Quantitative and Qualitative Investigations of Music Participation:

A Multiple Study Dissertation

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Abstract

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Introduction: The purpose of this dissertation is to contribute to the body of research that has investigated music participation within the field of music education. This dissertation contains four papers on the topic of music participation including a literature review, two quantitative studies, and one qualitative study. While the primary focus of this dissertation is the investigation of music participation, each paper also explores themes of gender and personal identity. A brief summary of each paper contained within the dissertation is described below.

Paper One: The purpose of this review is to identify factors that have been associated with music participation in existing scholarship. This paper organizes findings thematically, across research methodologies and musical domains. Synthesis of research findings from extant literature suggests that personal beliefs or characteristics, social influences, and socio-cultural influences impact music participation choices. This paper also provides implications for practitioners and future music researchers
**Paper Two:** The purpose of this study is to empirically test the influence of cultural gender norms on adolescents’ interest in music activities. Using an experimental design, middle school participants ($N=246$) were assigned to either a primed condition where students were asked to consider their gender identity or a control condition; all participants took a survey on interest in music activities. Findings suggest adolescents who had been primed to think about their gender identity rate music activities, including stereotypically masculine and feminine activities, significantly more positively than the control group.

**Paper Three:** The primary author of this paper is Steven M. Demorest; the paper was co-authored by this dissertation author and Peter Q. Pfordresher. The purpose of this investigation was to explore the role of musical background and personal attitudes about music in predicting students’ decisions to participate in elective music instruction in junior high and how those same variables related to their actual singing ability. Findings suggest that family music participation and positive attitudes toward music, particularly their view of themselves as musicians, can predict with 73% accuracy which students within the sample enrolled in elective music. Musical self-concept was also a unique predictor of singing accuracy performance, suggesting a connection between students’ actual singing ability and their view of themselves as musicians.

**Paper Four:** Although community music activities can take many forms, a “participatory ethos” is central to most community music endeavors. Karaoke is a common music activity that brings people together to experience a shared musical event. The case study used for this investigation is a karaoke culture at an LGBT establishment in the Pacific Northwest of the United States. This study focuses on the formation of community as well as identity through karaoke performance. Additionally, the application of Turino’s framework of
participatory and presentational performance was used to examine how musical behaviors may encourage the formation of community and identity. Findings within this case study reveal the importance of the roles of the participants, the role of the facilitator, the agency of the individual, the fixity of musical forms, and musical texture to promote participatory experiences.
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DEDICATION

To my family, for their unconditional love and support.

To my students, who continue to inspire and teach me.
INTRODUCTION

On the first day of class, before I would explain class expectations or even introduce myself, I would teach my choral classes a song by rote. As we sang phrase by phrase, it was my intent to communicate the nature of this music class to my students. Above all else, I would think to myself, we “do” music and participating in the musical activities is the nature of the discipline. These ideas are central to my philosophy of music education and are lived through my teaching praxis. For me, it is through active musical engagement that musical learning and skills are developed. I have observed this in my experience as a musician, whether as a singer in a choir or learning Zimbabwe marimba by rote, as well as in my students. By actively participating in music experiences, I not only learned ways to be more musical (e.g., contour of a phrase, expressive timing, uniform diction) but also the power of music (e.g., the social bond formed through performance, the expressivity of the unspeakable).

Significance of the Topic

For many practicing music educators, the issue of music participation is very important. Every year, music teachers, especially those at the secondary level, may be concerned with issues of retention and recruitment. For many teachers, recruitment campaigns are launched in order to maintain the quality of their program or to validate its existence in a school climate of competing programs. Routinely at music educator in-service workshops, clinicians extol ways to build programs or find the participants that may be more elusive (e.g., male singers or double-reeds). Likewise, in practitioner journals, advice is given by experts as a means to identify candidates to fill class rosters.
Most music teachers have beliefs about why students participate in music; however, their understanding of the topic may not be aligned with existing research or, perhaps, makes assumptions about why individuals participate in music activities. For these reasons, I pursued this line of research. At the core of this dissertation, I wanted to explore factors that may influence individuals to participate in music. This dissertation contains four papers that contribute to the extant research on the topic of music participation.

Contents of the Dissertation

The first of the four papers in this dissertation is an extensive literature review on the topic of participation in school music programs. While there has been a healthy scholarly record on the topic, there has been less attention made by researchers in music education to synthesize findings. The purpose of this review is to identify factors that have been identified in existing scholarship that are related to music participation. This paper organizes findings thematically, across research methodologies and musical domains. The paper also provides implications for practitioners and future music researchers. For this document, this paper also serves as an entry into the topic of music participation, relating important variables that will be explored and discussed in later papers.

The second chapter, “The Effect of Gender Salience on Interest in Music Activities,” is an investigation in how gender stereotypes and gender norms about music activities may influence interest in various music activities. Specifically, this study experimentally tested if gender salience used as a priming agent would influence adolescents’ interest in various music activities. In addition to the experimental manipulation, this study also examined participants’ gender and enrollment status in a music class as important variables related to interest in music activities.
The third chapter, “The Role of Home Environment, Attitude and Singing Ability in Predicting Music Participation,” is also a quantitative exploration of music participation. The primary author of this paper is Steven M. Demorest; the paper was co-authored by this dissertation author and Peter Q. Pfordresher. The purpose of this investigation was to explore the role of musical background and personal attitudes about music in predicting students’ decisions to participate in elective music instruction in junior high and how those same variables related to their actual singing ability. Mean comparisons and regression models were used to potentially identify variables that may impact music participation.

Finally, the fourth paper examines music participation from a very different vantage point. In “Everyone’s magical and everyone’s important’: Karaoke Community and Identity in an American Gay Bar,” music participation is examined through the lens of qualitative methodology. Using a framework designed by Turino, the paper explores the development of community and identity through participatory behaviors within karaoke events. The inclusion of this paper was intentional to open the scope of what is considered music participation. The first three papers of the dissertation explore the topic of music participation as a formal commitment, such as enrolling in a music class, to a music activity; in this study of karaoke performance, music participation is explored as informal musical practices and behaviors within a specific setting and culture.

While the primary focus of this dissertation is music participation, several themes pervade throughout all the presented papers. Throughout all four papers, the issue of gender or gender identity is important in the discussion of music participation. Additionally, aspects of identity (e.g., music self-concept, sexual identity) are explored in relation to music participation in all four papers. With these four papers, it is the aim of this
dissertation to contribute to the field of music education with these studies on music participation.
Abstract

For many music educators, the goal of music instruction is to develop students’ skills and knowledge for engagement in music, for the present as well as for future musical endeavors. Music educators, especially those teaching at the secondary level, must recruit and retain students in their programs to provide quality music performing and learning experiences. The purpose of this review is to examine the extant literature on the factors that impact school music participation and to synthesize the findings across study designs.

The specific questions this review explores include:

1. What factors are associated with students’ music participation decisions?
2. Are these factors different for different musical domains?

This review highlights existing research thematically, organizing similar findings across research methodologies and musical contexts. Factors that have been identified in the extant literature include personal attitudes, beliefs, or characteristics (such as music self-concept, personality, or interest), social influences (like teachers, parents, siblings, and peers), and socio-cultural variables (such as socio-economic status and gender). Finally, a discussion of the implications for music education practitioners and researchers is presented.
Introduction

For many music educators, the goal of music instruction is to develop students’ skills and knowledge for future engagement in music. In fact, the National Association for Music Education states in their vision for music education that “all students will receive a comprehensive, sequential music education that prepares them for lifelong involvement in music” (2011). While many music educators adopt this noble sentiment as part of their teaching philosophy, one challenge to this goal is that most students choose not to participate in music activities when classes are not compulsory (Elpus & Abril, 2011; Hoffer, 1980).

Music educators, especially those teaching at the secondary level, must recruit and retain students in their programs to provide quality music performing and learning experiences. Practitioners have been given plenty of advice on how to engage more students as well as how to retain students within their music program (Brinson & Demorest, 2014; Corke, 1991; Davis, 1989; Demorest, 2000; Doerkson, 2002; Hagner, 1985; Howe, 1979; Killian, 1988; Mills, 1983; Navarre, 1995; Peterson, 2002; Phillips, 1986; Prentice, 1989; Simons, 1993). While music educators are provided many ideas and opinions in how to recruit or retain students within music programs, there is little consensus about what factors influence an individual’s music participation choices.

In order to explain the decision-making process, Gates (1991) proffered a theory of music participation, adapting existing models from sociology, specifically leisure theory. In scholarship on leisure theory, Shamir and Ruskin (1982) examined sports and established that those who enjoyed participating in sports had different values from those who enjoy
watching sporting events. Additionally, Shamir and Ruskin found few crossover members from one group to the other, suggesting that interests, motivations, and value-systems for participating in the activities were significantly different between groups. Within a musical context, the implication is that only a certain percentage of the population would be interested in a participatory role in music activities. Stebbins’ (1979, 1980, 1982) similarly examined the role between participants and spectators in participation in leisure activities. Stebbins clarified roles by presenting a professional-amateur-publics (P-A-P) model where participants within a specific category share an agreed-upon set of values that is used to regulate behavior and evaluate quality.

Building off of these ideas from leisure theory, Gates (1991) adapted Stebbins’ model for participation in music activities and created a typology of music participation. Gates asserts that there are three types of people in regard to their relationship to music participation: participants (active music-makers), audience members, and those who have no interest in music. Of the music participants, Gates further delineates individuals by interest and motivation. By creating further distinctions, he describes music participants as fitting into one of the following categories: professionals, apprentices, amateurs, hobbyists, recreationists, and dabblers. The distinction between each group is fundamentally the cost-benefit understanding for participation in music activities, where those at the top of the system endure more costs in order to attain the highest benefits (income as a musician), while those at the bottom will only endure the costs of participation while the benefits of curiosity are fulfilled. This paradigm is essentially a reformulation of Stebbin’s P-A-P model.
Gates describes music participants who are professionals or apprentices as those who view the music participation as work, in that the individual is developing skills, knowledge, and contacts to be rewarded financially or to graduate to more elite forms of participation. Amateurs and hobbyists are those participants who seek serious leisure from the music activities, enduring economic costs (e.g., time or money) for the psychological benefits of music participation. Recreationists and Dabblers are only interested in music participation out of curiosity or for entertainment value, and will readily cease participation when costs outweigh the entertaining benefits. In order to increase music participation, Gates suggests providing different “program tracks” which align the music participation experience with the interest level of the individual. While Gates provides a theoretical model for how participation choices are made, this theory overlooks many variables that may influence participation choices other than costs and benefits.

Since Gates offered his theory on music participation, researchers in music education have continued to investigate which variables may influence music participation choices. These researchers have employed diverse design methodologies, including both quantitative and qualitative studies, and explored unique music participation settings. While there is a healthy record of inquiry on this topic, there have been few attempts to synthesize the findings. Furthermore, little attention has been given to examine findings between studies with differing methodologies. Another challenge to research examining music participation is researchers rarely examine more than one domain of music participation, such as only looking at one community string organization or the
participation choices of university students in choirs. This review seeks to fill in these gaps within the literature regarding music participation by addressing these issues.

The purpose of this review is to examine the extant literature on the factors that impact school music participation and to synthesize the findings across study designs.

The specific questions this review will explore include:

1. What factors are associated students’ music participation decisions?
2. Are these factors different for different musical domains?

This review will unfold thematically, highlighting similar findings across research methodologies and musical contexts as well as noting contradictions between studies. First, research findings that illustrate how personal attitudes, beliefs, or characteristics may influence music participation choices will be presented. Second, studies that provide evidence of social influences, such as parents, siblings, or peers, on music participation will be discussed. Last, cultural or systematic factors that influence music participation will be explored.

It should be noted that many researchers have examined music participation as an independent variable, exploring how it may affect other dependent variables such as academic achievement (see Elpus, 2013; Fitzpatrick, 2006; Demorest & Morrison, 2000). This review will not include these studies, but rather focus on literature that examines what factors are related to participation in music activities.

**Personal Attitudes, Beliefs, and Characteristics**

In the extant literature on music participation, personal attitudes and beliefs have emerged as important factors in motivating both initial and continued music participation. Researchers have identified specific important beliefs or attitudes that are shared among
music participants. These personal beliefs or attitudes include interest in or value of music, a belief in one’s musical abilities, and a belief that music participation imparts extra-musical benefits.

**Interest in and value of music: Those who like music**

It seems logical that students who elect to enroll in music classes or perform in ensembles would have interest in music as a discipline. Researchers in music education have provided evidence that an individual’s interest in or value of music is an important factor in participation choices.

Qualitative studies that have examined motivation for music participation have illustrated the magnitude of these beliefs on music participation. A strength of qualitative studies is that participants are allowed to give free responses, perhaps rich in detail that may be obscured in more limiting survey designs. While the findings in these qualitative studies are not generalizable beyond the groups examined, the similarities of the emerging themes between studies may suggest common experiences between music participants.

Several researchers in music education have explored motivation to participate in choral programs. Conway and Borst (2001), using an action research design, explored the motivation for middle school chorale students to continue singing in high school. The researchers employed structured individual interviews with six students as well as one parent. Of the emerging themes, Conway and Borst found that students participated in middle school choir for enjoyment and “for music itself.”

Similarly, Kennedy (2002) examined what factors motivated junior high school boys to participate in choral singing at school. The researcher interviewed 11 of 12 male
choristers at one junior high choral program using structured and semi-structured interviews. Kennedy reported that one of the most reported reason for participation in choir was love of singing. This motivation is typified by how one respondent bluntly described his motivation for joining choir, “I like to sing so – you just go to choir to sing” (p. 29).

Sweet (2010) also examined the motivations for boys participating in a middle school choral program. Five boys were interviewed in a group using a semi-structured format. Among the findings that emerged from the data, Sweet reported that music participation was highly motivated by the enjoyment of singing and music. When answering why they had signed up for the choral ensemble, one of the respondents described how this enjoyment affects motivation, saying “everyone that signs up for it [Choraliers] likes to sing….they know it’s fun and they like to do it” (p. 9).

In her ethnographic study of the Seattle Girls’ Choir that included interviews with singers, parents, and ensemble personnel, Bartolome (2013) explored the benefits of participation in an all-female, community choral program. Many of the participants in the study described the musical benefits as an important component to their participation in the group. One mother described how the organization helped foster her daughter’s interest in choral music, “It’s such a wonderful organization that has changed my daughter’s life. She composes choral music, she sings nonstop, she loves music, and she knows it at a depth she would never have gotten to otherwise” (p. 402).

Similar to these qualitative studies on choral participation, interest in and value of music have been identified as enhancing motivation to participate in instrumental ensembles. In a narrative study of three very involved band students, Abril (2013)
reported that these participants in the study were highly motivated by their enjoyment of musical engagement, particularly performing opportunities. Michiline, one of Abril’s participants in this narrative study, described her value of music:

> I love my instrument; I love playing it. I love how it feels and how it makes me feel....It is an amazing feeling when the music sounds so great. Music is such a life force for me....It’s part of who I am; it is me. When I play it, it gets even deeper into me. (p. 442)

In a qualitative study that explored music participation of instrumental and choral students, Adderley, Kennedy, and Berz (2003) interviewed 60 music high school students using a semi-structured protocol. The researchers asked the band, orchestra, and choir teacher to each select 20 students from each ensemble, balancing for boys and girls as well as for age. These participants also reported their enjoyment of music as being catalyst for ensemble participation. The authors note that students’ interest in music as a subject was present in most interviews, stating that the phrase, “I like music,” appeared frequently within the interview transcripts. When answering questions about the value of making music, students responded that they enjoyed the opportunity to perform; again, the phrase, “I like playing” was noted abundantly within the interviews. This qualitative study by Adderley, Kennedy, and Berz (2003) demonstrates the value of music as reported by the study participants. These qualitative studies that have explored motivation of music participation have allowed student musicians to describe their personal reasons for participation; it is clear that these musicians are influenced to participate by their genuine interest in music as a discipline and a high value of music in their lives.
Researchers in music education have also noted the important role of interest in or value of music using quantitative methods. Clements (2002) surveyed 504 sixth graders on many variables that may influence participation; using registration information from the school district, she compared attitudes and beliefs between students who had elected to take a music class in seventh grade and those who did not. Clements's (2002) study reported significant differences in attitudes about music between music participants and non-participants. Sixth graders who were music participants were significantly more positive on statements about their attitudes toward music, such as “Music makes me feel good inside” or “Music is an important part of my life.” Furthermore, students’ composite score on these items were significant in discriminating between music participants and non-participants. This finding corroborates the earlier results of Frakes (1984), who reported that interest in music was significantly predictive of intentions to participate in music in a sample of high school students. These studies examining interest and attitudes of music validate the qualitative findings that interest in music is a motivating factor for music participation.

Some music education researchers have examined interest in and value of music in relation to continuing music activities. In one of the first studies to examine retention within ensembles, Anthony (1974) examined factors that lead to participating in band programs in Iowa. He reported that students’ love and enjoyment of music was influential in participation decisions. Morehouse (1987), examining factors for retention in a string program, reported that attitudes toward the string class, attitudes about the literature, and attitudes about practicing were all significant factors in continuing to participate.
Sichivitsa (2003), in her path analysis based on the Tinto Model, reported that the highest predictive variable for continued participation in choral singing in college was value of music. Based on the model she presented, value or interest in music is informed by family support of music, musical self-concept, and past music experiences. In a replication study with non-music majors at the college level, Sichivitsa (2007) again reported value of music as a direct predictor of intentions to enroll in a choral ensemble. These quantitative studies provide evidence that an individual’s interest in music or value of music is an influential variable in initial and sustained participation in music activities.

While there is an argument building that students that are drawn to elective music classes have significantly more interest in music or have a higher value of music than those who do not, some researchers have suggested that there may be significant differences between interest in music and interest in school music. Some students may view school music as irrelevant to their musical life or pursuits—and thus, do not participate in musical activities at school. In a study examining the interest in music within a sample of 3037 U. S. high school students, McPherson and Hendricks (2010) reported that school music was viewed as the least important subject when compared to English, Math, Science, Art, and Physical Education with significantly lower ratings than the other subjects. Additionally, differences in level of interest were detected between sixth grade and the middle school years (grades 7-9), where interest in school music dropped. Furthermore, interest in school music rebounded in later high school years, with significantly higher ratings than during middle school. Despite the growth of interest in high school, school music was evaluated as the least important subject.
In comparison, however, interest in music outside of school was dramatically different. In sixth grade, participants indicated that their interest in music was significantly lower than sports. As seen with interest in school music, interest in music out of school waned during the middle school years before increasing dramatically in later high school. In fact, music was the highest ranked subject outside of school in grades 10 through 12. While music was ranked as the highest out of school subject, it was not significantly higher than physical education (e.g., sports). McPherson and Hendricks’ study demonstrates that participation in music ensembles may not be due to a lack of interest in music, but rather a lack of interest in the music that occurs at school.

In exploring the musical lives of students in and out of school, Lamont, Hargreaves, Marshall, and Tarrant (2003) found that the majority of students (67% of a nationally representative sample within the United Kingdom) had positive feelings about the music program within their schools. Interest in school music decreased over time, from Year 4 to Year 9. Other studies have also provided evidence that interest in school music decreases as students get older (Mizener, 1993; Siebenaler, 2006). While it is documented that interest in school music may deteriorate over time, it may be erroneous to suggest that those who do not enroll in music classes are less interested in music. Rather, it could be that students elect to take music classes when their music interests are aligned with the musical offerings of the school.

Studies using both qualitative and quantitative methodologies have documented the importance of interest in music or the value of music in making participation choices. Again, it seems a logical claim that students who are interested in music or value it in their life would elect to take music classes. However, this sentiment needs to be qualified. When
examining all the research findings regarding interest in music, even students interested in music may be reluctant to participate if they are not interested in the music activities of their school.

**Musical Self-Concept: those who believe they are good at music**

Another personal belief that may impact participation decisions is an individual’s musical self-concept, how musical an individual believes herself to be. Using quantitative methodologies, researchers have examined musical self-concept in student populations to identify if there are differences between music participants and non-participants. Austin (1990) examined the relationship between musical self-concept and music participation, both inside and outside of school. The sample consisted of 252 fifth- and sixth-graders from one school district; one third of the sample reported not participating in any type of elective musical activity. Using the Self-Esteem of Musical Ability scale along with a researcher designed questionnaire to identify degree of music participation, results indicated that musical self-concept was a significant predictor of participation in both school and out-of-school music activities.

Similarly, Clements (2002) found musical self-concept to be the most significant predictive variable of music participation in her study examining 504 sixth graders’ enrollment choices at the middle school level. How students viewed themselves musically influenced their course selection, regardless of registering for a choral or instrumental classes. While Clements identified many differences between music participants and non-participants, musical self-concept was the most predictive of music participation choices within her sample.
Like musical self-concept, differences in perceptions of domain competence have been identified between music participants and non-participants. Siebenaler (2006) reported that responses to a statement about singing competence ("people tell me I am a good musician") were a significant predictor of participation between high school students in choral programs and those who were not. In Amundson’s (2012) study of participants and non-participants in choral activities at the collegiate level, data indicated that there were significant differences in feelings of musical competence between choral singers and non-participants (high school choral participants that chose not to participate in singing at the college level).

The research literature also provides evidence that individuals with low musical self-concept may actively avoid music participation. In Whidden’s (2010) narrative study examining people who identify as being a “non-singer,” some participants were reluctant to sing in front of the researcher in fear that they may not meet some perceived cultural standard of singing proficiency and would be viewed negatively. As one participant described, “I wouldn’t want to take the chance of not being able to sing what I hear in my head. The fear factor of failure” (p. 6). Other participants discussed how being informed of being a poor singer by an authoritative person (e.g., their music teacher, parent) had tremendous impact on their musical identity and deflated motivation toward musical pursuits. Cheri, one of Whidden’s participants, described an episode where she auditioned for a choir that met during recess in the 4th grade; she was the only girl in the grade to not be invited to join the choir:

I was devastated….I was completely ostracized. So I was out at recess by myself in the freezing cold with no one to play with but all the boys. All the girls went to the
choir...It was humiliating—being the only one....It was a huge social event in the spring that I wasn’t a part of. It was just devastating for me. Up until that point I didn’t realize that I actually couldn’t sing. (p. 12)

Cherie confided that she was reluctant to participant in any musical activities as a result of this experience.

Cathie, another of Whidden’s participants, related a similar story. Cathie had a negative public performing experience in 3rd grade and felt that she did not perform as well as the other students. The feeling that she was not a competent singer influenced her to avoid all singing activities, stating “That experience made me say, ‘I’m not doing that again.’ It was uncomfortable. I’m not good at singing as so I just never put myself in that situation where I had to do that” (p. 12). The participants in Whidden’s study illustrate how beliefs about musical self-concept can have significant impact on future music participation.

In Abril’s (2007) narrative study of elementary teachers (“generalists”), participants recounted similar stories of how specific watershed events changed their perspective on their musical competence. Melissa describes an experience in elementary school:

When I was in sixth-grade we had the option of being in the choir. I wanted to be in [it] so badly...For the audition, the teacher went around the room, knelt by each person, and took notes...I was terrified as he came to me...Well, I didn’t make the cut...and what made it worse was that all my friends did. I was devastated! I quit singing after that because I figured all these people must be right about –my music teacher was the music expert! That really shattered my musical self-image. Since then I’ve felt pretty incapable.

Joan, another informant in Abril’s study, recounts a similar episode:
My music teacher, Sister Bertha, is still at the front of my mind after all of these years....One day, as we were singing in the classroom, she got very angry because she heard some wrong notes...I thought she might have a heart attack she was so upset...she stopped the entire group because she heard someone off pitch. She moved around the room putting her ear close to each of our mouths. She seemed quite determined to find the offender who messed up. I never wanted to take the chance that she would get me...I was always a good student in everything except music. I just didn’t want to let anyone down. (p. 10)

Joan further reported that this event had “stifled” her musical development and as a result she feels “musically illiterate today” (p. 10). When pressed by the researcher if anyone had ever specifically criticized her singing ability, she responded, “It was just the feeling I got” (p. 10). Melanie, another of the participants in Abril’s study, had a similar experience to Melissa. After auditioning for the school choir, she was heartbroken when she was not invited to participate, stating, “it really hurt my self-esteem regarding my musical ability” (p. 8). Like the other participants, Melanie actively avoided singing activities after this incident. Unlike the participants, she did pursue future music activities and elected to join the band in high school; however, she continued to feel that she was not as competent as her peers, stating “playing music was one of the hardest things I’ve ever tried to do....I just couldn’t get the beat and play the rhythms. I struggled so much” (p. 8). In both Abril’s and Whidden’s studies, future participation was heavily influenced by beliefs of their musical competence, regardless if the beliefs were valid.

Sloboda, Wise, and Peretz (2005) reported similar findings a study exploring congenital amusia (i.e., tone-deafness). Participants identified as being “tone-deaf” in
varying degrees. While some participants who labeled themselves as “tone-deaf” continued to pursue some musical activities such as learning an instrument, participants who believed that they were “severely” tone-deaf also believed that they were “unmusical” and did not participate in any musical activities. This finding, similar to Melanie’s account in Abril’s (2007) study, suggests that individuals who have a strong belief that they are poor singers may generalize to a sense that they are completely unmusical. These studies have provided evidence that students who have a negative musical self-concept may actively avoid music participation.

