teachers and family members influenced students in a positive way. Henry (2015) was able to measure students’ different experiences with music outside of school, including private lessons, summer music camps, and leadership opportunities that involved musical experience.

**Mixed methods research.** Mixed methods research combines qualitative and quantitative research to analyze and collect both kinds of data (Creswell & Plano Clark, 2007). Using both approaches often support more robust study findings and a stronger argument than using a qualitative or quantitative approach alone (Creswell & Plano Clark, 2007). Stewart (2005) used a mixed method approach to measure self-efficacy and interpret survey answers and
students' levels of performance. Stewart choose a survey to examine student's intentions to continue with the band by analyzing how determining factors such as gender, music experience, private lessons, academic achievement, self-efficacy, and dynamics in the home influenced student retention in music.

The survey Stewart used was adapted from several music studies that used similar surveys (Bong, 2001; Mizener, 1993; Schunk, 1987; Steele-Johnson, Beauregard, Hoover, & Schmidt, 2000; Wigfield & Eccles, 2000; Wigfield et al., 1997). The written survey measured five constructs related to music performance: socioeconomics, demographics, self-beliefs, music backgrounds, and student retention. Finally, random music students in the band were asked to perform a sight-reading task. The study revealed that 81% of students surveyed said they would continue with the band while 29% stated that they were uncertain. The most frequent reason why students stayed in band was centered on having a fun experience, travel, and friendship. The research revealed, much like previous studies, that social interaction and enjoyment in the activity contributed to student motivation to participate in band. Stewart also found that retention was not significantly related to self-efficacy, meaning that student's perceptions of their abilities were not a factor that contributed to participating in the band. Instead, students weigh the quality of their social experience in the band as a primary factor in their decision about whether to continue participating in the band. Research on teacher influence warrants further study (Stewart, 2005).

Kokotsaki (2017) also used a mixed methods approach to understand why students drop out of band programs. The research design used both formal and informal conversations that centered on focus groups. The focus groups and interviews took 15 to 20 minutes to conduct and discussed topics such as the enjoyment of music, student expectations, changes they would
make, and involvement in activities. The questionnaire used by Kokotsaki was adapted from Pell (2009) to measure students’ attitudes and music fulfillment by using a Likert-type scale to collect data (Lowe, 2012). To measure individual transcripts, Kokotsaki used the Atas-ti-software designed by Muhr (1997) for qualitative analysis, and developed codes to find similarities and differences in student’s attitudes. A phenomenographic approach allowed Kokotski to identify music students’ experiences. Phenomenographic approach helps the researcher identify human experiences about a phenomenon. This approach was adopted to measure their enjoyment or concerns about music throughout the school year.

The mixed method approach helped find that students were excited to transition to high school music programs and that they had positive attitudes toward music. Students’ perception of music was viewed as important, and they were eager to perform and learn different types of music. Students expressed the importance of their teachers and how they impacted their music experiences along with the pacing of classroom content (Kokotsaki, 2017).

Researchers were able to measure self-efficacy and motivation to learn music using the various mixed methods approaches. Research opens new opportunities to seek answers to new questions that warrant further research. In the next section, the studies reviewed will point out challenges in the methodologies providing opportunities for future research to be explored.

**Synthesis of Research Findings**

Throughout this literature review, there are common themes that are intertwined throughout several of the studies that investigate self-efficacy and what drives middle school music students to continue music education as they transition to high school. The goal was to understand what shapes students’ self-beliefs through the theoretical framework of self-efficacy and how music educators can use this knowledge to nurture students’ desires to pursue music.
Viewing these themes through the lens of Bandura, the common themes center on his four influences of self-efficacy beliefs. These themes include (a) mastery experience and how experiences shape student motivation, (b) vicarious experiences or how watching others model and showcase their musical skills can aspire future study in music, (c) verbal and social persuasion and how the school environment and feedback can motivate students, and (d) physiological state as related to understanding students’ needs to gain confidence and feel supported as they pursue music education (Bandura, 1994).

The first theme presented throughout many of the studies is the importance of mastery experience through successful musical experiences. Many factors contribute to students’ experiences in music education, including the opportunity to showcase student performance and the excitement of performing after vigorous hours of rehearsal. Students draw self-efficacy from mastery experience by believing that the activity they are participating in brings a sense of value and purpose to their lives (Cogdill, 2015). The expectancy-value theory suggests students pursue music because they value their experience and it brings meaning to their lives. Lowe (2012) expressed that value components are predictors of future enrollment decisions. Fant (1995), Woody (2004), and Kaschub and Smith’s (2016) work all support methods of practice that reward student’s goals and skills (Lowe, 2012). Students reach goals through mastery experience and thrive on showcasing their musicianship skills.

The second theme reveals how vicarious experiences impact student self-efficacy beliefs by watching others model or perform successfully. This exposure to watching others perform similar tasks can inspire students to imitate their mentors and peers (Bandura, 1994). For example, Zelenak (2010) researched students participating in large music ensembles and what motivated students to engage in music performance. The study showed that music teachers,
private teachers, and family members who had experience in music were positive influences in young musicians’ lives. Silvey and Koerner (2016) studied vicarious experiences by examining the effects of an expressive conductor. Watching a great conductor and being able to feel and connect to the music can inspire students. Students, who are exposed to live symphony orchestras, musical performances, and jazz concerts, can see the potential they have as musicians. Having students observe bands that are their age group can provide vicarious experiences that will motivate students. Vicarious experiences can also be negative in situations where students have failed repeatedly, so peer modeling should be monitored closely (Hendricks, 2016). Lack of exposing students to vicarious experiences may contribute to students dropping out of music because students may not see their full potential in their abilities to perform similar tasks (Hendricks, 2016). It is important for music educators to expose students to music, model instruction, and encourage vicarious experiences, so students can be inspired and driven to continue music education (Hendricks, 2016; Zelenak, 2010).

The third theme incorporates verbal and social persuasion. Bandura (1994) stressed the importance of the classroom environment and feedback that students receive from their teachers and how these concepts affect student's self-efficacy beliefs. The school environment, staff, and school administration play a vital role in supporting music education and student self-efficacy beliefs. If the school environment does not support music and nurture music students, it will affect student retention in music. Student experiences in music education often center on their social interactions and cultural norms. These experiences establish a classroom environment and contribute to verbal and social persuasion. These types of beliefs encourage self-efficacy to work hard and make the corrections needed to improve music skills and performance (Bandura, 1994).
Music educators use verbal and social persuasion to impact student intentions and encourage student retention in music (Stewart, 2005).

Finally, the fourth theme defines student self-efficacy through their physiological state (Bandura, 1994). A student’s physiological state is the perception the student has about their ability, and it is influenced by the body’s reaction both physically and emotionally depending on the situation (Bandura, 1994). The need for physiological arousal allows students to feel excited about performing music. The experience of highs and lows, stress versus relaxation, can shape the students’ beliefs about their ability to persist in a task (Hendricks, 2016). Understanding the nervous butterflies before performances, or the anxiety a student might feel before performing provides a window for music educators to build student confidence levels through encouragement (McPherson, 2009). Physiological states shape student determination and confidence in their playing abilities, and at the same time, can undermine the student depending on how they interpret it (McPherson, 2009).

The music teacher plays a vital role in fostering Bandura's (1977) four self-efficacy beliefs, giving students the tools needed to gain confidence in their tasks and abilities (Hendricks, 2016). This support builds students’ self-efficacy beliefs and contributes to their experience in music education. Musical knowledge is formed by shared visions and musical experiences of others. Ebie (2005) found that musicians and athletes share the same reasoning for participating in extracurricular activities because they enjoy the social environment, the experience of teamwork, and sharing common goals. Motivation is driven by day-to-day activities that influence the environment and create meaningful social interactions (O’Neill, 1999). Further, positive feedback from parents, teachers, and peers encourages students’ self-beliefs towards learning music (MacIntyre et al., 2012).
Student attitudes influence self-efficacy beliefs and contribute to the enjoyment they feel while performing music. Kokotsaki (2017) found that students with positive attitudes towards music were excited to transition to high school music programs. Henry (2015) also examined variables like musical experiences and career plans to determine what contributes to student motivation. Many students linked sharing music together, music teachers, and family members as sources that contribute to student's positive attitudes and experience. These qualities all support student retention, giving music educators the tools and teaching strategies to develop student self-efficacy beliefs. Self-efficacy drives students to achieve a successful music performance, providing a springboard that encourages student’s desire to continue long term goals in music (Henry, 2015).

**Critique of Previous Research**

Previous research reflects the importance of developing music self-efficacy (Henry, 2015; Kokotsaki, 2017; McPherson, 2009). The research is enriched with several studies that used various methodologies to study music self-efficacy. Many used theories, such as expectance-value theory (Csikszentmihalyi, Abuhamdeh, & Nakamura, 2014) and flow theory (Csikszentmihalyi’s, 1975, 1994) and several utilized Bandura's (1994) social learning theory, to examine motivation that drives students to musical achievement.

Some researchers used qualitative research methods to study self-efficacy with surveys (Zelenak, 2010), interviews (Kokotsaki, 2017), and observations (O'Neill, 1999) to examine self-efficacy through the lens of student experiences. Each study had useful findings; however, some research exposed areas that needed more investigation. Challenges that were evident in the qualitative research included narratives that did not show data to support their claims (Fant, 1995), and others ran into broad claims that needed to be updated (Chandler et al., 1987). Overall
these studies warranted further research to understand self-efficacy and whether it has an impact on student retention. Specifically, research warrants studies that examine Bandura (1977) four sources of self-efficacy beliefs and whether or not it plays a role in retaining music students.

Quantitative and qualitative research studies were examined throughout this literature review. Many researchers used surveys or interviews to collect data measuring student motivation and retention in music education. The data gathered in these studies provided strength and evidence to research claims about how musical experiences impact student perspectives and mindsets. Many research studies used surveys and questionnaires that were based on previous research studies for reliability. For example, Royer's (2005) 20-question survey was used in Henry’s (2015) study examining honor band students. Schatt (2011) used the Practice Attribution Survey (PAS), modified by McCormick and McPherson (2003), Schmidt (2005), and Miksza (2015), to measure instrumental practice. Although data provide evidence, challenges within these studies included changes in population, demographic diversity, and cultural influences because these variables can be unique and different depending on what the study wants to examine. Quantitative research is applicable because surveys are an efficient way to allow researchers to examine a population by identifying motivational influences that affect student attitudes and behavior.

The mixed methods approach allows the researcher to use strategies to acquire information. Mixed method approaches use combinations of observations, formal/informal interviews, and questionnaires to study self-efficacy and motivation in relation to music students. Using a mixed-method approach allows quantitative data to be collected along with qualitative data with observations, field notes, and free-response questions. Mixed method approaches allow researchers to interact with students and teachers and experience the learning environment first-
The benefits of experiencing the learning environment from a student’s perspective can provide substantial support to claims regarding students’ musical experience. Interviewing students and asking for their perspective can provide deeper understanding of the impact self-efficacy has on students’ beliefs and retention in music.

In conclusion, the research presented allowed the opportunity to view multiple perspectives on student motivation and how their musical experiences impact retention in music education. Continued research regarding self-efficacy in music will reveal innovative strategies that will engage students in a positive learning environment, fostering positive musical experiences. Positive musical experiences will, therefore, nurture student confidence levels and improve self-efficacy beliefs while encouraging student’s desires to continue music education as they transition to high school.

**Summary**

Chapter 2 is relevant to this research study because it gave insight into self-efficacy in music education and opportunities to build knowledge. Music is a social activity, and students enjoy making music together, creating experiences that will foster retention in music education. Although middle school music students confront challenges and decisions as they transition to high school band, there are positive outcomes through self-efficacy in music.

This study examined self-efficacy in music education and whether or not it plays a role in middle school students’ decisions to continue their music education as they transition into high school. This knowledge can provide an understanding of influential factors that will encourage middle school students to pursue music in high school. The study explores factors such as the importance of the learning environment so that students can create positive experiences in learning and performing music. The significance of this study is to understand student self-
efficacy beliefs in music education and understand whether or not there is an association between middle school music students’ and the desire to pursue music education, specifically band, as they transition to high school. Understanding student self-efficacy beliefs and the motivating factors are essential to nourishing students’ self-efficacy beliefs (Kokotsaki, 2017).

The problem guiding this study is retaining music students and will examine questions that will add knowledge for music educators that may help retain students. The theoretical framework of self-efficacy will use Albert Bandura’s social learning theory (1977), to examine the importance of developing self-efficacy beliefs nurtured through musical experiences. The literature review investigates self-efficacy and the importance of shaping students through mastery experience and equipping students with goals so that they can establish values and a sense of purpose. Values support and create enjoyment for students, fostering student retention in music. Several methodologies were used to measure student's self-efficacy beliefs, providing resources to music educators who want to connect and support student’s self-belief. Many research studies utilized surveys, interviews, observations, free response questions, focused groups, and questionnaires to examine student self-efficacy. Although these studies are reliable and added to the knowledge base, there is a need for further research to understand the importance of self-efficacy beliefs that are associated with students’ desire to continue with music education as they transition into high school.

In conclusion, based on this review of the literature that examines self-efficacy in music, it warrants the attention of investigating the impact of music self-efficacy and whether or not it plays a role in middle school music students continuing their music education as they transition to high school. This study will produce noteworthy findings toward student retention in music education. Therefore, this literature review has provided robust and vigorous support for
pursuing this research project to provide the following solutions to the research question: What sources of self-efficacy beliefs (active mastery experience, vicarious experience, verbal/social persuasion, and physiological state) associate the most to students’ desire to continue with music education, specifically band?
Chapter 3: Methodology

Introduction

This study sought to investigate the challenge associated with retaining music students as they transition between the eighth and ninth grades. This study examined whether or not eighth-grade music students’ self-efficacy is associated with their desire to continue in band, using the theoretical framework of self-efficacy. Bandura (1986) defined self-efficacy as people’s self-beliefs regarding their capabilities and judgments and their ability to perform specific tasks. In this study, music education focused on middle school band programs. Music educators may gain knowledge that will contribute to students’ self-efficacy beliefs and desires to continue with music education, specifically in band.

Several researchers have examined self-efficacy and how student confidence in their abilities is a significant part of learning and performing music (Hendricks, 2016; McCormick & McPherson, 2003; McPherson & McCormick, 2006; Wehr-Flowers, 2006). These studies were guided by Bandura’s (1986) theory of self-efficacy and how human thoughts and actions are influenced by the interaction of cognition, behavior, and environment (Zelenak, 2015). Bandura’s (1977, 1986) theory includes four sources that contribute to developing students’ self-efficacy beliefs – mastery experiences, vicarious experiences, verbal and social persuasion, and students’ physiological states (Zelenak, 2015). This quantitative study investigates music students’ self-efficacy beliefs. Specifically, the research uses Bandura’s four sources of efficacy and whether or not there is a relationship between self-efficacy beliefs and the desire to continue in band. This study will inform music educators who want to build and support their music programs and students.
**Purpose of the Study**

The purpose of this study was to develop a better understanding of the potential relationships between music self-efficacy and student retention during the transition from middle to high school. The four sources of self-efficacy that were studied include mastery experiences, vicarious experiences, verbal and social persuasions, and students’ physiological states in relation to learning and performing music. This study examined music self-efficacy and whether or not there is a relationship between student self-efficacy beliefs and their desire to continue in band.

**Research Questions and Hypotheses**

In reviewing the literature, several studies supported self-efficacy and its positive role in music education. The following hypotheses will be examined in this study to understand why students drop out of band by exploring the following research questions:

RQ1: What, if any, relationship exists between students’ overall self-efficacy and the desire to continue in band?

H₀₁: There is no relationship between students’ overall self-efficacy and the desire to continue in band.

H₁ₐ: There is a relationship between students’ overall self-efficacy and the desire to continue in band.

RQ2: What sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) are associated with students’ desire to continue in band?
H₀2: There is no relationship between the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

H₂a: There is a relationship between each of the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

**Research Design**

This study used a quantitative correlational design to measure the relationship between eighth-grade music students and their desire to continue in band. This research design investigated whether or not there is an association between self-efficacy in music education and students’ desire to continue in band. According to Creswell (2014), independent variables are “those that (probably) cause, influence or affect outcomes” (p. 52). Creswell defined a dependent variable as “those that depend on the independent variables; they are the outcomes or results of the influence of the independent variable” (p. 52). The independent variable, self-efficacy, will include Bandura’s (1977) four sources: mastery experience, vicarious experience, verbal persuasion, and physiological state. The dependent variable is students’ desire to continue in band, consisting of the dichotomous variable (Yes/No). This study examined the potential relationship between the independent variable, self-efficacy, and the dependent variable, the desire to continue in band.

This study is closely related to Zelenak’s (2015) and Henry’s (2015) works. Zelenak and Henry used a quantitative approach to collect data on music self-efficacy. They were able to measure students’ musical experiences and measure sources that motivate students to pursue further education in music by examining how teachers, family members, and the experiences of
making music together created a positive influence on students. The survey questions measured the four sources of self-efficacy and how self-efficacy significantly relates to student retention (Zelenak, 2015).

Results confirmed that there is a positive correlation between self-efficacy and music performance (Zelenak, 2015). The scale constructed used a Likert-scale from 1–100 (1 = strongly disagree, 100 = strongly agree) because it provided a stronger internal consistency (Pajares, Hartley, & Valiante, 2001). Scales that use a response format from 0–100 are likely to result in greater discrimination versus scales that use smaller numbers that narrow response options (Pajares et al., 2001). Internally the responses were consistent “mastery experience, $\alpha = .93$; vicarious experience, $\alpha = .90$; verbal/social persuasion, $\alpha = .94$; and physiological state, $\alpha = .90$” (Zelenak, 2015, p. 6).

The scale generated data that teachers can use to evaluate strengths and weaknesses in student’s self-efficacy beliefs toward music performance (Zelenak, 2015). Zelenak stated that the scores from MPSES “were not intended to be used as measures of achievement but rather as evidence from which to identify strengths and weakness in student’s self-perceptions of self-efficacy” (p. 35). This knowledge will help teachers improve students’ self-beliefs and performance achievement by establishing a balance between instruction and students’ self-perceptions during rehearsals (Zelenak, 2015).

In contrast to Zelenak’s (2015) research, this study is different in several ways. This study only tested eighth-grade music students who had at least one year of music experience. Therefore, the target population was smaller. The small target population may be considered a drawback. However, according to Zelenak (2015), MPSES was “designed to be broad, allowing them to apply to different types of performing ensembles, different grade levels, different levels
of music experience, and different times of the year” (p. 39). Further, the flexibility of the population size can be an advantage to research studies because it can test a variety of population sizes or performing groups and measure their self-efficacy beliefs. Asking students directly about their desire to enroll in high school band modified the survey. These modifications can add to the body of knowledge of the previous studies by directly targeting middle school music students, who will matriculate to high school music programs, highlighting students’ self-efficacy strengths and weaknesses directly. Modification of this study can also expand previous studies by providing data necessary to help music programs increase enrollment. This scale was intentionally designed to be broad to produce general conclusions that can contribute to measuring sources of information that shape students’ self-efficacy beliefs.

Although MPSES provided general conclusions about students’ self-efficacy beliefs, this study also includes a qualitative component in the form of a post survey interview. The quantitative component added significance to this study by providing students the opportunity to share their self-efficacy beliefs in face-to-face, one-on-one interviews. Post survey interviews will be used to shed light on quantitative findings and research questions. This face-to-face conversation may provide a deeper understanding of students’ self-efficacy beliefs. Students volunteered to participate in the post survey interview or not.

This quantitative study had a qualitative component; however, it was not a mixed method study. Creswell (2014) stated, “qualitative data tends to be open-ended without predetermined responses while quantitative data usually includes closed-ended responses, such as found on questionnaires or psychological instruments” (p. 14). During this study, the small qualitative component developed into a larger component than anticipated.
This study unintentionally developed an explanatory sequential mixed method in which the researcher initially conducted quantitative research, analyzed the data, and used qualitative data to help explain the results in more detail (Creswell, 2014). However, this mixed method presented the challenge of further exploring the quantitative results because of the unequal sample size for each phase of the study (Creswell, 2014). This is true for this study because the qualitative data, in the form of post survey interviews, presented the challenge of connecting with students after they have matriculated to ninth grade; therefore, there were fewer students to participate in the qualitative research.

Also, Creswell (2014) stated, “the choice of methods turn on whether the intent is to specify the type of information to be collected in advance of the study or to allow it to emerge from the participants in the project” (p. 17). The researcher’s intent was to use a quantitative research approach and state the hypotheses to be examined with data collection that would provide statistically meaningful data (Mills & Gay, 2016). As this study evolved, the qualitative data took on a larger role. However, it will remain a quantitative study with a qualitative component.

**Target Population, Sample Method, Power Analysis and Related Procedures**

**Target population.** According to Mills and Gay (2016), the target population is the population from which the researcher would ideally like to gather data and draw study conclusions. The target population in this study was eighth-grade band students, attending three local middle schools located in a small town in California, who had at least one year of band experience. These three middle schools belong to different elementary school districts but feed directly into the three local high schools located in the same town. It is important to clarify that elementary school districts are not associated with or aligned with the high school district. This
structure or alignment means the instrumental music curriculum is not discussed between the middle school and high school band directors.

Between the three middle schools, there were 113 eighth-grade students enrolled in band. The middle schools are designated as Title One, and the demographics are similar. The demographic breakdown of the three middle schools includes both seventh and eighth graders, while only eighth-grade music students with one-year experience were included in this study. This information provided an overall view of the student population that is associated with the study.

Middle School A had an approximate enrollment of 600 seventh- and eighth-grade students and had 32 eighth-grade students enrolled in band (California Department of Education, 2019). Middle School B had an approximate enrollment of 650 seventh- and eighth-grade students and had 44 eighth-grade students enrolled in band. Middle School C is a charter school and had an approximate enrollment of 400 seventh- and eighth-grade students and had 37 eighth-grade students enrolled in band (California Department of Education, 2019).

The target population was 113 eighth-grade students enrolled in band, with at least one year of experience, although not all potential participants partook in the study. Districts, principals, and music teachers agreed to participate in the study. Parent consent forms and student assent forms were turned in for the student to be eligible to participate in the study. Parent consent forms addressed disclosures that allowed parents to learn about the study and provided contact information if they required it. Student assent forms confirmed that students were willing to participate in the study, granting permission to use the data generated to help answer the research questions.
**Sampling method.** The sampling method for this study incorporated a convenience sampling procedure. Convenience sampling is chosen based on the convenience of participant availability (Creswell, 2014). The researcher’s intention was not to generalize findings beyond these specific schools. Even though the sample was isolated, the study findings may be used to inform other band directors in retaining music students. In this study, the middle school music teachers provided a direct list of names of the eighth graders who could potentially participate in the survey. Knowing that there are only 113 students in the target population, this study did not use cluster or random sampling because the population number was small. Rather, this study used nonrandom convenience sampling and used the population of eighth-grade music students who consented to participate in the study.

**Power analysis.** Using a G-Power analysis tool generated the appropriate sample size that will provide the most power to generalize to the population of this study (Faul, Erdfelder, Buchner, & Lang, 2013). The G-Power analysis tool will be used to estimate how likely it is to obtain accurate results of the population-based on the sample size. A priori power analysis determined which alpha and beta levels could be accepted, giving the researcher a good idea of what size to detect (Creswell, 2014). Therefore, using the G-Power analysis to compute A priori with two tails. In order to be generalized, the sample size had to be 84 using a 0.80 power and 0.05 error with a medium effect size of 0.3. For this study, the sample size was small. Therefore, the researcher used a large effect size of 0.5. The sample size will need to be at least 26, with 0.80 power, and a 0.05 error (see Appendix F).

Since this study did not use random sampling, instead it used a convenience sample, which may produce a sampling error. The students surveyed were band students who may have produced sampling bias. However, the intention behind the survey was to understand whether or
not self-efficacy plays a role in music retention. Mills and Gay (2016) defined sampling bias as errors in the data created by the researcher when conducting systematic sampling. Since this study consisted of nonrandom sampling, this technique “does not permit the researcher to specify the probability or chance, that each member of the population has of being selected for the sample” (Mills & Gay, 2016, p. 166). The three schools were a convenience sample of the larger population of interest of all eighth-grade students nationally. The advantage of this sampling method was that the researcher was familiar with the group and was using specific criteria to guide the investigation (Mills & Gay, 2016).

The anticipated size of the population was 113 participants. The anticipation that all students would participate was unlikely; however, the target response rate of 50% was expected. Baruch and Holtom’s (2008) work suggested that studies that use response rates will typically collect data from 52.7% of the population. The use of incentives does not improve response rates (Baruch & Holtom, 2008). The target response rate using a population of 113 students would be 57 students.

**Correlation research.** Correlation research was used in this study. Correlational research is used to determine what degree of relationship exists between two or more quantifiable variables (Mills & Gay, 2016). According to Mills and Gay (2016), “the degree to which two variables are related is expressed as a correlation coefficient, which is a number between +1.00 amid -1.00” (p. 29). Correlation coefficients approaching +1.00 are considered positive correlations and numbers that are near -1.00 are considered negative correlations. It is important to note that correlation among variables does not mean there is a direct cause and effect, but rather the correlation permits a prediction.
**Instrumentation.** The instrumentation used in this study was MPSES designed by Zelenak (2010) to measure Bandura’s (1977, 1986) the four sources of self-efficacy. This research surveyed eighth-grade music students before they transitioned into secondary education. MPSES is a valid and reliable instrument for assessing self-efficacy in music education (McPherson & McCormick, 2006; Zelenak, 2010). MPSES was used due to its appropriateness in measuring self-efficacy in music education. The survey instrument helped shed light on why some music students’ matriculate in music while others do not. In addition, a qualitative component in the form of student interviews was added to dig deeper into the MPSES findings.

According to Zelenak (2015), Bandura’s (1986) social cognitive theory was used as the framework for the self-efficacy scale. The MSEPS was designed by Zelenak (2010) to examine music performance self-efficacy in a secondary music classroom setting to understand student needs in the classroom better. Researchers in music education such as Craske and Craig (1984), Hendricks (2016), McCormick and McPherson (2003), and McPherson and McCormick (2000, 2006) have used this scale to measure self-efficacy in music (Zelenak, 2015). Researchers such as Aydin and Uzuntiryaki (2009), Lent, Lopez, Brown, and Gore (1996), Usher and Pajares (2006) Pajares (2007) have used the MPSES questionnaire in other content areas and found it to produce valid and reliable results (as cited Zelenak, 2015).

The four sources of self-efficacy that were measured included mastery experiences, vicarious experiences, verbal/social persuasions, and physiological state among middle school music students. The survey consisted of subjective questions to test Bandura’s (1977, 1986) four sources of self-efficacy directly by using multiple questions in the four source categories and using different questions to measure the same subjective state. Reaching maximum validity in this study required each dimension of the independent variable of self-efficacy to be identified by
asking the best questions that measured the construct of self-efficacy (Fowler, 2014). Utilizing the best questions that target self-efficacy in music education directly reduced measuring errors and improved the survey results (Fowler, 2014).

Questions in this survey were designed to address student self-efficacy beliefs by rating their responses to the survey questions using a Likert scale of 0-100. Examples of questions include:

- Have I had positive experiences performing music in the past?
- Have I improved my music performance skills by watching professional musicians who are similar to me in some way?
- Do I perform well? Do my friends think I perform well?
- Does performing with my instrument make me feel good?

One question that was added to modify the MPSES survey instrument asked students directly about their desire to continue in music education in the ninth grade. The questionnaire was administered to the eighth graders who returned the parental consent and student assent forms. This process was relatively inexpensive; however, challenges included the parents’ and students’ inability to turn in the consent forms by the suggested deadline.

Validity

Fowler (2014) suggested there are three steps to improve validity in subjective measures: (a) the questions need to be as reliable as possible, (b) have more defined question categories so that there is variety among the respondents that can be measured, and (c) have multiple questions stated in different forms that measure the same subjective state and construct a scale to analyze the answers. The MPSES questionnaire is valid because the subjective questions test Bandura’s (1977, 1986) four sources of self-efficacy directly by using multiple questions in the four
categories and by using different questions to measure the same subjective state. For example, there are seven questions to measure mastery experience, five questions to measure vicarious experience, six questions to measure verbal and social persuasion, and five questions to measure physiological state.

**Reliability**

These questions tested consistency in what was measured to provide reliability. Mills and Gay (2016) stated:

The more reliable a test is, the more confidence we can have that the scores obtained for them test are essentially the same scores that would be obtained if the test were re-administered to the same test takers at another time or by a different person. (p. 190)

Utilizing the best questions also reduced measuring errors and improved survey results (Fowler, 2014). The primary goal of this study was to generate knowledge that shed light on the relationship between music self-efficacy and student retention in music education, specifically band. This association brought a better understanding of the educational practices for music educators.

**Modification to the survey.** The survey was altered slightly by eliminating two questions regarding grade level and whether students were enrolled in a music class. A modification was necessary because the sample population was eighth-grade students who were enrolled in music class for at least one year. One yes/no question was added to ask the students about their desire to continue in band. Another question was added asking students if they would like to participate in a post survey interview. Students were also asked to identify their race and gender.
Post Survey interview. Post survey interviews with students took place to gain a deeper understanding of students’ self-efficacy beliefs. Students, when filling out the MPSES survey, chose volunteer to participate in the post survey interview or not. Interviews took place in a focus group setting located in the cafeteria during non-serving hours after survey results had been analyzed. Separate focus groups were assembled at each school. The researcher scheduled time convenient for the middle school band directors at each school to conduct the student interviews. Post survey interviews helped understand survey responses and provided a powerful dynamic between the researcher and student that was being interviewed (Saldaña, 2011). The students’ focus groups provided a deeper understanding of what the researcher was seeking, allowing further clarification to whether there is a relationship between self-efficacy and students desire to continue in band. Saldaña (2011) suggested that the researcher who is interviewing the participants create an atmosphere that fosters a working relationship providing a sense of security and comfort. Further, the researcher needs to speak to the participants with respect and consider them as experts in what knowledge they want to share (Saldaña, 2011). Student interviews directly addressed their desire or lack of desire to continue in band. Further, these interviews provided greater insight into why students answered the survey questions the way they did.

The intention was to collect qualitative data through post survey interviews in the form of focus groups. However, after conducting the post survey focus group interviews, it was determined that not enough rich, thick data was collected. Therefore, recollection of data was needed. The researcher recollected data in the form of face-to-face, one-on-one interviews. The researcher requested a continuance from IRB. In order to request a continuance, the researcher had to ensure all necessary documents for the interview protocol were approved and the
Modification After Approval Form was completed. An updated Parental Consent Form and Student Assent form were also submitted to IRB for approval. The interview questions were comprehensive based on the questions that were asked in the MPSES to add more depth to the study.

Data Collection and Management

Data collection. Using Zelenak’s (2010) MPSES, data were collected. This study gathered data from three middle school music programs located on the U.S. west coast only. The district office granted permission to administrate the survey to eighth-grade music students. The same process took place to seek permission from the principals, middle school music teachers, parents, and students. The consent forms were given to the middle school music teachers to pass out to the parents and students and were collected by a suggested deadline given by the researcher. The researcher administered the survey once all consent forms were turned in.

To administer the survey, the researcher arranged a date to visit the middle school band class to administer the survey. This survey took 30 minutes to complete and took place at all three middle schools. Students took the survey and volunteered to participate in the post survey interview or not. The students who wanted to participate in the post survey interview were placed into a focus group and then interviewed by the researcher. The step by step protocol of what the participants were asked to do includes:

1. Sign a parent consent form and sign a student assent form.
2. Fill out the survey: Appendix A.
3. Answer the question: Do you desire to enroll in band in the ninth grade?
4. Answer the question: Do you wish to participate in a post survey interview?
5. Students who volunteer for the post survey interview were interviewed in a focus group setting.

**Operationalization of variables.** The independent variable defined in this study is self-efficacy. This study focused on Bandura’s (1977) four dimensions of self-efficacy—mastery experience, vicarious experience, verbal/social persuasion, and psychological state—of eighth-grade music students. Mastery experience focused on student experience while performing music and how students felt about their experiences learning and performing the music (Bandura, 1994). Vicarious experience focused on how students felt when they watched others perform or compared their musical skills to others to improve their music performance (Bandura, 1994). Verbal and social performance focused on student beliefs of how they felt about what others, such as peers, family, or music teachers, thought of their musical skill (Bandura, 1994). The final dimension was the physiological state of music students, which focused on the enjoyment of their music experience and how they felt when they were performing music (Bandura, 1994). The MPSES questions were specifically designed to measure the four sources of self-efficacy.

The dependent variable defined in this study was the desire to continue in band. This study researched eighth-grade music students and how their music efficacy may shape their desire to continue in music education. Specifically, this investigation measured students’ desires to continue with music by exploring questions that asked students about their music experiences. For example, how they felt when they performed music, how they felt about what others thought about their performance, and how performing music made them feel. The survey examined the relationship between self-efficacy and the desire to continue in band.
Data Analysis Procedures

The results of this study come from the data generated by students’ answers. A point-biserial correlation was used to test the hypotheses and answer the research question making inferences about the population based on the sample. Mills and Gay (2016) defined inferential statistics as an analysis technique used to determine “how likely it is that results obtained from the sample or samples are the same results that would have been obtained from the entire population” (p. 523). The purpose of inferential statistics is to let researchers know if they can generalize a population based on the information given by the limited sample size.

The task that followed included interpreting the data and investigating the correlation of the various variables. Referring back to the related literature can strengthen the findings, drawing a connection to the existing knowledge. Acknowledging other researchers who have contributed to related research helps solidify the need for the study (Mills & Gay, 2016). Focus on the theoretical framework of Bandura's four sources of self-efficacy helped link the research findings beyond standard descriptive work, providing a rationale and meaning to the data that were collected (Mills & Gay, 2016).

Incorporating the students’ post survey interviews added a deeper understanding of middle school student’s self-efficacy beliefs and their desire to continue in band. Students had the option to volunteer in a post survey interview. All students who wished to participate in the post survey were interviewed in a focus group setting. The focus groups consisted of eight to 10 students and each group had 30 minutes to answer the researcher’s questions. The researcher took notes as the students discussed the questions being asked, no audio or video recordings took place. Post–survey interview questions included:

1. How would you describe your experience in middle school band?
2. What are some reasons why you have the desire to participate or not participate in band?

The detailed interview notes were transcribed into a Microsoft Word document shortly after the focus groups were completed to code repetitive patterns and identify common themes. These patterns and themes helped elucidate quantitative findings and provide a deeper understanding of self-efficacy in the context of students’ desire to continue in band. The researcher compared and contrasted the findings from the survey and post survey interviews to provide a narrative piece to help understand quantitative findings. However, focus group interviews did not provide rich data.

The recollection of data was needed to add a deeper understanding of middle school student’s self-efficacy beliefs and their desire to continue in band. The researcher was able to contact 34 students for a second face-to-face, one-on-one, post survey interview. The other students were not able to be contacted. Of those 34 students whom the researcher was able to make contact, 13 students agreed to participate in a face-to-face, one-on-one interview. These students completed a new student assent form and submitted a new parental consent form before participating.

Interviews took place during lunch or after school. Each interview took 15 to 20 minutes to conduct, depending on how extensively the students answered the questions. The interview questions were comprehensive based on the questions that were asked in the MPSES to add more depth to the study. Each face-to-face, one-on-one interview was recorded and transcribed using qualitative data analysis.

**Internal and external validity.** Mills and Gay (2016) referred to internal validity as the “degree to observed differences on the dependent variable are a direct result of manipulation of
the independent variable, not some other variable” (p. 289). Internal validity focuses on the threats that shape the outcomes of the study but are not caused by the independent variable. Possible threats to internal validity include “history, maturation, testing, instrumentation, statistical regression, differential selection of participants, morality, and selection-maturation interaction” (Mills & Gay, 2016, p. 290). Internal validity in this study was strong. MPSES is a reliable test that consists of subjective questions directly measuring self-efficacy.

According to Mills and Gay (2016), external validity “is the degree to which study results are generalizable, or applicable to groups and environments outside the experimental setting” (p. 289). External validity shapes the examination to focus on the threats that prohibit the results of the study that could be considered generalized (Mills & Gay, 2016). Threats affecting external validity can limit the generalization of other population results. These threats affect “setting, conditions, variables, and contexts to which results can be generalized” (Mills & Gay, 2016, p. 293). The setting directly tested eighth-grade music students who had one year of band experience to limit external threats

The scale used was specifically designed to measure self-efficacy in music performance, thus contributing to the strength of the psychometric properties. According to Creswell (2014), validity in quantitative research is determined by drawing meaning and reasoning from score results from past research studies. Scores serve a meaningful purpose because they provide knowledge of whether the instrument is appropriate for certain survey research or not (Creswell, 2014). In addition, scores from past research studies also provided reliability with consistency and test-retest correlations (Creswell, 2014).

**Expected findings.** Students’ proclivity to quit band inspired this study. Correlation research determined whether or not there is a relationship between student self-efficacy and their
desire to continue in band. Findings included there was not a significant relationship between students’ self-efficacy beliefs and their desire to continue in band. The study showed that students’ confidence levels shape students’ desires. Lack of skills needed to perform advanced music might discourage student desires therefore, quitting band is highly considered. Peer pressure, peer acceptance, and other social pressure may play an essential role in influencing student beliefs. Greater attention to student self-efficacy beliefs will serve to be evident as the technical aspects of making music can distract music educators.

**Ethical Considerations, Limitations, and Delimitations**

**Ethical considerations.** This quantitative study posed no ethical issues. Although the study used minors, consent forms were used to provide transparency to parents, students, and teachers. The researcher was mindful of the code of ethics and did not violate professional conduct. Also, the researcher obtained all necessary permissions before researching by gaining approvals to be on campus and interact with participants (Creswell, 2014). There was no risk or harm to the students, and proper consent forms were collected from all students who participated in the study. The researcher demonstrated limited bias. The researcher is confident with the knowledge of music. However, it did not limit the ability to be open-minded and search for effective and innovative ways to keep music students involved in music. Data was stored properly in a locked filing cabinet and will be destroyed three years after publication of this study.