Again, while the conclusion may be logical or even common sense, these studies indicate that a person’s belief of how musical he is may influence his participation choices. While there is compelling evidence to support this claim, music researchers have considerable work to understand the formation of musical self-concept. Researchers should examine what types of feedback and from what sources helps in developing strong musical self-concept in students. Researchers could also investigate if there is a natural progression in the development in musical self-concept; for instance, do music students that enroll in music classes have some significant musical experience before a certain age? The development of musical self-concept is ripe for researchers in music education to explore; the results from such inquiries could inform musical practices in both secondary and elementary schools.

Beliefs in extra-musical benefits of music participation

Students who participate in music activities have reported the belief that music participation imparts some extra-musical benefit. In the interview study by Adderley,
Kennedy, & Berz (2003), music students extolled the academic benefits that they gained through participation including developing a sense of high standards, being “well-rounded” in their academic pursuits, and building their resumes. The researchers distinguished these academic benefits from the psychological benefits the participants reported. Psychological benefits included growth in self-confidence and self-esteem, as well as fostering discipline, perseverance, commitment, and responsibility. Additionally, students in this study reported music activities as providing an emotional outlet or “expressing yourself through the music” (p. 199). Another student stated that music performance allowed her to have “an emotional experience you can find new feelings within yourself that you haven’t felt before” (p. 199).

These themes that emerged from this study are supported by findings in other qualitative investigations. In Conway and Borst's (2001) study of middle school choral students, self-expression emerged as one of the seven important themes for participation in choir. In Bartolome’s study of members of the Seattle Girls’ Choir, choristers described their music study as providing an emotional outlet; one respondent explained, “I personally have learned how to express myself better. In choir I’ve learned that through music I can let those emotions out” (p. 406). Other themes that emerged from this ethnographic study as extra-musical benefits for the girls in this choral program included development of self-confidence, commitment, leadership, and discipline.

Similarly, in his narrative study of three “hard-core” band students, Abril reported that students viewed their music participation as an opportunity to developing their emotional understanding. Michilene, one of Abril’s informants, described her growing awareness of her emotions through participating in music and dance, “Both ballet and
music help me to be more in tune with emotions and with controlling my emotions” (p. 442). These band members also noted that the development of leadership skills and cooperative goal setting were important by-products of the band experience. For the band students in this study, these extra-musical benefits were believed to be a natural outcome of music participation.

While these qualitative studies have provided evidence that music participants believe their participation may provide extra-musical benefits, there is little empirical evidence to suggest that these benefits are the source of motivation for participation. Quantitative studies have yet to produce results that suggest, for example, that students are led to music activities to develop leadership skills or to have an emotional outlet; however, as mentioned earlier, students who elect to take music classes have a higher value of music. Perhaps, these extra-musical benefits are subsumed in the construct of “value” of music. Alternatively, these extra-musical benefits may not be the motivating force to encourage participation, but are a valued by-product of their music-making. Further research should consider examining these extra-musical benefits that have been identified, especially in qualitative studies, to ascertain if any are the source for motivation to participate in music activities.

**Personality**

Other researchers have investigated the personalities of adult performing musicians in comparison to general populations. Kemp (1996) reported many significant differences between the personalities of professional musicians and the general population. Musicians, on average, are more introverted than the general population. This inward-looking trait
can manifest itself with a disconnection from social groups and a reticence to share feelings or emotions. Introversion may be an asset for those pursuing a career as a musical performer as a great deal of time in the practice room is likely required for many performing careers. While musicians typically are more introverted than the general public, certain types of musicians display different norms of introversions. Composers are identified as being the most introverted, while music teachers, conductors, and popular musicians display more extraverted characteristics (Kemp, 1996; Dyce & O’Connor, 1994).

Neuroticism is another personality trait that has been identified as being overrepresented in the musical community in comparison to the general population (Kemp, 1996). This trait of emotional instability can be typified by regular experiences of many emotions as well as volatility in personal relationships and social groups. In a study on popular musicians, Wills and Cooper (1998) found that popular musicians also reported more neurotic characteristics than the general public. While these studies seem to demonstrate that musicians are significantly different than the general public on these personality traits, it is unclear if music study makes individuals more neurotic or introverted (or vice versa), and/or if the personality traits are stable over time.

Researchers in music education have looked at the personalities of students who participate in music compared to students who do not take music classes. Cutietta and McAllister (1997), using the Junior Eysenck Personality Questionnaire as their measure, reported that students enrolled in band or orchestra did not exhibit significantly different personality traits from students that were not enrolled in music classes. This scale measures personality traits including introversion and neuroticism. The authors
concluded that “students with whom instrumental teachers work possess personalities that are not unique or unusual in any way” (p.291).

In a study comparing the personality types among high school band, choir, and orchestra students using the Myers-Briggs Type Indicator, MacLellan (2011) reported that choir participants were significantly more extraverted than band or orchestra students as well as national norms. No other significant differences were found between singers and instrumentalists; however, the author suggests that degree of extraversion/introversion in a student may be an influential factor in participation decisions, as being drawn to an ensemble that matches personality traits. While there were few distinctions between the various types of music students on the MBTI, the sample was significantly different from national norms, reporting that the sample was significantly more likely to be Intuitive (N, “paying attention to patterns and possibilities that exist in the information that they receive,” p.95) and Feeling (F, valuing “warmth in relationships and reason based on what is important to them and others”). These findings should be considered with caution, as they represent only one geographic area and were not randomly selected; further investigation in personality traits and music participation needs to occur to allow for generalization.

In both qualitative and quantitative studies, students who participate in music share important beliefs and attitudes concerning music. These students share a belief that music has value and they are interested in the musical options that are open to them at school. Students who choose to participate in music have a stronger musical self-concept than their non-music peers. Students who elect to take music also believe that they attain extra-musical benefits from their participation.
Social Influences

As students make choices regarding how they spend their time, important people within their environment will have an impact on their decisions. When making decisions concerning music participation, research in music education has shown that these social influences can emanate from the family, the teacher or school environment, and their peers. These influences consequently can affect a student’s participation choices.

Family influences

Both in qualitative and quantitative studies, family influence has been documented as influencing music participation choices. In Adderley, Kennedy, and Berz’s (2003) interview study, parents and siblings were identified as very important to initial participation in music. Participants reported that parental influence, either as encouragement or pressure, was the most important influence on initial music participation. This influence is seen in the following response from an orchestral member, “Like, my parents told me mostly to do it because when they were young they didn’t play, so they wanted me to just learn more how to play an instrument” (p. 195). In addition to citing parental influence as a motivating factor, many participants reported a sibling as influencing their decision to participate in a school ensemble.

In Sweet’s case study of middle school male choristers, students reported feelings of support from their parents in their singing participation. Some of the participants of the study also stated that their parents were unaware of their interest or ability in singing until they had elected to take a choral class.
In a mixed-method study examining the motivation and experience of advanced community youth ensembles, Hewitt and Allan (2013) reported parental and sibling encouragement, on the whole, was important in motivating participation in students. However, a significant portion of the respondents disagreed that their parents were influential in their decision to participate in the ensemble. Regardless of how parents influenced the initial participation of students in this study, there was little evidence that parental or sibling influence encouraged future participation; peer influence was much more important in continued participation (see below).

Several quantitative studies have also provided evidence of family influence on participation choices. Clements’ study (2002) reported family music background as a significant predicting variable in discriminating between music participants and non-participants. In Siebenaler’s study of a high school choral program (2006), students were more likely to continue to participate in a curricular choral program if their parents were active in musical endeavors or if they believed that their family valued music, as opposed to students who did not participate in music.

In contrast to these studies, one study has suggested that family influence and home environment may not have a significant impact on participation choices. Waters, McPherson, and Schubert (2014) reported parental influence had no significant effect on elective sport or music choices in a sample of 293 students at an all-boy private school in Australia. Despite the contrary findings in other studies, the authors contend that adolescents may view their choice as a way to assert their own autonomy and may not recognize the influence of their family environment on their elective choices. These findings should also be viewed with caution, as a very small number of the sample (N=15)
elected to participate in music and should not be considered generalizable outside the sample. Additionally, the discrepancies in the findings of this study compared to Clements’s (2002) and Siebenaler's (2006) studies could be due to examining different elements of home environment or parental support, e.g. parental involvement in music-making or parental control of decisions. Despite the findings of Waters, McPherson, and Schubert (2014), it is likely that the results from these studies indicate that family home musical environment is a motivating factor in music participation.

These studies provide evidence that family influences, either parental or sibling, may be an important catalyst for some students’ participation choices. Additionally, different types of family support may influence participation choices differently. Researchers in music education should continue to clarify various constructs within family musical influences. Zdzinski (2014) has examined parental involvement and home musical environment in a principal components analysis and identified seven different factors to family home musical environment: Home Musical Structure, Family Attitudes toward Music, Home Musical Environment, Music Program Support, Parental Expectations, Family Musical Participation, and Family Musical Background. This emerging type of research will help to tease out the variable of family influence in future research. Researchers in music education should also examine how family influences interact with the personal attributes and beliefs of music that may influence music participation.

**Teacher/School Program**

Some studies in music participation have shown that students' participation choices may be influenced by teachers or a desire to be a part of a school music program. In
Kennedy's (2002) study of middle school boys in a choral program, the influence of the teacher is evident in recruitment of singers. One of the interviewed students recounted how the teacher encouraged him to join choir, “she [the teacher] kept pushing me and Terry...and she's like, ‘Gotta be in choir next year, gotta be in choir’...so I was first and Terry followed.” Similarly, Conway & Borst (2001) found that the participants in their study were motivated to be identified with the middle school choral program. Students have also reported the importance of their interaction with their teacher as providing value to their music participation (Adderley, Kennedy, & Berz, 2003). For the participants in Hewitt and Allan's (2013) mixed-method study, the ensemble director and how the rehearsal was organized was an important concern toward continued participation.

The interaction of the music teacher at feeder schools may be another factor in music participation. In a multivariate exploration of student participation in middle school choral settings, Miller (1993) reported that teacher interaction level was the only independent variable (as opposed to gender of teacher, gender of student, school environment, perception about choral teacher) that was a significant predictor of subscale measures (different reasons for participating in choral music). Additionally, there was a significant relationship identified between teacher interaction scores and perception of the vocal music teacher and program, suggesting that teachers who were more active in communicating with students at feeder schools were perceived more favorably.

In Clements (2002) study, a teacher’s education, experience, or personality had no significant influence on choral participation decisions at the middle school level, although only three teachers were used in the study. However, the vocal music teachers that had more communication with their elementary feeder programs had higher percentages of
participation. Again, these claims should be considered with caution as only three teachers and their practices were examined.

The role of the teacher has also been explored as an influential factor in band participation. In a study to examine the effects of teacher turnover on retention Kloss (2012) analyzed marching participation rates over a 6-year period in Arizona high schools. The author reported significantly higher participation rates in marching band between schools that had the same teacher over the entire period when compared to schools that had band teacher turnover. When examining the trends of participation, the author notes that participation in marching band was lower the following year after turnover had occurred. These findings suggest that program stability, or the presence of a particular teacher, may be a factor in student participation, which may be overlooked in most participation literature.

Music teachers are likely an influential factor in music participation. However, like the research on family influence, the degree of influence is not fully understood. The findings from the reviewed studies may suggest that music teachers that have personal interactions with students may be more influential in the participation choices of their students. Future research should consider how music teachers influence the development of attitudes about music and music self-concept.

**Peers: Music Participation as a Social Outlet**

Qualitative and quantitative studies that have examined student participation in music have documented the importance of peers as part of the musical experience. In Abril’s (2013) narrative study of “hard-core” band students, all three participants
mentioned the importance of the social dimension of their ensemble participation. The study participants described being musically creative with the other band members—above and beyond socializing with students with similar interests. One band student, Baccus, stated “you're with people who also enjoy making music...there’s something about that that’s different from in other places in the school....We are working together to get something accomplished” (p. 441). Michiline describes the bonds being forged through musical participation, “[Band] kind of feels like a family because we are pretty tight with each other. We've grown up together...we've shown each other that we can do this and that bring us together. It gives us respect for each other. I feel so good when I am playing with everyone” (p. 441). Hewitt and Allan (2012) examined the factors that led to continued participation in youth community instrumental ensembles. The participants reported the primary reason for continued participation in the ensembles was for social reasons (e.g. making new friends, maintain existing friendships, spending time with people the same age with similar interests).

Similarly, students in choral ensembles have reported the importance of social bonds with their peers. In Kennedy’s (2002) qualitative study on middle school boys in a choral program, boys reported how the social interactions with their peers motivated them to persist in singing. One informant, Bob, stated, “Last year I came in and I didn't know nobody, but as soon as I continued on with it, I met a lot of people and it was pretty cool” (p. 33). Conway and Borst (2001) similarly report that middle school students were motivated to participate in choral music activities for group or social reasons. In Sweet’s (2010) case study of middle school boys, peer affirmation and classmates with similar musical goals were motivating factors for participation. As one participant stated,
“Everyone that signs up for it [Choir] likes to sing....they know it’s fun and they like to do it” (p. 10). These middle school boys also enjoyed the social attention that they received from their female classmates.

For the participants of the Seattle Girls' Choir in Bartolome's (2013) ethnography, the social interaction between peers was a significant component of sustained participation. Rachel, a 14 year-old member of the group, described the importance of how her peers provided a constancy as she transitioned between different schools:

Everything else had changed...I had changed schools. So much had changed right then and if it wasn't for those girls I would have like, cracked. But they stayed with me and they were something constant in my life. I think choir is like that in general, something consistent that goes through all parts of your life. (p. 407)

Furthermore, the members of the Seattle Girls' Choir reported feelings of being in an accepting group and a place where they could belong. Choristers also enjoyed spending times with students that shared the same musical interest. Grace, a high school senior, described this feeling:

It is cool to have friends who care about that stuff to the same degree as me, who hear an iv-9 chord and go, “Oh my gosh, that’s so gorgeous! That iv-9 chord!” And then I don’t feel like a total dork, which is what I feel like everywhere else.

Students in Adderley, et al. (2003) described the music classroom as a “home away from home” further documenting the importance of the social environment in promoting music participation. Students reported that their initial participation in music was influenced by a social desire or the need “to feel part of something.” As one informant from the project reported:
I’m drawn to, like, to singing and music in general, and then there’s the social aspect which is real fun because, like, walking into the chorus room breaks down like social barriers, and you get to know people a lot better than you would outside of the music room (p. 195)

While these music students describe the importance of the social rapport within the music ensemble, they also differentiate the type of friendships they have between other music students and other groups of students. One high school band member reported, “I have many different friends, people that are in the band, people who play sports, people who don’t do anything—just like to hang around. My band friends usually hang out all summer since I’m with them and we get to know each other a lot better” (p. 195).

Other studies that have examined music participation have also noted the importance of peer interactions in participation choices. Clements (2002) reported that peer influence on decisions was a significant predictor for discriminating between participants and non-participants in her sample of 6th graders. Students that elected to take music classes were more likely to be influenced by their peers in decision-making than those who did not elect to take a music class. This study further suggests that students were already are influenced by their peers prior to enlisting in music classes—not being influenced by the social milieu of the ensemble. Thus, students who participate in music may be drawn by the social environment that they believe the music class to be in addition to being well more susceptible to peer pressure.

In his study comparing choral participants with non-participants at the high school level, Siebenaler (2006) reported that 61% of choral students were motivated by social factors to participate in school choir (i.e., being “where their friends are”). In comparison,
only 32% of non-participants stated that they chose elective classes while considering what their friends were taking. These studies that indicate social influence in motivating music participation corroborates the findings of the qualitative studies.

While there is considerable evidence to support the claim that social support from peers may encourage or motivate sustained participation in music, researchers in music education have also documented the social liability of participation. In qualitative studies that have explored the nature of music participation in ensembles, students were clear that they had experienced stigma as a result of their participation. In Sweet’s (2010) study, the middle school boys in choir recounted incidents of being teased by students both inside and outside the music program. These boys rationalized the teasing as a product of jealousy from others, “they’re just jealous because they know that you’ve accomplished something that they haven’t. So that’s why they tear you down.” (p. 9)

Researchers examining band participation have also reported similar social liabilities for those who associated with band programs. Gouzouasis, Henrey, and Belliveau (2008) met with four focus groups at different elementary schools to discuss perceptions and desires about participation in band at the middle school level. Almost every participant in the study used the term “geek” when referring to band participants; this observation makes claim of the insider-outsider nature of belonging to a band culture as well as some of the social costs. Participants reported that students who discontinued participation in band were making an active choice to avoid band participation and the social costs involved, rather than pursuing a competing activity.

Adderley, Kennedy, and Berz (2003) report similar findings where the music ensemble is not seen as a popular place. One instrumentalist remarked, “The popular kids
don’t think that it’s cool to be in it [orchestra class]. Because to them it’s kind of geeky, just like classical music is not popular.”(p. 198) These researchers also clarified that participation in a music ensemble did not guarantee the social benefits that many students experience. Within the school music cultures examined in this study, loners or students who “just don’t fit in” were still a part of the music community.

Like many decisions, students’ music participation decisions are informed by their friends and peers. For many music students, the social interaction that occurs within music activities is a strong motivating factor to continue participation. However, the social context of participation may also inhibit music participation for some individuals, as several studies provide evidence of the social liabilities of participation. Researchers in music education have illustrated how social forces can influence student music participation choices. Parents may help instigate initial participation, through encouragement or pressure, but are less likely to be influential in motivating continued participation. Teachers may encourage participation, but are likely to be most influential in students with whom they have considerable rapport. Similarly, friends and peers are likely to influence participation decisions; however, the social cost-benefit analysis of music participation will likely be a factor as well.

**Socio-Cultural Factors**

Research in music participation has identified personal attitudes or beliefs as being a motivation for participation. Similarly, research confirms that many students are influenced to participate in music activities by important people in their lives, possibly parents, siblings, teachers, or friends. Even though these research findings come from a
variety of design methodologies, including quantitative and qualitative studies, the conclusions from research on music participation have relied heavily on self-report—either through interview or survey designs. While researchers can identify important factors that affect (or are believed to affect) music participation choices, systematic or cultural factors may be overlooked within these research designs.

Alternatively, some researchers have employed research designs that explore large-data sets to identify trends in music participation. Recent studies examining large data sets have documented a trend toward lower music participation in school ensembles. In examining the effect of No Child Left Behind (NCLB) on music enrollment at the high school level, Elpus (2014) examined the participation rates of ten nationally representative cohorts of high school students using data from the National Center for Education Statistics. The data included transcript information that tracked students’ class credits across their high school career; the data includes ten graduating classes from 1982 to 2009. Elpus reports that the participation rates for music students are relatively stable around 34% across the thirty-year span. For this study, a music participant was defined as a student who received at least one credit for any music class. The researcher concludes that it appears that NCLB had little influence on the overall participation rates of music students. In fact, the rate of attrition significantly decreased over this thirty year period, with more students electing to take music classes for three or four years. This study corroborates Stewart’s (1991) dissertation study, the first large data-set study to explore music participation. She also reported a similar overall music participation rate of 30.6.

In an effort to create a demographic profile of students who enroll in performing ensembles, Elpus and Abril (2011), used data from the 2004 follow-up wave of the
Educational Longitudinal Study of 2002 ($N = 13,240$) and estimated a participation rate of 21% for American high school seniors in the graduating class of 2004 enrolled in a music ensemble course. The dramatic difference in participation between this profile and the Elpus (2014) study is likely due to methodological differences. In the study examining the effects of NCLB (2014), the researcher examined four-year transcripts and identified any student that received credit for a music class as a music participant; Elpus and Abril (2011) used a self-report item on the follow-up survey that asked if participants were taking a band, choir, or orchestra class during their senior year. Even though this distinction should encourage caution when interpreting results, Elpus and Abril (2011) identified many socio-cultural trends in music participants. Researchers, like Elpus and Abril, have identified systematic differences in music participation by socio-economic status level, ethnicity, and gender.

**Socio-Economic Status**

Researchers in music education have documented the impact of socio-economic status on music participation. Dividing their large data-set sample into quartiles based on an algorithm for family income, parental occupational prestige, and parental level of education, Elpus and Abril (2011) found that students in the top quartile of SES indicators were overrepresented in music ensembles while individuals in the lowest quartile were underrepresented. In fact, the researchers state that music participants were 1.71 times more likely to be in the top quartile of SES level than in the lowest quartile. These findings suggest that SES may have systematic influence of music participation in American schools,
where students who have higher SES status have greater access or resources to participate in music activities.

This claim is supported by results in other studies. Examining participation in extra-curricular activities including music and sports, Covay and Carbonaro (2010) reported a significant relationship between SES and extra-curricular participation. Using the Early Childhood Longitudinal Study-Kindergarten Class of 1998-99, the authors report that the lowest levels of SES have a participation rate of over 60%, and participation rates increase with higher SES levels. Using large representative data sets, these findings suggest that those with higher SES statuses are more likely to participate in music activities in- and out-of-school.

In other quantitative studies with smaller populations, socio-economic status (SES) has been identified as a robust predictor of students continuing to participate in music. Examining a sample of 205 fifth-graders from the one school district in Pennsylvania, Klinedinst (1991) reported that SES was a strong predictor for retention in instrumental programs, more highly predictive than musical aptitude or academic achievement. Using a logistic regression model to predict retention in high school band programs, Corenblum and Marshall (1998) reported that SES variables (e.g., parent occupation, number of instruments owned) were significant predictors of retention. Furthermore, within this model, SES variables were significant predictors of attitudes of significant others (e.g., parents) concerning band participation. The authors suggest that the perceived attitudes of parents and teachers by students may reflect “a larger belief system associated with middle-class cultural beliefs and values.”
Kinney (2010) reported mixed results on SES as a predictor for band participation. Kinney examined retention in eighth-graders and initial enrollment into band in sixth-graders from two urban schools. SES, defined as a dichotomous variables based on status in free-and-reduced-lunch program, was only a significant predictor in retention of band eighth-grade students, but was not a unique predictor of sixth-grade students who were enrolling in band. In other words, eighth-graders who were identified as low-SES were more likely to withdraw from the band program; the statistical model could not differentiate between sixth-grade participants and non-participants in band based on SES.

The author suggests that the mixed results could be explained by programs that help low-SES register for the band program (e.g., use of school owned instruments) but provide little help for the residual costs (e.g., reeds, valve oils). Another explanation could be that the use of free-and-reduced-lunch status may be an imprecise variable for SES within this context.

These studies provide compelling evidence that students with lower socio-economic status are significantly less likely to participate, whether by circumstance or by choice, in school music. Researchers in music education should continue to explore how socio-economic status influences music participation. Future research questions could explore if socio-economic status influence music participation in instrumental and choral programs similarly.

Understanding the relationship between socio-economic status and school music participation is important for the field of music education as a social justice issue. As a research community as well as community of practitioners, access and opportunity should be available for all students, regardless of socio-economic status. Otherwise, our noblest
intentions, even if emblazoned within a mission statement of professional organizations, are hollow and unrealized.

**Gender**

Studies exploring large data sets have also identified gender as an important factor in music participation. In their examination of a large data set from the Educational Longitudinal Study of 2002, Elpus and Abril (2011) reported that 61.1% of the students enrolled in choral, orchestral, or band classes were female. This finding of female over-representation is similar to Stewart’s (1991) study that 61.4% of students who participate in music classes are female. This pair of studies suggests that there has been no change in the ratio of boys and girls participating in music classes in high school from the class of 1982 to the class of 2004. Stewart asserted that the imbalance in participation rates may be due to underrepresentation of boys in choral music classes; however, Elpus and Abril could not confirm this claim as their coding did not identify type of music participation (e.g., band, chorus, or orchestra).

In a follow-up study, Elpus (2015) examined the ratio of male and female participation in school music ensembles by type (e.g., choir, band, and orchestra) from 1982 to 2009. Elpus examined transcript information from ten different graduating cohorts that was amassed by the National Center for Education Statistics. Elpus reported that there is a tendency for more female students than male students to enroll in all types of music ensembles at the high school level. This finding suggests that Stewart’s claim that male underrepresentation in choral ensembles may be imprecise. For choral ensembles, all ten cohorts that Elpus examined had female-to-male ratios at or above 2:1. While band enrollment has been closer to equal between male and female students, female
participation outnumbered male participation in all but two of the studied cohorts and was statistically different from a 50:50 ratio. Examining band participation rates over the entire period, the overall mean female participation rate from 1982 to 2009 was 56.07%, suggesting that young women have outnumbered young men in band participation. Differences in participation in orchestra by gender is also significant, with the average female participation of each cohort being 63.67% and the average male participation per cohort being 36.33%. Thus, while Stewart’s claims about disproportionate levels of female participation in choral ensembles are corroborated by this study, a more complete description of differences in participation by gender is that female students have higher participation rates in all three types of ensembles.