The sample population tested eighth-grade music students with one year of band experience. Autonomy is demonstrated in middle school music programs, creating an environment that nourishes music education. Student privacy was observed and respected; no names of students were released in the study. Middle school music teachers were respected, and
the study did not address or comment on instructional practices, thus respecting the teacher’s rights to confidentiality (Mills & Gay, 2016).

**Limitation of research design.** Limitations in a research study can be defined as the acknowledgment that there are negative effects that may be produced by the results of the study that are beyond the researcher’s control (Mills & Gay, 2016). The sample population for this study was small and convenient. Sampling bias was possible since not everyone participated. The disadvantage of using purposive sampling includes a limitation in sample selection and generalized results (Mills & Gay, 2016). The researcher reduced this weakness by understanding the population and including all eighth-grade music students who had at least one year of band experience. The sample size was determined by the availability of middle schools and the researcher’s ability to conduct meaningful research. Language barriers between Hispanic families can be a limitation because some families are Spanish speaking only. This study provided a descriptive analysis and a point-biserial correlation design to analyze the MPSES data.

**Delimitation of research design.** A delimitation in this study was the small sample size that included three middle schools. As the population was small, the sampling method was limited, eliminating sampling procedures such as random and cluster sampling. The delimitation of only focusing on self-efficacy may mean other important predicting factors were ignored. In the initial qualitative data collection, the researcher was not going to confirm if eighth-grade music students are retained in a high school music program, rather the researcher asked students for a prediction. What students said and action follow-through may not actually happen. In the recollection of qualitative data, the researcher was able to confirm students’ enrollment in band.
Chapter 3 Summary

This chapter defined the methodology used in this study. It defined the purpose and the research questions that were answered by using MPSES post survey interviews and the recollection of qualitative data. This study examined the relationship between self-efficacy in music education and students’ desires to continue in band. This quantitative research design surveyed eighth-grade music students with at least one year of band experience and their desire to continue or not continue in band. An extensive qualitative component consisting of a face-to-face, one-on-one post survey interview added meaningful layers to gain a deeper understanding of music students’ self-efficacy beliefs. This study investigated Bandura’s (1977) four sources of self-efficacy and how they impact students’ self-belief in their abilities to perform music. The results of this study may help music educators understand student self-efficacy beliefs that contribute to student retention in music education adding to their body of knowledge.
Chapter 4: Data Analysis and Results

Introduction

This study examined the overarching problem of retaining music students between eighth and ninth grade, specifically in band programs. Although there is no national data on this topic, Gibson (2016) explored the problem and found that almost half of eighth-grade students quit band as they transitioned to high school. The purpose of this study was to develop a better understanding of music self-efficacy and middle school band students' desire to continue in band as they transition from middle to high school. Specifically, this quantitative study sought to understand whether there was a relationship between self-efficacy and students' desire to participate in band. This study used Zelenak’s (2010) MPSES, a survey based on Bandura’s (1977) four sources of self-efficacy to measure students’ self-beliefs in music performance. Because the questions specifically focused on past musical experiences, a minimum of one year of music experience was necessary to evaluate students’ self-efficacy beliefs. Therefore, this study focused on eighth-grade middle school music students who had completed at least one year of band experience before completing this survey. The following research questions guided this study:

RQ1: What, if any, relationship exists between students’ overall self-efficacy and the desire to continue in band?

H10: There is no relationship between students’ overall self-efficacy and the desire to continue in band.

H1a: There is a relationship between students’ overall self-efficacy and the desire to continue in band.
RQ2: What sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) are associated with students’ desire to continue in band?

H02: There is no relationship between the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

H2a: There is a relationship between each of the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

This chapter provides a description of the target population, participant sample, a summary of the results, detailed quantitative data analysis, and quantitative data results. Further, qualitative data collection and analysis, qualitative results, and discussions of the connection between qualitative and quantitative findings, and limitations are discussed. This chapter concludes with a summary presenting the study results that contribute to the body of knowledge on this topic.

**Target Population**

The students were drawn from a larger population of three local middle schools in a small town in California. The researcher sought permission to research in three middle schools. These middle schools feed directly into three local high schools. Although each school varies, the students had similar music education experiences that include school concerts and state music festivals.

According to the School Accountability Report Card (SARC), students’ socioeconomic backgrounds are also similar at all three schools from which the researcher recruited study
participants (California Department of Education, 2019). For example, Middle School A had an approximate enrollment of 600 students and 88% of the student population is socioeconomically disadvantaged. Middle School B had an approximate enrollment of 650 students and 74% of the student population is socioeconomically disadvantaged. Middle School C had an approximate enrollment of 400 and 44% of the student population is socioeconomically disadvantaged.

Additional student demographics and enrollment by grade at each school are presented in Table 1. Student demographic data includes the percent of students disaggregated by students’ race, English proficiency status, instructional setting, and students who do not live with their parents. According to Sweeting and Hunt (2014), who conducted a study on adolescent socio-economic and school-based social status, socioeconomically disadvantaged can be defined and associated with social status, health, and well-being. For this study, according to the district superintendent, socioeconomically disadvantaged was measured by the number of students who received free and reduced-price meals.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Middle School A</th>
<th>Middle School B</th>
<th>Middle School C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 6</td>
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</tr>
<tr>
<td>Grade 7</td>
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<td>310</td>
<td>188</td>
</tr>
<tr>
<td>Grade 8</td>
<td>276</td>
<td>307</td>
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</tr>
<tr>
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<td>626</td>
<td>540</td>
</tr>
<tr>
<td>Ethnicity</td>
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<td></td>
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<td>Black or African American</td>
<td>6.0%</td>
<td>3.9%</td>
<td>4.0%</td>
</tr>
<tr>
<td>American Indian or Alaska</td>
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<td>0.7%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Native</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>0.6%</td>
<td>1.2%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Filipino</td>
<td>0.6%</td>
<td>0.7%</td>
<td>3.66%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>78.0%</td>
<td>73.0%</td>
<td>46.8%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.3%</td>
<td>0.0%</td>
<td>1.00%</td>
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Table 1 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Middle School A</th>
<th>Middle School B</th>
<th>Middle School C</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>12.0%</td>
<td>16.8%</td>
<td>44.2%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>2.5%</td>
<td>3.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Students’ Status</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Socioeconomically</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Disadvantaged</td>
<td>88.5%</td>
<td>74.0%</td>
<td>44.3%</td>
</tr>
<tr>
<td>English Learners</td>
<td>16.0%</td>
<td>12.2%</td>
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<tr>
<td>Students with Disabilities</td>
<td>13.0%</td>
<td>10.5%</td>
<td>9.66%</td>
</tr>
<tr>
<td>Foster Youth</td>
<td>1.5%</td>
<td>0.5%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

**Description of the Sample Demographics**

The sample used in this study consisted of eighth-grade middle school students who were enrolled in band and who had completed at least one year of band experience before completing the MPSES survey. In addition, the small town has a large population of Hispanic families who consist of migrant workers. Further, the town is a dairy community that is rich in agriculture.

**Student recruitment.** The researcher recruited the students by visiting each school site and introducing the study and its purpose. Parent consent forms were printed in English and Spanish on bright colored paper with important deadlines highlighted to maximize student recruitment (see Appendices A and B). Further, student assent forms were written at grade level to help students clearly understand the study (see Appendices C and D).

The original target population included 113 eighth-grade music students. Seventy students submitted both consent forms, and of those 70, two declined to participate in the study leaving 68 participants to complete the survey. Several measures were taken to encourage participation among the remaining 41 students who did not return their forms. There was no initial incentive for students to return their forms, but later the Band Director of Middle School A offered to enter students’ names in a drawing for a food snack that is known to be a favorite...
among middle school students. Middle School B’s Band Director offered, “practice time credit” in exchange for participating in the study. Practice time credit is credit generally given to the students when they practice their instruments outside the school day. Middle School C’s Band Director did not offer an incentive for the students to return their forms. Further, the researcher made multiple visits to the middle schools to encourage the students to return their forms and communicated through email with middle school band directors to remind parents to return their consent forms through email communication. The researcher also administered a second round of surveys in an attempt to increase the participant sample size and response rate. The final survey sample size was 68 students, representing a response rate of 60.2%.

Sample participant demographics. The students who volunteered to participate in this study were between the ages of 13 and 14 and provided their ethnicity and gender. The participants’ demographic data consisted of two Asian (2.9%), two Black (2.9%), 31 Hispanic (45.6%), one American Indian (1.5%), 15 Mixed Background (22.1%), and 17 Caucasian (25.0%) students. The results showed a high percentage of Hispanic students participated in the study compared with other ethnic groups (see Table 2).

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Asian</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>African American</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>31</td>
<td>45.6</td>
</tr>
<tr>
<td>American Indian</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>Mixed Background</td>
<td>15</td>
<td>22.1</td>
</tr>
<tr>
<td>Caucasian</td>
<td>17</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The participants’ gender consisted of 51 females (75.0%) and 17 males (25.0%). The results showed a high percentage of females participated in the study. Although gender and race
were not focal variables in this investigation, the majority of students who were surveyed were female (see Table 3).

Table 3

*Participants’ Gender*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>51</td>
<td>75.0</td>
</tr>
<tr>
<td>Male</td>
<td>17</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Summary of Quantitative Results**

**Research Question 1.** Research Question 1 was examined for overall music self-efficacy and students desire to continue in band. The first research question and associated hypotheses were:

RQ1: What, if any, relationship exists between students’ overall self-efficacy and the desire to continue in band?

H$_{10}$: There is no relationship between students’ overall self-efficacy and the desire to continue in band.

H$_{1a}$: There is a relationship between students’ overall self-efficacy and the desire to continue in band.

A Point-Biserial correlation was computed to examine the relationship between overall self-efficacy and students’ desire to participate in band. The correlation indicated a negative relationship ($r_{pb} = -.061$); although it was not statically significant ($p < .05$). Therefore, the researcher failed to reject the null hypothesis that there is not a relationship between overall self-efficacy and the desire to continue in band.
Research Question 2. Research Question 2 examined the four sources of self-efficacy beliefs and if they were associated with students’ desire to participate in band. The second research question and associated hypotheses were:

RQ2: What sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) are associated with students’ desire to continue in band?

H02: There is no relationship between of the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

H2a: There is a relationship between each of the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

A Point-Biserial correlation was computed to examine the relationships between the four sources of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to participate in band. Findings indicated a negative correlation (p < .05) existed between students’ desire to participate in ninth grade band and music self-efficacy, mastery experience ($r_{pb} = -.146$), vicarious experience ($r_{pb} = -.019$), verbal/social persuasion ($r_{pb} = -.193$) and physiological state ($r_{pb} = -.090$). Therefore, the researcher failed to reject the null hypothesis that there is a relationship between music self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band. Detailed results are presented later in the chapter.
Detailed Analysis

Preparing the data for analysis. Data were collected using the MPSES survey tool, and every survey item was entered into an Excel spreadsheet, including participants’ demographics. The spreadsheet was imported into the Statistical Package for the Social Sciences (SPSS) program to conduct the necessary preliminary statistical analysis. The researcher examined the data and no missing or incomplete data were found. A mean score for each subscale was obtained by adding the items in each subscale and then dividing by the number of questions in the subscale. Mastery experience had seven questions; vicarious experiences had five questions; verbal/social persuasion had six questions, and physiological state had five questions. The overall self-efficacy total score was obtained by adding the total for all four subscales (23 questions). The researcher computed descriptive statistics with the data.

Descriptive information for the variables of interest. Cronbach’s alphas were computed to examine the reliability of the MPSES. Each subscale was examined for reliability (mastery experience, vicarious experience, verbal/social persuasion, and physiological state). The Cronbach’s alphas were sufficiently reliable among the participants. The reliability coefficient ranged from 0 to 1 (Fraenkel, Wallen, & Hyun, 2012). The reliability coefficient is based on the inter-item correlation, which provides acceptable reliability the closer the scores are to 1.0. Based on George and Mallery’s (2003) reliability guidelines, $\alpha > 0.9$ is excellent, $\alpha > 0.8$ is good, $\alpha > 0.7$ is acceptable, $\alpha < 0.6$ is questionable, and $\alpha < 0.5$ is poor. Reliability analysis allows the researcher to examine properties of a specific measurement scale and determine if the items composed of that scale produce an acceptable reliability. The highest reliability estimate occurred for the verbal/social persuasion subscale ($\alpha = 0.803$, considered good), and the lowest reliably score was vicarious experience ($\alpha = 0.604$, considered questionable). No subscale
occurred in the highest reliability range ($\alpha > 0.9$, excellent). See Table 4 for the summary of reliability for the predictor variables.

Table 4

*Reliability of Music Performance Self-Efficacy*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha ($\alpha$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Efficacy</td>
<td>23</td>
<td>0.774</td>
</tr>
<tr>
<td>Mastery Experience</td>
<td>7</td>
<td>0.619</td>
</tr>
<tr>
<td>Vicarious Experience</td>
<td>5</td>
<td>0.604</td>
</tr>
<tr>
<td>Verbal/Social</td>
<td>6</td>
<td>0.803</td>
</tr>
<tr>
<td>Persuasion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiological State</td>
<td>5</td>
<td>0.653</td>
</tr>
</tbody>
</table>

The researcher examined the minimum, maximum, mean, standard deviation, skewness, and kurtosis for self-efficacy. The mean score for overall self-efficacy was 73.52. The standard deviation was 9.84; overall self-efficacy had a minimum score of 46.63 and a maximum score of 93.50.

The standard deviation for all subscales was computed. Standard deviation represents the spread of a distribution from the mean (Barde & Barde, 2012). The mastery experience subscale average score was 89.13, and the standard deviation was 11.32. The lowest observed score was 45.71, and the highest observed score was 100. Skewness and kurtosis were examined on each of the variables. If $S_k \leq -1$ and $S_k \geq 1$, then the distribution shows high skewness. If, $S_k \geq -1$ and $S_k \leq -0.5$, then the distribution displays moderate skewness. If, $S_k \leq -0.5$ and $S_k \geq 0.5$, then the distribution is normally symmetric (Fraenkel, et al., 2012). Mastery experience was moderately, negatively skewed ($S_k = 0.605$). This suggested that most participants strongly agreed they had experienced components of mastery experience that affected their self-efficacy beliefs. The components of mastery experience include having a positive experience performing
music, overcoming challenges to work through hard music, and using practice routines to prepare for musical performances.

The vicarious experience subscale average score was 62.68. The standard deviation was 19.35 with the lowest observed score being 2.00 and the highest observed score was 100. Vicarious experience was normally symmetric (\(S_k = -0.140\)), which suggested that most participants’ scores were equally spread among the distribution. The subscale of vicarious experience includes improving music performance by watching others perform well.

For the verbal/social persuasion subscale, the average score was 75.64, and the standard deviation was 19.03 with the lowest observed score being 16.67 and the highest observed score was 100. Verbal/social persuasion was highly negatively skewed (\(S_k = -1.127\)). This suggested that most participants highly agreed they had experienced components of verbal/social persuasion that affected their self-efficacy beliefs. Verbal/social persuasion includes friends, family, and music teachers encouraging through positive feedback on practice efforts and musical performances.

For the physiological state subscale, the average score was 79.30, and the standard deviation was 15.33 with the lowest observed score being 18.00, and the highest observed score was 100. Physiological state was highly negatively skewed (\(S_k = -1.166\)) which suggested that most participants highly agreed they had experienced the components of physiological state that affected their self-efficacy beliefs. Physiological state suggests participants feel good performing music and that they had positive memories of most past musical performances. Table 5 displays the descriptive statistics for overall self-efficacy and the four self-efficacy subscales.
Table 5

Descriptive Statistics for Overall Self-Efficacy and Self-Efficacy Subscales

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Efficacy Mastery</td>
<td>46.63</td>
<td>93.50</td>
<td>73.53</td>
<td>9.84</td>
<td>-0.339</td>
<td>0.262</td>
</tr>
<tr>
<td>Experience</td>
<td>45.71</td>
<td>100.00</td>
<td>81.93</td>
<td>11.32</td>
<td>-0.605</td>
<td>0.348</td>
</tr>
<tr>
<td>Vicarious Experience</td>
<td>2.00</td>
<td>100.00</td>
<td>62.68</td>
<td>19.35</td>
<td>-0.140</td>
<td>0.181</td>
</tr>
<tr>
<td>Verbal/Social Persuasion</td>
<td>16.67</td>
<td>100.00</td>
<td>75.64</td>
<td>19.03</td>
<td>-1.127</td>
<td>1.203</td>
</tr>
<tr>
<td>Physiological State</td>
<td>18.00</td>
<td>10.000</td>
<td>79.30</td>
<td>15.33</td>
<td>-1.166</td>
<td>2.468</td>
</tr>
</tbody>
</table>

Note. N = 68

**Level of measurement.** Point-Biserial correlation coefficients were used in this study and relied on several assumptions. The first assumption included that one of the two variables should be measured on a continuous scale (Lund & Lund, 2018). The researcher assessed the scale of measurement assumption for a Point-Biserial correlation on the two variables – self-efficacy and students desire to continue band. Variable 1, self-efficacy, consisted of the combined composite scores of the four sources; mastery experience, vicarious experience, verbal/social persuasion, and physiological state, as measured by the MPSES (Zelenak, 2010). The self-efficacy scale was measured on a continuous, ratio-level scale and results ranged from 1 to 100. Variable 2, students desire to participate in band, consisted of the dichotomous variable (Yes/No) and it was dummy coded as 1 = yes to continue band and 0 = no, not to continue band. Therefore, assumption 1 was met in order to compute a Point-Biserial Correlation.

**Paired variables.** The second assumption associated with computing the Point-Biserial Correlation was that one of the variables should be dichotomous (Lund & Lund, 2018). The participants’ data consisted of paired variables. The overall scores of music self-efficacy
consisted of one composite score and four subscales (mastery experience, vicarious experience, verbal/social persuasion, and physiological state.) Each independent variable (overall self-efficacy and self-efficacy subscales) was paired with a dependent variable (dichotomous variable of yes or no desire to continue in band).

**Outliers.** The third assumption associated with computing the Point-Biserial Correlation included that there should be no outliers (Lund & Lund, 2018). The data were screened for univariate outliers by transforming raw scores to z-scores and comparing z-scores to a critical value of +/- 3.29 (Tabachnick & Fidell, 2007). Z-scores that exceeded this critical value were more than three standard deviations away from the mean and thus represented outliers (Tabachnick & Fidell, 2007). The distributions were evaluated and no cases with univariate outliers were found (see Table 6).

Table 6

<table>
<thead>
<tr>
<th>Variables</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>z-score: Self-Efficacy</td>
<td>-2.732</td>
<td>2.028</td>
</tr>
<tr>
<td>z-score: Mastery Experience</td>
<td>1.594</td>
<td></td>
</tr>
<tr>
<td>z-score: Vicarious Experience</td>
<td>-1.585</td>
<td>1.928</td>
</tr>
<tr>
<td>z-score: Verbal/Social Persuasion</td>
<td>-3.098</td>
<td>1.279</td>
</tr>
<tr>
<td>z-score: Physiological State</td>
<td>1.349</td>
<td></td>
</tr>
</tbody>
</table>

**Homogeneity of variance.** A test of homogeneity of variance was conducted. Homogeneity of variance examines the sample data from the various treatment condition which must come from the population with equal variance (Hatcher, 2013). However, if the condition is met, the researcher can conclude that the variance is equal. Individuals who did not have the desire to continue in band showed greater variability on each component of overall self-efficacy.
than those who had the desire to continue band. Table 7 shows the variance in overall self-efficacy and each of the four subscales among individuals with the desire to continue in band and those who did not have the desire to continue in band.

Table 7

*Population Variance*

<table>
<thead>
<tr>
<th>Music Self-efficacy Dimension</th>
<th>Student Desire</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Self – Efficacy</td>
<td>No to Band</td>
<td>123.05</td>
</tr>
<tr>
<td></td>
<td>Yes to Band</td>
<td>85.29</td>
</tr>
<tr>
<td>Mastery Experience</td>
<td>No to Band</td>
<td>156.69</td>
</tr>
<tr>
<td></td>
<td>Yes to Band</td>
<td>109.60</td>
</tr>
<tr>
<td>Vicarious Experience</td>
<td>No to Band</td>
<td>447.96</td>
</tr>
<tr>
<td></td>
<td>Yes to Band</td>
<td>281.68</td>
</tr>
<tr>
<td>Verbal/Social Persuasion</td>
<td>No to Band</td>
<td>379.99</td>
</tr>
<tr>
<td></td>
<td>Yes to Band</td>
<td>269.83</td>
</tr>
<tr>
<td>Physiological State</td>
<td>No to Band</td>
<td>208.27</td>
</tr>
<tr>
<td></td>
<td>Yes to Band</td>
<td>177.39</td>
</tr>
</tbody>
</table>

In addition, the researcher examined the test of homogeneity of variance with the Levene’s Test (Hatcher, 2013). The researcher examined the variance of the subscales to examine if the population variance was equal. If the population variance among the two groups’ *p* values were greater than .05, the sample met the assumption of homogeneity. The mean scores for the sample were greater than .05. Thus, the homogeneity of variances was met for the sample. Further, the distribution scores around the mean of the between the two groups are considered equal. Table 8 shows the results from Levene’s test of homogeneity of variance.
Table 8

**Levene Test of Homogeneity of Variance**

<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Levene Statistic</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Self-Efficacy</td>
<td>.568</td>
<td>.454</td>
</tr>
<tr>
<td>Mastery Experience</td>
<td>.448</td>
<td>.506</td>
</tr>
<tr>
<td>Vicarious Experience</td>
<td>2.297</td>
<td>.134</td>
</tr>
<tr>
<td>Verbal/Social Persuasion</td>
<td>.797</td>
<td>.375</td>
</tr>
<tr>
<td>Verbal/Social Persuasion</td>
<td>.797</td>
<td>.375</td>
</tr>
</tbody>
</table>

**Mean and standard deviation of the levene test.** The mean and standard deviation of the Levene test was conducted. Students who did not express the desire to continue in band showed greater mean and standard deviation in overall self-efficacy than students who did express the desire to continue in band. Further, students who did not express the desire to continue in band showed greater mean and standard deviation in all four subscales sources of self-efficacy than students who did express the desire to continue in band.

- For overall self-efficacy, individuals who did not express the desire to continue in band showed a greater mean and standard deviation ($M = 19.45, SD = 4.97$) than those expressed desire to continue in band ($M = 18.88, SD = 4.00$). The range for overall self-efficacy was 15.56.

- For the mastery experience subscale, individuals who did not express the desire to continue in band showed a greater mean and standard deviation ($M = 4.39, SD = 1.428$) than those individuals who expressed the desire to continue in band ($M = 3.95, SD = 1.365$). The range for the transformed data was 6.44.

- For the vicarious experiences subscale, individuals who did not express the desire to continue in band showed a greater mean and standard deviation score ($M = 63.81,$
SD = 21.165) than those individuals who expressed the desire to continue in band
(M = 63.07, SD = 16.783). The range for the data was 68.00.

- Among verbal/social persuasion, individuals who did not express the desire to
  continue in band showed a greater mean and standard deviation score (M = 5.10, SD
  = 1.751) than those individuals who expressed the desire to continue in band (M =
  4.33, SD = 1.827). The range for the transformed data was 8.18.

- Among physiological state, individuals who did not express the desire to continue in
  band showed a greater mean and standard deviation score (M = 4.49, SD = 1.661)
  than those individuals who expressed the desire to continue in band (M = 4.17, SD =
  1.633). The range for the transformed data was 6.42.

The correlations and associated significance levels among the overall self-efficacy and
four subscales and eighth-grade music students' desire to continue in band were examined. Table
9 shows the mean and standard deviation for overall self-efficacy and the four subscales. In
addition, table 9 shows eighth-grade music students' desire to continue in band.

Table 9

<table>
<thead>
<tr>
<th>Music Self-Efficacy</th>
<th>Desire to participate in Band</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Self-Efficacy</td>
<td>Yes to Band</td>
<td>18.88</td>
<td>4.001</td>
</tr>
<tr>
<td></td>
<td>No to Band</td>
<td>19.45</td>
<td>4.978</td>
</tr>
<tr>
<td>Mastery Experience</td>
<td>Yes to Band</td>
<td>3.95</td>
<td>1.365</td>
</tr>
<tr>
<td></td>
<td>No to Band</td>
<td>4.39</td>
<td>1.428</td>
</tr>
<tr>
<td>Vicarious Experience</td>
<td>Yes to Band</td>
<td>63.07</td>
<td>16.783</td>
</tr>
<tr>
<td></td>
<td>No to Band</td>
<td>63.81</td>
<td>21.165</td>
</tr>
<tr>
<td>Verbal/Social Persuasion</td>
<td>Yes to Band</td>
<td>4.33</td>
<td>1.827</td>
</tr>
<tr>
<td></td>
<td>No to Band</td>
<td>5.10</td>
<td>1.751</td>
</tr>
<tr>
<td>Physiological State</td>
<td>Yes to Band</td>
<td>4.17</td>
<td>1.633</td>
</tr>
<tr>
<td></td>
<td>No to Band</td>
<td>4.49</td>
<td>1.661</td>
</tr>
</tbody>
</table>
**Test for normality.** The fourth assumption associated with computing the Point-Biserial Correlation states the continuous variable should be approximately normally distributed (Lund & Lund, 2018). Normality was evaluated using Shapiro-Wilk’s Test of Normality (Shapiro & Wilk, 1965). Hatcher (2013) suggested that if \( p \)-values are greater than 0.05 \( (p > 0.05) \), then normality has not been violated. However, if values were less than 0.05 \( (p < 0.05) \), then the assumption of normality is violated, restricting the researcher from rejecting the hypothesis. Further, if the test violated normality, the researcher would transform the data to assume normality. Table 10 provides a summary of the Shapiro-Wilk’s test conducted on the variables (Hatcher, 2013). Based on the results, normality was violated for mastery experience, verbal/social persuasion, and physiological state.

Table 10

*Shapiro-Wilks Test of Normality*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Self-efficacy</td>
<td>.984</td>
<td>68</td>
<td>.522</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>.102</td>
<td>68</td>
<td>.044</td>
</tr>
<tr>
<td>Mastery Experience</td>
<td>.073</td>
<td>68</td>
<td>.082</td>
</tr>
<tr>
<td>Vicarious Experience</td>
<td>.126</td>
<td>68</td>
<td>.001</td>
</tr>
<tr>
<td>Verbal/Social Persuasion</td>
<td>.100</td>
<td>68</td>
<td>.024</td>
</tr>
<tr>
<td>Physiological State</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Data transformation.** Based on the results of Shapiro-Wilks, the assumption of normality was violated for mastery experience \( (p = .044) \), verbal/social persuasion \( (p = .001) \), and physiological state \( (p = .024) \), overall self-efficacy \( (p = .522) \) and vicarious experience \( (p = .082) \) scores showed a normal distribution. According to Osborne (2002), “violation of the assumption of normality can seriously increase the chances of the researcher committing either a Type I or II error” (p. 1). Therefore, the researcher transformed the data because of negative skewedness,
which violated normality. To transform the data, the researcher took the square root of the maximum values within the variable data set. When applying the square root transformation, “the square root of numbers above 1.00 always become smaller, 1.00 and 0.00 remain constant, and numbers between 0.00 and 1.00 become larger” (Osborne, 2002, p. 2). Next, a total of 1 was added to the maximum value and subtracted from the overall variable data set. The maximum values in the data set were 100. The calculations were: SQRT (101-Mastery_Experience), SQRT (101-Verbal_Social_Persuasion), and SQRT (101-Physiological_State; Lund & Lund Statistics, 2018). Normality was assessed by the transformed data. Histograms provided a visual representation of the data normally distributed, as shown in Appendix E. Table 11 displays results from the transformed Shapiro-Wilks test of normality and all p values are greater than 0.05. Thus, the data showed normality for all the subscales.

Table 11

*Transformed Data Shapiro-Wilks Test*

<table>
<thead>
<tr>
<th></th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
</tr>
<tr>
<td>Music Self-efficacy</td>
<td>.984</td>
</tr>
<tr>
<td>Overall Self-Efficacy</td>
<td>.981</td>
</tr>
<tr>
<td>Mastery Experience</td>
<td>.968</td>
</tr>
<tr>
<td>Vicarious Experience</td>
<td>.989</td>
</tr>
<tr>
<td>Verbal/Social Persuasion</td>
<td>.973</td>
</tr>
<tr>
<td>Physiological State</td>
<td></td>
</tr>
</tbody>
</table>

**Analysis for research questions 1 and 2.** A Point-Biserial correlation was computed to examine if and to what extent a relationship exists among student overall self-efficacy, the four self-efficacy subscales, and students’ desire to participate in band. Overall self-efficacy consisted of the composite score of the four sources of self-efficacy beliefs, which included mastery experience, vicarious experience, verbal/social persuasion, and physiological state as measured by the MPSES. Next, the researcher used the dichotomous variable (Yes/No) that measured
eighth-grade music students' desire to participate in band. Table 12 displays a summary analysis for research question 1 and research question 2.

Table 12

*Summary of Analyses*

<table>
<thead>
<tr>
<th>Research Question #</th>
<th>Variable 1</th>
<th>Variable 2</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>Overall Self-Efficacy</td>
<td>Desire to continue in music</td>
<td>Point-Biserial Correlation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dichotomous Variable (Yes/No)</td>
<td></td>
</tr>
<tr>
<td>R2</td>
<td>Mastery Experiences</td>
<td>Desire to continue in music</td>
<td>Point-Biserial Correlation</td>
</tr>
<tr>
<td></td>
<td>Vicarious Experiences</td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verbal/Social Persuasion</td>
<td>Dichotomous Variable (Yes/No)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physiological State</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Detailed Results*

Students who expressed the desire to continue in band consisted of 48 participants, and students who expressed the desire not to continue in band consisted of 20 students. The results showed that a higher percentage of students expressed the desire to continue with band when they transition to high school. The results showed that the Asian and American Indian sample population had the highest percentage, followed by the mixed background of students continuing in-band. In addition, the Hispanics represent the largest sample in the group and have 76% (21) students continue in band and 32% (10) students did not continue in band. No Asian or American Indian students said no to band (see Table 13).
Table 13

Participants Ethnic Background and Desire to Participate in Band

<table>
<thead>
<tr>
<th>Ethnic Background</th>
<th>Yes to Band</th>
<th>No to Band</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>100 % (2)</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>African American</td>
<td>50% (1)</td>
<td>50% (1)</td>
<td>100%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>67.7% (21)</td>
<td>32.3% (10)</td>
<td>100%</td>
</tr>
<tr>
<td>American Indian</td>
<td>100% (1)</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Mixed Background</td>
<td>80.0% (12)</td>
<td>20.0% (3)</td>
<td>100%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>64.7% (11)</td>
<td>35.3% (6)</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>48</strong></td>
<td><strong>20</strong></td>
<td><strong>68</strong></td>
</tr>
</tbody>
</table>

**Research Question 1.** Research question 1 was examined for overall self-efficacy. Students’ reported their experiences in band. Further, they expressed their desire to continue or not continue in band. The first research question and associated hypotheses were:

RQ1: What, if any, relationship exists between students’ overall self-efficacy and the desire to continue in band?

H₀₁: There is no relationship between students’ overall self-efficacy and the desire to continue in band.

H₁₁: There is a relationship between students’ overall self-efficacy and the desire to continue in band.

The overall self-efficacy mean and standard deviations were examined to observe which group expressed higher and lower self-efficacy. For overall self-efficacy, individuals who did not express the desire to continue in band showed a greater mean and standard deviation ($M = 19.45$, $SD = 4.97$) than those who reported the desire to continue in band ($M = 18.88$, $SD = 4.00$). Table 14 shows the mean and standard deviation of overall self-efficacy by students’ desire to continue in band.
Table 14

*Overall Self-Efficacy and Individuals Desires to Continue in Band*

<table>
<thead>
<tr>
<th>Music Self-Efficacy Measure</th>
<th>Interest in Band</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Self-Efficacy</td>
<td>Yes to Band</td>
<td>18.88</td>
<td>4.001</td>
</tr>
<tr>
<td></td>
<td>No to Band</td>
<td>19.45</td>
<td>4.978</td>
</tr>
</tbody>
</table>

A Point-Biserial correlation was computed to examine the relationships between overall self-efficacy and individuals’ desire to participate in band. The results showed the desire to participate in band and overall self-efficacy were not significantly correlated ($r_{pb} = -0.061$). Therefore, the researcher failed to reject the null hypothesis. Table 15 shows the Point-Biserial correlation between overall self-efficacy and the desire to continue in band ($r_{pb}(66) = -0.061$, $p = .623; p > 0.05$).

Table 15

*Overall Self-Efficacy and the Desire to Participate in Band*

<table>
<thead>
<tr>
<th>Band</th>
<th>Point-Biserial Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>-0.061</td>
<td>.623</td>
</tr>
</tbody>
</table>

**Research Question 2.** Research Question 2 was examined by conducting a Point-Biserial correlation. Students’ reported their experiences in band using the four sources of self-efficacy. Further, they expressed their desire to continue or not continue in band. The second research question and associated hypotheses were:

**RQ2:** What sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) are associated with students’ desire to continue in band?
There is no relationship between the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

There is a relationship between each of the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

The four subscales of self-efficacy and eighth-grade music students’ means and standard deviations were examined to observe which group expressed higher and lower self-efficacy. Among mastery experience, students who did not express the desire to continue in band showed a greater mean and standard deviation ($M = 4.39, SD = 1.428$) than students who expressed the desire to participate in band ($M = 3.95, SD = 1.365$). Among vicarious experience, students who did not express the desire to continue in band showed a greater mean and standard deviation ($M = 63.81, SD = 21.165$) than students who expressed the desire to continue in band ($M = 63.07, SD = 16.783$). Among verbal/social persuasion, students who did not express the desire to continue in band showed a greater mean and standard deviation ($M = 5.10, SD = 1.751$) than students who expressed the desire to continue in band ($M = 4.33, SD = 1.827$). Among physiological state, students who did not express the desire to participate in band showed a greater mean and standard deviation ($M = 4.49, SD = 1.661$) than students who expressed the desire to participate in band ($M = 4.17, SD = 1.633$). Further, all subgroups showed that students’ who did not express the desire to continue in band had the highest self-efficacy beliefs. Table 16 shows the mean and standard deviation for each subscale by participants’ desire to continue in band.
Table 16

Mean and Standard Deviation of Music Self-Efficacy

<table>
<thead>
<tr>
<th>Music Self-Efficacy</th>
<th>Band</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mastery Experience</strong></td>
<td>Yes to Band</td>
<td>3.95</td>
<td>1.365</td>
</tr>
<tr>
<td></td>
<td>No to Band</td>
<td>4.39</td>
<td>1.428</td>
</tr>
<tr>
<td><em>Vicarious Experience</em>*</td>
<td>Yes to Band</td>
<td>63.07</td>
<td>16.783</td>
</tr>
<tr>
<td></td>
<td>No to Band</td>
<td>63.81</td>
<td>21.165</td>
</tr>
<tr>
<td><strong>Verbal/Social Persuasion</strong></td>
<td>Yes to Band</td>
<td>4.33</td>
<td>1.827</td>
</tr>
<tr>
<td></td>
<td>No to Band</td>
<td>5.10</td>
<td>1.751</td>
</tr>
<tr>
<td><strong>Physiological State</strong></td>
<td>Yes to Band</td>
<td>4.17</td>
<td>1.633</td>
</tr>
<tr>
<td></td>
<td>No to Band</td>
<td>4.49</td>
<td>1.661</td>
</tr>
</tbody>
</table>

*Note. Likert scale (0, strongly disagree -100, strongly agree) * Interpret (0 to 49 would be strongly disagree, and 50-100 would be strongly agree. **Transformed data interpret (0-3.5 strongly disagree and 3.6-7.00 strongly agree).

A Point-Biserial correlation was computed to examine the relationships between each of the sources of music self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and eighth-grade music students’ desire to participate in band. The results indicated a negative correlation between the desire to participate in band and mastery experience ($r_{pb} = -.146$), vicarious experience ($r_{pb} = -.019$), verbal/social persuasion ($r_{pb} = -.193$) and physiological state ($r_{pb} = -.090$). The results indicated none of the sources of self-efficacy beliefs subscales were significantly related to participants desire to continue in band (mastery experience ($r_{pb} (66) = -.146, p > 0.05$), vicarious experience ($r_{pb} (66) = -.019, p > 0.05$), verbal/social persuasion ($r_{pb} (66) = -.193, p > 0.05$) and physiological state ($r_{pb} (66) = -.090, p > 0.05$). Based on the findings, the researcher failed to reject the null hypothesis. Therefore, there was not a statistically significant relationship between each of the four sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and the desire to participate in band. Table 17 shows the correlation between the four sources of self-efficacy beliefs and reported the desire to continue in band.
Table 17

*Correlation Between Self-efficacy Beliefs and the Desire to Continue in Band*

<table>
<thead>
<tr>
<th></th>
<th>Band Mastery Experience</th>
<th>Vicarious Experience</th>
<th>Verbal/Social Persuasion</th>
<th>Physiological State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point-Biserial Correlation</td>
<td>1</td>
<td>-.146</td>
<td>-.019</td>
<td>-.193</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.235</td>
<td>.880</td>
<td>.114</td>
<td>.465</td>
</tr>
<tr>
<td>N</td>
<td>68</td>
<td>68</td>
<td>68</td>
<td>68</td>
</tr>
</tbody>
</table>

**Qualitative Data Collection and Analysis**

**Data collection.** Once the quantitative data were analyzed, the researcher conducted one-on-one interviews with students to gain a deeper understanding of students’ self-efficacy beliefs and why they chose to continue in band or not. The interviews served as a platform for students to share their experiences in band and how they shaped their decisions regarding whether to continue in band. Originally the intention was to conduct focus groups for students to share their experience in band. However, not enough data was collected to add significant findings to the study. Therefore the researcher conducted a second face-to-face, detailed one-on-one interview with students to collect data. The intention was to explore four groups of students, which included: (a) students with high self-efficacy who indicated they were continuing in band, (b) students with high self-efficacy who were not continuing in band, (c) students with low self-efficacy who were continuing in band, and (d) students with low self-efficacy who were not continuing in band.