In addition to these important findings on the gender imbalance in music ensemble participation, these data suggest that the disparity in participation has been constant for nearly the past 30 years. The consistency of the gender gaps in participation across time corresponds to research in gender disparities in instrument choice that has been relatively constant across time (Abeles, 2009). Perhaps these findings suggest that there are cultural expectations for girls to participate in music classes or cultural mechanisms that push boys away from participation.

Gender was identified as a significant factor in retention of students in an urban band program in Kinney’s (2010) study. The researcher reported that boys were significantly more likely than girls to withdraw from band, when examining band retention of urban 6th and 8th graders. Using a regression model, Kinney reports that female students were twice more likely to be retained in band than boys, suggesting that there may be pressure within urban schools for boys to withdraw from music participation. Kinney’s
results reinforce earlier results by McCarthy (1980) that found gender as being a factor in dropping out of band in an urban school district. In a larger sample from the United Kingdom, Driscoll (2009) reported that girls were more likely to start instrumental tuition than boys.

Interest in certain music activities may be influenced by gender norms. In jazz ensembles at the secondary level, there have been reported gender differences in participation levels with male students participating significantly more often than female students (McKeage, 2004). Surveying a group of 628 students in college instrumental ensembles from 15 universities, McKeage reported that 80% of male instrumental students had participated in a jazz ensemble at the secondary level, while only 52% of female students had participated. Furthermore, male students reported playing in jazz ensembles for a significantly longer period of time. The author claims that the gender disparity in participation could be a result of jazz instrumentation, which consists primarily of instruments selected more often by male students. Female participants reported being uncomfortable within jazz settings more often than male students and were less likely to see jazz participation as important for their career goals.

Several researchers, examining older elementary children, have identified gender differences in attitudes toward music class. Siebenaler (2008), examining a sample of African-American and Hispanic children, reported that girls were more likely than boys to view singing as an appropriate activity for either gender. Additionally, girls were more likely to express a desire to continue to participate in singing activities. These findings corroborate Mizener’s (1993) results that girls are more interested in participating in choral singing. In Mizener’s study, it is interesting to note that while boys were much less
likely to report interest in participating in a choral ensemble, there were no gender differences in attitudes toward singing with the radio, singing with friends, or their ability as a singer. These findings were corroborated by Welch, Himonides, Papageorgi, Saunders, Rinta, Stewart, Preti, Lani, Vraka, and Hill (2009); these researchers reported that as children age, their interest in school singing activities decrease. Additionally, boys in particular lose interest in singing as a social activity, but their attitudes toward singing for personal enjoyment increased. Perhaps, these studies, while focusing on choral participation, illuminate gender differences in attitudes about school music participation.

The extant research on music participation provides substantial evidence that gender is an important factor in music participation choices. The evidence is clear that girls are significantly more likely to enroll in music classes. While this seems to be a global phenomenon in instrumental and choral settings (with the exception of jazz bands), there is no clear understanding why girls are overrepresented and boys are underrepresented, other than it is a by-product of gender norms and stereotypes. Future research should investigate the relationship between gender and interest in music activities, as boys may be more influenced by cultural norms to be pushed away from music for more “acceptable” activities like sports. Furthermore, researchers should investigate why some music programs have equitable participation between boys or girls.

**Ethnicity and English Language Status**

Ethnicity has also been identified as a factor in music participation in large data set studies. In their national profile of music participants, Elpus and Abril (2011) found that ethnicity and race was significantly related to participation rates. Specifically, when
comparing the percentage of ensemble students to percentage of ethnic group within the sample, white students were significantly overrepresented within music ensemble participants while Hispanic student were significantly underrepresented. Black students were also overrepresented within the music participants, but not at a statistically significant level. In Covay and Carbonaro’s (2010) study on extra-curricular activities, race was a significant factor in extra-curricular participation. White students are significantly more likely to participate in extra-curricular activities when compared with other racial and ethnic groups. Again, these findings suggest that different ethnic groups have significantly different participation rates in music activities, both during and outside the school day.

Elpus and Abril (2011) found that native English speakers were significantly overrepresented within music ensemble participants and native Spanish speakers underrepresented. Lorah, Morrison, and Sanders (2014) substantiated this findings by examining the Educational Longitudinal Study of 2002 ($N = 15,011$); however, after controlling for SES and academic achievement within their multi-level logistic regression model, English Language Learner status was not a significant factor in predicting music participation. In other words, ELL students were just as likely as their native English peers with similar academic achievement or SES level to participate in music classes.

In summary, several studies that explore participation through the use of large data studies suggest that students of certain racial or ethnic groups may be underrepresented in music activities, while others are overrepresented. Additionally, there is conflicting data on music participation among students who are English Language Learners. Although Elpus and Abril (2011) identify English Language Learners as underrepresented in music classes,
Lorah, Morrison, and Sanders (2014) controlled for academic achievement and socio-economic status, indicating that the lack of representation for non-native English speakers may be due to other factors.

**Access and Music Participation**

One of the limitations of the recent large data studies is the lack of investigation in how access to music activities may influence participation choices. These published studies did not control for schools that do not offer music classes. It seems logical that a percentage of students who do not take music classes would enroll in a music course so if they were given the opportunity. Stewart (1991) explored access to music classes in her large-data set dissertation study and reported that a large majority (around 90%) of schools in 1982 offered some type of music class (choir, band, orchestra, theory, music appreciation or history). Stewart also reported trends in music offerings with smaller schools, private schools, and schools in the southern region of the United States having larger percentages of schools that offer no music courses.

The National Center of Education Statistics, using a large survey design to examine arts education in public schools in the United States, reported little change in the availability to music instruction in schools from 1999-2000 to 2009-2010 (Parsad & Speigelman, 2012). 94% of all elementary schools reported offering music instruction in both 1999 and 2009. There was some variation in the availability due to school demographics. Elementary schools with a low percentage of students enrolled in free-and-reduced lunch programs reported music instruction in 97% of schools, while schools with 76% or more of students enrolled in free-and-reduced lunch have music instruction in 89%
of schools. In public high schools, availability to music instruction actually increased from 90% in 1999 to 91% in 2009. Like elementary schools, there were considerable differences in access to music education based on the demographic factors. High schools with high percentages of students enrolled in free-and-reduced lunch programs offer music instruction in only 81% of schools, while high schools with low percentages of free-and-reduced lunch enrollees offer music in 96% of schools.

This descriptive data that is presented by the National Center for Education Statistics is sobering and suggests that schools with high percentages of lower-income students have considerably fewer opportunities to participate in music. Unfortunately, SES is the only variable that is examined in relation to availability rates; future research should extend this investigation to examine other variables, like percentage of students of different ethnicities, ELL status, or special education students. While Elpus (2014) suggests that music educators should be encouraged that participation rates have remained fairly stable over the past 30 years, this data indicates that certain populations (e.g., schools with a high percentage of low SES) may have substantially less access to music education than they did ten years ago. Additional research needs to elucidate how the lack of access to music education influences the music participation rates of students in U.S. schools systematically.

The collective results from these large data studies should concern music educators. These results provide evidence that certain populations within our schools, including low SES, Hispanic, and male students are underserved in music education. The reasons for the underrepresentation of these groups are not known and could be due to a lack of access to music programming or a lack of relevance or interest in the musical opportunities in their
settings. These large data studies provide evidence of factors that may have been overlooked with smaller sample sizes. While these studies use a blunt tool to examine the topic of music participation, the weight of these findings compel music educators to deliberate on how to better serve all students.

**Conclusion**

The existing research on school music participation has identified important factors that influence music participation choices. Personal attitudes and beliefs including interest in music and music self-concept can motivate or inhibit students to participate in school music programs. Additionally, social influences such as parents, siblings, teachers, and parents can have substantial influence in promoting initial or continued participation in music. Finally, large data set studies have identified systematic or cultural factors that influence students’ music participation choices. While these factors may have been less visible in other study designs, these studies provide evidence that socio-economic status, gender, and ethnicity have a significant impact on music participation choices.

To fully understand the complex nature of participation choices, more work needs to be done by researchers in the field of music education. In the past 10 years, strides have been made in refining our comprehension of what variables may influence participation choices. The use of large data sets (Elpus & Abril, 2011; Elpus, 2014; Elpus, 2013) has allowed for research findings to emerge from nationally representative samples. While the sampling may be nationally representative, these studies lack richness or clarity of how complex decisions regarding participation are made. Examining how socio-cultural factors influence individual factors such as developing a strong musical self-concept or interest in music could further elucidate how individuals make participation choices.
Another missing link in this line of research is fully understanding how access to music education influences music participation. While the overall availability of music education within schools has remained stable from 1999 to 2009 (Parsad & Speigelman, 2012), schools with higher percentages of low-income students have reported reduced access to music education over the same period while schools with very low percentages of low-income students have increased availability to music education. Since 2001, the data suggests a widening gap of access to music education based on socio-economic status. Further exploration into the cause and the nature of this disparity of access to music education is certainly warranted. While the overall availability of music education has remained stable since 2001, it is unclear if the quality of music education has changed over that time period. For instance, a school that has reduced a music staff of three teachers to one, eliminating string and choral programs, would not alter the overall percentage of schools that offer music. Further clarification of what kinds of music education opportunities are available to students, as well as the quality of those programs, will create a more complete profile of music participation. In order to understand participation choices, access to music education should also be explored longitudinally. Students that lack access to musical activities as young children may avoid music activities, as they may not value music activities or feel that they have not procured the requisite musical skills to pursue music.

For the music educator who is interested in retaining or recruiting students to a music program, these findings should be noted. Teachers need to provide music instruction and experiences, especially at the elementary level, that foster the attitudes and beliefs that lead to continued music participation. For instance, teachers should consider
how to provide feedback to students that allow students to grow musically without impeding the development of music self-concept. As seen in the qualitative studies reviewed, some students form very negative views of their musical ability from feedback from music teachers; this feedback ultimately leads some students to refrain from music participation for the rest of their life. In some cases, it appears that tacit information about a student’s ability leads to the development of a low musical self-concept. Music teachers are likely a part of the problem; as a field, we must find balance in pursuing musical excellence while building the music self-concept of our students.

Further research is needed to understand how the construction of musical self-concept influences future music education. For instance, are there certain musical experiences that are more effective in building musical self-concept in young children? Perhaps, elementary classrooms that focus on musicking as an extension of playful exploration or musical games rather than grade-level performances instill, subconsciously, a stronger musical self-concept in students. On the other hand, students who have early meaningful performances may adopt a sense of being a musician as part as their identity. Future research should examine the types of musical activities within music classrooms and their influence on the development of musical self-concept.

Music teachers should consider the social influences that affect music participation. Teachers who nurture rapport with their students and have a personal connection with them may be more successful in recruitment and retention of students. We should also consider recruiting, not students, but whole families to participate within the music program. Teachers should connect school music activities to community and cultural musical customs to foster life-long musicking behaviors as well as bond with inter-
generational musicians (Myers, 2008). Teachers should also be aware of the social interactions of music participants and their peers—helping to maintain a warm and friendly environment where students with diverse experiences can share a common musical goal. Ultimately, music teachers should examine and understand their students, and provide music opportunities that reflect the interests of their community.

As this review illustrates, the choice to participate in school music programs is a complex and personal decision. Future research needs to examine the relationships between various factors that have been already identified within the research literature. Specifically, music researchers should investigate factors within the context of music programs with varying degrees of participation, with the possibility of identifying factors that lead to successful recruitment and retention. This type of investigation may provide evidence of teacher practices (e.g., teacher-student rapport, communication with feeder schools, instructional techniques) that encourage or inhibit music participation. With ongoing investigation into music participation, a more nuanced model of music participation may be proffered. A deliberate and scientific approach could provide a better knowledge of how factors interact and how students make their participation choices.
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PAPER TWO

The Effect of Gender Salience on Interest in Music Activities

Abstract

In adolescence, a time of gender intensification, many students may align their music participation choices with the expectations for their gender group. While gender norms or stereotypes have been offered as explanations for gender disparities in music activities, there is no empirical evidence of how stereotypes of music activities may influence students’ participation decisions. The purpose of this study is to experimentally test the influence of cultural gender norms on adolescents’ interest in music activities. Using an experimental design, middle school participants (N=246) were assigned to either a primed condition where students were asked to consider their gender identity or a control condition; all participants took a survey on interest in music activities. Findings suggest adolescents who had been primed to think about their gender identity rate music activities, including stereotypically masculine and feminine activities, significantly more positively than the control group. Music students were also identified as rating music activities significantly higher than their non-music peers. Gender was only identified as having a significant relationship with feminine music activities, as ratings for stereotypical masculine were statistically similar between boys and girls. This experiment provides
evidence that gender salience can impact students interest in various music activities. With a more complete understanding of how gender stereotypes affect music participation, music educators can address and possibly minimize cultural influences that inhibit music participation.
**Introduction**

Researchers in music education have explored gender norms and stereotypes to explain music participation choices in students (Abeles, 2009; Hallam, Rogers, & Creech, 2008; Harrison, 2008; Sheldon & Price, 2005). Adolescence is a time of gender intensification when many students may align their participation choices with the expectations for their gender group as a security from social stigma. When crossing gender norms in music participation, the social cost can be great; as Green (1993) states, “both boys and girls tended to restrict themselves or find themselves restricted to certain musical activities for fear of intruding into the other sex’s territory, where they may have been accused of some sort of musical transvestism” (p. 248).

Despite research findings and diversity campaigns within the past several decades, gendered expectations for music participation have persisted, in both instrumental and singing activities (Abeles, 2009; Harrison, 2008). While the number of girls who have crossed gender norms in music activities has grown over time, the number of girls who participate in music activities has also increased, suggesting that the percentage of girls who participate in a music activity that is stereotypically masculine may not have changed or even decreased over time (Zervoudakes & Tanum, 1994). The pursuit of music study itself may be considered a feminine activity. Girls have been significantly overrepresented within high school music ensembles over the past thirty years, with approximately two thirds of choirs and orchestras being female (Elpus, 2015). Some researchers, such as those investigating the disparity of boys and girls in choral singing, believe a “hegemonic masculine” culture prevents boys from crossing gender norms and participating in music activities at all (Harrison, 2008). While gender norms or stereotypes may be used as
explanations for disparities between genders in music activities, there is no empirical evidence of how stereotypes of music activities may influence students’ participation decisions. This paper will explore how interest in music activities may be affected when gender is made salient.

**Gender and Music Participation**

Researchers in music education propose that gender disparities in music activities may due to by gender stereotyping which may cause children to view certain musical activities to be the domain of a particular sex. From a very early age, children assign masculine or feminine labels to certain musical instruments, with higher wind and string instruments being perceived as feminine and percussion and brass being perceived as masculine (Abeles & Porter, 1978; Delzell & Leppa, 1992; for a review, see Eros, 2008). These gender norms of instruments are established by five years old (Pickering & Repacholi, 2001) with evidence that even preschoolers are aware of such norms (Marshall & Shibazaki, 2013).

In an attempt to manipulate instrument choice, Harrison and O’Neill (2000) used an experimental design to assess if an intervention of cross-gender modeling would increase interest in non-stereotypical instruments for each gender. The researchers used three groups of participants: one group observed a concert of instrumentalists that played stereotypical instruments for each gender (e.g., a female flutist, a male guitarist); one group observed performers who did not play stereotypical instruments for their genders (e.g., a male flutist, a female guitarist); lastly, the control received no demonstration of performers. The results indicated that the modeling did influence the interest of the students; however, girls who saw a male playing piano (a cross-gender stereotype) were
less interested in playing piano than participants in the other groups. Similarly, boys who observed a female guitarist were significantly less interested in playing guitar than their peers in the other conditions. These results suggest that an intervention used to promote cross gender activities may have unintended consequences.

Despite the accumulation of research on instrument selection and gender stereotyping, there are far fewer studies that investigate singing as a gendered activity. In a longitudinal study examining instrument choice and length of study, boys were as likely as girls to select studying voice in early childhood (Hallam, Rogers, & Creech, 2008). However, as the years passed, boys were much more likely to discontinue studying voice than girls.

Gender differences have also been found in attitudes toward general music class, where singing is often a part of the musical activities (Boswell, 1991). Pogonowski (1985) found that the decline in positive attitudes toward general music class in upper elementary grades was more pronounced in boys than in girls. Similarly, while boys in elementary school reported less desire to join a choir than girls, their attitudes toward the enjoyment of singing were more similar (Mizener, 1993). Welch (2009) reported similar findings, in that boys’ interest in singing school at decreased as they got older, although their enjoyment of personal singing actually increased during the same time. These findings may suggest that the lack of male participation in singing activities could be a reluctance to commit to school singing activities rather than a distaste for singing. Furthermore, the gender disparity in attitudes about music class in upper-elementary school may forecast the disparities in participation at the secondary level.
To examine secondary music participation by gender, Elpus (2015) examined the ratio of male and female participation in school music ensembles by type (e.g., choir, band, and orchestra) from 1982 to 2009 using transcript information from the National Center for Education Statistics. He reported that there is a tendency for more female students than male students to enroll in all types of music ensembles at the high school level. For choral ensembles, all ten cohorts examined had female-to-male ratios at or above 2:1. Like choral ensembles, female participation within orchestral ensembles was significantly higher than male participation, with the average female participation of 63.67% across cohorts compared to the average male participation of 36.33%. In band, there was more equitable distribution of genders; however, female participation rates were higher than male participation rates in all but two cohorts. The overall participation of young women to young men in band was statistically different from a 50:50 ratio. Examining band participation rates over the entire period, the overall mean female participation rate from 1982 to 2009 was 56.07%, suggesting that young women have outnumbered young men in band participation. In ensemble participation, girls have been significantly overrepresented within all types of ensembles over the past thirty years. These findings may suggest that there are cultural expectations for girls to participate in music classes or cultural mechanisms that push boys away from participation. These findings seem to reflect historical research conducted in music education; Koza (1990; 1991; 1993) reported that music study was considered a feminine enterprise within American culture in the 19th and early 20th centuries. While music researchers have been actively exploring the topic of gender disparities in music activities over the past several decades, there has been a long history to gender differences in music participation.
A limitation of contemporaneous research studies that have investigated gender disparities in music activities is that these studies almost exclusively rely on self-report data of preexisting groups, either through quantitative survey designs or qualitative interview studies. This could be problematic when interpreting the findings to create a theory of participation, as no causal claim can be made through this methodology. Even though cultural forces have been identified as a possible influence certain types of music participation, the extent of this influence has not been tested experimentally.

**Gender and Stereotyping**

Gender differences in behavior are a product of cultural norms (Wood & Eagly, 2002). These differences are a consequence of the interaction of the physical attributes of men and women with the social environment which they inhabit. This biosocial perspective on gender differences is a stark departure from the earlier theory that gender differences were a result of evolutionary process (Buss, 1989). For instance, from a strictly evolutionary perspective, men's ability at hunting could have emerged as a result of sexual selection processes (Geary, 1998). Wood and Eagly (2002) debunked this evolutionary theory of gender differences by examining ethnographic records of nonindustrial societies. The findings of this multi-cultural study demonstrated that there are no universal gender differences in regards to division of labor, childcare, power structures, or warfare. Ultimately, this line of inquiry has created a strong argument that gender norms are primarily created and fostered by individual cultures.

Children, from a very early age, perceive these gender differences and categorize them as fixed roles for one of the sexes (Brown, 1995; Ruble & Martin, 1998). Thus,
stereotypes based on gender are formed early in a child’s life and used as the basis of social categorization. Gender stereotypes, as well as stereotypes based on race, age, or physical appearance, may be the most pervasive and stubborn forms of prejudice; these stereotypes become salient immediately upon interaction within social contexts, more so than stereotypes based on religious beliefs, political affiliation, or sexual orientation (Stangor, et al, 1992; McArthur & Baron, 1983). These obstinate stereotypes are present in the minds of most people of a shared culture, and require active thought suppression or “stereotype inhibition behaviors” to offset their influence on social behavior (Devine, 1989).

Stereotype activation has considerable effects on social interactions and behaviors (Bargh, Chen, & Burrows, 1996). For example, priming stereotypes of the elderly can affect walking speed (Bargh, et al, 1996), priming an African-American male stereotype can influence aggression in social interactions as well as produce evaluations of African-Americans as more aggressive, and activating gender stereotypes can result in men being evaluated as more aggressive and women as more dependent (Devine, 1989; Higgins, 1996). Moreover, when asked to think about the stereotype of a group one belongs to, individuals’ performance relevant to that stereotype will be impaired (Inzlicht & Schmader, 2012; Steele & Aronson, 1995).

The phenomenon of stereotype threat has been often researched by scholars in psychology, with over 500 published articles on the topic since Steele and Aronson’s seminal 1995 study (Inzlicht & Schmader, 2012). When stereotype activation occurs in the context of performing a task related to the stereotype, researchers have identified decrements in the performance of individuals that are stigmatized by the stereotype (Inzlicht & Schmader, 2012; Steele & Aronson, 1995). Decrements in performance, caused
by stereotype threat, have been identified in African-American and Latino students on academic tests (Steele & Aronson, 1995; Gonzales, Blanton, & Williams, 2002), the elderly on memory tasks (Chasteen, Kang, & Remedios, 2013), and the poor on standardized testing (Croziet & Millet, 2011). In addition to decrements on cognitive or academic tasks, Stone, Lynch, Sjomeling, and Darley (1999) demonstrated that performance on a physical task, a golf-putting task, was negatively affected by the presence of stereotype threat. In this study, African-Americans outperformed Whites when participants were primed that the task relied on athletic ability; conversely, Whites outperformed African-Americans when the task was presented as a mathematical task. Furthermore, stereotype threat negatively affects performance even when stereotypes are unfounded and deceptively presented to participants (Aronson, Lustina, Good, Keough, Steele, & Brown, 1999; Stone, et al, 1999).

As a result of the work investigating stereotype threat, social psychologists have identified other threat mechanisms that influence attitudes and behaviors. Social identity theory posits that individuals maintain positive perceptions of the groups and collective of which they are members (Tajfel & Turner, 1986). Individuals can have many varied social identities that are meaningful to them, including political affiliation, ethnicity, gender, and allegiance to a particular sports team (Ethier & Deaux, 1994; Hogg, 1992; Hogg & Abrams, 1988). These social identities have a prototypic representation of an ideal member, based on the beliefs, attitudes, and behaviors of the collective membership. Identifying with social identities that are meaningful to the individual has positive benefits such as heightened self-esteem (Luhtanen & Crocker, 1992). However, threats to social identity
can lead to negative outcomes like antisocial behavior, decreased self-esteem, depression, and stress (Aquino & Douglas, 2003).

Gender is “one of the most important, salient, and pervasive social categories” (Maass et al., 2003, p. 854). When gender identity is made salient in men, the idealized prototype of hegemonic masculinity can be activated as an identity prototype; this threat to social identity can influence behavior and attitudes depending on the social context (Lusher & Robins, 2009). Thus, gender identity threat is a type of social identity threat; similarly, stereotype threat is identified, by some social psychologists, as a type of social identity threat (Derks, Inzlicht, & Kang, 2008).

When a particular social identity (such as gender) is activated, membership within that social group becomes salient and a vigilance process is initiated, which can be associated with physiological responses and stress (Murphy, Steele, & Gross, 2007). During this vigilance period, individuals process situational cues to evaluate if their group membership is a liability within the social context (Cohen & Garcia, 2008). If the environment confirms that group membership will not be a source of stigma or devaluation, then vigilance subsides. However, if situational cues suggest that the individual will be negatively viewed for group membership, vigilance increases. The heightened arousal state of vigilance can lead individuals to conclude that innocuous cues, such as an instructor’s sex or race, may be seen as a potential source for devaluation (Wout, Shih, Jackson, & Sellers, 2009). Any proficiency or interest in a music activity that does not align with one’s gender could activate a gender identity threat (Rudman, Dohn, & Fairchild, 2007). In gender identity threat, an individual’s membership with their gender group is questioned, causing the individual to actively restore their membership by adhering to
gender norms (Bosson & Vandello, 2011; Sinclair & Carlsson, 2013). For example, gender identity could be threatened when a boy is teased by his peers for being interested in singing.

While there is substantially less research on gender identity threat, recent research indicates that its influence on social behavior is similar to the influence of stereotype threat. Gender identity threat has been identified as affecting attitudes and preferences. Sinclair and Carlsson (2013) reported that adolescents’ preferences for certain professions were significantly more stereotypical in a gender threat condition; gender identity threat was caused by having participants compare their experiences to that of “real men” or “real women.” The findings suggest that when gender identity threat is activated, their preferences are more aligned with socially accepted gender norms. Additionally, Sinclair and Carlsson found that the gender identity threat affected both adolescent males and females similarly, with both genders preferring stereotypical careers more highly when under gender identity threat.

In Anderson and Bushman’s study (2002), male participants were given deceptive feedback after completing an instrument on gender identity; the researchers told some participants that they scored lower than average while telling others falsely that they had scored higher than average. The participants were then asked to fill out a word-completion task, where the participant would supply letters to a word-stem (e.g., _IGHT). Men in the gender identity threat condition were more likely to complete the word with an aggressive word (e.g., FIGHT), while those in the gender identity affirmation condition were more likely to offer a benign word (e.g., RIGHT). The researchers suggest that the gender identity
threat influenced their cognitive processes to provide more stereotypical masculine answers.