The participants’ scores on the MPSES survey were used to determine the group in which students were placed. The students were organized into the four groups based on the minimum and maximum scores for low and high self-efficacy and whether or not they expressed the desire to participate in band. The minimum and maximum score for low self-efficacy were 11.67 and 15.55. The minimum and maximum for high self-efficacy were 15.56 and 27.23. The range
between low-self efficacy and high self-efficacy was 15.56. All students whose responses below 15.56 were placed into the “low self-efficacy” group and all students whose responses were above 15.56 were placed into the “high self-efficacy” group. Recruitment for interviews was conducted during the summer and continued into the students’ ninth grade school year. Therefore, contacting students presented several challenges, which included contacting students who were spread across three high schools.

Of the 68 students who originally participated in the study, 38 students participated in the first post survey focus group. However, the data collected in the first post survey focus groups did not contain enough information to contribute to the study; therefore, the focus group data was not used and qualitative data was recollected. Of the 53 students who agreed to participate in the first post survey focus groups, the researcher was able to contact 34 students for a second face-to-face, one-on-one post survey interview. The remaining students were not able to be contacted.

Of those 34 students with whom the researcher was able to make contact, 13 students agreed to participate in a face-to-face, one-on-one interview. These students completed a new student assent form and submitted a new parental consent form prior to participation. Interviews took place during lunch or after school. Each interview took 15 to 20 minutes to conduct, depending on how extensively the students answered the questions. Students were asked 42 questions about their self-efficacy beliefs. Interviews were recorded and transcribed. Further, students who had high self-efficacy beliefs and said no to band were difficult to locate among the three different high school campuses, therefore students were unavailable to interviewed. Table 18 shows the number of students from each group who participated in the face-to face, one-on-one, post survey interview.
Table 18

Interview Participants by Self-Efficacy and Band Participation

<table>
<thead>
<tr>
<th>Students with High Self-efficacy, Yes to Band</th>
<th>Students with High Self-efficacy, No to Band</th>
<th>Students with Low Self-efficacy, Yes to Band</th>
<th>Students with Low Self-efficacy, No to Band</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Participants contacted</td>
<td>18</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Participated in Interview</td>
<td>5</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Percent of students that participated in each group</td>
<td>27.0%</td>
<td>33.3%</td>
<td>57.1%</td>
</tr>
</tbody>
</table>

**Sample demographics.** The demographic information of the students who participated in the face-to-face, one-on-one, interviews is presented in Table 19; four participants were male, nine participants were female; one participant was African American, three were Caucasian, and nine were Hispanics. Whereas the majority of the students interviewed were female and had high self-efficacy beliefs related to their musical skills, the majority of the males who were interviewed were Hispanic and had low self-efficacy in music.

Table 19

Demographics of Face-to-Face, One-to-One Interview

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>African American</th>
<th>Caucasian</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students with High Self-efficacy, Yes to Band</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Students with High Self-efficacy, No to Band</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Students with Low Self-efficacy, Yes to Band</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>
Table 19 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>African American</th>
<th>Caucasian</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students with High Self-efficacy, No to Band</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total Sample</td>
<td>4</td>
<td>9</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

**Instrumentation**

After analyzing the focus group data, it was determined recollection was necessary. A new interview protocol was created. The researcher requested a continuance from IRB. In order to request continuance, the researcher had to ensure all necessary documents for the interview protocol were approved and the Modification After Approval Form was complete. An updated Parental Consent Form and Student Assent form was also submitted to IRB for approval. The interview questions were comprehensive based on the questions that were asked in the MPSES to add more depth to the study. There were 11 general questions to explore the students’ background experiences (e.g., how long they have been in band). There were six questions that examined students’ self-efficacy beliefs in mastery experience (e.g., achieving music), six questions that explored vicarious experience (e.g., observing others), eight questions that explored verbal persuasions (e.g., support from music teacher, family and friends,), and 12 questions that explored students’ physiological state (e.g., joy performing music). The interview questions were reviewed by experts (dissertation committee members) to ensure that rich, thick descriptions of students’ experiences would be gathered. See Appendix G for the interview protocol.

**Data Analysis**

First, each face-to-face, one-on-one interview was recorded and transcribed using qualitative data analysis. Saldaña (2015) suggested that the primary goal of coding is to find
“repetitive patterns of actions and consistencies in human affairs as documented in the data” (p. 5). The first cycle of coding started with structural coding, which is appropriate for interview transcripts and semistructured data-gathering protocols to gather lists of major categories or themes (Saldaña, 2015). Structural coding was used because the interview questions directly asked students about their four sources of self-efficacy beliefs. Students sharing their musical experiences in the middle school band provided thick rich data. The four sources of self-efficacy were major themes that were used in this study to organize the findings. The use of structural coding allowed the researcher to categorize the data into the four sources of self-efficacy. This coding allowed the data to be quickly examined for commonalities, differences, and relationships (Saldaña, 2015).

The researcher diligently read student responses to the interview questions and color-coded the transcripts several times to identify codes. The researcher looked for words and phrases that seemed appropriate to highlight or underline (Saldaña, 2015). In Vivo codes were to “prioritizes and honors the participant’s voice” (Saldaña, 2015, p. 106). Further, In Vivo is appropriate when working with youth because “adolescent voices are often marginalized, and coding with their actual words enhances and deepens and adult’s understanding of their cultures and worldviews” (Saldaña, 2015, p. 106). This process provided a quick assessment of the data, allowing the researcher to identify patterns and similar responses among students who had high or low self-efficacy and whether or not they had the desire to participate in band or not.

After the first cycle of coding, the researcher used code charting to organize participants’ data. Code charting helps reveal patterns and dimensions found in the range of codes (Saldaña, 2015). Codes were classified by mastery experience, vicarious experience, verbal/social persuasion, and physiological state. The researcher created a chart for each source of self-
efficacy and created a column for students’ responses that represented successful and unsuccessful experiences and assigned a process code to identify the action of the code. For example, “achievement” was assigned to a student response who reported feeling successful about performing a solo perfectly, and “frustration” was assigned to a student response if the student reported feeling unsuccessful. In addition, student responses were organized into students who had high self-efficacy or low self-efficacy and whether they had the desire to continue in band.

Further, the researcher attached the appropriate source of the self-efficacy belief to the quote if the student response crossed over into other sources. For example, sometimes, a quote was attributed to more than one theme. If the question was about mastery experience and the student expressed support from a teacher, family, or friend, verbal persuasion was coded to the student’s response. Once student responses were charted and organized by the four sources (mastery experience, vicarious experience, verbal/social persuasion, and physiological state), the researcher was able to draw comparisons across groups and discuss the findings.

**Presentation of the Qualitative Data Results**

The intention of adding the qualitative component to this quantitative study was to provide a deeper understanding of eighth-grade band students’ self-efficacy beliefs and whether or not there is a relationship between self-efficacy, sources of self-efficacy beliefs, and students' desire to continue in band. The statistical analysis from the MPSES showed that there was not a statistically significant relationship between students’ overall self-efficacy and their desire to continue in band (Research Question 1). Further, the results for Research Question 2 showed there was no statistically significant relationship between the four sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and
students’ desire to continue in band. However, given that these findings do not align with literature regarding student efficacy beliefs and desired actions (Lopez & Lent, 1992; Usher & Pajares, 2006, 2009), face-to-face, one-on-one interviews were useful in better understanding this discrepancy.

The recollection of qualitative data was beneficial in allowing the researcher to follow up on some students’ decisions to enroll in band or not. Interestingly, some students who expressed the desire to continue in band changed their decision and did not enroll in band. Of the original 46 students who shared the desire to continue in band, 21 students did not enroll in band. The same can be said for students who expressed the desire to not continue in band but then changed their decision and enrolled in band. Of the original 22 students who shared the desire not to continue in band, five students did enroll in band. Thus, some students who reported having a low self-efficacy on the MPSES expressed high areas of confidence during the follow-up interviews, while some students who reported having a high self-efficacy on the MPSES expressed self-doubt and low confidence in the follow-up interviews.

Students’ self-efficacy beliefs. This section presents a breakdown of the four sources of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and student responses from each group. Interview questions focused on the four sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state). Groups included (a) students with high self-efficacy who desired to continue in band, (b) students with high self-efficacy who did not desire to continue in band, (c) students with low self-efficacy who desired to continue in band, and (d) students with low self-efficacy who did not desire to continue band. Student voices from each group are represented to increase transparently.
Mastery experience. Bandura (1977) defined mastery experience as having a successful performance. Students expressed this theme by discussing their experience in band as being successful or unsuccessful through practice and performance. Interview questions that focused on mastery experience explored students’ self-beliefs by asking them to report if they felt successful as a band student and whether or not it influenced their decision to continue in band.

High self-efficacy and continuing in band. The researcher developed several themes regarding the findings of mastery experience from the five students who had high self-efficacy and expressed the desire to continue in band. Students reported they felt successful because they could overcome challenges by practicing hard. For example, one student shared, “After practicing, I finally get it; it makes me feel pretty successful.” Students reported they felt unsuccessful when they compared themselves to others or made a mistake during a performance. For example, one student shared that she did not feel successful as a band student when she compared herself to others and noticed how they were grasping music much faster than she.

Students were asked to report if their experience of being successful or successful had influenced their decision to continue in band. One student shared, “Yes, being able to succeed made me want to go out and succeed more.” An unsuccessful student reported, “at times, yes, but at the end, I just continue because I know I would get better when I practice.” Students achieved mastery experiences through success and failure and reported overcoming their challenges in learning and performing music through practice.

High self-efficacy but not continuing in band. The researcher developed several themes for the two students who had high self-efficacy but did not express the desire to continue in band. Students had successful performances and reported they were proud of their accomplishments and the progress they had made in learning their instrument. For example, a student shared,
“Yes, I have come very far in the instruments I play.” Students reported they felt unsuccessful when they did not know how to play certain parts of the music they were assigned, making the experience in the classroom stressful.

Students were asked to report if their experience of being successful or unsuccessful had influenced their decision to continue in band. A student who had a conflicting response stated, I really won’t say successful because I don’t really want to continue band but at the same time, I still do. I know if I was more committed to band, I could probably do better than I am right now.

Both students’ desires not to continue in band were influenced by stress and pressure of not knowing how to play the music they were assigned. For example, a student shared, “I did not have a good experience in jazz band because I had a hard time learning the music, but I stayed the rest of the year.”

**Low self-efficacy and continuing in band.** The researcher developed several themes regarding the findings of the four students who had low self-efficacy and expressed the desire to continue in band. Students reported they felt most successful when they practiced and noticed their improvements. A student shared, “Yes, my success has been a good motivation towards my music career and striving to improve myself constantly; that’s why I continue band.” Another student reported, “I feel very successful, I practice as much as I can, and it’s always a lot of fun to play with others.” Students reported they felt unsuccessful when they struggled to learn their notes and rhythms. For example, a student shared, “I struggle a lot more than I should, and I felt it was a waste of my time if I couldn’t understand the music.”

Students were asked to report if their experience of being successful or unsuccessful influenced their decision to continue in band. Students reported their desire to continue in band
was influenced by overcoming challenges by achieving small successes through practice. Students reported they felt nervous during performances because they might make mistakes while playing and would stand out negatively. A student shared, “the lack of success made me want to quit, but there were times I did really good and I thought like yeah I could do this. I love band; why would I quit?”

Low self-efficacy but not continuing in band. The researcher developed several themes regarding the findings of the two students who had low self-efficacy and expressed the desire not to continue in band. Students reported that they felt successful when they could play their parts and were proud of their musical achievements. One student reported she felt very successful as a musician and proud that she could play her parts by herself. She expressed how interesting and exciting it was to actually be able to play the music that was assigned to her. Another student reported he felt successful because the band received a superior rating at a band festival. Both students reported they felt unsuccessful when they could not play their parts, creating a negative experience in the classroom, specifically in the Jazz band. Students shared examples of participating in jazz band. One student shared she could not play her assigned parts proficiently and lacked confidence; the other student did not work well with the music teacher.

In terms of mastery experiences influencing their desire to continue in band, this group of participants shared diverse perspectives. One student’s desire not to continue in band was influenced by her lack of confidence in her playing abilities. She expressed, “I kind of gave up a little bit.” When asked if that made her want to quit band, she said, “It did, I felt like I didn’t belong, I didn’t think I would be able to be successful.” When asked if this lack of success influenced her decision to continue in band, she said, “Well, maybe because I lack confidence.”
Although both students indicated they would not continue in band on their survey, both students did report continuing in band at the time of the follow-up interviews.

**Overall findings regarding mastery experience.** Several themes emerged across all four groups. All students reported they felt successful as band students. Students felt most successful when their practice efforts resulted in a successful performance. In addition, all students, at some point, reported they felt like they struggled when learning music and felt nervous about mistakes made during a performance. Most students were able to overcome their lack of success by practicing more. Overall, most students reported they felt proud of their accomplishments and wanted to continue in band because they knew they could achieve more if they continued to participate in band.

The main difference between the four groups is how students viewed their individual experiences with mastery experience. Some students with high self-efficacy beliefs discussed how their self-efficacy beliefs were nourished by their practice efforts and how they had improved as musicians, resulting in positive experiences in the classroom. While students with low self-efficacy beliefs discussed how their self-efficacy beliefs were challenged when they struggled with learning the music they were assigned, resulting in a negative experience in the classroom. A second difference between the four groups of participants, in terms of their perceptions about mastery experiences, is how they overcame challenges. Students who continued with band viewed challenges as an opportunity to practice more in order to succeed. Students who did not continue in band viewed challenges with frustration and less confidence about succeeding in band.

**Vicarious experience.** Bandura (1994) defined vicarious experiences as watching others perform successfully, encouraging students to believe that they too can master the skills
necessary to succeed. Students expressed this theme by discussing their experiences watching professional musicians or students their own age perform. Interview questions that focused on vicarious experience explored students’ self-beliefs by asking students if they have ever watched a professional musician or students their own age who play the same instrument. Students were able to share examples of vicarious experiences and discussed how watching other students or musicians has or has not influenced their decisions to continue band.

*High efficacy and continuing with band.* The researcher developed several themes regarding vicarious experiences for students who had high self-efficacy and expressed the desire to continue in band. Some students were inspired by watching professional musicians, giving them an example from which to learn. For example, a student expressed she became inspired by watching a person play the *Legend of Zelda* on the flute and described the performer was dressed up like Link (Zelda character) and who was playing in front of a huge crowd. The student shared, “I thought it was actually really amazing and wanted to pursue further in band to be great like her one day.” Students also shared they were able to improve their music skills by hearing what the music should sound like. For example, a student shared “it showed me what sounds good and what does not sound good.” The student was able to understand what she should sound like and emulate that sound on her own instrument. Two students shared that observing other students or watching professional musicians play did not improve their music or performance skills because they were unable to draw a connection to the music they were assigned and the music they were hearing.

Students were asked to report if their experiences watching professional musicians or other students had influenced their decision to continue in band. Most students expressed the desire to continue in band, so they could continue to improve as musicians. Students expressed
that if they continued in band and continued to work hard, they could potentially be as good as the professional musicians they heard.

**High self-efficacy but not continuing in band.** The researcher developed several themes regarding vicarious experience for students who had high self-efficacy but did not express the desire to continue in band. Students learned instrumental technique from watching professional musicians and students their own age play. One student shared,

Sometimes when you hear how something is supposed to be played it is easier to play it.
For me if I don’t know what something sounds like I won’t be able to play it. I like to listen to it played by people who actually know how to play the song, then I try to play it, it works, it helps me out.

One student reported she did not have vicarious experiences to share. Students were asked to report if their experience watching professional musicians or other students had influenced their decision to continue in band. Students in this group expressed that watching other students or musicians did not influence their decision to stay in band.

**Low self-efficacy and continuing in band.** The researcher developed several themes regarding vicarious experience for students who had low self-efficacy and expressed the desire to continue in band. A student who observed professional musicians stated it was helpful when they were first learning their instrument. For example, one student shared,

Yes, when I first started jazz and saxophone I didn’t know what was going on, so my first week I believe, I started watching high performances, watching players and solos, helped quite a lot and I tried to mimic as best as I could.

Another student shared a similar experience and improved by attending a jazz clinic. She expressed that it was helpful having professional musicians with strong fundamental techniques
show her how to play some rhythms and she immediately started to play better. Some students shared that watching student musicians their own age was fun but did not improve their skills. These participants questioned the musical abilities of students their own age. One student expressed students her own age did not help her improve because she did not trust they were playing the right rhythms and questioned their abilities.

Students were asked to report if their experience watching professional musicians or students their own age influenced their decision to continue in band. One student reported, “Yes, it is really interesting to see people play and how much enjoyment they get out of it and knowing I can get the same amount if not more.” Another student shared, “Yes, I think so because they inspired me to be better and try even harder than I’ve tried before.”

Low self-efficacy but not continuing in band. The researcher developed several themes regarding vicarious experiences for students who had low self-efficacy and expressed the desire not to continue in band. Students had limited experience watching professional musicians. For example, both students had limited experience watching professional musician play their same instrument, therefore, it did not impact their playing abilities. However, both students reported vicarious experiences with students their own age. Students expressed they enjoyed watching their friends perform music. However, one student expressed she was frustrated by comparing herself to other students who could play well. Both students reported that their music skills did not improve from watching professional musicians or students their own age perform.

In terms of vicarious experiences influencing the desire to continue in band, one participant indicated it had a negative impact. This student shared she was discouraged because she compared herself to other students. She reported that she felt discouraged because she felt
she did not belong in the band. The other student had limited vicarious experiences, so he was not influenced to continue in band by watching other people.

**Overall findings regarding vicarious experience.** Across all four groups, several themes emerged. Students thought observing professional musicians and students their own age was helpful and improved their music skills. Students reported they were inspired to work hard so that they could, one day, be as proficient as professional musicians. Most students were influenced to continue in band because they were inspired to improve their music skills by watching others perform.

The main difference between the four groups is whether students reported learning and improving through their vicarious experiences. Students with high self-efficacy learned from students their own age and students with low self-efficacy expressed that their music skills did not improve by observing students their own age. A second difference between the four groups of participants in terms of their perceptions about vicarious experiences was watching professional musicians inspire students who continued in band and students who did not continue in band were not inspired by watching other musicians perform.

**Verbal Persuasion.** Bandura (1994) defined verbal/social persuasion as building confidence through encouragement and constructive criticism. Students expressed this theme by discussing their experience inside and outside the classroom. Interview questions that focused on verbal persuasion explored the students’ self-beliefs by asking students to discuss how their music teachers, friends, and family had shaped their self-efficacy beliefs. Students were asked to share if their music teacher complemented them and provided corrections on their music performance. They were asked to report if their music teachers, friends, and family had indicated that their practice efforts had improved their performance and offered positive encouragement.
such as “you can do it.” Further, students were asked if the expectation of other people (friends, family, or music teachers) has influenced their decision to continue in band.

*High self-efficacy and continuing in band.* The researcher developed several themes regarding verbal persuasion for students who had high self-efficacy and expressed the desire to continue in band. All students had successful experiences with their music teachers. Many shared that their music teachers expressed corrective criticism and acknowledged their practice efforts were improving their performances. Students shared that their music teacher would notice their improvement and addressed the whole band on large areas that needed improvement. For example, a student shared, “our music teacher would point put what we need to fix and what we need to play louder or softer, stuff like that.” All students shared that their friends and family expressed that they were good performers and offered encouragement when needed. One student shared, “When I performed my solo my brother complimented me on it and said it was good.” Another student expressed that her family encouraged her if she was struggling by saying, “everyone learns at their own pace and they say I will eventually get it.” No students discussed a lack of support from their music teachers, family or friends.

Students were asked to report if they were influenced to stay in band by their music teacher, family, or friends. All students expressed that they were influenced by their music teacher, family, or friends to continue in band because they felt they needed to meet their expectations. One student shared, “Both my brothers are in band so yes, they expect me to go on with band.” Another student expressed about her parents, “Yes, they say ‘I can’t wait to see what you can do further down,’ and I just don’t want to let them down.”

*High self-efficacy but not continuing in band.* The researcher developed several themes regarding verbal persuasion for students who had high self-efficacy and expressed the not to
continue in band. Students expressed their music teachers reward them on their musical performances. A student expressed that her music teacher complimented her and gave the band ice cream since they earned a Superior rating at the state music festival. Students also shared that their music teacher not only provides verbal corrections but also shows them how to play a rhythm, by either counting or clapping the rhythm. Students shared that their teachers encourage them to practice and that their practice efforts improved their performances. One student reported,

I remember when we were doing performances by ourselves, I would come in at lunch I would practice my music and she told me that I got better and better every time I came in and practiced. So, when it came time to play what I was playing it was really good.

Students expressed that their friends and family offered positive encouragement. One student shared,

Yes, my mom, because when I feel like I’m struggling in band I’ll go talk to my mom. We will talk about it and in the end, she is like, “I know you can do this, keep your head in the game and keep trying.” My mom is just a really supportive person.

Students were asked to report if their music teacher, friends, and family influenced their decision to stay in band. One student shared that the expectation of her family influenced her decision to stay in band even though she wanted to quit band. Another student expressed, “Yes, my mom seems proud of me, I take that and I put it in my head, if I do something that makes other people happy and me happy maybe I should continue doing it.” One student did not want to share what influenced her decision not to continue in band.

Low self-efficacy and continuing in band. The researcher developed several themes regarding verbal persuasion for students who had low self-efficacy and expressed the desire to
continue in band. Although their experiences were different, students shared similar responses of students who had high self-efficacy. One shared that his music teacher complimented the whole band and different sections. He also expressed that his music teachers tell him to practice quite often. For example, he shared, “They always tell me to practice and when I do practice and I play well, they tell me I am doing good.” Another student shared after they rehearsed with their section on their own (sectionals) her teacher said, “you guys got better since the last time I heard you.” Friends and family also expressed positive encouragement. One student shared, “Yes, my parents at performances, they always compliment me and tell me how good I am doing, and when I practice, they let me know that I sound great.”

Students were asked to report if their music teacher, friends, and family influenced their decision to stay in band. One student expressed, “Yes, my parents because I was having second thoughts about being in band, and they said that you should stay in it because you have put in so much work.” Another student expressed, “The expectation of my music teacher always motivates me to get better.” Last, a student shared, “No, it was my own choice, never what people would expect me to do.”

*Low self-efficacy but not continuing in band.* The researcher developed several themes regarding verbal persuasion for students who had low self-efficacy and did not express the desire to continue in band. A student shared the music teachers offer incentives before performances to encourage the students to play their best. For example, his teacher offered the band treats before a performance to encourage the band to play better. After the performance, he would praise the band and tell them how good they performed. Further, students shared that their music teacher encouraged them to practice and offered encouragement while learning new music. Students did not elaborate on whether or not their music teacher expressed that their practice efforts had
improved their performance. However, one student expressed her music teacher would not directly express her practice efforts had improved her musical performance, but her music teacher would comment on other students. All students shared friends and family had offered positive support by attending concerts and encouraging their performance efforts. One student shared, “My parents have, they tell me that I do really well in the performances. They told me that I shouldn’t be so nervous about it because I did really well.”

In terms of verbal persuasion influencing their desire to continue in band, these groups of participants shared diverse perspectives. One student expressed, “I really haven’t been influenced by them, so I can’t say really say it did influence my decision, or it didn’t really help me make that decision.” Another student shared that he wanted to meet his family’s expectations or go beyond their expectations but if he can manage both band and football, then he would like to continue in band.

**Overall findings regarding verbal persuasion.** Across all four groups, several themes emerged. All students reported they had received both complements and corrections on their music performance. All students shared their music teachers have expressed their practice efforts have improved their performance individually and the band as a whole. Most students shared their music teacher has expressed the need to practice more, especially when they are struggling on a part of the music. All students shared that their music teacher expresses positive encouragement when helping students work through challenging music. Further, all students shared that their friends and family were supportive by attending their performances and offering encouragement such as “great performance, good job, and the band sounded great.” Many students reported the expectations their music teacher, family, and friends to continue in band
influenced their decision to continue in band. Only one student shared that he made his own choice without being influenced by others.

The main difference between the four groups is how students viewed their individual experiences with verbal persuasion. Some students with high self-efficacy discussed how their self-efficacy beliefs were strengthened by their music teachers' positive encouragement and corrective criticism, while students with low self-efficacy did not receive individual encouragement. Rather their music teachers addressed the whole band or a specific section of the band was encouraged. A second difference between the four groups of participants in terms of their perceptions about verbal persuasion is how they interpreted people’s expectations. Students who continued in band were influenced by the expectations of their music teacher and family, while students who did not continue in band were not directly influenced by other people’s expectations.

**Physiological state.** Bandura (1994) defined physiological state as the emotional state a student experiences while performing a task. Students expressed this theme by discussing their performance experiences. Students were asked to report how they felt when they performed, specifically, if they ever felt happy, anxious, or sad when they performed. Interview questions explored students’ physiological state. Students were asked to share overall types of memories they had about past performances and share an example of one experience performing. In addition, students were asked to report if the feeling they got while performing on their instrument influenced their decision to continue in band.

**High self-efficacy and continuing in band.** The researcher developed several themes regarding physiological state for students who had high self-efficacy and expressed the desire to continue in band. Although all students reported feeling nervous, students were most anxious
about making mistakes while performing music. One student reported she feels nervous before a
performance, but she enjoys the moment of playing. Another student shared, “I feel really
excited and anxious at the same time. I’ll get anxious at one point and then review the music and
then think, why am I anxious over this?” One student reported that he positively used his anxious
feelings. He shared, “Being anxious; it makes me want to play with all my effort and give it my
best.” All students reported they felt proud of their performances and the accomplishments they
achieved. Most students reported that they did not feel sad when they performed. However, one
student reported that she felt sad if she did not meet her expectations. She expressed, “It sucks;
after all this practice, it was like for nothing.” Otherwise, students only shared positive
experiences that centered on successful performances. For example, one student reported she
feels happy after her performance when she can hear the audience clapping and cheering because
she knows that they enjoyed her performance. She described reporting the feeling like a “rush of
happiness and you feel really proud and confident and then you step off the stage.”

Students were asked to report if their experience performing influenced their decision to
continue in band. All students reported that the positive feeling they had performing influenced
the decision to continue in band. One student shared “Yes, when I can get a part down in the
music, it helps me like have courage to keep on playing.” Another student reported, “Yes, I like
the feeling of excitement and the rush of energy.”

High self-efficacy but not continuing in band. The researcher developed several themes
regarding physiological state for students who had high self-efficacy and did not express the
desire to continue in band. Students reported they felt anxious while performing and relieved
after they performed. For example, a student shared,
After I perform, I know I that either played something wrong or right but usually I play something right and I’m like yah, I did that right that was me. I like to hear the end result when I play the music.

Students shared performing music can be fun but frustrating. A student reported, “I feel anxious all the time, I don’t know how to describe it, it feels fun but frustrating.” Most students shared positive memoirs about band being fun and their experiences centered on performing music with their friends.

Students were asked to report if their experience performing influenced their decision to continue in band. Most students reported positive experiences performing but one did not. One student shared her negative experience influenced her to quit band. She stated, “Yes, whenever I felt anxious or nervous, like those type of feelings, it made me want to quit because I was tired of feeling that way.”

**Low self-efficacy and continuing in band.** The researcher developed several themes regarding physiological state for students who had high self-efficacy and the desire to continue in band. All students reported they felt nervous before a performance. One student shared, “I feel anxious usually before the show or right after and I get kind of scared but excited to play and hear the feedback and stuff.” Students reported they felt anxious that they might play wrong notes but excited to perform. For example, a student reported, “when I solo for jazz band I feel nervous that I will play wrong notes, but when I play in a big group and I don’t single myself out in front of everyone, I don’t feel as nervous.” He described his feelings as, “I’ll get butterflies in my stomach and I’ll get shake quite a bit and my hands get sweaty, it’s not a fun feeling but eventually I overcome it” Students reported they felt proud of their performances and described the experience as positive and fun. One student shared, “I’m proud of me and proud the band and
how we performed.” Students reported they also felt happy when they performed because they know their practice efforts help them improve as musicians. For example, one student shared, “Yes, performing and doing what I love most in life is a refreshing experience. It feels like joy whenever I play, I get happy and I feel good, my mind goes blank and I enjoy it.” No students reported feeling sad when they perform.

Students were asked to report if their experience performing influenced their decision to continue in band. All students shared positive memories of past musical performances focused on school concerts and jazz clinics. All students reported the feelings they get when they perform influenced their decision to continue in band. One student shared, “I get to talk with my friends and play together, it’s always fun and its always a positive experience and it makes me happy, so yes I enjoy doing band because of it.”

_Low self-efficacy but not continuing in band._ The researcher developed several themes regarding physiological state for students who had low self-efficacy and did not express the desire to continue in band. Students reported they felt stressed about how well the band was going to perform when they did not practice well. One student reported “its nerve wracking.” Most students reported that they felt nervous and happy when they performed. For example, one student shared “when I perform I feel nervous but at the same time I feel it is an exciting moment like I am performing for a lot of people and I actually have a good time.” Another student shared she felt most happy during school performances. She shared “Yes, when we have school performances and we played some popular pop songs, those were really fun.” She further reported the feeling felt like “a little kid getting his first Christmas present that he always wanted.” Another student reported he felt confident when he performed. He reported,
“performing feels like, I was nervous but once I got used to performing it got normal and simpler for me.” No students reported they felt sad when they performed.

In terms of physiological state influencing their desire to continue in band, this group of participants shared diverse perspectives. One student reported he was influenced to continue in band by the feelings he got when he performed. He shared, “Yes, it helps me because if I like doing it and I’m good at it, I might as well keep doing it.” The other student reported that she did not factor her feelings about performing into her decision not to continue in band. She indicated, “I really didn’t think about that.” Overall memories of band performances were positive. One student shared, “before the performance we would talk and think how we would do good on everything, and if we messed up we would smile and keep playing.” The other student shared their festival experience, “we got to travel to the coast to play and got some good feedback to help us get better before our last concert.” Although both students indicated they would not continue in band on their survey, both students indicated they had continued in band at the time of the follow-up interviews.

**Overall findings regarding physiological state.** Across all four groups, several themes emerged. All students reported they felt nervous performing and anxious before they performed. Students used words and phrases like “jitters,” “sweaty hands,” and “butterflies in their tummy” to describe their anxious feelings. Students reported that these feelings go away once they start performing. Overall, all students reported they felt happy once they were done performing. Further, they reported they felt a sense of pride and accomplishment about their performance. Among all participants, only one student reported she felt sad performing music when she did not meet her expectations. The memories students shared about band were all positive and their individual experiences centered on performing at school concerts, festivals and receiving high
scores, or performing with their friends. Further, students were influenced to continue band because of their positive experiences. Most students wanted to continue in band because they enjoyed performing music.

The main difference between the four groups is how students viewed their individual experience with physiological state. Some students with high self-efficacy beliefs discussed using their anxious feelings in a positive way by motivating the students to work harder, while students with low self-efficacy were more challenged with overcoming the anxiety of performing. A second difference between the four groups of participants in terms of their perceptions about physiological state is how students internalize the stress of performing. Students who continued in band were able to overcome nervous feelings and have positive performances while students who did not continue in band were not able to overcome the stresses of performing in band.

**Connecting Qualitative and Quantitative Findings**

Research Question 1 was examined for overall music self-efficacy and students desire to continue in band. Quantitative results indicated there was not a statistically significant relationship between overall self-efficacy and students’ desire to continue in band. The quantitative findings based on students’ reported scores on MPSES did not align with qualitative findings from interview responses. Specifically, students viewed their self-efficacy beliefs differently when verbalizing their musical experiences verses what they reported on the MPSES. Some students changed their desire to participate or not participate in band from what they originally stated on their survey. Recollection of the qualitative data allowed the researcher to follow up on students and their decisions to continue or not continue in band. Overall, the
quantitative data did not align with the qualitative data. Qualitative results indicated that overall self-efficacy beliefs are associated with students’ desires to continue in band.

Research Question 2 examined what sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) were associated with students’ desire to continue in band. Quantitative results indicated that there was not a statistically significant relationship between students’ desire to participate in band and the four sources of self-efficacy. The quantitative findings based on students’ reported scores on MPSES did not align with qualitative findings from interview responses. Specifically, the themes that emerged included that most students had successful experiences performing music (mastery experience). Most students’ performance and music skills improved by watching professional musicians or students their own age perform music (vicarious experience). All students reported that their music teachers had expressed corrections on their music performance (verbal persuasion). Finally, all students reported they felt anxious before a performance but were able to have a positive experience performing. (physiological state). Overall, the quantitative data did not align with the qualitative data. Qualitative results indicated that the four sources of self-efficacy are associated with students’ desires to continue in band.

**Limitations**

There are many advantages and disadvantages to focus group interviews. According to Creswell (2014), advantages include allowing the researcher to control the line of questioning and obtain historical information from participants when participants cannot be directly observed. Limitations include filtered indirect information from participants. This information is obtained from a designated place rather than the natural field setting. Participants do not articulate or share perspectives equally, and the researcher’s presence may create bias responses
(Creswell, 2014). For this study, the disadvantages of focus groups outweighed the advantages; therefore, recollection of qualitative data was needed. Limitations that occurred in recollection of data included the challenge of contacting and connecting with middle school students after they matriculated to 9th grade. Students were spread out among three different high schools; therefore, creating challenges with resources and time. Students needing to return a new-signed parent consent form and student assent form presented challenges. The inability to contact and connect with students who did not express the desire to continue with band created limitations with a small data sample; the small sample represented only a few students from each group. Further, only three middle schools were represented in this study, which limited the generalizability and statistical power.

Another limitation that occurred in this study included the possibility of misreporting on the survey. The timing of distribution of the quantitative survey and the recollection of the qualitative data may have impacted students’ momentary perceptions. The time gap between what the students’ reported on the survey and the recollection of the qualitative data allowed the students to change their minds as to whether to continue or not continue in band. Also, having students recall their middle school experience after they had experienced high school band may have influenced their interview answers. Chapter 5 will offer a deeper understanding of middle school music students and their self-efficacy beliefs and why they have the desire to continue in band or not.

Summary

The purpose of this study was to explore whether or not there is a relationship between self-efficacy and students desire to participate in band. MPSES was used to measure music students’ self-efficacy beliefs based on Bandura’s (1977) four sources that include mastery
experience, vicarious experience, verbal/social persuasion, and physiological state. Further, face-to-face, one-to-one interviews allowed the researcher to gain a deeper understanding of students’ self-efficacy beliefs and why students have the desire to participate in band. The connection between the quantitative results and the qualitative results did not align. There was inconsistency between the MPSES survey results and students’ post survey interviews. Quantitative results indicated there is no statistically significant relationship between students’ self-efficacy beliefs and continuing in band. However, qualitative results indicated that the four sources of self-efficacy beliefs and the themes that emerged within those sources are associated with students’ desires to continue in band. This chapter presented the quantitative research findings based on MPSES and the qualitative results from the post survey interviews. Chapter 5 will discuss these results considering the extent of this topic and in the context of Bandura’s theory and recommendations that have resulted in this study.
Chapter 5: Discussion and Conclusion

Introduction

The purpose of this study was to explore the overarching problem of retaining music students between eighth and ninth grade, specifically in band programs. There is little research regarding self-efficacy in music (Hewitt, 2014). The goal was to explore eighth-grade music students’ self-efficacy beliefs to understand how their confidence might predict their desire to participate in band as they transition to high school. The intent of this quantitative study was to shed light on eighth-grade band students’ self-efficacy beliefs based on their experience in middle school band. Data was gathered from eighth-grade band students with at least one year of band experience. This study also explored the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and how they influence students’ desire to continue in band. A qualitative component was added in the form of individual interviews, contributing a deeper understanding of students’ self-efficacy beliefs.

The intention behind this quantitative study was to determine if there is a relationship between eighth-grade music students’ self-efficacy beliefs and their desire to participate in band as they transition to high school. Bandura’s (1977, 1997) self-efficacy theory was used as the conceptual framework that shaped this study. The MPSES (Zelenak, 2010) was used to measure eighth-grade band students’ self-efficacy beliefs. A composite score of the four subscales (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) was used to measure overall self-efficacy.

This study is a quantitative study with a qualitative component; it is not a mixed method study. As this study evolved, the qualitative data took on a larger role and the study developed into an explanatory, sequential mixed methods study, in which the researcher conducted
quantitative research, analyzed the data and then used qualitative data to help explain the results in more detail (Creswell, 2014). Creswell (2014) stated, “the choice of methods turn on whether the intent is to specify the type of information to be collected in advance of the study or to allow it to emerge from the participates in the project” (p. 17). The researcher’s intent was to use a quantitative research approach and state the hypotheses to be examined with data collection that would provide statistically meaningful data (Mills & Gay, 2016). Although results of the quantitative analysis provided meaningful data, it was not statistically significant. The researcher intended to use post survey interviews as platform to digger deeper into the quantitative findings. Therefore, this study remains a quantitative study with a qualitative component.

The following research questions were examined:

RQ1: What, if any, relationship exists between students’ overall self-efficacy and the desire to continue in band?

H10: There is no relationship between students’ overall self-efficacy and the desire to continue in band.

H1a: There is a relationship between students’ overall self-efficacy and the desire to continue in band.

RQ2: What sources of self-efficacy beliefs (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) are associated with students’ desire to continue in band?

H02: There is no relationship between the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.
There is a relationship between each of the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band.

This research offered insight into the complexity of students’ self-efficacy beliefs and how internal beliefs could influence students’ music experiences. This chapter summarizes the results of this study and discusses how this information can shape future research and conversation regarding self-efficacy in music education. The organization of this chapter is as follows: summary of the results; discussion of the results; discussion of the results in context of theory; discussion of the results in context of literature; study limitations; discussion of the implications of the results for practice, policy and theory; recommendations for further research, and the conclusion.

Summary of Results

To answer the research questions, data were collected from eighth-grade band students who had at least one year of band experience. A Point-Biserial correlation was computed to examine the relationships between overall self-efficacy and students’ desire to continue in band. Although not statistically significant, findings indicated overall self-efficacy of individuals not continuing in band showed a greater mean and standard deviation ($M = 19.45, SD = 4.97$) than students continuing in band ($M = 18.88, SD = 4.00$). The results are the opposite of the expectations when comparing the group’s average. This finding does not align with previous literature, which is discussed later in the chapter.