Bosson, Vandello, Bumaford, Weaver, and Wasti (2009) sought to explore if gender identity threat would affect decision-making. After making male participants perform a gender identity threat task (a hair braiding task) or a gender-neutral task (a rope tying task), the researchers gave the participants the choice of solving a puzzle or hitting a punching bag. Participants in the gender identity threat condition were significantly more likely to choose the punching bag over the puzzle activity. The researchers suggest that the punching bag activity provided males whose gender identity was threatened the opportunity to restore it, by participating in a stereotypical aggressive behavior.

In a follow-up experiment, these researchers had all participants (both the hair-braiding and the rope-tying conditions) hit a pad that measured the intensity of their punch. Those participants who had participated in the hair-braiding hit the pad significantly harder than those in the rope-tying condition. Again, the researchers indicated that physical aggressive behaviors, a stereotypical male behavior, might facilitate a restoration of masculinity. The researchers continued this line of study, having all participants complete the hair braiding activity, the gender identity threat condition. Half of the participants were then asked to hit the punching bag. All of the participants then completed a measure of anxiety. The results indicated that those participants who did not have the opportunity to hit the punching bag had significantly higher levels of anxiety than those who did, suggesting that acts of aggression can help alleviate anxiety caused by gender identity threats. In another study, Weaver, Bosson, and Vandello (2013) demonstrated that gender identity threat influenced men to make riskier financial
decisions than participants who were affirmed in their gender identity. The researchers, again, suggest that adopting stereotypical male behaviors (in this case, risky and impulsive financial decisions) may alleviate the negative psychological effects of gender identity threat.

To examine the effects of gender identity threat on performance and motivation on stereotypical feminine professions, Smith and Allen (2011) recruited male and female participants to perform elementary teacher tasks (designing a bulletin board, identifying emotions on children’s faces, and creating a lesson plan) and nursing tasks (take patient history, blood pressure, and diagnose condition). Gay salient symbols were placed in the environment for half of the participants in order to threaten masculinity. Results showed that men in the experimental condition were evaluated as significantly less proficient on the performance tasks than all women and men in the control condition; women in the experimental condition were not affected by the priming of gay salience. Additionally, men in the experimental condition were significantly less motivated to participate in the “feminine” activities in the future. This study suggests that gender incongruence can lead to an avoidance of activities that are deemed to be culturally “feminine.”

The purpose of this study is to empirically test the influence of cultural gender norms on adolescents’ interest in music activities. By activating gender identity, the influence of cultural gender norms on the interest of various music activities can be examined. The research in social psychology provides a theoretical framework for this study. The findings from these previous studies suggest that salience of one’s gender identity could affect adolescents’ attitudes toward various music activities. Furthermore, by activating gender identity in adolescents within an experimental setting, the cultural
influence of gender stereotypes on music participation may be observed. The specific research question this project intends to explore:

Will adolescents’ interest in various music activities be influenced by gender salience or thinking about one’s gender?

Based on the literature in social psychology, one hypothesis is that participants will be more aligned with stereotypical activities for their gender group when gender identity is activated. Additionally, participants may have less interest for music activities that are not aligned with their gender group when gender identity is activated. While the primary focus of this study is examine how gender salience could influence interest in music activities, the research literature exploring gender norms in instrumental choice and singing activities suggests that a participant’s gender will also be an important variable in attributing interest for various music activities. Furthermore, it could be a logical hypothesis that students that are currently enrolled in music classes may report more interest in music activities than their non-music peers. Thus, this study explores how these variables (gender, music student status, and gender salience) interact to promote or inhibit interest in music activities.

**Manipulation Check**

In order to induce a gender identity threat response in participants, a priming agent is required. In Sinclair and Carlsson’s (2013) study, participants were primed with either a gender identity threat or a gender identity affirmation. In the gender identity threat, participants were asked to list ten activities that the participant had engaged in the past two weeks that was typical for a boy or girl of their age. In that study, participants had three minutes to complete the list. The researchers also used deception to further initiate
the gender identity threat, telling participants that most boys or girls were able to think of twelve activities. The rationale is that if participants could not readily name ten or twelve typical activities then they were not typical, leading them to question their role within their gender group. For the affirmation group, the participants completed the same task; however, they were asked to list two activities and that most participants could only think of one.

For this study, a more subtle priming agent was used to examine if merely thinking of one’s gender, or gender salience, could result in responses similar to a gender identity threat. In lieu of using Sinclair and Carlsson’s (2013) priming agent, the decision was made to use the Collective Self Esteem Scale: Gender Version (more about this instrument will be discussed in the next section). To ensure that the Collective Self-Esteem Scale resulted in the same gender priming as the gender identity threat, I conducted a pretest experiment. Thirty-nine university students (20 men, 19 women) aged 18 to 21 were recruited to participate in the manipulation check. Each participant was randomly assigned to a priming agent (Collective Self-Esteem Scale vs. Typicality Listing) and then asked to complete the Gender Activity Scale. Composites from the Gender Activity Scale were used for the dependent variables.

The results from the manipulation check demonstrated that for both men and women, ratings of interest in masculine and feminine activities were not significantly different between types of priming (see the Table 2-1 and Table 2-2 below). The results from this manipulation check indicate that the use of the Collective Self-Esteem Scale: Gender Version will prime participants in a similar manner as the gender identity threat prime in Sinclair and Carlsson’s study.
Method

Participants. The participants for the experiment were recruited from 15 seventh and eighth grade classes at a middle school in the Pacific Northwest. After receiving proper authorization from the university’s Institutional Review Board and the middle school administration, the author presented the opportunity to participate in the study to the students approximately one week before the experiment (see Appendix E and F for copies of the recruitment script and the opt-out waiver students received). Classes that
participated in the study were representative of the school as well as the surrounding community. The school is highly diverse with the student body being 39% Hispanic, 16% Asian, 6% African-American, 5% Pacific Islander, 1% Native American, 26% White, and 7% two or more races (demographics taken from state school report card, 2013-2014). In addition to ensuring the representative nature of the classes, both music students and non-music students were approached for participation. Music students were defined as those enrolled in a band class at the middle school at the time of the experiment as no other music class was offered at this school. A total of 246 participants volunteered to participate in the experiment.

**Instrument Development.**

In order to develop an instrument used in the gender salience study, a pilot study was conducted to validate assumptions that individuals systematically view various musical activities as feminine or masculine. While there is a healthy scholarly record of gender norms on instruments (Abeles, 2009), there is little documentation that musical activities and the context with which they take place have similar gendered expectations (e.g., singing in a choir, singing in a garage band). Fifty-nine college students (26 female students) were recruited from 100-level music classes for non-music majors (see Appendix A and B for recruitment script and IRB approved consent forms for participation). Any student that was older than 21 was excluded from participation in the pilot study in order to be more similar to the target population of adolescents that will be used in the experiment.

The Gendered Activity Scale, created by the author, was adapted from Steele and Ambady's (2006) study that examined women's attitudes to math and art activities. For
the purpose of this pilot, participants rated the masculinity and femininity of 29 activities (14 music activities and 15 non-music activities; for the complete list, see Appendix c). The prompt was, “Please rate how masculine or feminine each of the following activities is perceived by most people.” Participants rated each item on a rating scale from 1 (Very Masculine) to 7 (Very Feminine); a rating of 4 was defined as neutral.

The masculinity or femininity of musical activities as rated by the fifty-nine participants are present below in Table 2-3 (or Figure 2-1 to see the results graphically). Lower ratings indicate that the participants believed the activity was perceived by most people as masculine while higher ratings were viewed as feminine. A one-sample t-test was run to determine whether ratings of masculinity or femininity were significantly different from neutral, a rating of 4, using Bonferroni adjusted alpha levels of .003 per test (.05/16). All music activities significantly differed from the midpoint of the scale, with three exceptions: listening to music, writing lyrics for a song, and attending a concert. Six activities were rated as significantly less than the mid-point or more masculine than neutral: singing in a garage band, learning to play guitar, playing video games like Guitar Hero, working a soundboard at a theatrical production, performing in a drum circle, and making playlists, mash-ups, loops, and mixes. Seven music activities were rated as significantly feminine: singing in a choir, performing in a musical, singing karaoke, learning to play the violin, learning to play the piano, learning to play the flute, and taking a dance class. The results from this pilot study were used to further refine the instrument (Gendered Activity Scale) used in the experiment.
Table 2-3. *Masculinity and Femininity of Music Activities*

<table>
<thead>
<tr>
<th>Activity</th>
<th>M</th>
<th>SD</th>
<th><em>t</em>(58)</th>
<th><em>p</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Singing in a garage band</td>
<td>2.71</td>
<td>.890</td>
<td>-11.098</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Playing a video game like Guitar Hero</td>
<td>2.76</td>
<td>.93</td>
<td>-10.17</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Learning to play guitar</td>
<td>3.20</td>
<td>.85</td>
<td>-7.23</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Performing in a drum circle</td>
<td>3.29</td>
<td>.85</td>
<td>-6.42</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Working soundboard at a theater production</td>
<td>3.49</td>
<td>.82</td>
<td>-4.78</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Creating playlists, mash-ups, loops and mixes</td>
<td>3.53</td>
<td>.82</td>
<td>-4.46</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Listening to music</td>
<td>3.90</td>
<td>.34</td>
<td>-1.93</td>
<td>0.06</td>
</tr>
<tr>
<td>Writing lyrics for a song</td>
<td>4.10</td>
<td>.71</td>
<td>1.10</td>
<td>0.28</td>
</tr>
<tr>
<td>Going to a concert</td>
<td>4.11</td>
<td>.46</td>
<td>2.00</td>
<td>0.05</td>
</tr>
<tr>
<td>Learning to play piano</td>
<td>4.27</td>
<td>.55</td>
<td>3.78</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Singing karaoke</td>
<td>4.42</td>
<td>.81</td>
<td>4.00</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Learning to play the violin</td>
<td>4.54</td>
<td>.75</td>
<td>5.55</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Performing in a musical</td>
<td>4.86</td>
<td>.71</td>
<td>9.40</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Singing in a choir</td>
<td>4.90</td>
<td>.82</td>
<td>8.37</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Learning to play the flute</td>
<td>5.03</td>
<td>.89</td>
<td>8.92</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Taking a dance class</td>
<td>5.36</td>
<td>.78</td>
<td>13.31</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

Figure 2-1. *Masculinity and Femininity ratings of music activities.*
Procedure

Each participant completed two instruments: the revised Gendered Activity Survey and the Collective Self-Esteem Scale: Gender Version. The Gender Activity Scale was revised using the information gleaned from the pilot study. In the pilot study, six items were identified as being masculine music activities (singing in a garage band, learning to play guitar, performing in a drum circle, working the soundboard at a theatrical show, playing a music video game like Guitar Hero, and creating mixes, loops, mashups, or playlists). Even though seven items were identified as feminine activities, six items (singing in a choir, singing karaoke, performing in a musical, learning to play the piano, learning to play the flute, and taking a dance class) were selected to be congruent with the masculine activities. In addition, five filler activities (learning to juggle, reading a magazine, working out, studying for an exam, and drawing) were added to the survey to obscure the purpose of the study. Participants were prompted to rate “how pleasant you find the following activities” on a scale from 1 (very unpleasant) to 7 (very pleasant). A rating of 4 was identified as neutral. Because previous research has shown that participants may respond differently between personal interest and appropriateness for others like them (Steele & Ambady, 2006), participants were also asked to rate “how pleasant people like you (your friends or classmates) would find the following activities”; the activities were presented in a different order. The revised Gender Activity Scale is presented in Appendix I.

All participants also completed the Collective Self-Esteem Scale taken from previous studies (Luhtanen & Crocker, 1992; Tobin et al, 2010, see Appendix J). This instrument is a 16-question survey that asks the participant to evaluate his or her relationship to his or her
gender group by rating statements on a scale of 1 (strongly disagree) to 7 (strongly agree). Example statements on the scale include “The gender group I belong to is an important reflection of who I am” or “I often regret that I belong to my gender group.” For a full listing of the statements on the scale, please refer to Appendix J. The advantage of using this scale over other scales that intend to measure gender identity (i.e. Sex Role Inventory Scale by Bem, 1981) is that the participant infers what it means to be “male” or “female” rather than being supplied stereotypes by the instrument (Tobin et al, 2010). This approach is considered more valid in measuring gender identity, as an individual can appraise his or her gender holistically, rather than measuring one dimension of gender (e.g. aggression, sensitivity). It also does not pressure the participant to respond in a way that is stereotypical of their sex (Perry & Pauletti, 2011).

Finally, all participants answered two demographic questions. Participants were asked to identify their gender (selecting from boy or girl) as well as their grade level (selecting from seventh or eighth grade).

The survey instruments were administered in classroom settings within a normally scheduled class period. Before beginning the protocol for the experiment, the researcher read from a script to again acknowledge the risks of participating in the study as well as communicate that participation is voluntary. Each participant was given a packet of surveys with a cover page. Every participant completed: 1) Collective Self-Esteem Scale: Gender Version; 2) Gendered Music Activity Scale; 3) Demographic Questions. Although all participants completed the same surveys, the surveys were presented in different orders depending on condition. For the experimental condition, the participants completed the Collective Self-Esteem Scale (used as a priming agent), the Activity Attitude Scale
(dependent variable), then the demographic survey. For the control condition, the participants completed the Activity Attitude Scale first (dependent variable), Collective Self-Esteem Scale (used as a comparison for the threat condition), then the demographic survey.

To randomize the conditions for participants, both conditions were administered simultaneously within classrooms as packets were distributed from a pre-sorted stack of randomized packets. The stack was randomized using a random number generator.

**Results**

Two hundred and forty-six students participated in the experiment. Genders were equally represented in the study with 123 boys and 123 girls participating; two participants indicated that they identified as transgender and their responses were not included in these results. One hundred and eleven music students participated in the study as well as 135 non-music students. There were 134 students in the experimental condition and 112 in the control condition. Descriptive data for each musical activity are presented below in Table 2-4.

<table>
<thead>
<tr>
<th>Table 2-4. Participants rating of music activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boys</strong></td>
</tr>
<tr>
<td><strong>Experimental</strong></td>
</tr>
<tr>
<td>M(SD)</td>
</tr>
<tr>
<td>Singing in a garage band</td>
</tr>
<tr>
<td>Playing a video game like Guitar Hero</td>
</tr>
<tr>
<td>Learning to play guitar</td>
</tr>
<tr>
<td>Performing in a drum circle</td>
</tr>
<tr>
<td>Working soundboard at a theater production</td>
</tr>
<tr>
<td>Creating playlists, mashups, loops, and mixes</td>
</tr>
<tr>
<td>Learning to play piano</td>
</tr>
<tr>
<td>Singing karaoke</td>
</tr>
<tr>
<td>Performing in a musical</td>
</tr>
<tr>
<td>Singing in a choir</td>
</tr>
<tr>
<td>Learning to play the flute</td>
</tr>
<tr>
<td>Taking a dance class</td>
</tr>
</tbody>
</table>
In order to explore the research question, composites were tabulated to compare between conditions; six activities were used for masculine and feminine music activities each. A 2 (gender type; fixed, between-subjects) x 2 (music status; fixed, between-subjects) x 2 (condition type; fixed, between-subjects) factorial ANOVA was conducted on ratings of personal enjoyment of masculine music activities. The results (displayed in Table 2-5) revealed two significant main effects: music status ($p < .001$) and experimental condition ($p = .004$). There was no significant main effect detected associated with gender ($p > .05$), indicating that boys and girls have similar distributions in rating their interest of masculine activities. Examination of the means across conditions shows that music students rated masculine music activities higher than non-music students. Similarly, students who had been primed to think about their gender (gender salience condition) rated masculine music activities higher than students in the control condition.

The significant main effects should be interpreted in light of a significant two-way interaction between music status and experimental condition was significant ($p = .029$). To better understand the nature of the interaction, the group means of the main effects are plotted below, separated by gender. The plots demonstrate that non-music students who were primed in the gender salience condition rated masculine music activities ostensibly higher than their peers in the control groups; however, music students rated masculine activities favorably regardless of condition. Lastly, Figures 2-2 and 2-3 illustrate that girls and boys rated masculine music activities similarly. The other two-way and three-way interactions in the model were not significant ($p > .05$).
For feminine music activities, a 2 (gender type; fixed, between-subjects) x 2 (music status; fixed, between-subjects) x 2 (condition type; fixed, between-subjects) factorial ANOVA was conducted on pleasantness ratings of feminine music activities. The results (displayed in Table 2-6) indicated three main effects on ratings of feminine music activities: gender type ($p < .001$), music status ($p < .001$) and experimental condition ($p = .001$). By examining the group means, it is evident that girls significantly rated these music activities higher than boys. Additionally, music students rated these activities higher than their non-music peers. Lastly, students that had been primed to think about their gender rated
feminine music activities significantly higher than participants in the control group. The model did not detect any significant two-way or three-way interactions. Figures 2-4 and 2-5 depict the group means affected by all three factors.

Table 2-6. Descriptives and Results for Ratings of Feminine Music activities

<table>
<thead>
<tr>
<th>Condition</th>
<th>Boys Music</th>
<th>M (SD)</th>
<th>Boys Non-Music</th>
<th>M (SD)</th>
<th>Girls Music</th>
<th>M (SD)</th>
<th>Girls Non-Music</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>22.14</td>
<td>(7.34)</td>
<td>20.46</td>
<td>(7.07)</td>
<td>32.26</td>
<td>(6.30)</td>
<td>26.10</td>
<td>(7.56)</td>
</tr>
<tr>
<td>Control</td>
<td>20.90</td>
<td>(7.69)</td>
<td>15.15</td>
<td>(7.39)</td>
<td>28.73</td>
<td>(7.80)</td>
<td>23.18</td>
<td>(7.89)</td>
</tr>
</tbody>
</table>

Model Results

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>(df)</th>
<th>p</th>
<th>(\omega^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>70.55</td>
<td>1, 245</td>
<td>&lt;.001</td>
<td>0.20</td>
</tr>
<tr>
<td>Music Status</td>
<td>25.87</td>
<td>1, 245</td>
<td>&lt;.001</td>
<td>0.07</td>
</tr>
<tr>
<td>Condition</td>
<td>11.93</td>
<td>1, 245</td>
<td>.001</td>
<td>0.03</td>
</tr>
<tr>
<td>Interactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender*Music</td>
<td>1.30</td>
<td>1,245</td>
<td>.256</td>
<td>0.00</td>
</tr>
<tr>
<td>Gender*Condition</td>
<td>0.00</td>
<td>1,245</td>
<td>.978</td>
<td>0.00</td>
</tr>
<tr>
<td>Music*Condition</td>
<td>0.84</td>
<td>1,245</td>
<td>.360</td>
<td>0.00</td>
</tr>
<tr>
<td>Gender<em>Music</em>Cond</td>
<td>1.54</td>
<td>1,245</td>
<td>.215</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Figures 2-4 and 2-5.

The gender activity scale also asked participants how “people like them (their classmates or friends)” would rate the different music activities. As with the ratings of personal enjoyment of music activities, composites were computed for comparison between factors. A 2 (gender type; fixed, between-subjects) x 2 (music status; fixed, between-subjects) x 2 (condition type; fixed, between-subjects) factorial ANOVA was conducted on perceptions of peer enjoyment of masculine music activities. The results (see
Table 2-7) reveal a main effect by music status ($p = .001$) and a main effect by experimental condition ($p = .026$). Similar to personal ratings, music students perceived that their peers would find masculine music activities more pleasant than their non-music participants when looking at the group means. Gender was not identified as a significant main effect ($p > .05$), indicating that the ratings of peers’ enjoyment of masculine music activities were not significantly different between boys and girls.

Additionally, a significant two-way interaction between music status and condition was also identified; this interaction indicates that the effect of the experimental condition is contingent on music status. Music students that had been primed by gender salience rated their peers’ enjoyment of masculine music activities lower than music students who had not been primed. Non-music students who had been primed rated their perceptions of how others would enjoy masculine music activities substantially higher than their non-music peers who had been in the control group. The group means have been plotted in Figures 2-6 and 2-7 to illustrate the interaction between music status and experimental condition.
Finally, a 2 (gender type; fixed, between-subjects) x 2 (music status; fixed, between-subjects) x 2 (condition type; fixed, between-subjects) factorial ANOVA was conducted on the ratings of perceptions of how pleasant participants believed others would view feminine music activities. Two significant main effects were indicated in the results (see Table 2-8): gender type and music student status. An examination of the group means reveals that girls reported higher perceptions of how their peers would rate feminine music activities than boys, across both experimental condition and music status. Participants who were music students were generally more positive in rating peer
perceptions of feminine music activities, with the exception of boys in the experimental condition. Experimental condition was not identified as a significant main effect nor were any significant two-way or three-way interactions identified. The plots of group means are presented in Figure 2-9 and 2-10.

Table 2-8. Descriptives and Results for Ratings of Feminine Music activities for Others

<table>
<thead>
<tr>
<th>Condition</th>
<th>Boys</th>
<th></th>
<th>Girls</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Music M (SD)</td>
<td>Non-Music M (SD)</td>
<td>Music M (SD)</td>
<td>Non-Music M (SD)</td>
</tr>
<tr>
<td>Experimental</td>
<td>22.29 (8.32)</td>
<td>23.42 (8.32)</td>
<td>25.67 (8.97)</td>
<td>24.42 (6.76)</td>
</tr>
<tr>
<td>Control</td>
<td>22.63 (7.40)</td>
<td>18.18 (7.41)</td>
<td>25.88 (5.44)</td>
<td>22.87 (6.80)</td>
</tr>
</tbody>
</table>

Model Results

<table>
<thead>
<tr>
<th>Effects</th>
<th>F (df)</th>
<th>p</th>
<th>(\omega^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>Gender</td>
<td>10.24</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Music Status</td>
<td>3.87</td>
<td>.050</td>
</tr>
<tr>
<td></td>
<td>Condition</td>
<td>2.61</td>
<td>.107</td>
</tr>
<tr>
<td>Interactions</td>
<td>Gender*Music</td>
<td>0.06</td>
<td>.807</td>
</tr>
<tr>
<td></td>
<td>Gender*Condition</td>
<td>0.86</td>
<td>.355</td>
</tr>
<tr>
<td></td>
<td>Music*Condition</td>
<td>3.65</td>
<td>.057</td>
</tr>
<tr>
<td></td>
<td>Gender<em>Music</em>Cond</td>
<td>0.99</td>
<td>.321</td>
</tr>
</tbody>
</table>

Figures 2-9 and 2-10.

Discussion

The purpose of this study was to examine if priming adolescents in a gender salience condition would induce a gender identity threat response. In this response, individuals would be drawn more to activities that stereotypically align with their gender. The results
are clear, in that the priming agent had a significant effect on the interest of music activities. However, contrary to the proposed hypothesis, participants under the gender salience condition viewed both stereotypical activities for their gender group and non-stereotypical activities more favorably than participants in the control condition.

Under the gender salience condition, both boys and girls rated stereotypical music activities for their gender significantly higher than their peers in the control group. These results are similar to the results of Sinclair and Carlsson (2013) where students who had been primed with a gender identity threat showed more interest in stereotypical professions for their gender group than students who had been given a gender identity affirmation. Thus, it appears that the subtle priming of gender salience may induce a response similar to gender identity threat, although that response was relatively weak in influence ($\omega^2 = .03$ for both boys and girls).

However, the priming effect also influenced ratings for non-stereotypical music activities. This finding seems to conflict with the idea of a gender identity threat response, as it would be logical for individuals to be less interested (or more statistically similar to the control group) in music activities for the other gender group if their gender identity was threatened. Sinclair and Carlsson (2013) did not publish how gender identity threat influenced interest in stereotypical professions for the other gender group in their study, so it is unclear if this is a new finding. While it is not feasible to ascertain the cause of the higher ratings for non-stereotypical music activities from this study alone, there are several possible explanations.

First, the higher ratings for the non-stereotypical activities (as well as the rating for the stereotypical activities) could be a result of an order effect. Participants in the
experimental group were first primed with the Collective Self-Esteem Scale: Gender Version, an instrument that asked participants to consider their relationship to their gender group. These participants then rated their interest in music activities on the Gender Activity Survey, a decidedly less burdensome task on their cognition, while the control group started the experiment by rating the music activities. Thus, the order of the tasks may have influenced how participants rated music activities. While an order effect is a possible explanation, music students were affected differently by the experimental condition than non-music students. It is likely that if an order effect had influenced the dependent variables, it would have affected music and non-music students in a similar manner.