In addition, self-efficacy was examined as four subscales based on Bandura’s model – mastery experience, vicarious experience, verbal/social persuasion, and physiological state. Quantitative results indicated students who did not have the desire to continue in band presented
higher self-efficacy than students who had the desire to continue in band, among all four subscales (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) of self-efficacy. Many students who were confident in performing music did not have the desire to continue in band. This finding also does not align with previous literature (e.g., Lent, Lopez, & Bieschke, 1991; Lopez & Lent, 1992; Matsui, Matsui, & Ohnishi, 1990; Usher & Pajares, 2009). Outside influences may contribute to an explanation, which are discussed later in this chapter.

Overall, qualitative findings indicated that the four sources of self-efficacy beliefs and the themes that emerged regarding those sources are associated with students’ desire to continue in band. The themes that emerged included that most students had successful experiences performing music (mastery experience). Most students reported that their performance and music skills improved by watching professional musicians or students their own age perform music (vicarious experience). All students reported their music teachers had expressed corrections on their music performance (verbal persuasion). Finally, all students reported they felt anxious before a performance but were able to have a positive experience performing (physiological state). These finding align with previous literature. Thus, in this study, the quantitative data did not align with the qualitative data. Quantitative results indicated there was not a statically significant relationship between the four sources of self-efficacy and the desire to continue in band and qualitative data suggested students are influenced by their self-efficacy beliefs.

Discussion of the Results

**Research Question 1.** The quantitative results regarding the first research question showed there is not a statistically significant relationship between overall self-efficacy and eighth-grade music students’ desire to continue in band. These findings were not expected; it was
hypothesized there would be a relationship between student self-efficacy and eighth-grade band students’ desire to continue in band. However, qualitative results indicated a relationship between overall self-efficacy and students desire to continue in band. Most students who had the desire to continue in band shared they have had a successful experiences, enjoyed performing, and were proud of their hard work and successful achievements. Also, all students were inspired to continue in band by overcoming challenges and wanting to improve as musicians. Further, all students shared that their music teacher, friends, and family influenced them to continue in band by offering encouragement and support.

Most students who did not have the desire to continue in band also reported they felt successful as musicians, despite the challenges they faced while trying to master their instrument. Most students’ desire not to continue in band was influenced by stress and pressure of not knowing how to play the music they were assigned. As a result, their experience in the classroom was negative because they were unable to master their instrument and meet their music teacher’s expectations. By not being able to play their assigned part, they had unsuccessful experiences. Students experienced anxiety during performances due to the fear of people hearing the mistakes they might play because they were not proficient at playing their instruments or assigned music parts.

Study results still leave the unanswered question as to why some eighth-grade music students with high self-efficacy beliefs do not have the desire to continue in band as they transition to high school. If there is no statistically significant relationship between overall self-efficacy and students’ desire to continue in band, then further discussion is warranted to understand what contributes to students’ desire to continue in band. According to Zelenak (2015), although results from MPSES is valuable in many ways, there may be other influences
on the desire to continue band than just self-efficacy. Other influences may contribute to how students view themselves.

Other hypotheses for why students with high self-efficacy would choose not to continue band may include outside influences. For example, outside influences may include social demographics, personal reasons for performing music, and the individual effort students use to reach levels of achievement (Zelenak, 2015). These outside influences may impact students’ self-efficacy beliefs by wanting to master the task of something new. Other possible explanations may include students having new priorities that are not focused on band (e.g., academic college goals, vocational classes, student leadership). Students might see other students participating in activities other than band, sparking interest to participate in a new activity other than band. Students may experience social pressures from their friends and not continue in band because their friends are not continuing in band. In addition, students with socioeconomic challenges may experience financial limitations that may discourage them from continuing in band (e.g., instrument, private lessons, marching band shoes). Further, students may be influenced by social stereotypes (e.g., “band is not cool”), which may deter them from continuing in band.

Research Question 2. The results from the second research showed there is not a statistically significant relationship between the four sources of self-efficacy and students’ desire to continue in band. These findings were not expected. When developing the research question, it was hypothesized there would be a relationship between each of the four dimensions of self-efficacy (mastery experience, vicarious experience, verbal/social persuasion, and physiological state) and students’ desire to continue in band. The MPSES was specially designed by Zelenak (2010) to measure Bandura’s (1977) four sources of self-efficacy. Each source was weakly negatively correlated to eighth-grade music students’ self-efficacy and their desire to continue in
Unexpectedly, quantitative results showed individuals who did not have a desire to participate in band showed higher self-efficacy mastery experience, vicarious experience, verbal/social persuasion, and physiological state than students who had the desire to continue participating in band. The results of this study did not align with previous studies (e.g., Lent et al., 1991; Lopez & Lent, 1992; Matsui et al., 1990; Usher & Pajares, 2009) and theory (Bandura, 1986). Across these prior studies, among the four sources of self-efficacy, mastery experience consistently demonstrated the strongest relationship with overall self-efficacy (Zelenak, 2015).

Furthermore, the results of this study showed mastery experience was not the greatest influence on students’ self-efficacy for band, which also conflicted with Bandura’s (1986) theory, and previous studies (Lent et al., 1991; Lopez & Lent, 1992; Matsui et al., 1990; Usher & Pajares, 2006, 2009). Bandura (1997) contended that the most powerful source is mastery experience because it is the result of an individual’s personal attainment.

Further, mastery experience is strengthened by accomplishments that are tangible evidence of success (Bandura, 1997; Schunk & Usher, 2012). A potential explanation for the misalignment observed in this study could be how mastery experience was assessed and how students personally perceived their performance. Pajares and Urdan (2006) suggested that self-reporting can be subjective, and students’ interpretations may not reflect mastery experience (a successful performance) as characterized by Bandura(1997). In addition, the way students choose to remember their experiences (negative) might underestimate their performance capabilities if students choose to focus more on their negative experiences (Bandura, 1997). For example, students with low self-efficacy beliefs reported they did not continue in band because they were not proficient in learning the music they were assigned to play which created a negative experience in the classroom and low confidence levels during a performance.
As discussed in Chapter 4, the results showed both verbal persuasion and physiological state indicated most participants highly agreed they had experienced the components of those two sources, which is different from mastery experience being the most influential source of self-efficacy beliefs in other studies. Rank order was determined by the measurement used in MPSES and how students reported their experiences. Participants were asked to record the strength of their beliefs by reflecting on their experiences using a 100-point Likert scale (Bandura, 1997). The self-efficacy items were formulated in terms of what participants can achieve versus what they want to achieve (McPherson & McCormick, 2006). Having students report what they can do is basing judgment on a skill they have already mastered and experienced versus skills they want to learn and have not experienced. Students reported that their self-efficacy beliefs were strengthened more by the support and encouragement of their music teachers, family, and friends than their experiences mastering the task of playing their instrument.

Another possible explanation for the rank order being different (in this study compared with prior literature) may be because of other influences in the classroom (Zelenak, 2015). Classroom influences can include the music teachers, peers, the amount of rehearsal time, and the number of resources available. The dynamics of the band can impact how rehearsals are conducted. If students are focused, much of the rehearsal can consist of mastering fundamentals and music expression verses redirecting or reinforcing rehearsal etiquette when students are unfocused. Learning to play a musical instrument may be challenging for young learners and may leave learners in a position to choose for themselves how and when they want to complete their practice (McPherson & McCormick, 2006). The physical, mental, and emotional efforts needed to engage in long-term progress may not be apparent, leaving students challenged when needing to engage in repetition to fully master the task. Some students may not have the
resilience or persistence needed to fully master the repertoire (McPherson & McCormick, 2006). Resilience an be especially challenging for students who have low self-efficacy. Therefore, students rely on the encouragement and support from the music teachers, family, and friends to help them work through the challenges of mastering the task of playing their instrument.

In addition to the explanation of rank order, according to Bandura (1977), nurturing strength, relaxation, positive energy, and elation, versus the opposite (e.g., strain, stress, fatigue, and depression) can heighten the students’ perceptions of their ability to persist in a task (Hendricks, 2016). Woody (2004) suggested teaching young musicians with friendliness, encouraging student interaction with their musical peers, and inspiring students to set goals to achieve growth as they practice will strengthen students’ self-beliefs, which are strong components of verbal persuasion and physiological state. Student responses on the MPSES and from the post survey interview supported that verbal persuasion and the physiological state contributes strongly to students to students desire to participate in band. Students expressed that the encouragement from their music teacher’s family and friends strengthen their self-efficacy beliefs, especially when students are struggling to master the task of playing their instrument. In addition, parents played a key role in nurturing students’ self-efficacy beliefs because students reported that the support, encouragement, and expectations from their parents were a strong influence to continue in band.

**Discussion of the Results in Context of Theory**

Previous studies have examined whether there is a relationship between self-belief and achievement (Hendricks, 2016). Based on Bandura’s social cognitive theory (1997), there is a relationship between an individual’s behaviors, personal factors (efficacy), and environment that contribute to student motivation and performance (Bandura, 1997). As discussed in Chapter 4,
the quantitative results of this study are not directly aligned with Bandura’s social cognitive theory. In this study, quantitative results indicated there is no relationship between self-beliefs and achievement. Some students with high self-efficacy beliefs still choose to quit band regardless of the positive success, achievement, and encouragement that takes place inside and outside the music classroom.

**Mastery experience.** The largest contributor to an individual’s self-efficacy beliefs is mastery experiences, defined as having a successful performance (Bandura, 1994). Previous studies have shown that students draw self-efficacy from mastery experience by believing the activity they are participating in gives them a sense of value and purpose in their lives (Cogdill, 2015). Lowe’s (2012) findings support that the value component is a predictor of future enrollment for students participating in band.

The quantitative results from the study indicated that most participants strongly agreed they had experienced the components of mastery experience. Qualitative data from post survey interviews support students have experienced successful performances and enjoy playing their instrument. Students’ with high- and low self-efficacy also expressed that they valued band. Students who value band prioritize practicing their instrument to master the task of achieving a successful performance despite setbacks in the learning process. Most students reported they were able to overcome the challenges while mastering the task of learning music.

**Vicarious experience.** Vicarious experiences are provided by social models (Bandura, 1994) and can be defined as watching others perform successfully. Vicarious experiences encourage students to believe they, too, can master the skills necessary to succeed. Students need to be exposed to model instruction and watch others perform similar tasks that the students can imitate. (Hendricks, 2016; Zelenak, 2010). The use of peer or teacher models or observing
professional musicians can foster positive vicarious experiences (Zelenak, 2010). Literature supports that students have their personal opinions and gauge their capabilities differently in relation to the performance of others (Pajares & Urdan, 2006). Also, students may alter their own beliefs by comparing themselves to a model’s success or failure (Schunk, 1987).

The quantitative results from this study support the literature, indicating that most participants’ scores were equally distributed with experiencing the components of vicarious experience. There was an equal spread of students who have experienced components of vicarious experiences and students who have not. Qualitative data from post survey interviews also support the literature. Most students with high self-efficacy reported that they improved their skills by watching professional musicians or students their age. Students with high self-efficacy beliefs were inspired to continue in music by watching professional musicians. Students were able to understand if they applied themselves to practice, they would improve their music skills. Students who had low self-efficacy were challenged by watching students their age because they questioned their skills, or they discussed being frustrated by comparing themselves to others. In this case, students with low self-efficacy beliefs and musical skills were not inspired by the role model, but more so were trying to connect with what the role model was doing and the music they were playing.

**Verbal persuasion.** Verbal persuasion builds confidence through encouragement and constructive criticism. Students who are verbally persuaded and are capable of the task are likely to put forth greater effort and harbor less self-doubt when personal deficiencies arise (Bandura, 1994). Dynamics in the classroom can be influenced by verbal persuasion and could be used as a platform to motivate students (Bandura, 1997). Previous studies showed that teachers encourage self-efficacy beliefs by providing feedback and instructional techniques boosting students’
attitudes (MacIntyre et al., 2012). Further, shared experiences can foster social experiences that form friendships.

The quantitative results of this study indicated that most participants highly agreed that they had experienced the components of verbal persuasion. Qualitative data from post survey interviews support previous literature because all students reported they received positive feedback and encouragement from their music teachers. Students reported that their music teachers offered constructive criticism to build students' music skills. All students reported they appreciated the support and encouragement they received from their friends and family and believed that their parents think they perform well. Students reported they enjoy playing music with their friends and work hard together so they can perform well.

**Physiological state.** Physiological state is the emotional state of students as they perform a task, which influences how they judge their capabilities (Bandura, 1994). Students’ perceptions about performing music also bring awareness of physical and emotional reactions that contribute to performance (Bandura, 1997). Previous studies show that students feel fulfillment when physiological needs are met (Evans et al., 2013). Also, self-esteem was a strong predictor of students participating in band (Warnock, 2009).

The quantitative results of this study indicated that most participants highly agreed they had experienced the components of physiological state. Qualitative data from post survey interviews support these findings because all students reported they felt nervous before a performance and most students reported these feelings went away once they started performing. An explanation for this may contribute to the training and practice that has taken place in the classroom prior to the performance. Students build their confidence through practice and feedback they receive during rehearsal. Therefore, as a result, students reported a sense of pride.
and accomplishment about their performance, contributing to positive memories of participating in band. Some students who did not continue in band reported they had difficulties overcoming the anxiety that came with performing music.

**Discussion of the Results in Context of Literature**

Studies show responses to self-efficacy share common characteristics not only in music but also in other content areas including math and English (Zelenak, 2015). Further, according to Zelenak (2015), “mastery experience consistently demonstrated the strongest relationship with self-efficacy, followed by verbal/social persuasion, physiological state, and finally, vicarious experience” (p. 391). As discussed previously, this study did not identify mastery experience as the strongest influence relationship with self-efficacy.

This study also indicated that students who did not have the desire to continue in band showed higher levels of self-efficacy than those students who expressed the desire to continue in band. This unexpected result of the study may support Stewart’s (2005) study, which examined self-efficacy and students’ levels of performance. Stewart found band retention was not significantly related to self-efficacy, meaning students’ perceptions of their abilities did not factor into whether or not they participate in band. Qualitative results from the post survey interviews support similar findings. First, students who did not continue in band supported Stewart’s (2005) findings by reporting they would like to spend more time with their friends or participating in other activities, such as sports. Second, findings showed that students who did not continue in band were influenced to quit band because they frustrated with comparing themselves to other proficient students. Further, students’ anxiety was heightened by the fear of making mistakes and disappointing others because they could not master the music they were assigned.
Another explanation for the misalignment between the literature and the quantitative findings may be that there are influences beyond self-efficacy that shape these particular students’ desire to participate in band. There is little research regarding self-efficacy and music education (McCormick & McPherson, 2003). However, based on previous studies that examined self-efficacy, task value plays a key role in determining the activities in which students choose to participate (Bong, 2001; Wigfield & Eccles, 2000; Wigfield et al., 1997). For example, all students reported during the post survey interview that they valued band whether or not they had high or low self-efficacy beliefs and whether or not they continued in band. This implication suggests that participating in band is important to students; they value and enjoy playing music, and students are willing to invest their time participating in band. However, some students still quit band regardless of the fact they value band.

Further, Pintrich and Schunk’s (1996) findings showed that students avoid tasks that make them feel inadequate and gravitate toward tasks they can achieve. The qualitative data suggested students who did not continue in band reported they struggled with mastering their instrument and playing the music that was assigned to them. Students who shared negative experiences in the classroom expressed that they did not enjoy band (specifically jazz band) when they could not play their assigned parts with proficiency. Not knowing how to play the music created stress and tension in the classroom. Also, the frustration and anxiety students experience in the process of learning and mastering music skills outweighed the value or positive experiences students reported.

McCormick and McPherson (2003) determined that values and competency play an important role in activity selection as students’ transition to high school. Quantitative findings in this study contradict that value and competency plays a role in determining if students want to
continue in band. Quantitative results indicated that students who did not have the desire to continue in band presented higher self-efficacy than students who had the desire to continue in band. These findings were confirmed with the recollection of qualitative data. The recollection was beneficial in allowing the researcher to follow up on some students’ actual decision to enroll in band.

Of the original 46 students who shared the desire to continue in band, 21 students did not enroll in band. Of the original 22 students who shared the desire not to continue in band, five students did enroll in band. Overall, findings showed that 55.8% of the eighth-grade band student population did not continue in band. These findings are similar to the findings of Gibson’s (2016) study, where the results found that almost half of the eighth-grade music population also dropped band as they transitioned to high school. Gibson’s (2016) study addressed time commitment, repertoire selection and friend influences and did not focus on Bandura’s (1977) four sources of self-efficacy beliefs. Overall, understating the reasons why students do not continue in band still warrants further study.

Study Limitations

The limitations of this study are factors beyond the researcher’s control. The findings may have been impacted by the fact that participants knew of the researcher and could have provided responses favorable to the researcher. In addition, post survey interview findings may be limited depending on how comfortable the students were sharing their individual experiences of participating in middle school band. This study was limited because it was based on whether students reported they would continue in band and whether they actually continued in band. The results of this study show evidence that student reporting was often misleading. Findings would have been different if students had accurately reported what they would do. Further, using a
more continuous scale, consistent with the MPSES, for example, 0-5 might have provided more insight into students’ desires to continue in band by examining their degree of interest and commitment.

**Implications of the Results for Practice, Policy and Theory**

This study could inform practice and policy in middle school band programs by identifying the students’ strengths and weaknesses in their music self-efficacy. Nurturing abilities is an essential component of learning music performance (Hendricks, 2016; McCormick & McPherson, 2003; McPherson & McCormick, 2000; Wehr-Flowers, 2006). The findings of this study will contribute to the body of knowledge regarding self-efficacy and music retention, specifically in band.

The findings of this study indicate that verbal/social persuasion and physiological state have the strongest influence in the classroom, suggesting students connect to the feedback they receive when mastering the task of learning music. Implication of practice and policy for music educators may include collaborating ways to incorporate the four sources of self-efficacy in the classroom to strengthen students’ self-efficacy beliefs. Music educators can continue to build on student verbal and social persuasion and physiological states while incorporating more ways to nurture mastery experience and vicarious experiences in the classroom. For example, choosing skill-appropriate music that develops music skills to foster successful performances may strengthen students’ mastery experiences.

Being that vicarious experience is the weakest influence, measures that can be taken to strengthen students’ self-efficacy beliefs within that source may include incorporating more school field trips to symphony concerts or musicals. Exposing all students to a professional concert setting and providing models for the students to imitate may inspire them to continue in...
band. Nurturing student leadership (section leaders) and fostering team-building actives may provide stronger student models that will help students with low self-efficacy be more receptive to learning from their peers. In addition, middle schools and school districts can implement this practice by collaborating with high school music teachers to align music curriculum, further strengthening students’ self-efficacy beliefs while continuing to prepare students for high school music programs.

This study added to the existing theory regarding Bandura’s four sources of self-efficacy and how they contribute to middle school music students’ desire to continue in band. The results of this study showed that students who do not have the desire to continue in band have higher levels of self-efficacy than students who have the desire to continue in band. This finding suggests there are confident, well-skilled middle school band students who enjoy band but are choosing to not continue in high school band because of other interests. Retaining music students implies more work and research to keep these students involved in music.

**Recommendations for Further Research**

Based on the study findings, several recommendations for further research are warranted. Expanding the sample population to include more middle schools can be explored. Comparing schools nationally, or studying rural communities verse urban cities are worthy of exploring. Increasing the sample size of the study could provide explanations beyond this study. Examining only eighth-grade music students who have the desire to continue in band may identify relationships as to why students continue in band. Examining only eighth-grade music students, who do not have the desire to continue in band, and examining other influences such as sports, student leadership, and social pressures may produce useful information regarding music retention, specifically in band. Last, revising the questions by directly asking participants about
their desire to continue in band and measuring the response from 0-5, or a more continuous scale, could add valuable information to enhance this study.

Examining whether students enroll in band in ninth grade should be considered. Discrepancies in the desire to participate and the act of committing to continue in band are worthy of being explored. This study was able to follow up on student enrollment because of the recollection of qualitative data, which added several layers to the study. Conducting face-to-face, one-on-one student interviews was an effective way to provide narratives to delve deeper into the findings. However, other ways to gather information may include individual interviews with music teachers and parents. Expanding interviews beyond students may provide deeper discussions about experiences with more details to understand individual student’s self-efficacy beliefs, further explaining the results of this study. Interviewing teachers could provide rich details about the students’ progress and how they are developing as musicians, highlighting the strengths and weaknesses of the student and performance success. Interviewing parents will provide insight into the students' practice time at home and if the student comes from a family that may or may not value music. This information can be used in determining how students interpret and report their self-beliefs.

Conclusion

The intent of this quantitative study was to determine if there is a relationship between eighth-grade music students’ self-efficacy beliefs and their desire to continue in band as they transition to high school. This study was viewed through the lens of eighth-grade middle school band students with one year of band experience using the conceptual framework of Bandura’s (1977) four sources of self-efficacy. Zelenak (2015) stated, “students develop self-perception of their music abilities as they acquire knowledge and skills in the classroom” (p. 390).
Researchers have explored several ways to measure self-efficacy in music in an attempt to create a tool for music educators to use as a formative assessment in providing feedback on the effectiveness of their teaching practices in the classroom (Zelenak, 2015). Using MPSES, this study was able to explore eighth-grade band students’ self-efficacy beliefs and their desire to continue in band. This quantitative study has revealed that there is no statistically significant relationship between students’ self-efficacy beliefs and their desire to continue in band. However, the qualitative data indicated that there is an association between students’ self-efficacy beliefs and continuing in band.

While this comprehensive investigation revealed there is no statistically significant relationship between students’ self-efficacy beliefs and their desire to continue in band, students still showed high levels of self-efficacy beliefs, even though they did not have the desire to continue in band. Finding constructive ways to retain these middle school music students should be explored. Bandura’s (1977) four sources of self-efficacy can build a framework for music educators to use in their classroom, creating a learning environment that is positive for all students. In addition, information gained from the results of this study could be valuable to music educators as they continue to set goals to build their music programs and assess students’ self-efficacy beliefs throughout the school year.

In conclusion, this research study was designed to create more discussion regarding music self-efficacy and student retention to help bridge the gap between eighth- and ninth-grade music programs. After a rigorous study of the literature, there remains room to question what drives eighth-grade music students’ desire to continue in band. The research questions brought meaningful discussion regarding music students’ self-efficacy beliefs and post survey interviews...
added a deeper explanation of the findings. The results of this study may foster conversation and research regarding bridging the gap between eighth and ninth grade music programs.
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Appendix A: Consent Form

Research Study Title: Bridging the Gap, Self-Efficacy and the Desire to Continue Music Education.
Principal Investigator: Janet Anne Levine
Research Institution: Concordia University–Portland
Faculty Advisor: Dr. Belle Booker-Zorigian

Purpose and what you will be doing:
The purpose of this survey is to determine whether there is a relationship between self-efficacy beliefs and students' desire to continue music education in high school. The researcher expects approximately 162 eighth-grade music students to participate in this survey. There will be no financial compensation to participate in this study. The survey process will begin on December 1, 2018 by handing out parent consent forms and student assent forms. The survey will be administered anywhere between November 26, 2018, and December 20, 2018, depending on the availability of the middle schools. Post student interviews will take place after the survey has been administered. To participate in the study students will need to turn in a parent consent form and a student assent form, agreeing to participate in the study. Students who turn in both forms will take the 15-minute survey and can volunteer to participate in a post interview with the researcher discussing further reasons to whether they are choosing to continue with music education in high school or not. The researcher will take notes during the interviews; there will be no video or audio recordings. This process should take less than 30 minutes of instructional time.

Risks:
This quantitative study posed no ethical issues. Although the study uses minors, consent forms were used to provide transparency to parents, students, and teachers. The researcher is mindful of the code of ethics and will not violate professional conduct. Also, the researcher will obtain all necessary permissions before conducting the research, gaining approvals to be on campus and interact with participants. There will be no risk or harm to the students, and proper consent and assent forms will be collected from all students who participate in the study. Student privacy will be observed and respected; no names of students or teachers will be released in the study. Middle school music teachers will be respected, and the study will not address or comment on instructional practices, thus respecting the teacher's rights to confidentiality. Survey data will be analyzed and all survey documents will be kept for three years and then destroyed.

Benefits:
The results of this study may help music educators understand the importance of self-efficacy and students' desire to continue with music education adding to the body of knowledge. Music educators will gain knowledge that will contribute to students’ self-efficacy beliefs and desired to continue with music education, specifically band. This knowledge will be helpful with building music programs and students desire to continue with music education throughout high school.
Confidentiality:
The information obtained for this study will be kept private and confidential and will be used for educational purposes for this study only. The only exception to this confidentiality would be if a student reports abuse or neglect that is considered a concern for the health and safety of the student.

Right to Withdraw:
Student participation is greatly appreciated and the researcher is mindful that some questions in the survey are personal in nature. With this being said, students are free at any point to withdraw from the study. Students have the freedom to skip questions they are not comfortable answering. It is not mandatory for students to participate in this study.

Contact Information:
Parents and students will receive a copy of this consent form. If there are any questions, please feel free to contact the principal investigator at [redacted]. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch (email obranch@cu-portland.edu or call 503-493-6390).

Your Statement of Consent:
I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

_________________________________________                   ___________
Student Name                                      Date
_________________________________________                   ___________
Parent Signature                                 Date

Janet Levine                                      ___________
Investigator Name                                 Date

_________________________________________                   ___________
Investigator Signature                           Date

Investigator: Janet Anne Levine  email: [redacted]
c/o: Professor Belle Booker-Zorigian
Concordia University–Portland
2811 NE Holman Street
Portland, Oregon  97221
Appendix B: Consent Form (Recollection)

Research Study Title: Bridging the Gap, Self-Efficacy and the Desire to Continue Music Education.
Principal Investigator: Janet Anne Levine
Research Institution: Concordia University–Portland
Faculty Advisor: Dr. Belle Booker-Zorigian

Purpose and what you will be doing:
Thank you for allowing your student to participate in my study about self-efficacy (student self beliefs) and whether there is a relationship between self-efficacy beliefs and students desire to continue band in high school. I am asking consent for your student to participate in a second interview. The interview will be conducted by phone or in person. To participate in the second interview students will need to turn in a parent consent form and a student assent form, agreeing to participate in a second interview. Students who turn in both forms will participate in a second interview. This interview will take no more than 30 minutes. In the interview students will be asked questions about their experience in middle school band, how they feel about playing music, and talk about whether or not they want to stay in band. This interview will take place during a time that is convenient for the student. Students do not have to participate in a second interview; it will not affect their grade or anything else with school. This interview will be different in that way that I will be using audio recording during the interview. Students can choose to skip interview questions and stop the interview at any time. Students have the freedom to quit the study at any time. Interview transcripts will be analyzed and will be kept for three years and then destroyed.

Risks:
This quantitative study posed no ethical issues. Although the study uses minors, consent forms were used to provide transparency to parents, students, and teachers. The researcher is mindful of the code of ethics and will not violate professional conduct. Also, the researcher will obtain all necessary permissions before conducting the research, gaining approvals to be on campus and interact with participants. There will be no risk or harm to the students, and proper consent and assent forms will be collected from all students who participate in the study. Student privacy will be observed and respected; no names of students or teachers will be released in the study. Middle school music teachers will be respected, and the study will not address or comment on instructional practices, thus respecting the teacher's rights to confidentiality. Survey data will be analyzed and all survey documents will be kept for three years and then destroyed.

Benefits:
The results of this study may help music educators understand the importance of self-efficacy and students desire to continue with music education adding to the body of knowledge. Music educators will gain knowledge that will contribute to students’ self-efficacy beliefs and desired to continue with music education, specifically band. This knowledge will be helpful with building music programs and students desire to continue with music education throughout high school.
Confidentiality:  
The information obtained for this study will be kept private and confidential and will be used for educational purposes for this study only. The only exception to this confidentiality would be if a student reports abuse or neglect that is considered a concern for the health and safety of the student.

Right to Withdraw:  
Student participation is greatly appreciated and the researcher is mindful that some questions in the survey are personal in nature. With this being said, students are free at any point to withdraw from the study. Students have the freedom to skip questions they are not comfortable answering. It is not mandatory for students to participate in this study.

Contact Information:  
Parents and students will receive a copy of this consent form. If there are any questions, please feel free to contact the principal investigator at [redacted]. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch (email obranch@cu-portland.edu or call 503-493-6390).

Your Statement of Consent:  
I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for my student to participate in a second interview for this study.

_______________________________                   ___________
Student Participant Name                     Date

_______________________________                   ___________
Parent of the Participant Signature             Date

Janet Levine ________________________________                     ___________
Investigator Name                                Date

_______________________________                   ___________
Investigator Signature                         Date

Investigator: Janet Anne Levine     email: [redacted]
c/o: Professor Belle Booker-Zorigian
Concordia University–Portland
2811 NE Holman Street
Portland, Oregon  97221

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Appendix C: Letter of Assent

Dear Student,

I am doing a study that looks at self-efficacy (student self beliefs) to see if there is a relationship between self-efficacy beliefs and students desire to continue band in high school. To join this study, you will need to turn this form in saying yes you would like to participate in this study. If you want to want to join in the study you will take the 15-minute survey and can choose to participate in the post interview with the researcher or not. In the post survey interview, you can talk about why you want to stay in band or not. Post student interviews will take place after you take take the survey.

There are some things you should know about the study. I will respect you. Your privacy will be respected your name or your music teachers name will not used in the study. The study will not talk about how or what your teachers teach, respecting your teacher's rights to privacy. Survey data will be looked at and all survey papers will be kept for three years and then destroyed. I will not be using audio or video recording during student interviews.

When I am finished with this study, I will write a report about what was learned. Music teachers can learn from this study the importance of self-efficacy and how it can help students stay in band. This information can be used to build music programs and students desire to continue with band when they go to high school. You can benefit from this study personally by sharing your thoughts about band. This information will help music teachers help other band students.

You do not have to join this study and it will not affect your grade, or anything else with school. You can choose to skip questions, stop at any time, change answers, and not share answers in the study. You have the freedom to quit the study at any time.
If you want to join the study please sign your name:

I, ________________________, want to join in this research study.

__________________________________  ______________________

(Sign your name here) (Date)

Thank you for reading this form and thinking about joining the study or not.

__________________________________

Janet Levine- Researcher email [redacted]

c/o: Professor Belle Booker-Zorigian, Ph.D

Concordia University–Portland

2811 NE Holman Street

Portland, Oregon 97221
Appendix D: Letter of Assent (Recollection)

Dear Student,

Thank you for participating in my about self-efficacy (student self beliefs) and whether there is a relationship between self-efficacy beliefs and students desire to continue band in high school. I am asking to see if you would be willing to participate in a second interview. The interview will be conducted by phone or in person. You will need to turn this form in saying yes you would like to participate in a second interview. This interview will take no more than 30 minutes. In the interview you will be asked questions about your experience in middle school band, how you feel about playing music, and talk about why you want to stay in band or not. This interview will take place during a time that is convenient for you.

Many things remain the same about the study. I will respect you. Your privacy will be respected. Your name or your music teachers name will not used in the study. The study will not talk about how or what your teachers teach, respecting your teacher's rights to privacy. Interview transcripts will be analyzed and will be kept for three years and then destroyed. This interview will be different in that way that I will be using audio recording during the interview.

When I am finished with this study, I will write a report about what was learned. Music teachers can learn from this study the importance of self-efficacy and how it can help students stay in band. This information can be used to build music programs and students desire to continue with band when they go to high school. You can benefit from this study personally by sharing your thoughts about band. This information will help music teachers help other band students.

You do not have to participate in a second interview; it will not affect your grade or anything else with school. You can choose to skip interview questions and stop the interview at any time. You have the freedom to quit the study at any time.
If you want to participate in a second interview please sign your name.

I, ______________________, want to continue to participate this research study and agree to participate in a second interview.

______________________________  _________________
(Sign your name here)  (Date)

Thank you for reading this form and thinking about participating in a second interview or not.

______________________________
Janet Levine- Researcher email [redacted]

Professor Belle Booker-Zorigian, Ph.D

Concordia University–Portland

2811 NE Holman Street

Portland, Oregon 97221
Appendix E: Interview Protocol

Desire to Continue with Band

1. How long have you been in band?
2. What made you decide to enroll in band in middle school?
3. Tell me a little about your experience in band class and performing music?
4. Do you like it/value it?
5. What do you like most about being in band?
6. What do you like most about performing music?
7. What do you like the least about being in band?
8. What do you like least about performing music?
9. Do you plan to continue in band next year?
10. When did you make that decision?
11. What made you decide to continue in band (or not/depending on answer)?

Mastery Experience

1. Do you feel successful as a band student/musician?
2. Tell me about a time when you felt really successful as a band student.
3. Did that make you want to continue learning music?
4. Tell me about a time when you did not feel successful as a band student.
5. Did that make you want to quit band?
6. Do you think your success in band (or lack of success) has influenced your decision to continue in band next year (or not continue with band next year)?
**Vicarious Experience**

1. Have you ever watched professional musicians who play the same instrument as you to help you improve your performance skills?
2. Can you tell me about a time when this happened?
3. Do you think your musician skills improved by watching professional musicians play?
4. Have you ever watched other band students who play the same instrument as you to help you improve your performance skills?
5. Can you tell me about a time when this happened?
6. Do you think watching other students or musicians has influenced your decision to continue in band next year (or not continue with band next year)?

**Verbal Persuasions**

1. Does your music teacher complement you on your musical performances?
2. Does your music teacher give you corrections on your musical performances?
3. Does your music teacher express to you that your practice efforts have improved your performance?
4. Do they express to you that you need to practice more?
5. Have your friends and family told you that you are a good performer on your instrument?
6. Does your music teacher express positive encouragement, such as “you can do it”?
7. Does your family or friends express positive encouragement, such as “you can do it”? 
8. Do you think the expectations of other people (friends, family, or your music teacher) has influenced your decision to continue in band next year (or not continue with band next year)?

Physiological Arousal

1. How do you feel when you are performing?
2. Do you ever feel anxious when you perform?
3. If so, how often or what does that feel like? (depending on response above)
4. Do you ever feel happy when you perform?
5. If so, how often, or when? (depending on response above)
6. Tell me what that feels like?
7. Do you ever feel sad when you perform?
8. If so, how often, or when? (depending on response above)
9. Tell me what that feels like?
10. Overall, what type of memories do you have about past musical performances?
11. Can you tell me about one experience performing?
12. Do you think the feelings you get when you perform has influenced your decision to continue in band next year (or not continue with band next year)?
Appendix F: Histograms

Overall Self-Efficacy

Figure 1. Histogram of overall self-efficacy.

Mastery experience

Figure 2. Histogram of mastery experience.
Vicarious experience

Figure 3. Histogram of vicarious experience.

Verbal/social Persuasion

Figure 4. Histogram of verbal/social persuasion
Figure 5. Histogram of physiological state.

Mean = 4.27  
Std. Dev. = 1.636  
N = 68
Appendix G: G*Power Analysis

G*Power 3.1.9.2

File Edit View Tests Calculator Help

Central and noncentral distributions Protocol of power analyses

critical t = 2.0639

Test family Statistical test

t tests ⊆ Correlation: Point biserial model

Type of power analysis
A priori: Compute required sample size - given α, power, and effect size

Input Parameters
Determine →

<table>
<thead>
<tr>
<th>Tail(s)</th>
<th>Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect size</td>
<td>50</td>
</tr>
<tr>
<td>α err prob</td>
<td>0.05</td>
</tr>
<tr>
<td>Power (1-β err prob)</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Output Parameters
Noncentrality parameter δ | 2.9439203 |
Critical t | 2.0638986 |
Df | 24 |
Total sample size | 26 |
Actual power | 0.8063175 |

X-Y plot for a range of values Calculate
Appendix H: Music Performance Self-Efficacy Scale

Identification Code________

Sources of Music Performance Self-Efficacy Scale

Directions: Respond to the following statements based on your current level of music ability, experience, and primary instrument. There are no right or wrong answers. Indicate to what degree you either agree or disagree with the statement by writing any number between 0 (Strongly Disagree) and 100 (Strongly Agree) on the line next to the statement. Carefully consider the number you choose.

0 10 20 30 40 50 60 70 80 90 100

Part I- (Master experiences)

_____1. I have had positive experiences performing music in the past
_____2. I have had positive experiences performing in large ensembles.
_____3. I have had positive experiences performing solo, or in, a small ensemble
_____4. I have had positive experiences performing simple music.
_____5. I have had positive experiences performing complicated music.
_____6. I have overcome musical challenges through hard work and practice.
_____7. I have used a practice routine to help me prepare for my performances.

Part II- (Vicarious experiences)

_____8. I have improved my music performance skills by watching professional musicians, who are similar to me in some way, perform well.
_____9. I have improved my music performance skills by watching other students, who are similar to me in some way, perform well.
_____10. I have used other music students as models to improve my performance skills.
11. I have compared my performance skills with those of other students who are similar in musical ability to me.

12. I have watched other students of similar musical ability as me to perform a piece of music, and then decide whether I could, or could not, perform the same piece of music.

**Part III- (Verbal/social persuasion)**

13. My friends think I am a good performer on my primary instrument.

14. Members of my family believe I perform well.

15. My music teacher has complimented me on my musical performance.

16. People have told me that my practice efforts have improved my performance skills.

17. I have received positive feedback on music performance evaluations.

18. I have met or exceeded other people’s expectations of being a good musician for someone of my age.

19. Write only the number 9 for this answer (not 1-100 rating).

**Part IV- (Physiological state)**

20. Performing with my instrument makes me feel good (Return to using 1-100 rating).

21. I enjoy participating in musical performances.

22. I am, learning, or have learned, to control nervousness during a performance.

23. I do not worry about small mistakes during a performance.

24. I have positive memories of most, or all, my past musical performances.
Place an “X” next to the correct response.

What is your gender?  _____ Male  _____ Female

What is your race?  _____ Asian  _____ Black  _____ Hispanic  _____ White
  _____ Indian (American)  _____ Mixed  _____ Other

Do you desire to enroll in band in the ninth grade?  _________ Yes  _________ No

Do you wish to participate in a post survey interview?  _________ Yes  _________ No
Appendix I: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy.

This policy states the following:

**Statement of academic integrity.**

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

**Explanations:**

*What does “fraudulent” mean?*

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

*What is “unauthorized” assistance?*

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project.
- Unauthorized solicitation of professional resources for the completion of the work.
Statement of Original Work (continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.

2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*.

Janet Anne Levine

Digital Signature

Janet Anne Levine

Name (Typed)

12/11/2019

Date