The unexpected results may have been produced from a lack of precision in the prime. The priming agent (the Collective Self-Esteem Scale: Gender Version) was selected as a subtle means to have participants consider their gender identity; however, it may have been too subtle to garner an authentic gender identity threat. Although a manipulation check was employed to ensure that this priming agent was similar to the priming agent that induced gender identity threat in Sinclair and Carlsson’s (2013) study, the small number of participants in that pilot may have been susceptible to a Type II error, where there is a significant difference between groups but a lack of power prevented it from being detected. Additionally, the participants of the pilot and the experiment may be influenced by the priming agent differently; the participants of the pilot were 18-21 years old while the participants in the experiment were 12-14 years old.

The priming agent may have primed the participants in other ways than intended. Rather than inducing a gender identity threat, the priming agent for these students may
have prompted an openness toward gender issues. As noted in the method section, two participants reported being transgender and their results were excluded from analysis. The presence of transgender students within the middle school may prompted the school administration and teachers to discuss gender identity with their students more often than other school settings. In discussion with the teachers at the study site, they were clear that their students were very affirming of students with different gender identifications. Perhaps, for this sample, the priming agent promoted a more global attitude of gender affirmation, while university students in the manipulation check experienced the priming agent similarly to gender identity threat. Future study is needed to explore if these results are idiosyncratic to this sample where gender identity may be more widely discussed and salient in the participants.

Regardless of why the priming effect occurred on non-stereotypical activities, its influence on interest in non-stereotypical music activities bears some discussion. While there were positive gains in the ratings of non-stereotypical music activities by participants in the experimental condition, the gains have to be qualified. For boys, the experimental group rated feminine music activities significantly higher than the control group. However, when looking at the mean values of ratings for the feminine activities (see Table 2-4), boys in the experimental group rated every feminine music activity as lower than 4 (neutral) despite the influence of the priming agent. Thus, for boys, the priming agent influenced boys to view the feminine activities to a lesser degree of unpleasantness rather than being pleasant.

For girls’ ratings of masculine music activities, the influence of the priming agents on the results is more nuanced. For some masculine music activities (performing in a drum
circle, singing in a garage band), the priming agent influenced girls in the same manner as boys, where the mean scores remained below the neutral threshold and overall rating the activities as unpleasant. Several music activities (learning to play the guitar, creating playlists, mash-ups, mixes, and loops) were viewed more positively than neutral by girls in the control; the priming agent influenced girls in the experimental group to view them even more positively than their control group counterparts. The mean scores of two activities (playing a music video game like Guitar Hero, working the soundboard at a theatrical production) crossed from being viewed as unpleasant in the control group to being viewed as pleasant in the experimental group. These results may indicate that the priming effect may cause girls to view some music activities as pleasant that they would normally view as unpleasant.

The priming agent also influenced students differently depending on their status as a music student, as identified by the interaction effects between experimental condition and music status. For music students, the priming agent had little effect on the ratings of music activities. These findings could suggest that music students are already at a heightened state of gender salience—although why they are at a heightened state of gender salience is still unclear. Another explanation is that the survey concerning music activities activated components of their identity as a music student and the result was similar to what non-music students experienced in the experimental condition. Clearly, these explanations are only speculative and would need additional study to understand more fully.

Other main effects other than experimental condition had been detected in the results. Status as music students was identified within the models as a main effect on
ratings on music activities. Music students viewed both masculine and feminine music activities as significantly more pleasant than their non-music peers. This finding seems logical as students who elect to take a music class during the school day may be more interested in music activities than non-music students. The effect sizes for the main effects of music status on ratings for masculine music activities ($\omega^2 = .07$) and on ratings for feminine music activities ($\omega^2 = .07$) indicate a moderate association between music status and the dependent variable.

In the results of the experiment, gender was identified as a factor that produced a significant main effect for interest in feminine music activities. The results indicate a large disparity in ratings of feminine music activities between boys and girls, with girls being much more interested in feminine music activities. These results seem to typify the discussion of hegemonic masculinity as a cultural phenomenon (Freer, 2012; Harrison, 2008), where boys are not attracted to feminine activities. The effect size for this main effect ($\omega^2 = .20$) was the largest effect size detected in the study, suggesting a very strong association between gender and personal enjoyment of feminine music activities.

While gender had a strong association with ratings of feminine music activities, there was no significant difference in the ratings of masculine music activities between boys and girls. This finding is consistent with some other studies inside and outside of music that found that girls are more willing to consider masculine activities than boys are to consider feminine activities (Conway, 2000; Green, 1993). Girls may be more willing to cross gender norms in order to seek perceived benefits of acting like a man, a privileged gender within U.S. culture (Harrison & O’Neill, 2000). Girls may also be encouraged more to challenge gender roles that they find restrictive.
While boys may be more attracted to masculine music activities than feminine music activities (as the data here suggest), boys may be guarded in their interest in such activities because they view the entire domain of music as a feminine enterprise. Even though girls are equally attracted to masculine music activities as boys, they are less drawn to masculine activities than feminine activities. However, girls are ostensibly more attracted to masculine music activities than boys are interested in feminine music activities. Again, this finding could be a result of hegemonic masculine culture where girls encounter fewer social liabilities to cross gender barriers than boys. These findings are similar to those of Pickering and Repacholi (2001) who found that girls were more willing to consider counter-stereotyping of instruments than boys. This study cannot illuminate why there are not more pronounced differences between genders on masculine music activities and future research on this topic is warranted.

Participants also reported how people like them would rate the different music activities. These results mirrored the results of their personal ratings of the music activities. Peers’ perceived interest in masculine music activities had main effects by music status and experimental condition and an interaction effect between music status and condition. For the peers’ enjoyment of feminine music activities, participants’ ratings had significant differences by gender type, music status, and experimental condition, but there were no interactions between factors. While the ratings for others reflect the personal ratings, the effect sizes are considerably smaller for these dependent variables. This evidence suggests that adolescents expect their peers to have similar interests to themselves, although the factors of gender, music status, and experimental condition have a smaller degree of influence on these ratings.
The finding that participants reported significantly different ratings of peers’ interest due to experimental condition is surprising. Participants who had been in the experimental group rated the enjoyment of others in music activities higher than the control group. This finding is at odds with Steele and Ambady’s (2006) study that asked adult women to rate their enjoyment of math and arts activities after receiving a subliminal prime; conditions varied by the presentation of masculine or feminine primes. The participants in that study reported significant differences in their personal ratings of activities depending on the priming agent they had experienced, but there were no differences detected on how others would enjoy the same activities between experimental conditions. The difference between the former findings and the current ones could be an issue of age, where the priming agent influenced the younger participants differently. Additionally, the subliminal prime in Steele’s and Ambady’s (2006) study may have been too subtle to influence the ratings of peers’ interests in activities.

For ratings of how others would enjoy masculine and feminine music activities, gender similarly influenced the dependent variables. There was no significant difference in how boys and girls rated their peers’ interest in masculine music activities, however boys rated their peers’ interest in feminine music activities lower than girls. While the model detected a significant main effect however, the association was small \( \omega^2 = .03 \).

Music students reported significantly higher ratings of how others would enjoy both masculine and feminine music activities. Again, this finding may suggest that music students may see value in many types of music endeavors and believe that others would be attracted to all kinds of music activities. For both masculine and feminine music activities,
the effect sizes detected in the results suggest small associations between music status and dependent variables ($\omega^2 = .04$ and $\omega^2 = .01$, respectively).

In conclusion, participants in this experiment were influenced by the priming agent and rated stereotypical music activities for their gender group significantly more pleasant than their peers in the control group. The priming agent also influenced participants in the experimental condition to have more positive (or less negative) evaluations of non-stereotypical music activities for their gender group. To a lesser degree, participants in the experimental group were also influenced in how they reported their peers’ interest in the music activities.

**Limitations**

This experimental study has several limitations that must be considered in interpreting the findings. First, the findings cannot be generalized beyond the sample used in the experiment. While the study site was chosen to be representative of a diverse population (including healthy proportions of various ethnicities and socio-economic levels), it was not chosen at random and the findings may have resulted from environmental factors that were not examined. For instance, the study site was located in a part of the country that is socially progressive and in a suburb of a large metropolitan city. The findings here may be substantially different from other areas of the country, such as schools in rural areas or parts of the country that are more socially conservative. As mentioned earlier, the presence of transgender students within the student body may influence the students that participated in this study to view gender identity differently than school-aged students who do not know transgender peers, though such situations are
becoming more common nationally. Future replications of this study should consider using different types of school sites in order to assess the generalizability of these findings.

Additionally, participants did not rate several of the music activities as expected from the pilot study used to develop the study instruments. For instance, in the pilot, “singing in a garage band” was evaluated by participants as the most masculine music activity on the survey; however, male participants in the experiment rated this activity among the lowest of all the music activities. The discrepancies between the results of the pilot and the experiment may be due to the difference in ages used for each part of the study. Even though the pilot excluded any university student over the age of 21, it is possible that middle school and college students do not have congruent views on gender stereotypes and music activities. More exploratory analysis of middle school students’ views of gendered music activities is warranted; this could be accomplished by surveying a similar sample used in this experiment and performing an Exploratory Factor Analysis in order to validate the constructs being examined in this study. This could also be accomplished by replicating the experiment with college-age adults, 18 to 21 years old.

Implications and Future Research

The findings of this study offer important implications for the field of music education. First, the results confirm and extend understanding of how gender influences certain music activities. Consistent with many studies that have examined gender differences in music education (for a review, see Abeles, 2009; Warcheza, 2013), boys are significantly less interested in music activities that are considered feminine (e.g. singing in a choir or performing in a musical) than girls. Furthermore, there was no significant difference detected in level of interest in masculine music activities by gender. These
findings empirically corroborate Harrison’s (2008) and Freer’s (2012) contentions about the role of hegemonic masculinity in the participation choices of students. Boys’ interests in music activities seem to be constrained by gender expectations. Girls, on the other hand, have more freedom to express interest in music activities that do not align with their gender group; girls may also be more drawn to cross-gendered music activities than boys due to the higher status of masculinity (or masculine things) within U.S. culture.

For music educators, these findings can inform curricular decisions of class offerings. For instance, if a school is looking to enlist more music students, schools should consider providing electives in which both genders have interest (e.g., a guitar class, a class using technology to compose/arrange music). Music teachers should recognize the cultural influences that may affect their students’ participation choices and acknowledge the social liability of students who cross gender norms.

Even though this study provides evidence of the influence of gender expectations on adolescent beliefs and behaviors, the experiment conducted demonstrated that adolescents’ beliefs can be manipulated by subtle stimuli within the environment. Participants who had been primed to consider their gender identity rated all music activities significantly higher than the control group. On the surface, this finding suggests that music teachers should consider making gender salient in prospective students as a recruitment tool. For stereotypical music activities, this idea may work. As seen in this experiment, making gender salient in prospective music students may activate interest in some stereotypical music activities for all students and interest in non-stereotypical music activities for girls. For boys, gender salience may increase their rating of enjoyment of non-stereotypical music activities but they will likely still consider them “unpleasant.”
Thus, while the gender salience prime influenced interest ratings in music activities positively, it is unknown if this influence would affect participation decisions if students had to make a forced choice.

In Bosson’s et al. (2009) study, men who were given a forced choice to hit a punching bag or complete a puzzle were highly influenced by the priming agent they were given (rope tying task or hair braiding task); participants that were asked to do the hair braiding task (gender identity threat) were significantly more likely to hit the punching bag than those who had completed the rope tying task (neutral task). If gender salience is activated in boys as a recruitment tool, they would likely choose to participate in a stereotypical music activity over a non-stereotypical activity. Moreover, if gender salience was activated in boys, they may more likely choose to participate in more stereotypical activities for boys in general (e.g., participating in sports) than any music activity. Thus, while some music educators may use campaigns like “Real Men Sing” or “Girls Can Play Jazz” to fight the cultural stereotypes of music participation, students may experience a gender identity threat by these cues and be pushed toward more gender-aligned activities, possibly outside of music altogether. Future replications of this experiment using a forced choice as a dependent variable or the use of a stronger, threatening prime could help validate this phenomenon.

This experiment provides evidence that thinking about one’s gender identity for a few moments can influence his or her interest in various music activities. Future research in this line of inquiry should examine what other stimuli may have similar effects. Perhaps, physical objects that are displayed within typical music classrooms (e.g., choir robes, pianos, sound equipment, trophies) send gendered messages to students and inform them
if they are welcome within the space. This phenomenon, called ambient belonging (Cheryan, Plaut, Davies, & Steele, 2009), has been shown to influence women’s interest in computer science; women who attended an informational meeting about computer science were significantly less interested in the discipline when stereotypical masculine “nerd” objects (e.g., Star Trek poster, video games) were in the environment than neutral objects (e.g., motivational poster, nature magazines). This line of study has shown that very subtle stimuli within the environment, possibly subliminally, can influence an individual’s interest and motivation. Music education researchers should examine music classrooms, using techniques from social psychology, to explore how ambient belonging can impact music participation decisions.

The intent of this study was to empirically explore the effect of cultural gender norms on interest in music activities. While this experiment did illustrate that priming male and female participants with gender salience led to more interest in music activities stereotypical for their gender, the priming agent also influenced participants to cross-gender activities more positively. Music educators and researchers in music education need to continue to explore the motivations for participating in various music activities and how cultural expectations may influence participation decisions. Future studies by researchers in music education should consider the use of intervention designs to explore how specific cultural norms may influence students’ views on music participation. Harrison and O’Neill’s study (2000), in conjunction with this study, illustrate that very simple interventions (i.e., priming agent of gender salience, concert presentation that challenges cultural norms) may affect interest in various music activities. Studies that incorporate thoughtful or prolonged interventions (e.g., units within general music classes
that have all students study “masculine” or “feminine” instruments concurrently, frank discussions with students about cultural gender norms of music activities) may provide evidence of ways to combat cultural norms that may push students away from a musical endeavor in which they are interested. With a more complete understanding of how gender stereotypes affect music participation, music educators can address and possibly minimize cultural influences that inhibit music participation, supporting all students to pursue any music activity they wish.
References


Abstract

Research on adults who identify as “tone deaf” suggest that their poor musical self-concept is shaped by their view of themselves as non-singers even when their perceptual skills and even their singing ability is not significantly worse than the general population. Many of these adults self-selected out of further participation as children but expressed regret as adults for lost opportunities. The purpose of this investigation was to explore the role of musical background and attitudes about music and music participation in predicting students’ decisions to participate in elective music instruction in junior high and how those same variables related to their actual singing ability. Findings suggest that family music participation and positive attitudes toward music, particularly their view of themselves as musicians, can predict with 73% accuracy which students choose to continue in elective
music. Musical self-concept was also a unique predictor of singing accuracy performance, suggesting a connection between students' actual singing ability and their view of themselves as musicians.
When I was in sixth-grade we had the option of being in the choir. I wanted to be in [it] so badly - I thought I might be picked despite what my family said about me. For the audition, the teacher went around the room, knelt by each person, and took notes . . . I was terrified as he came to me because I knew it was all or nothing (I remember my heart thumping so loudly) . . . Well, I didn’t make the cut . . . and what made it worse was that all my friends did. I was devastated! I quit singing after that because I figured all these people must be right about me - my music teacher was the music expert! That really shattered my musical self-image. Since then I’ve felt pretty incapable. (Melissa in Abril, 2007, p. 6)

Stories like the one above are common when people are asked why they identify as “tone deaf”. The stories most often involve either a music teacher or a family member who was critical of the person’s singing at a young age. While the stories center on singing, participants often report feelings of unmusicality and report, like Melissa, feelings of inadequacy that led them to stop participating in music. This anxiety around singing can carry well into adulthood and inhibit even casual musical engagement for fear of revealing a perceived lack of musical “talent”.

Previous studies have reported that individuals who believe they are poor singers have been reluctant to participate in music activities (Abril, 2007; Knight, 1999; Sloboda, Wise & Peretz, 2005; Whidden, 2010). Sloboda, Wise, and Peretz (2005) investigated the beliefs of self-identified “tone deaf” individuals through interviews. Among their findings, these researchers reported that individuals who believed they were very “tone deaf” were also likely to describe themselves as “unmusical" and reluctant to participate in any music
activities. They also believed that their condition of tone deafness was permanent and limited the musical goals that they could accomplish. The researchers also note that their participants’ negative musical self-concepts were informed through social interactions. Many of the participants had normal music perceptual and singing abilities, but believed that they were “tone-deaf” because they were comparing their abilities to much stronger musical peers. It may be that self-described “tone deaf” singers are unsure if they sing badly or not, and are reluctant to sing in the presence of others, fearing their self-perceptions of their singing ability reflects an actual lack of skill.

In qualitative studies that have explored poor-pitch singers, participants noted that their perceptions of their self-described poor singing ability stifled their future music participation. In Whidden’s (2010) study of people who viewed themselves as weak singers, participants discussed how being evaluated by an important person (e.g., their music teacher, parent) had a significant impact on their musical identity and future music participation choices. One informant in Whidden’s study, after given feedback about her singing performance stated, “That experience made me say, ‘I’m not doing that again.’ It was uncomfortable. I’m not good at singing so I just never put myself in that situation where I had to do that” (p. 12).

While term “tone deaf” suggests a problem with a person’s ability to hear music, researchers have found that the great majority of people who identify as tone deaf have normal perceptual ability (Cuddy, Balkwill, Peretz & Holden, 2005). To the general population, however, the term “tone deaf” is instead equated with a perceived inability to sing (Sloboda et al., 2005). This initial misattribution in terminology may be responsible for many peoples’ sense that singing alone is a marker of musicality, of natural talent. Singing
more than any other musical skill is seen to reflect a natural capability rather than the extent of someone’s experience or practice (Demorest & Pfordresher, 2014; Whidden, 2010), despite the fact that there is ample evidence of improvement in young children’s ability to sing throughout the elementary grades (cf. Welch, 2006). Do self-perceptions of singing ability shape children’s decisions to continue in secondary elective music instruction and are those perceptions rooted in an actual lack of ability?

Participation in elective music instruction has long been a concern of music educators. Recent statistics suggest that approximately 34% of U.S. students participated in some kind elective music instruction in secondary school (Elpus, 2014; Keiper, Sandene, Persky, & Kuang, 2009) and that percentage declines to around 21% for ensemble participation of high school seniors (Elpus & Abril, 2011). Researchers have explored a number of possible reasons for the relatively low level of participation in elective music including socio-cultural (Corenblum & Marshall, 1998; Elpus, 2014; Elpus & Abril, 2011; Kinney, 2008, 2010; Klinedinst, 1991; Siebenaler, 2008), family and peer influence (Clements, 2002; Sichivitsa, 2007; Siebenaler, 2006), attitudes toward music (Amundson, 2012; Clements, 2002; Hallam, 1998; Mizener, 1993; Sichivitsa, 2003; Siebenaler, 2008), and self-perceptions of musicality (Amundson, 2012; Austin, 1990; Clements, 2002; Klinedinst, 1991; Mizener, 1993; Sichivitsa, 2007; Siebenaler, 2006). Of particular interest to this study are those investigations that directly compared background, attitudes and beliefs of music participants and non-participants.

Participation decisions often come at transition points in a student’s education such as elementary to middle school, middle school to high school or high school to college. Several studies surveyed the background and attitudes of college students who chose to
continue participating in choir to see what might have influenced their decision. Sichivitsa (2003, 2007) looked only at students who were enrolled in choir at the college level and found that parental involvement, self-concept in music and overall value of music were most associated with motivation to continue choral participation in college. Amundson (2012) compared collegiate choir students to non-choir students who had sung during high school and found that participants differed from non-participants in their views of how time-consuming choir would be, their self-perceptions of competence and the intrinsic value of music in their lives. Siebenaler (2006) did a similar comparison with high school choir and non-choir students’ surveying their background and attitudes. Logistic regression analyses indicated that the factors that predicted continued participation in choral music for these high school students were positive support and parental involvement at home, positive music experiences in elementary school and middle school, a positive self-concept in regard to music skills, and the support of peers. Corenblum & Marshall (1998) tested a multi-factor model that included musical and non-musical variables as well as attitudinal measures and teacher ratings of ability to see what predicted 253 Canadian ninth grade instrumental students’ intent to continue in band. In the resulting structural equation model, they found that socioeconomic level, teacher ratings and perceived attitudes of important others predicted students’ intent to continue.

Studies by Klinedinst (1991) and Hallam (1998) looked at the relationship of self-report measures and teacher ratings to musical achievement of instrumental students, however, both studies included continuing participation in music as a variable. Out of eleven factors in Klinedinst’s study including teacher ratings, attitude, academic achievement, background and motivation, continuing participation of fifth grade
instrumental students was best predicted by their socio-economic status, their self-concept in music, and their academic achievement. Hallam’s 1998 study of string students ages 6-16 found that students who dropped out a year after the original data collection could be discriminated from those who continued with only a two-factor model that included the teachers ratings of their ability to understand instructions and their self-reported intention to practice. No other variables were significant. At the elementary level, Austin (1990) looked at whether or not gender, grade level and musical self-esteem were related to elementary students’ participation in both in school and out-of school music. Musical self-esteem was the only significantly predictor of the degree of music participation.

In a 2002 study Clements sought to identify what combination of variables would predict not just students’ interest or continuation in music, but their initial choice to participate in elective music instruction in the transition from elementary to junior high. She had 504 sixth-graders complete a series of questionnaires that looked at personality, sex roles, attitudes toward music, self-concept in music, cost of participation, peer influence, and perceptions of the junior high music program. To these variables she added standardized test scores and the teacher’s assessment of each students’ singing ability and overall musical ability. After the students had registered for junior high classes she employed a discriminant function analysis to determine which set of variables best discriminated between those who continued in music and those who did not. The four most influential variables for determining who continued in music were high musical self-concept, a positive attitude towards music, a greater positive impact of peer influence, and a lower perceived cost of participation. The four other significant predictors in her model were high vocal ability as rated by their music teacher, family musical background, higher
than average feminine self-perception (BEMS Sex Role Inventory), and high musical ability as rated by the music teacher. Her model correctly classified 59.7% of the sample’s participation choices between choir, non-choir music classes, or no music classes.

Several variables seem to appear in most of the studies looking at influences on music participation. Musical self-concept appears frequently as a strong predictor of participation and often ahead of more objective assessments of students’ musical ability. Influences of parents and peers either through support, engagement, or the student’s perceptions of support seem to matter to students who continue. While socioeconomic level has been found to be significant in several studies regarding student retention (Corenblum & Marshall, 1998; Kinney, 2010; Klinedinst, 1991), it was not consistently defined and did not seem to predict initial enrollment (Kinney, 2010). Academic achievement was significant for instrumental participation but was not a factor in choral participation studies. Teacher’s ratings of student ability were also found to be predictors in several studies, but less so than the students’ self-perceptions or attitudes. Few of the studies cited measured students’ musical achievement objectively and none of them included a measure of their singing ability, which is of primary interest to this investigation.

Mizener (1993) did not do a predictive study per se but did look at the attitudes of elementary students in grades 3-6 toward singing and how that differed by grade level, gender, prior experience and singing skill, both self-perception and assessed. What was unique about this study was the inclusion of an assessment of singing skill as a variable. 23% of the total sample \( (n=123) \) sang Jingle Bells twice from a given pitch and then sang a second song of their choice. This yielded three scores, a pitch matching score (presumably
matching the initial E of Jingle Bells), melodic accuracy in the best performance of Jingle Bells and melodic accuracy in the song of their choice (both on a 7-point rubric). The only significant relationship between singing accuracy and all of the other study variables was between grade level and melodic accuracy on Jingle Bells, with 4th and 5th graders scoring higher than 3rd and 6th graders. She also reports:

The most surprising results of all were that no significant relationships were found between self-perception of singing skill and assessed singing skill or between liking to sing or wanting to sing in choir and assessed singing skill. Results indicated that students who thought they were good singers did not demonstrate significantly better singing skills than did the students who did not think they sang well. (p. 240)

Her findings suggest that students’ attitudes toward singing and self-perceptions are not grounded in actual skill. It should be noted, however, that she provided no information regarding the type of analysis used to test the significance relationships or any mean scores regarding self-perceptions of singing skill for her singing sample and how they compared to the larger group.

Previous studies have explored the influence of family members, peers, attitudes, and musical self-concept on music participation decisions while others have explored connections between singing ability and musical self-concept. For this study, we wanted to connect a number of those variables in a single investigation looking first at the role of self-reported attitudes toward music and family musical background on eventual participation choices and then at connections between those same variables and actual singing skill as measured by singing accuracy under two conditions.
The purpose of the first study was to explore what environmental and attitudinal variables were related to a student’s choice of whether or not to continue in elective music instruction. Based on previous research we generated the following hypothesis for Study 1: There will be significant differences in attitudinal statements between students who choose to continue music participation and those who do not. We were also interested in any differences in home environment of those who chose to continue versus those who did not. Beyond identifying that differences existed, we were interested in which aspects of student attitude or background were most predictive of their participation choice.

**METHOD STUDY 1**

The participants in Study 1 were 6th graders (mean age 12.16) drawn from five different elementary schools that all feed the same junior high school in a suburban district in the Pacific Northwest. In this particular district, elective music begins in grade 7 so all of our participants were receiving general music instruction two days/week for 30 minutes a day. Students could also elect to begin instrumental music instruction in grade 5. Students in instrumental music received pull-out lessons two times a week for 45 minutes in addition to general music class. All of the 6th graders in these schools were invited to participate in the study using an opt-out procedure resulting in 328 students who participated or 98% of the total 6th grade population in the five schools. Of those 328, nine had questionnaires that were rejected for being largely incomplete, resulting in a usable sample of 319 surveys (49% female) or 95% of the total 6th grade population. The study was conducted with the approval of, and in accordance with, the guidelines of the University of Washington’s Institutional Review Board.
Procedure

Two questionnaires were administered to the participants during their normally scheduled music class time. A member of the research team was present to distribute and collect the questionnaires and answer any questions students had about the items. The questionnaire took approximately 20 minutes per class to complete. All survey data were collected prior to the students registering for their junior high classes. After the students completed registration for the following year’s classes, we were able to link their registration data to their survey data and remove the names leaving only an anonymous participant number.

The first questionnaire sought information about students’ musical and family background including questions about additional musical training, family members involved in music, amount of music listening at home, and where and how often they sing as well as basic information about age and gender. The second questionnaire was adapted from an instrument developed by Clements (2002). The Music Participation Questionnaire was designed to measure students’ attitudes and beliefs about music and music participation by asking them to rate statements on a 5-point Likert scale from “Strongly Disagree” to “Strongly Agree”. Clements original questionnaire had 42 items divided into seven subscales, but we were interested in only the four subscales that were most reliable and shown to discriminate between participants and non-participants (Clements, 2002, p. 83-84). The 24 items on the questionnaire were slightly altered to fit our setting and represented four different constructs: Musical Self-Concept (6 items), Attitudes about

1 Clements also found family musical background to be a significant predictor, but we chose to explore musical background in a separate questionnaire.
2 In some cases, the audio quality of a response or a single pitch from a response was too
Music and Singing (6 items), Peer Influence (6 items), and Cost of Participation (6 items). Musical Self-concept statements like “People like to hear me sing,” reflected how confident the students felt about themselves as musicians and singers. Attitude toward music and singing dealt with how much students reported enjoying music and singing activities such as, “I enjoy listening to music.” “Being in choir would help a person make new friends.” is an item related to peer influence or how important peers were in decisions to continue in music. Cost of participation statements related to whether students believed that musical participation would interfere with other pursuits, for example “A person can play sports and have time to do music.” The entire questionnaire is included in Appendix K.

RESULTS STUDY 1

Of the 319 students that completed the questionnaire 51% registered for elective music in 7th grade. Of those 161 students (53% female) who chose to continue in music 45% chose band, 32% chose orchestra, 21% chose choir and 2% chose multiple music classes.

We predicted that there would be significant differences in attitude and belief statements between students who registered for elective music and students who did not. Before analyzing differences between groups, we examined the internal consistency of the questions used to measure each construct of the Music Participation Questionnaire. Table 3-1 provides the alpha levels for each of the subscales of the questionnaire. These numbers are very similar to those found by Clements (2002, p. 76) with somewhat lower reliability for attitude and self-concept and higher reliability for peer influence and cost of participation. All of the subscales were deemed to have high enough internal reliability to
be treated as unified constructs. We used the four subscale means for our subsequent analyses.

Table 3-1.
*Internal Consistency of the Music Participation Questionnaire.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Alpha</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>Range</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Attitude</td>
<td>.83</td>
<td>3.62</td>
<td>2.72</td>
<td>4.67</td>
<td>1.95</td>
<td>.42</td>
</tr>
<tr>
<td>Music Self-concept</td>
<td>.79</td>
<td>3.42</td>
<td>2.90</td>
<td>4.14</td>
<td>1.25</td>
<td>.24</td>
</tr>
<tr>
<td>Peer Influence</td>
<td>.77</td>
<td>2.83</td>
<td>2.27</td>
<td>3.73</td>
<td>1.46</td>
<td>.36</td>
</tr>
<tr>
<td>Perceived Costs</td>
<td>.83</td>
<td>3.62</td>
<td>3.11</td>
<td>3.94</td>
<td>.83</td>
<td>.12</td>
</tr>
<tr>
<td>Total</td>
<td>.92</td>
<td>3.37</td>
<td>2.27</td>
<td>4.67</td>
<td>2.41</td>
<td>.35</td>
</tr>
</tbody>
</table>

Figure 3-1 illustrates the means and standard error by group for the four categories of the Music Participation Questionnaire. We tested our initial hypothesis by running t-tests between music participants (MP) and non-participants (NP) on each of the four areas, Self-concept, Attitude, Peer Influence, and Cost of participation using a Bonferroni correction for multiple comparisons to control for type-1 error. Students who registered for a music class reported significantly higher means on all four subscales. They had significantly higher perceptions of musical self-concept than those who did not intend to participate ($t(317) = 6.26, p < .001$). They also reported significantly more favorable attitudes toward music ($t(317) = 4.61, p < .001$), were more likely to be influenced by peers in their participation choices ($t(317) = 4.61, p < .001$), and believe more strongly that music is not a barrier to other activities ($t(317) = 4.93, p < .001$).
To examine relationships between music participation and musical background or environment we performed Chi-square tests of independence on several background variables including gender, parental involvement, sibling involvement, piano lessons and elective instrumental music. No significant relationship was detected between gender and participation choice, $\chi^2 (1, N = 319) = 1.99, p = .159$. The next two analyses involved parental and sibling musical involvement. Question 7 on the background questionnaire asked participants to list family members who participate in music and their relationship to the student. Students were coded as having a parent musically involved if they listed either a mother or a father who was musically active; similarly, if students reported a sibling engaged in music activities, the student was coded accordingly. A chi-square test of
independence found a significant relationship for both parental music involvement $\chi^2 (1, N = 319) = 19.14, p < .001$ and sibling musical involvement $\chi^2 (1, N = 319) = 19.55, p < .001$ with music participation. Students who reported a parent or sibling engaged in music were significantly more likely to participate in elective music classes.

Students who reported receiving piano lessons for any length of time were also significantly more likely to choose elective music in junior high, $\chi^2 (1, N = 319) = 12.36, p < .001$. In contrast, however, there was no relationship detected between current instrumental study and participation choice, $\chi^2 (1, N = 308) = 0.67, p = .414$. Students who were currently in band or orchestra were no more likely to register for a music class than students that were not in band or orchestra.

To determine which of these variables best predicted the music participation decisions of our sample, we put all of the significant independent variables into a multiple logistic regression with standard predictor entry. Eleven variables were entered into the regression model (see Table 3-2) based on differences between the two groups. Along with the four attitude variables and the three environment variables, the students’ school was effect-coded into four variables, using one school as a reference group to control for any clustering effects within schools. Musical self-concept, attitudes toward music, cost as barrier, and peer influence were each entered into the model as a metrical variable. Piano study, parental involvement in music, and sibling involvement in music were all coded as dichotomous variables and entered into the model. A test of the full model with the set of predictors against the null model with no predictors was significant, $\chi^2 (14) = 81.61, p < .001$, indicating that the set of predictors reliably distinguished individuals who registered for elective music classes from those who did not. The approximate variance in
registration status accounted for by the set of predictors was 0.33 using Nagelkerke's formula. Model sensitivity was 72% and specificity was 74%, with an overall hit rate of 73%, which was better than the null model’s hit rate of 51%.

<table>
<thead>
<tr>
<th>Participation Choice</th>
<th>$\chi^2(11)$</th>
<th>$p$</th>
<th>$\text{Pseudo } R^2$</th>
<th>Sens</th>
<th>Spec</th>
<th>HR</th>
<th>b (SE)</th>
<th>$\text{Wald}(1)$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>79.02</td>
<td>&lt;.001</td>
<td>0.30</td>
<td>0.72</td>
<td>0.74</td>
<td>0.73</td>
<td>0.52 (0.18)</td>
<td>8.41</td>
<td>.004**</td>
</tr>
<tr>
<td>School 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.39 (0.26)</td>
<td>2.22</td>
<td>.136</td>
</tr>
<tr>
<td>School 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.24 (0.26)</td>
<td>0.87</td>
<td>.174</td>
</tr>
<tr>
<td>School 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.34 (0.25)</td>
<td>1.84</td>
<td>.337</td>
</tr>
<tr>
<td>School 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.49 (0.25)</td>
<td>3.69</td>
<td>.055</td>
</tr>
<tr>
<td>Piano Study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.24 (0.15)</td>
<td>2.38</td>
<td>.123</td>
</tr>
<tr>
<td>PMI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.38 (0.17)</td>
<td>5.30</td>
<td>.021*</td>
</tr>
<tr>
<td>SMI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.46 (0.15)</td>
<td>9.53</td>
<td>.002**</td>
</tr>
<tr>
<td>ATM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.03 (0.20)</td>
<td>0.02</td>
<td>.881</td>
</tr>
<tr>
<td>Cost as Barrier</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.08 (0.19)</td>
<td>0.20</td>
<td>.654</td>
</tr>
<tr>
<td>Peer Influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.34 (0.18)</td>
<td>3.58</td>
<td>.058</td>
</tr>
<tr>
<td>Musical Self-Concept</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.43 (0.20)</td>
<td>4.53</td>
<td>.033*</td>
</tr>
</tbody>
</table>

Note. $N = 319$. PMI = Parental Music Involvement; SMI = Sibling Music Involvement; ATM = Attitudes Toward Music.* $p < .05$, **$p < .01$.

The intercept was significantly different from zero, indicating that the log-odds of registering for a music class across the sample (holding all predictors constant at zero) was 0.50, which is significantly different from zero, $b = 0.52$ (SE 0.18), $Wald(1) = 8.41$, $p = .004$.

The mean predicted probability of music participation for any given student within this sample, keeping all other variables constant, was 62%. Several variables in the model did not uniquely predict music participation status, indicating shared variance between the variables; the variables that did not uniquely predict music participation status were piano experience, attitudes about music, peer influence, perceived cost of participation, and school location.
Musical self-concept was significantly predictive of music participation, $b = 0.43$, ($SE = 0.20$), $Wald(1) = 4.53$, $p = .033$. For every standard deviation increase in musical self-concept, we expect a 0.44-logit increase in music class registration. Students that are one standard deviation above average in musical self-concept had a 72% predicted probability of music class registration; students that are one standard deviation below average had a 52% predicted probability of music class participation.

Parental musical engagement was also predictive of music class registration, $b = 0.38$ ($SE = 0.17$), $Wald(1) = 5.30$, $p = .021$. For students that report a parent that is musically active, we expect a 0.38-logit increase in music class registration. In other words, students who report a parent who is musically active had a 71% predicted probability of registering for a music class compared to students who do not report a musically active parent who had a 54% predicted probability of music class registration.

Similarly, sibling musical engagement was a significant predictor of music class registration as well, $b = 0.46$ ($SE = 0.15$), $Wald(1) = 9.53$, $p = .002$. The effect size for this variable was the largest among all the variables within the model. For students that report a sibling that is musically active, we expect a 0.46-logit increase in music class registration. Students who report a sibling who is musically had a 73% predicted probability of registering for a music class compared to students who do not report a musically active sibling who had 52% predicted probability of music class registration. The predicted probability of music class registration for a student who reported both a parent and a sibling being engaged in music activities was 80%. For a student who reported both a parent and a sibling engaged in music and was a standard deviation above mean on musical self-concept, the predicted probability of participation was 86%.
METHOD STUDY 2

Study 1 explored the role of attitudinal and environmental variables in students’ decisions to continue elective music instruction. We were also interested in whether students’ musical environment and attitudes about music and about themselves as musicians were related to their actual singing ability. Previous research with adults who are poor pitch singers indicated that their attitudes about themselves as musicians were strongly impacted by their difficulties with singing (Sloboda, Wise, & Peretz, 2005; Abril, 2007). The questions for study 2 were 1) is there a difference in singing skill between those who chose to continue music instruction and those who do not and 2) are any aspects of students’ background or self-reported attitudes significantly related to their actual singing accuracy?

Our participants for study 2 were sampled randomly from the study 1 participants. We used non-proportional stratified sampling to include both those who were continuing music participation and those who were not. The 100-student sample yielded a total of 55 students (MP=32, 53% female; NP=23, 30% female) that consented to have their singing accuracy tested.

Singing Measure

The singing task procedure was facilitated by a MATLAB protocol that presented the stimuli and recorded the participants’ responses. In order to find appropriate singing ranges, the participants would sing a comfortable pitch. Using Praat software, the pitch content of the response was displayed to the researcher in Hz and an estimate of the nearest pitch category. If the chosen pitch seemed uncomfortable or strained to the researcher, other singing exercises were conducted until there was some confidence in the
workable range. Based on this information, the researcher chose an appropriate register based on D4, A3, or F3 with the range of a fifth. All pitch stimuli were recorded by a female voice singing on the syllable “doo”. One sample of each target pitch was selected and edited for onset and adjusted for accuracy in such a way that it could be combined with the other pitches in any combination.

After a comfortable range was identified, the participant was asked to sing the familiar tune, “Happy Birthday” on any pitch they chose. The measure then continued with echo singing tasks. For each task, participants would hear four consecutive pitches presented at mm=60 on the syllable “doo” after which they echoed back the whole sequence. All participants were presented with three different echo tasks: single pitch (where all 4 pitches were the same), intervals (the first two notes and last two notes were the same), and patterns (where all four pitches are different). After a brief familiarization with the echo procedure, all three tasks were presented in a randomized order for 18 total echo tasks, six of each type. After the echo tasks, the student was asked to sing “Happy Birthday” again.

The 18 echo singing tasks were scored acoustically using a procedure adapted from Pfordresher & Brown (2007). The F0 of each sung pitch was extracted from the audio signal via autocorrelation and checked for octave errors. The difference between the sung frequency and the target frequency was represented as a cent deviation score for each pitch. This was used to calculate an average cent deviation score for the entire measure. Pitch deviation scores were further converted into acoustically derived percent correct scores, by coding every pitch deviation outside a window of +/- 50 cents as an error (score
of 0), with other sung pitches being coded as accurate (score of 1) and then dividing the number correct by the total number of pitches analyzed\(^2\).

Each of the two attempts at singing Happy Birthday from memory were scored on an 8-point scale developed by Wise and Sloboda (Figure 3-2) by two independent judges who were blind to the study group and order of attempt for each example. Inter-rater reliability for scoring the song task was \(r=.91\) and the scores were averaged across attempts and judges to yield a single score.

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>All melody is accurate and in tune, and key is maintained throughout.</td>
</tr>
<tr>
<td>7</td>
<td>Key is maintained throughout, and melody accurately represented, but some mistunings (though not enough to alter the pitch-class of the note)</td>
</tr>
<tr>
<td>6</td>
<td>Key is maintained throughout and melody mostly accurately represented, but some errors (notes mistuned sufficiently to be ‘wrong’).</td>
</tr>
<tr>
<td>5</td>
<td>Melody largely accurate, but singer’s key drifts or wanders. This may be the result of a mistuned interval, from which the singer then continues with more accurate intervals but without returning to the original pitch.</td>
</tr>
<tr>
<td>4</td>
<td>Melody fairly accurate, or mostly accurate within individual phrases, but singer changes key abruptly, especially between phrases (e.g., adjusting higher-lying phrases down).</td>
</tr>
<tr>
<td>3</td>
<td>Singer accurately represents the contour of the melody but without consistent pitch accuracy or key stability.</td>
</tr>
<tr>
<td>2</td>
<td>Words are correct but there are contour errors. Pitches may sound almost random.</td>
</tr>
<tr>
<td>1</td>
<td>Singer sings with little variation in pitch, and may chant in speaking voice rather than singing.</td>
</tr>
</tbody>
</table>

*Figure 3-2.* The rating scale from Wise and Sloboda (2008) used to judge song singing accuracy.

\(^2\) In some cases, the audio quality of a response or a single pitch from a response was too poor to analyze acoustically which is why scores were represented as a proportion of analyzed attempts.
RESULTS – STUDY 2

Table 3-3 shows the mean deviation score, percent correct, and mean rating for all the singing tasks by participant group. To answer question one regarding differences in singing performance between those chose to go on in music and those who did not we performed $t$-tests on the singing tasks by participant group. There was no significant difference in the singing accuracy of the two groups for either the echo singing tasks ($t(53) = 1.12, p = .266$) or the Happy Birthday task ($t(52) = 1.82, p = .075$).

Table 3-3.
Average Singing Performance by Participant Group.

<table>
<thead>
<tr>
<th></th>
<th>Echo Singing Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Deviation Score in cents</td>
</tr>
<tr>
<td></td>
<td>Single pitch</td>
</tr>
<tr>
<td>In Music Next Year</td>
<td></td>
</tr>
<tr>
<td>Yes $(n=32)$</td>
<td>41.31</td>
</tr>
<tr>
<td></td>
<td>(59.7)</td>
</tr>
<tr>
<td>No $(n=23)$</td>
<td>55.92</td>
</tr>
<tr>
<td></td>
<td>(67.07)</td>
</tr>
</tbody>
</table>

* only 22 participants completed this task
To answer question two regarding possible relationships between singing accuracy performance and the variables that influence participation choices, two multiple linear regression analyses with standard predictor entry were used to see which variables might predict singing accuracy scores in echo and song-singing tasks respectively. For the first regression model musical self-concept, sibling musical engagement, and parental musical engagement were chosen to be entered into the model predicting echo-singing performance as these variables were identified in the previous logistic regression as significant and unique predictors of music participation. Results, with all predictors entered in the model (see Table 3-4), showed that the average student echo singing accuracy score was 78% ($b = 0.78, SE = 0.04$), holding all other variables constant ($t(54) = 21.68, p < .001$). Musical self-concept was identified as a unique predictor of singing accuracy on echo tasks ($b = 0.13, SE = 0.03, t(54) = 3.79, p = .001$). For every standard deviation increase in musical self-concept above average musical self-concept, an increase of 13% accuracy is predicted. In other words, a student who reports musical self-concept one standard deviation above the mean will be predicted to have a singing accuracy of 91% in echo tasks. A student who reports musical self-concept one standard deviation below the mean will be predicted to have a singing accuracy of 65%, keeping all other variables constant. Neither variable related to family musical engagement was significant related to singing-accuracy in the echo tasks.

A second multiple linear regression was used to predict song-singing ability. Results, with all predictors entered in the model (see Table 3-4), showed that the average student song-singing ability score was 4.58 ($SE = 0.18$) on the Wise and Sloboda scale, holding all other variables constant, $t(53) = 25.93, p < .001$. As with echo singing, only
musical self-concept significantly predicted song-singing scores \((b = 0.74, SE = 0.17, t(53) = 4.42, p < .001)\). For every standard deviation increase in musical self-concept, an increase of 0.74 points would be predicted in song-singing ability. Thus, holding all other variables constant, a student who reports musical self-concept one standard deviation above the mean would be predicted a song-singing score of 5.32. On the other hand, a student who reports musical self-concept one standard deviation below mean would have a predicted song-singing score of 3.84.

Table 3.4. Multi-ple Linear Regression with Standard Predictor Entry for Echo Tasks and Song-Singing Task

<table>
<thead>
<tr>
<th>% of Correct Pitches in Echo Tasks</th>
<th>(R^2)_{total}</th>
<th>(R^2)_{adj}</th>
<th>(F(3, 51))</th>
<th>(p)</th>
<th>(b)</th>
<th>(SE)</th>
<th>(t)</th>
<th>(p)</th>
<th>(sr^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.27</td>
<td>0.22</td>
<td>6.14</td>
<td>.001</td>
<td>0.78</td>
<td>(0.04)</td>
<td>21.68</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>PMI</td>
<td>0.00</td>
<td>(0.03)</td>
<td>0.11</td>
<td>.917</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMI</td>
<td>0.02</td>
<td>(0.04)</td>
<td>0.47</td>
<td>.640</td>
<td>0.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musical Self-Concept</td>
<td>0.13</td>
<td>(0.30)</td>
<td>3.79</td>
<td>&lt;.001</td>
<td>0.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Song-Singing Score</th>
<th>(R^2)_{total}</th>
<th>(R^2)_{adj}</th>
<th>(F(3, 50))</th>
<th>(p)</th>
<th>(b)</th>
<th>(SE)</th>
<th>(t)</th>
<th>(p)</th>
<th>(sr^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.32</td>
<td>0.28</td>
<td>7.82</td>
<td>&lt;.001</td>
<td>4.58</td>
<td>(0.18)</td>
<td>25.93</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>PMI</td>
<td>0.03</td>
<td>(0.16)</td>
<td>0.21</td>
<td>.832</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMI</td>
<td>0.00</td>
<td>(0.17)</td>
<td>0.02</td>
<td>.987</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musical Self-Concept</td>
<td>0.74</td>
<td>(0.17)</td>
<td>4.42</td>
<td>&lt;.001</td>
<td>0.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(N=54\), PMI = Parental Music Involvement; SMI = Sibling Music Involvement.

**DISCUSSION**

In study 1 we discovered a number of preexisting differences between 6th graders who registered for elective music in 7th grade and those who did not. Students who chose to continue elective music instruction after elementary school were significantly more positive about music and about themselves as musicians than those students who did not choose to continue. They were also more likely to see music as something more positive for
peer relationships and less likely to interfere with other pursuits. The importance of these variables is consistent with Clements’s 2002 predictive study. When all of the variables that distinguished the two groups (music self-concept, attitudes about music, cost as barrier, influence of peers, piano experience, parental music involvement, and sibling music involvement) were entered into a logistical regression to see which combination of variables best predicted group membership (participant versus non), the model could predict with 73% accuracy which students in our sample chose to continue music participation. This suggests that identifying future music participants in elementary school may be possible by surveying elementary students’ musical background and attitudes about music. The fact that these opinions were recorded prior to the students having to make their registration choices, lends greater credence to their validity than data collected from students retrospectively who have already identified as ensemble members. The results support previous findings that looked at how attitudes and family background (Amundson, 2012; Clements, 2002; Mizener, 1993; Siebenaler, 2006; Sichivitsa, 2003) might influence students’ choices about continuing in music. In addition, students who chose elective music were more likely to have received piano instruction.

Because of our interest in singing as a possible influence in participation, one limitation of the study is that our survey questions were somewhat skewed toward singing-related activities while the majority of music participants in our sample chose instrumental music as their elective. Had the questions been more neutral as to type of musical engagement the variables of attitude toward music, peer influence, and cost of participation may have had more influence, though participants and non-participants differed significantly in responses to all four. It is worth noting, that in Clements’s study
(2002) those four constructs, worded in much the same way, also separated music participants of all types, instrumental and vocal, from non-participants.

Musical self-concept and the two variables related to family musical engagement were found to be unique predictors of music participation. The importance of musical self-concept as a predictor echoes an earlier finding that students’ view of themselves as musicians was a stronger predictor than the teacher’s assessment of a student’s vocal or musical ability (Clements, 2002). Though in that study attitude toward music, peer influence and cost of participation were all more influential than family background. This may be a result of the way in which those questions were asked since Clements had six items related to family musical background including comments like “Would you parents be proud if you joined choir?” and the reliability of this category was below her criterion of .70. In our study, family engagement was simply how many family members participated in music making of some kind, which we then separated into parent and sibling categories.

The second study explored connections among the variables that predicted continued participation and actual singing performance. There were no significant differences in singing scores between our sample of future participants and non-participants though participants’ scores were higher on every task. This would seem to support the findings of previous work that perceived ability does not accurately reflect actual ability (Mizener, 1993). Given that perceived ability is influencing students’ choices, this disconnect may have significant consequences for future music participation.

When the three variables that uniquely predicted music participation (Self-concept, parent engagement, sibling engagement) were tested for their ability to predict singing performance, only musical self-concept was found to be a significant predictor. This
suggests a relationship between actual singing ability and musical self-concept, a relationship alluded to in investigations of poor pitch singing with adults (Abril, 2007; Sloboda, Wise, & Peretz, 2005; Whidden, 2010).

It isn’t surprising that children’s singing skill may play a significant role in the development of their musical self-concept given the emphasis on singing activities in elementary general music curricula (Campbell & Scott-Kastner, 2013; Philips and Doneski, 2012). If one’s ability to sing on pitch plays a role in developing a positive view of oneself as a musician, then deficiencies in that skill could lead students to opt out of further music training. Given that previous research has found connections between accurate singing and musical training (Demorest & Pfordresher, 2014; Welch et al., 2009), students that opt out would seem to be avoiding the very experience they would need in order to improve.

The relationship of musical self-concept to both participation decisions and singing accuracy brings up an apparent contradiction in our findings. If those who choose to continue music have a higher self-concept, and a higher self-concept can predict who sings more accurately, then why were there not differences in singing performance between our participant groups. One possible explanation may be that our sample for study 2 was not as representative of the larger group from which they were drawn. Figure 3-3 shows the mean self-concept score for the Study 2 sample groups compared to the Study 1 groups from which they were drawn. The sample of 23 non-participants for the singing task had a higher overall self-concept scores than the non-participant population in study 1, suggesting that they may not have been representative. A one-way ANOVA on self-concept scores for the four sample groups in the two studies found a main effect for group $F(3, 315) = 13.21, p < .001$. Scheffé post hoc tests revealed that while the Study 1 non-participants
were significantly different in self-concept from both music participant samples, the Study 2 non-participants did not differ from any of the other sample groups, participant or non, on self concept. This indicates the possibility of a selection bias, which can be a challenge for any study that attempts to compare singing skills in the general population. Non-participants with lower self-concept scores were possibly not as willing to consent to participate in a study that asked them to sing.

![Figure 3-3. Self-concept in music scores for participants in Study 1 and Study 2 (error bars indicate standard error).](image)

**CONCLUSION**

Based on these results, students with a higher musical self-concept and music in the home are more likely to choose to participate in elective music instruction. Music teachers in the elementary grades might consider surveying younger students about their musical
Musical self-concept is an important predictor of both children’s interest in future music participation and their singing ability. Music teachers need to know more about how their interactions with students could help or hinder the development of a positive music self-concept. If singing accuracy is instrumental in developing children’s musical self-concepts, then it would be important for music teachers to provide more opportunities for students to practice this skill and experience success. However, narrative investigations of adults who self-identify as tone deaf suggest that music teachers are one of the culprits in students developing a negative view of themselves as singers (Abril, 2007; Whidden, 2010). It may be that too much attention to a child’s singing accuracy early on may actually hinder the development of a positive self-concept and therefore discourage further engagement in music.

While self-concept was related to both participation choices and actual singing ability, non-participants were not significantly poorer singers suggesting that the relationships between these variables are complex. If we as a profession are interested in expanding the number of children who choose to continue elective music instruction, we should continue to explore how singing skill and musical self-concept interact throughout a child’s early development and what experiences might encourage improvement in both attributes.
REFERENCES


Abstract

Although community music activities can take many forms, a “participatory ethos” is central to most community music endeavors. Karaoke singing, the practice of public singing to an accompaniment track, which on the surface appears to emphasize solo performance, has the potential to provide a communal flow experience that could be described as community music within certain contexts. Karaoke singing has become a musical practice and form of entertainment around the world and in many types of settings. The case study used for this investigation is a karaoke culture at an LGBT establishment in the Pacific Northwest of the United States. This study focuses on the formation of community as well as identity through karaoke performance. Additionally, the application of Turino’s framework of participatory and presentational performance was used to examine how musical behaviors may encourage the formation of community and identity. Findings within this case study reveal the importance of the roles of the participants, the role of the facilitator, the agency of the individual, the fixity of musical forms, and musical texture to promote participatory experiences.
In a cosmopolitan neighborhood in the Pacific Northwest, a local haunt named
Metamorphosis sits. A small neon sign bearing the name of the bar, an American flag,
and a Pride flag adorn the front of the building; it could easily be overlooked by passers-
by. Two men are huddled by the door, sharing a cigarette.

The bar is known as “the friendliest gay bar in the city,” or at least that is what
they say on their website. The place smells of bar food and beer, with the occasional
whiff of a man wearing too much cologne. Every Thursday and Sunday, Metamorphosis
hosts karaoke singing. I enter just after nine, when the karaoke is supposed to start, and
see that they are still setting up the equipment and checking audio-levels. Most karaoke
nights, the singing can go on until one or two in the morning, with two or three rotations
before the show ends; this gives participants several opportunities to perform at the
microphone. The interior of the small bar is narrow and dimly lit, with wood paneling on
the walls making the room feel smaller than it is. The bar is immediately on the left,
where some of the regulars, a few older men, are in their usual seats. I take my seat near
the entrance at one of the empty high-top tables not far from the performance space.

Beyond the bar, nearly thirty feet away, a pool table is bathed in light from the fixture
above, illuminating a bundle of binders lying on the green felt tabletop. A man and a
woman are already bent over, rummaging through the catalog books and looking for a
song to perform. Affixed to the walls throughout the bar, seven large flat-screen
television s glow and the room buzzes with anticipation.

Suddenly, over the din of bar patrons, a guitar riff of quintessential classic rock
shrieks loudly over the speakers. Customers shift their attention to the man at the

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microphone who begins singing the opening lines of ACDC’s “Highway to Hell.” Lucas, a 50-year-old karaoke jockey, sings dramatically; his eyes are wide as he gesticulates with his hands. He is a short and stocky man, with a smattering of salt-and-pepper hair on his head and a swarthy complexion. Despite his small stature, his performance personality fills the room. His voice is gruff and raw, but very accurate and similar to the original song. Midway through the first verse, he leaves his post and adjusts the audio levels, continuing to sing into the cordless microphone while diverting his gaze to the small knobs and dials. After he is satisfied with the sonic output, he returns to his animated performance, making deliberate eye contact with customers, sometimes touching their arms or shoulders. He approaches the crowded bar and points, as in a statuesque pose, to the bartenders who nod in response in tempo with the music. The room erupts in singing as many customers join Lucas in the well-known refrain, “I’m on the highway to hell.”

Introduction

In community music activities, individuals can engage with others regardless of social, political, or economic standing while in pursuit of musical expression and skill-building (Higgins 2012; Small 1998). The aesthetic value of these endeavors lies in the melding of individual personalities and experiences into one sonic output or the “meeting in the One” (Nachmanovitch 1990: 94). During the past half-century, community music initiatives have campaigned to encourage musical collaboration between diverse people within social settings (Higgins 2012).
Despite common purposes and goals, community music activities can take many forms in practice (Veblen 2008; Higgins 2012). One central tenet of community music is a focus on participatory processes in music-making or a “participatory ethos—an emphasis on creative endeavors toward music making through workable agreements and conversation” (Higgins 2012: 136). Thomas Turino (2008), a recently retired ethnomusicologist at the University of Illinois at Champaign-Urbana, presents similar ideas in how to promote social understanding and interaction through collaborative music-making. In Music as Social Life: The Politics of Participation, Turino (2008: 4) asserts that active participation in music can lead to intimate “oneness” between players. He attributes this phenomenon to Csikszentmihalyi’s theory of flow (1988; 1990), where a heightened state of concentration makes “all other thoughts, concerns, and distractions disappear and the actor is fully in the present” (Turino 2008: 4). When this “oneness” occurs in music-making between diverse social circles, community music is achieved.

In his book, Turino describes live music experiences and creates a typology for music participation, exploring specific elements within music practices. Consequently, he separates two forms of live performances: presentational and participatory. In Turino’s view, presentational performances value the final product above process, giving emphasis to the quality of the composition or the virtuosity of the performers. Presentational styles of performance assign different, prescribed roles for the performers and the audience. Additionally, Turino describes musical elements that characterize presentational performances. These types of performances generally have fixed or scripted forms, many times relying on printed scores for preparation of the performances. Presentational performances also require
clarity in texture in order to emphasize the musical ideas of the work or the dexterity of the performers. There are extensive contrasts in presentational performances—in textures, tempos, key centers, and meters. These contrasts are intentional as elaborations of musical ideas as well as a means to continually engage the audience who are removed from the active music-making.

In contrast, participatory performances value process and participation over the final musical product. In this type of musical practice, there is no distinction between performers and audience, only different levels of participation, or in Turino’s (2001: 48) words, “there are only participants and potential participants.” Participatory music is highly repetitive to allow for synchrony between the participants. While there is organization to the musical product, the music is not scripted or predetermined as it is in presentational styles of performance. Instead, participatory performances have “feathered” or layered beginnings and endings, which are guided by a facilitator or a fellow collaborator. Participatory performances typically indulge in a thick texture where different levels of expertise can be “cloaked” within the musical amalgam. There is minimal contrast in this type of performance as compared with presentational styles, although intensive variation by virtuosic performers exists within the complexity of sound. While Turino states that both presentational and participatory types of performances have value within certain contexts, he attributes flow experiences to participatory types of musical behaviors. Turino’s framework is a useful tool for examining musical behaviors within community music activities.

Karaoke singing, the practice of public singing to an accompaniment track, which on the surface appears to emphasize solo performance, has the potential to provide a communal flow
experience that could be described as community music within certain contexts. Karaoke singing has become a musical practice and form of entertainment around the world and in many types of settings. In the United States, many bars, including those that cater to gay men, have incorporated karaoke as a way to attract customers on slow business evenings (Armstrong 1992). The purpose of the study was to explore how community and identity are developed through karaoke performance within the context of a gay bar. To explore this purpose, Turino’s continuum of participatory and presentational performances was used as a framework to examine musical practices within karaoke performance that encourage or inhibit participation, community-building and identity formation.

Karaoke

Karaoke singing is a global phenomenon that began in the port city of Kobe, Japan (Drew 2001). By the late 1960s, it was common practice for bar patrons in Kobe to sing songs while being accompanied by live bands, strolling musicians, or rudimentary cassette tape accompaniments. The first prototype of a karaoke machine, which included 48 accompaniment tracks, a microphone mixer with echo effect, and lyric sheets, was created in 1972 by a group of musicians in Kobe and was called the Crescent Juke (for a more detailed account of the genesis of karaoke, see Mitsui 2001). Mitsui (2001) notes that the developers of this karaoke technology viewed this machine as an extension of the juke-box and implies that its intended use was for amateur public singing. By 1973, Japanese karaoke companies were creating instrumental accompaniments that were very similar to the original versions of well-known songs (Mitsui 2001). Major Japanese recording companies like Teichiku, Columbia, Toshiba
EMI, and Victor, began producing karaoke tracks in 1976, improving the quality of the accompaniments.

While karaoke became widespread throughout Japan and other parts of Asia in the 1970s, the first karaoke bars emerged in the United States in 1983, catering to what Zimmerman (1991) called an “Asian clientele.” By the 1990s, karaoke singing was a widespread activity in many bars across the United States, mostly used as a promotional tool several nights a week (Armstrong 1992). In one of the first explorations of karaoke practices by an ethnomusicologist, Keil (1984) described his experience in a karaoke bar in Tokyo:

“Behind the bar you find a complete cassette tape stereo with mixer and echo effects, a full library of specially recorded tapes that are missing the lead vocal parts, two to four songs per tape for quick access. On the bar itself there are microphones and songbook catalogues that provide lyrics and locate the song you want to sing. During the evening the microphone passes from hand to hand and every individual present can be a star in turn...People applaud after each vocal segment but they also go on with their own conversations; the music volume is not too high, so the atmosphere is relaxed, appreciative of the singer, but not focusing tightly on each person’s efforts. The goal of each singer seems to be a perfect replication of a specific star in a specific style, but a lot of subtle research might uncover nuances and variations on standard star models that are valued variously in diverse karaoke contests. (p. 94)

This early description of karaoke illustrates the common experience in many karaoke bars, even today, but also suggests how the specific context may influence the values of participating singers.”
In the United States, communities that engage in karaoke singing may do so for different reasons. In his exploration of three diasporic Chinese communities in the United States, Man Kong Lum (1996) presents how different communities use karaoke. For Chinese-Americans in New York’s Chinatown neighborhood, karaoke is used as a way to connect to cultural traditions through the singing of Cantonese opera (yutkuk) and maintain a traditional form of social entertainment, although the musical practices may be transformed or obscured by the use of karaoke technology. In the affluent suburbs of New Jersey, karaoke performance in a Taiwanese community is viewed as a symbol of social status, as individuals take private singing lessons for their karaoke performances. For a Malaysian-Chinese community in Flushing, New York, karaoke is seen as a haven or as an escape from the banality of everyday life and struggles; these informants were minorities within a minority and used the karaoke experience to maintain connections within their community.

In Wong’s (2004) description of a karaoke community of Vietnamese-Americans, the karaoke experience is characterized by informality, where the participants pass around the microphone, without getting out of their seats or even putting out their cigarettes. For these singers, the enjoyment of karaoke stems from the camaraderie of the experience and the ritual of singing the same songs nightly, with little attention given to the quality of performance. Wong is clear that the meaning of karaoke is different for each community or generation, citing that some Japanese karaoke bars in Los Angeles are used as a means to learn their parents’ language. She further states that “karaoke is whatever its performers make it, and not vice-versa. Karaoke is a template for performative possibility. (p. 86)”
Man Kong Lum (2001) believes that people from individualistic societies (e.g. Western Europe, North America) experience karaoke differently than those from more collectivist groups. In studying karaoke participants who are North Anglo-Americans, Man Kong Lum noted that many participants needed to be half-drunk or put on a performance disguise (e.g., dark glasses) in order to perform. He claims that karaoke violates these participants’ cultural expectation for privacy. Drew (2001), in his ethnographic exploration of karaoke in the United States, believes that North Americans value performance above all else in karaoke practice, and that the purpose of karaoke, for most venues, is to be a “star.” Drew explains, “Whereas in Japan, karaoke is seen as many things—a skill, an etiquette, a cultural emblem, a health aid, a purification rite, an aphrodisiac—in the United States, it is seen overwhelmingly as one thing: a chance to be a star. (p. 13)”

The purpose and value of karaoke varies in every unique environment. For karaoke that occurs within a gay setting, it is possible that karaoke is valued as an escape from a hetero-normative landscape or as a celebration of the gay community. Also, as karaoke is a performative outlet of popular culture, participants in karaoke at a gay venue could be motivated by the allure of the spotlight and the chance to be a rock star. Before examining the practices and performances of karaoke at Metamorphosis, it is important to better understand the context of this project: the gay bar.

**Queer Spaces and the Gay Bar**

In the 1970s and early 1980s, researchers in the social sciences began to observe and report that sexual minorities were constructing their own distinct social, political, and cultural
spaces for gay men or women exclusively (Levine 1979). For a more thorough understanding, Woodhead (1995) describes queer or gay spaces:

To conceptualise “gay” material spaces is not difficult. Examples include bars, clubs, cafes, community centres, the bedroom parks, heaths, car parks, beaches, public toilets, saunas and sex shops. These are constituted gay spaces that somehow, through their inscription as being impenetrable to heterosexuals, pretend perfect accessibility to gay men and lesbians. (p. 238).

There are many purposes for these types of spaces. Primarily, the spaces provided a physical environment where an individual could safely be “out” and develop their own sexual identity (Whittle 1994). These public spaces also provided access to meeting other individuals who identify as queer, an affiliation that could result in significant social stigma. During less progressive times when homosexual acts were considered criminal acts in North America or Western Europe, the gay bar provided a place for social interactions, giving patrons an element of protection in pursuing same sex relationships (Achilles 1967).

Queer spaces that were “off-limits” to heterosexuals became centres of the gay community. Political activism and education were embedded within the social dynamics of these places where homosexuals could congregate, addressing important issues like police harassment or health education during the AIDS epidemic (Achilles 1967; Romesburg 2013). While bars and clubs were places that were used to organize the gay community, some of these spaces were also used to fulfill sexual desires, including cruising and illicit sexual contact (Achilles 1967).
Researchers examining sexual geographies and boundaries disagree on the exclusiveness of these queer spaces. In early investigations of gay bars, Weightman (1980) describes them as uniquely private places. Privacy within public queer spaces has been debated among researchers over the past thirty years (Brickell 2000; Brown 2000; McDowell 1995). One perspective is that the commercial enterprise of the gay bar makes it primarily a public space with access granted to those who are willing to support the business (Matejskova 2012). However, in reality, the nature of these spaces is more ambiguous. It may be unproductive to assign these spaces a binary characterization of public or private (Johnston & Valentine, 1995); rather, these spaces could be viewed as more fluid as they are negotiated by those who occupy them (Casey 2004). In more recent times, these spaces have become vulnerable to losing their queerness with the advent of heterosexual tourists and visitors in search of what Valentine (2002: 147) describes as “a bit of the exotic other.” Many of these visitors are heterosexual women seeking a respite from heterosexual space. Skegg (1999) describes these women as, “Safe from the constant male gaze present in heterosexual space; it is a space away from constant evaluation and judgment. It is a space to be invisible, to not be forced to partake in the heterosexual market. (p. 225)” With the inclusion of heterosexuals within the boundaries of queer space, its identity is in constant negotiation and is at risk of being transformed into a hetero-normative space. Queer spaces have also changed due to technological advances, as some of the unseemly behaviors at gay bars and clubs have been eliminated with the advent of classified websites and mobile apps (Dhuffar & Griffiths 2015; McClelland 2003). This study took place in bar that identified as gay and that offered the opportunity for patrons to participate in Karaoke within that context.
Method

Metamorphosis

Metamorphosis in many ways appears to be a normal “dive” bar that just so happens to cater to gay men. The furnishings, including the wood paneling, the aquariums in the sitting area, the pool table and the homo-erotic drawings on the wall, give the atmosphere an outdated vibe. Just by the door, there is a pile of free cultural magazines, literature on reducing HIV risks, and packets of condoms furnished by Planned Parenthood. In the afternoons and early evenings, there are only a handful of patrons, a dozen at most; this clientele is almost exclusively men, normally middle-aged or older. Many of these men appear to be regulars, sitting in the same spaces at the bar or at a particular table. Around 8 p.m., more customers, generally younger (e.g., men in their twenties, thirties, or forties) stream in until about 11 p.m. as the older clients begin to leave. On weekday nights with no planned events, the crowd may grow to thirty or forty, almost exclusively men. On weekend nights, there are considerably more customers, making the place feel crowded with perhaps sixty or more.

On karaoke nights at Metamorphosis, the attending crowd is different. About half of the customers are people I have seen on other nights of the week; the other half are customers who have come exclusively for the karaoke events, either regular singers or people curious about the event. Even though the bar is marketed toward gay men, women comprise a considerable proportion of the group, an estimated 25% to 30%. Both queer and straight women participate in the karaoke events. Additionally, a handful of heterosexual men are present, usually with a female partner, and appear to be comfortable within the setting. The ethnic diversity at these karaoke events is comparable to the demographics of the
neighborhood; the attendees are mostly white with some African-American, Asian, and Hispanic participants. A wide range of ages, from early twenties to late seventies, is represented.

Data Collection and Analysis

The data for this project were obtained through the use of an ethnographic model, including observations and interviews for data collection (Creswell 2011). The observations occurred during the scheduled karaoke events on Thursday and Sunday nights over a period of eight weeks. Approximately 26 hours of observation were accumulated over the study period, with a combination of Thursday and Sunday night events. As a researcher, I assumed the role of a participant-observer, performing karaoke and interacting socially within the context of the setting. In order to maintain a more natural presence, I made initial jottings using a texting function on my mobile phone. After each visit, I produced field notes from the texted jottings, documenting the performances and interactions of each event. Twenty-five pages of single-spaced field notes were generated as a result of the observations.

In addition to site observations, I employed both formal and informal interviews for gathering data (Emerson, Fretz, and Shaw 1995). One-on-one and group formats were used for formal interviews. All formal interviews were recorded using Voice Record on a Generation 3 iPad and fully transcribed. Transcriptions of formal interviews provided sixteen single-spaced pages of data. Furthermore, informal interviews were used for gleaning additional information. Within the social context of a bar, I had conversations with various collaborators discussing karaoke and the culture at Metamorphosis. These collaborators exhibited varied levels of participation in karaoke, from spectator to avid performer. These informal interviews were
recorded in jottings and field notes. Names of all collaborators in this project have been changed to ensure anonymity.

After the data were collected over the course of the study, I coded the field notes and interview transcripts using an open coding system (Emerson, Fretz, and Shaw 1995). After a line-by-line analysis was completed, I developed categories to classify codes and identify themes.

Findings

Karaoke as Community

*It is the top of the rotation so now it’s Lucas’s turn to perform. Instantly, as the instrumental introduction starts, Kathryn and Allison begin to dance in their seats on the bench next to me. Hoots and hollers explode throughout the room. Lucas heads to the microphone and begins singing “Little Willy” by the band The Sweet. Apparently, I am one of only a few who didn’t know the song. The women next to me begin to sing enthusiastically with Lucas. I notice I am moving to the music, just as the women are. Lucas moves throughout the room as he sings the chorus. The men sitting at the bar are singing along, shifting their view from Lucas to the illuminated screens. The last two notes of the chorus are to be sung after an unusual rest; Lucas gestures to the crowd to cue when these last words are to be sung. Everyone seems to be a part of the performance. Christina, a middle-aged blonde woman who always attends the karaoke night but never sings at the microphone, is sitting at a table in the corner. During the last chorus, Lucas makes his way over to her. For the last few lines, he presses his cheek*
against hers and holds the microphone in front of them so they can sing the final lines together.

When discussing what makes karaoke at Metamorphosis distinctive from other karaoke outlets, several regular singers noted the sense of community and friendliness of this particular bar. Ryan, one of the bartenders who performs at the microphone even when he is on a shift, describes the close-knit family community:

We’re a small karaoke crowd here, but this show has been going on for about 16 years. So, it’s really just like an extended family around here; we all see each other at our best, and our worst, but it’s always a lot of fun to sing around here for the simple fact that you can really mess something up if you want to, and no one is going to really care.

Rio, another very active singer at Metamorphosis, describes the group who meets for karaoke as a subculture of the larger Metamorphosis community, describing it as having a “family kind of feel.” Rio discussed the nature of the relationships amongst the participants:

This bar is sort of like the Cheers of (our neighborhood), like everyone has been in here at one time or another. Everyone knows Lucas (the KJ). Our bartenders have been with us for several years. Everyone knows Floyd (the owner). We all know each other. We have a volleyball team out of this bar, we have a softball team, we do fund-raisers. We all know everyone.

On any karaoke night, the congenial interaction between patrons is easily visible. It is commonplace to see members of the community hug and kiss each other as they enter the bar. Lucas, the KJ, is a frequent recipient of such attention. Interviewees mentioned how the small limited space contributed to the interactions between members of the community. Michael,
another frequent performer, stated, “we meet a lot of new people in here because it’s so small and you can’t avoid each other.” Ryan, the bartender, also proposed that the “intimate space” contributed to the friendly atmosphere. This was my experience during my first visits to Metamorphosis, as regular patrons joined me at my table and introduced themselves to me.

The establishment fashions an atmosphere for celebration and community. The management adorns the bar with elaborate decorations for every passing holiday. For Mardi Gras, a large purple, gold, and green joker was inflated in the middle of the bar. This space was similarly embellished for Valentines’ Day, St. Patrick’s Day, and Oscar Night. Several other nights, colorful streamers, balloons, and a “Happy Birthday” sign were festooned above the bar.

Patrons sang “Happy Birthday” to a member of the karaoke community on five different occasions during the eight weeks of observation. Several times, birthday cake would be passed out to those who had gathered on these karaoke nights, even those who were not regular patrons—I felt awkward taking a piece of cake for a stranger’s celebration. Other celebrations such as anniversaries were occasionally noted over the microphone during the karaoke sessions. Lucas, the KJ, would also note in his introductions if a regular singer were returning from an extended absence. While I am unaware if similar celebrations may occur beyond the Thursday and Sunday nights I observed, I believe the format of karaoke, with a KJ and a microphone, facilitates the shared celebration and communication for its members of its community.

Friendliness is another important value for the participants of karaoke at Metamorphosis. This value translates into encouragement and an invitation to participate. Rio commented on how this cultural belief emanates from Lucas, the karaoke jockey:
This environment, Lucas is really about a friendly environment, he wants people to sing, he doesn’t want people to think that they can’t sing because the singers are too good or we don’t want them to sing, or it’s invitation only and they’re not allowed in here. We don’t have that kind vibe. We don’t invite that kind of (activity).

To further illustrate Rio’s quote, Lucas regularly displays a plaque on top of his sound equipment that reads, “Be nice, or leave.” Lucas actively pursues a setting of encouragement and support. His charismatic and effusive personality allows him to be the principal progenitor of the supportive singing environment.

Since the members value a friendly and supportive atmosphere, it is reasonable that overly critical or insulting behavior is not tolerated. Lucas described a recent incident where a person was asked to leave the event:

Well, the person that was out there was over-enthusiastic about what was going on and felt that they need to coach the singer…. The young lady went up pushing on his chest, and pushing on his diaphragm. She was physically handling him. They don’t even know each other….Don’t walk into somebody else’s spotlight… Then, it was followed by an insult. Which then was followed by the bartender saying it’s time to go… and then, as you saw, the audience takes over… It’s time to go, you need to leave, goodbye, thanks for coming, come back next time when you’re in a better mood. And, I refer to that as the walk of shame.

In field notes documenting the same incident, I noted, during a pregnant pause between the interaction of the misbehaving patron and the bar staff, another person in the audience declared, “We don’t insult here.” This simple phrase communicated two very important
elements of the karaoke culture at Metamorphosis. First, the audience member’s statement indicates that the offending behavior was not the invasion of space or unwanted touching of the performer, but the insult. Second, the audience member identifies the offender as being an outsider to the community with the use of the pronoun of “we.” To become a part of this community, participants must not engage in insulting behavior. As these examples suggest, a friendly and supportive community is highly valued and cultivated within the context of karaoke at Metamorphosis.

After weeks of observation, the karaoke community and the larger social community of Metamorphosis maintain a symbiotic relationship. The supportive and friendly atmosphere of the karaoke culture promotes a sense of community within the bar. At the same time, characteristics of the existing Metamorphosis community, such as the friendly atmosphere where everyone knows each other or the physical proximity within the interior space, provides a suitable setting for communal music experiences.

The karaoke setting of Metamorphosis is similar to other karaoke cultures that have been examined in previous studies. The informants in this project describe their community like a family, similar to how White describes Japanese karaoke as “a home away from home” (in Man Kong Lum, p.9). Similarly, Ogawa (1993) states:

Karaoke encloses a ‘karaoke space’ with its music wall. People there are thought to be friends. And a person singing in the presence of the others in spite of shyness is thought to be trusted. Both sharing a ‘karaoke space’ and singing in the presence of the others reinforce group consciousness. (p. 2)

Man Kong Lum (2001) clarifies the relationships to which Ogawa refers; here, “friends” are not
well-known comrades, but fellow participants in an activity that must abide by a social contract of support. Man Kong Lum further suggests that this behavior is somewhat foreign to North American participants in karaoke; however, evidence suggests that the participants at Metamorphosis abide by such a social contract. In the incident in which a patron was asked to leave the karaoke event, her behavior of insulting the performer broke the social code of the community and resulted in her expulsion. This incident is reminiscent of many karaoke communities where there are both implicit and explicit rules of conduct or lists of taboos to be avoided (Maruyama 1991; Ueno 1993). While Mitsui and Hosokawa (2001) suggest the these rules are put in place to foster a politeness within public spaces, the karaoke events at Metamorphosis abide by a code of conduct to support the development of community and to protect its individual members. Moreover, this social contract at these particular karaoke events may be an effort to protect a marginalized community or individuals that may experience discrimination or stigma in other social settings.

Because of the friendly and supportive community at these karaoke events, musical participation is very high. The majority of those who attend the karaoke nights perform their own songs, including the bartenders and the karaoke staff. Lucas is an active promoter and makes continual rounds among the crowd to solicit performances. While performing at the microphone is not a requirement to be a part of the community, it is greatly valued by those who attend. On one evening, I observed Robert, a staff member, perform. The karaoke jockey commented on his participation since he so rarely performs. Seth, one of the other bartenders, discussed how Robert’s performance was valued by the community:
It was nice, because he doesn’t ever sing, so it was cool that he did. It was him being supportive of the karaoke, his friends, it was awesome and it was a really fun moment. He doesn’t do it very much, and he won’t do it again very often, so it’s a big deal when he does.

As noted in Seth’s comment, participation by singing at the microphone conveys support for the community.

Despite the claim that American karaoke is a three-minute opportunity to be a “rock star,” karaoke at Metamorphosis values participation over performance level (Drew 2001). Several regular performers sing every week, despite having pitch-matching issues. While these performers are in the minority, they have a consistent and noticeable presence, especially when singing between stronger performers. These singers are applauded and valued, without any critical judgment placed upon them. Lucas, the karaoke jockey, sets this tone of support in his position of host:

The show is about everybody. For myself as a host, there are no friends. When I’m grabbing slips and doing karaoke, I’m doing a job, and I don’t see myself as the owner of the business; I see myself as the leader of the band. So every performance is stellar, everyone’s great. Everyone’s magical and everyone’s important. I see everybody in that same light.

Participation is not only limited to singing at the microphone. Many patrons participate along with the singer who is “in the spotlight” by singing along, dancing, or moving to the music. In some karaoke research, the singer wants attention drawn to herself, asking the audience to only listen and not sing along (Drew 2001). This is not the case at Metamorphosis;
in fact, many performers invite the other patrons to sing along with them. This behavior is in stark contrast with other research examining karaoke, where the singer’s performance is the sole focus (Drew 2001).

Some songs, such as “Dark Lady” by Cher or any song from the soundtrack from the Rocky Horror Picture Show, have implicit participatory roles for the Metamorphosis audience. For instance, when the introduction to “Dark Lady” began, Miguel turned to his companions and said, “This is the one with the clapping.” He was referring to parts of the chorus where the audience claps a rhythmic motif. Smiling, Miguel seemed delighted as everyone in the bar clapped at the appropriate times. Miguel, who has never performed as a singer, was able to participate in the communal music experience.

Ancillary participation is not restricted to songs with prescribed roles for the audience. Many patrons readily dance or sing along with any performance. Couples dancing slowly to a Michael Bublé standard, a bevy of women pretending to be back-up singers on “We Want the Funk,” or a woman at the bar flitting her napkin in rhythm to a rendition of “Centerfold” are just a few examples of how the audience participates with the singer. The actions of the “audience” members, at times, are reminiscent of the Vietnamese American karaoke participants that Wong describes (2004), who are engaged in the performance while silently mouthing the words being sung. At Metamorphosis, there is a concerted effort to encourage participation from all those who attend. However, the participation can take many forms and does not necessarily include a turn at the microphone.

**The facilitator: Promoting participation and community.** The facilitator at community music events can serve as a catalyst for these participatory musical experiences (Higgins &
Campbell 2010; Turino 2008). Turino uses an example from the Venda people to illustrate his view. In Venda tribal villages, facilitators in ritual activities are charged with encouraging the whole community to participate in the music experience (Turino 2000). For these ceremonies, if a virtuosic facilitator is unable to engage the community to participate, the ritual is considered a failure. Thus, the value of a facilitator is determined by his or her ability to encourage participants into the musical activities, not solely by his or her musical expertise.

At Metamorphosis, the facilitator of the karaoke events is Lucas, the owner of a karaoke company that provides events in various venues throughout the city. Lucas identifies his role as facilitator and feels compelled to motivate patrons to participate. In his words, he views himself as “the leader of the band.” During the karaoke events, he is very active going throughout the space, asking patrons if they are interested in taking a turn at the microphone. He is warm, welcoming, and never pushy. He encourages new singers by introducing them to the microphone and announces the return of performers that may have been absent for several weeks.

In less obvious ways, Lucas facilitates much of the participatory behavior through his actions. Throughout the karaoke events, Lucas can be seen manipulating the audio equipment for each performer. This audio intervention serves two purposes. First, it allows Lucas to present the singers in the best possible light, by adjusting levels that best suit the performer’s voice. Second, the soundscape that Lucas creates is a dense texture that allows for various types of participation from the other patrons present. The resulting sonic output allows for other people to sing along without becoming the focus of the event. This is precisely how Turino describes texture in participatory musicking events in that a dense texture causes a
“cloaking function” (page 48), which allows people with variable levels of expertise to participate. In these types of settings, newcomers may be more likely to participate without the pressure of their musical offering being closely scrutinized by the other community members. Over time, as participants gain confidence and comfort within the setting, they may graduate to participating in ways that require higher expertise, such as singing at the microphone. The varying ways to participate are encouraged by singers at the microphone as they invite those in the audience to sing or dance along. This thick texture, manipulated by the KJ, allows the focus of the event to be shared among those present and not solely on the performer at the microphone.

Turino also discusses the various roles within the participatory experience of musicking. Turino provides a distinction between core and elaboration types of performers. The core musicians provide the musical framework within which the other participants can interact; the elaboration type of performer, such as a lead guitarist in a rock group or a dancer, can improvise within the sonic space to the level of his or her ability. During karaoke at Metamorphosis, the primary core roles are played by Lucas and the high-fidelity accompaniment tracks used for the performance. With his expertise, Lucas creates the participatory environment with its dense texture that allows for varied levels of participation. The track used for the performance, although unchanging and pre-recorded, provides the structure for the other musicking behaviors. When discussing old-time contra dancing, Turino further states that core musicians should be reserved in improvisation, which could lead to a lack of predictability and attenuate participation. In some ways, the use of an audio track in karaoke encourages participation in the community, as the track will never deviate from its
accompaniment function. The other players in the community perform the elaboration function by singing, moving, adding rhythmic elements, or dancing within the musical structure provided by the core.

There are some limitations to Lucas’s role as facilitator in these karaoke events. The duties included in the facilitator role include guiding the musical experiences within the context, and providing a variety of challenges that build the musical creativity and skills in the participants (Higgins and Campbell 2010). While Lucas is adept in interacting with and encouraging patrons to participate in singing, he has little control of the trajectory of each performance. Singers have complete freedom to choose any song from the thousands of songs within the catalogue. If there is a mismatch between the musical challenge and the ability in the performer, flow experiences will be unlikely. While the karaoke jockey could suggest certain songs that will provide an appropriate challenge for the singer or that will invoke participatory behaviours in others, he is reluctant to overstep his role as emcee. Despite Lucas’s inability to select music to maximize participatory behaviours in the group, singers indicated that they considered the group dynamic when selecting their songs to perform. Even though the group is considered, interviews with participants indicate that the desire to perform a particular song well and enjoyment of performing a particular song are much more influential in song selection. Thus, the karaoke jockey is limited in some respects as facilitator as the participants forge the musical path for the group.

Certain song choices by performers at the microphone will readily invite the other patrons to participate in the musicking activity. As mentioned before, some songs like Cher’s “Dark Lady” have implicit musical roles for the audience. Individuals who choose to perform
these songs invite the audience to engage with the musical performance, whether they tell the
audience to participate or not.

With the guiding force of the musicking event in the hands of the performers at the
microphone, the participatory behaviors can be highly variable. Generally, faster tempos and
stronger vocal performances were more likely to elicit participatory behaviors from the other
patrons. However, on some occasions, the audience would sing to help a struggling singer who
had trouble finding the melody. Other factors outside of the karaoke jockey’s control, such as
the size of the turnout, can also affect participatory behaviors at these events.

Moreover, when performances exhibit participatory behaviors, the flow of the event
could be arrested as soon as the track is over and a new singer approaches the microphone.
This scenario typifies Turino’s belief that scripted forms of presentational musicking can inhibit
flow experiences. In Turino’s example of contra-dancing, songs are repeated and elongated to
minimize these transitions between flow experiences. In karaoke, the responsibility to get the
group back to a flow experience rests with the next performer at the microphone, in his or her
song selection as well as his or her ability to engage the others present. Through this
discussion, the facilitator (e.g., the karaoke jockey) promotes the participatory behaviours
through encouraging the participants and manipulating the sonic texture; however, his role is
limited by fixed forms of the accompaniment tracks and the agency of the participants in song
selection.

During the course of observations, Lucas was unable to facilitate a scheduled event
because he was ill. One of the bartenders assumed the role of karaoke jockey in his absence.
Despite having a substitute facilitator, the event was similar to the other events in which I had
participated. This observation indicates a healthy community engaged in musical participation, in that the activity did not suffer due to the absence of the regular facilitator. If a facilitator grossly affects the musicking event due to his or her absence, it suggests that the event is more about the individual facilitator than the community.

**Physical space and participation.** In participatory musical experiences, the organization of the physical space is important. Turino describes the organization of social space in contra-dance gatherings as a means to promote, even pressure, participation as there are areas designated for socializing away from the dance calling. He similarly describes the spatial organization of Aymara festivals in the Andean region of South America:

The circle of musicians forms the focal point of the event, with dancers moving around them. Beyond these two circles, community members stand around drinking, eating, and socializing and, at will, get up to dance, or take up an instrument and join the inner circles (p. 186).

As these examples illustrate, the organization of the social space can allow for a variety of types of participatory behaviors.

The physical space at Metamorphosis is comparable to the phenomena that Turino describes. The interior of the small bar is very narrow, perhaps only 20 feet wide. The bar is situated immediately on the left and travels down halfway the length of the room (see Figure 4-1 for a diagram of the space). Beyond the bar sits a pool table. With such limited square footage, benches and chairs are placed in areas to maximize seating without creating a feeling of over-crowdedness.
Figure 4-1. Physical Layout of Metamorphosis Bar
For karaoke events, the microphone for the singer is placed between the far end of the bar and the pool table, essentially the center of the room. The placement of the microphone allows the singer to be a focal point. Those that are closest to the performer are most likely to exhibit participatory behaviors, with many of the patrons facing away from the bar toward the singer or people moving closer to the singer to dance or sway to the music. This set-up maximizes communication and can intimate a sense of democracy among those present (Higgins & Campbell 2010). The singer being in the middle of the room also allows the facilitator, without disturbing the flow of the event, to easily interact and invite other participants to the microphone.

Similar to contra-dancing events or bira ceremonies, there are varied expectations and etiquettes in different spaces throughout the room. If someone is sitting in the pool table area, they are more likely to be gently pressured to sing at the microphone by the facilitator. The area by the entrance and the back patio are areas that are designated as social spaces with less interaction with the musical activities taking place. Participants can easily move from various areas within the space, which can reflect their level of engagement. Easily, the microphone could have been placed at either end of the room, perhaps optimizing space in some ways; however, this alternative set-up would create a dichotomy between performer and audience members, possibly inhibiting participatory behaviours. The physical space of any musical event can promote or inhibit the participatory behaviours of the assembled.

The karaoke events at Metamorphosis allow for a group of diverse individuals to become a community through their shared musical experiences. This community celebrates its members and encourages participation of varying abilities within the musical endeavor.
Participatory musical behaviours are nurtured by the actions of the facilitator, the use of the physical space, and the shared beliefs of the participants.

**Karaoke as Identity**

In karaoke performance, participants must adopt a performance persona that includes song-selection. When discussing with collaborators how they choose songs to perform, the answers were consistent. There were two primary factors that the singers considered: the song had to be enjoyable to perform and it had to be a song they believed they could perform well. The following two quotes show how important these factors are in song selection:

> It’s a combination of factors, it’s what I feel like singing, if there’s an unruly group here that wants to hear something upbeat as opposed to something like a ballad...if there’s not a lot of people here I’ll try some new stuff so that I can unleash it on a bigger crowd and know that it’s not going to bomb on me.

- Rio (interview, February 21, 2013)

> I confess I do like to show off every now and then, especially if there’s another good singer in there or somebody I know from way back in the day. Mostly, though, it’s what’s going to be fun, what’s going to sound good, what’s going to keep people going.

- Ryan (interview, February 23, 2013)

Clearly, both these informants show that an underlying element to their song selection is “reading” the mood of the crowd. However, the role of the audience is secondary to personal enjoyment and confidence in success in the song selection process. These responses from
informants allude to the trends that were noted by Drew (2001) where karaoke participants are drawn to the spotlight to be a “star.”

Sexual orientation seemed to play less of a role in influencing the performances than one might expect. Even though Metamorphosis is identified as a gay bar for men, the clientele is richly diverse with many women, both lesbian and straight, and a handful of straight men. Sexuality did not affect the performances in a uniform fashion. Some gay men would change the lyrics during a performance from a hetero-normative perspective, a worldview that promotes heterosexuality as normal or privileged. For example, singers would alter the pronouns from “she” to “he,” although sometimes the changes were more creative. In a performance of “The Longest Time” by Billy Joel, one singer changed the line, “Now I know the woman that you are” to “Now I know the gay man that you are.” Although this method of changing gendered words was the most common alteration to the lyrics, it occurred fairly infrequently.

More often, gay male singers would perform a piece by a female artist as written. One of the first times I had seen Mark perform, he performed the sixties hit, “And Then He Kissed Me” by the Crystals. Performing songs by other-gendered artists allows some singers an opportunity to perform a song authentically while making it relevant to their sexuality. While this practice is fairly common within the Metamorphosis community, performing songs recorded by the opposite sex is considered taboo in some Japanese karaoke cultures (Mitsui & Hosokawa 2001). Gender-bending performances may illustrate the individualistic nature of karaoke in North America, where the personal relevance of the performance is more highly valued than social politeness (see Man Kong Lum 2001).
On the other hand, many of the performances at Metamorphosis, by both gay and straight performers, were hetero-normative in presentation. Over the course of the study, three different gay men performed “Mr. Jones” by Counting Crows, despite the hetero-normative content within the song. Thus, karaoke provides the opportunity for singers to adopt whatever sexual identity they desire for their performance. This sexual identity in performance is not fixed, as some performers would vacillate between identities. Ryan, for instance, performed “Suddenly Seymour” from Little Shop of Horrors as a duet with another man, assuming the female character role of Audrey. But other times, he would perform “Walking in Memphis” from a hetero-normative perspective. Thus, at Metamorphosis, karaoke participants are able to be fluid in their sexual identity. In this performative karaoke, participants dismiss a dichotomous nature of sexuality, rejecting a gay/straight binary. As patrons of gay establishments use space to define and develop their sexual identity (Whittle 1994), karaoke at Metamorphosis allows participants to develop their sexual identity as well as to experiment with performing various sexual identities.

In Drew’s (2001) ethnographic exploration of American karaoke, more men choose to perform at the microphone than women at a ratio of 2 to 1. At Metamorphosis, this is not the case, with women having approximately equal time at the microphone than men. While there are some lesbians that frequent the karaoke events at Metamorphosis, many of the women who perform identify as straight. While these women may come with gay male friends or to avoid the male attention at straight karaoke venues, their presence influences the identity of the space. The identity of queer spaces must be constantly (re)negotiated with the inclusion of straight others, as cultural forces will try to normalize the space. Perhaps, queer performances
(e.g., altering hetero-normative lyrics or performing a song recorded by the opposite sex) are subtle methods for re-establishing the queerness of the space.

In karaoke performance at Metamorphosis, participants choose to perform songs that they believe can performed competently and are enjoyable to sing, as well as what will be well-received by the audience. Gender and sexual identity influence these decisions in various ways that have not been documented in other karaoke research. Queer performances within the space may be a result of personal choice, an experiment with different sexual identities, or a reclaiming of the queerness of the space.

**Agency and Identity.** Within a social context, there can be a tension between the practices of a culture and the disposition of the individual. Turino (2008) believes individuals as well as cultures have internalized “habits,” a product of past interactions with and understandings of an environment. Additionally, he claims:

The value of conceptualizing the *self, identity, and culture* in terms of habits is this:

Habits have specific histories, create material effects, and over time gain relative stability. They are real, existing forces at the level of both the individual and society. On the other hand, habits are not set in stone; they can and do continually change, and they are the result of circumstances and experiences in conjunction with biological capacities and propensities. (p. 121)

For Turino, the individual has the agency to adapt within a social context by imitating those around them, while communities adapt to the habits of individual members—a process Turino calls *cultural dynamism*. Thus, individual agency and cultural values share responsibility in constructing community as understood by the participants.
As previously discussed, the participants in the karaoke events at Metamorphosis can perform any song they choose. In making this performing decision, the individual must make choices regarding his or her own identity, especially as it relates to gender identity, within the community. Because of the culture formations of this community, the participant is welcome to perform as any identity he or she chooses.

The personal agency of the performers, working in tandem with the cultural habits of the group, fosters a community of participation. Within this safe space, patrons are given the freedom to assume any performing identity; in other karaoke contexts, participants may have neither the freedom nor the safety that Metamorphosis provides. Thus, the social construction of the community with its largesse of individual agency promotes participation.

Moreover, the context of karaoke provides agency as individual participants select the songs that will fill the karaoke space. This common practice in karaoke culture helps foster community as the political, social, and cultural statements of individuals must be negotiated within the group. In essence, the karaoke experience is a democratic musical endeavor where the personal agency and identity of each participant influences the shared music experience.

**Conclusion**

As Wong (2004) noted in her essay on karaoke among Vietnamese Americans, “karaoke is whatever its performers make it, and not vice-versa. Karaoke is a template for performative possibility” (p. 86). For the singers at Metamorphosis, karaoke has promoted the creation of a community, where its members are routinely celebrated. Within the safe space of this local bar, individuals can participate in the communal music-making at the level with which they are comfortable. Similarly, the space allows participants to explore or experiment with sexual
identity through the performative acts of karaoke. The themes that have emerged from this study may be unique for this community or context; karaoke at other gay bars in the United States may have similar cultures or values, but further research is needed for generalizations about gay karaoke.

When exploring community music practices, especially in atypical musical communities, Turino provides useful tools for examining the musical customs that can nurture the social inclusion and integration of diverse individuals into a musicking community. The roles of the participants, the agency of the individual, the fixity of musical forms, the role of the facilitator, and the musical texture are some of the factors that can describe how individuals interact within a musical community. For organizations pursuing the goals of community music, these participatory behaviours should be an aspiration for group-musicking endeavors; a lack of them might cause practitioners to evaluate their methods. Additionally, the use of Turino’s ideas concerning participatory performances can be applied to other fields, such as music therapy, music education, and religious rituals, to explore how community is built through social musicking. While practices within the field of community music will continue to be diverse, the adoption of theoretical models, such as Turino’s views on participatory performance, will encourage valuable discussion among community music researchers and facilitators.
References


APPENDICES
Appendix A

Recruitment Materials: Oral Approach Script (Pilot/Sub-pilot)

Script

Hello, my name is Jamey Kelley and I am a researcher at the University of Washington. This year, we are conducting a pilot study investigating the interest in various activities in young people and would like to ask all of you to participate. The survey may ask you questions about different social groups you belong to and/or your interest in various activities.

The administration of the surveys will take place outside of this class time and will take approximately 20 minutes to complete.

Your participation in this study is completely voluntary. If you do not want to participate, there will be no penalty or negative consequence for you. It will not affect your grade in any way. There will be no special treatment or incentive to take part in this study. Some people may experience a little discomfort when answering questions about themselves. You can discontinue participation in the study at any time.

If you are interested in participating in this pilot, please see me after this class to schedule a time to participate (or if the room is available after the class: please see me after this class to participate).
Appendix B

UNIVERSITY OF WASHINGTON
CONSENT FORM
Identity and Activity Preferences - Pilot

Researchers: Jamey Kelley - jfk6@uw.edu (814) 441-2020

Researcher’s statement
I am asking you to be in a research study. The purpose of this consent form is to give you the information you will need to help you decide whether to be in the study or not. Please read the form carefully. You may ask questions about the purpose of the research, what we would ask you to do, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear. When we have answered all your questions, you can decide if you want to be in the study or not. This process is called “informed consent.” We will give you a copy of this form for your records.

PURPOSE OF THE STUDY
This research study investigates factors, specifically aspects of personal identity, that may influence participation decisions. Please read the following information and feel free to contact me for any further clarification or to answer any questions about the purpose or procedures.

STUDY PROCEDURES
In this study you will be asked to answer questions about your interest in various activities as well as your relationship toward certain social groups. You will also be asked to provide demographic information related to age and gender. The questionnaire should take 5 to 20 minutes to complete. You may refuse to answer any question on the questionnaire.

RISKS, STRESS, OR DISCOMFORT
There is minimal risk for those who participate in this study. You could feel uncomfortable answering questions about your identity or your relationship to social groups. However, care will be taken to assure that you will be comfortable if you are willing to participate.

BENEFITS OF THE STUDY
You may not directly benefit from participation in this study. The primary benefit of this study will be collective as we seek to better understand what factors motivate participation in various activities.
CONFIDENTIALITY OF RESEARCH INFORMATION

Data collected will be anonymous, you will not be asked to provide any identifiable information on the questionnaire.

OTHER INFORMATION

Participation is completely voluntary. You may refuse to participate and you are free to withdraw from this study at any time without penalty or loss of benefits to which you are otherwise entitled.

Printed name of study staff obtaining consent  Signature  Date

Subject’s statement
This study has been explained to me. I volunteer to take part in this research. I have had a chance to ask questions. If I have questions later about the research, or if I have been harmed by participating in this study, I can contact one of the researchers listed on the first page of this consent form. If I have questions about my rights as a research subject, I can call the Human Subjects Division at (206) 543-0098. I will receive a copy of this consent form.

Printed name of subject  Signature of subject  Date

Copies to:  Researcher  Subject
Appendix C

Gender Activity Survey - Pilot

Please rate how **masculine** or **feminine** the following activities are perceived by most people?

<table>
<thead>
<tr>
<th></th>
<th>Very Masculine</th>
<th>Masculine</th>
<th>Somewhat Masculine</th>
<th>Neutral</th>
<th>Somewhat Feminine</th>
<th>Feminine</th>
<th>Very Feminine</th>
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<td>1.</td>
<td>Socializing with friends</td>
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<td>2</td>
<td>3</td>
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<td>5</td>
<td>6</td>
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<tr>
<td>2.</td>
<td>Learning to play the guitar</td>
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<td>2</td>
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<td>3.</td>
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<td>4.</td>
<td>Reading a magazine</td>
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<td>Spending time on Facebook</td>
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<td>9.</td>
<td>Creating mixes, loops, mashups, or playlists</td>
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<td>2</td>
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<td>6</td>
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</table>
Gendered Profession Survey

Please rate how **masculine** or **feminine** the following professions are perceived by most people?

<table>
<thead>
<tr>
<th></th>
<th>Very Masculine</th>
<th>Masculine</th>
<th>Somewhat Masculine</th>
<th>Neutral</th>
<th>Somewhat Feminine</th>
<th>Feminine</th>
<th>Very Feminine</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lawyer</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2.</td>
<td>Waiter/Waitress</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>Nurse</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4.</td>
<td>Firefighter</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5.</td>
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<td>3</td>
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<td>5</td>
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</tr>
<tr>
<td>6.</td>
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<tr>
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</tr>
<tr>
<td>11.</td>
<td>Airline Pilot</td>
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<td>3</td>
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<tr>
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<tr>
<td>13.</td>
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<td>15.</td>
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<tr>
<td></td>
<td>Very Masculine</td>
<td>Masculine</td>
<td>Somewhat Masculine</td>
<td>Neutral</td>
<td>Somewhat Feminine</td>
<td>Feminine</td>
<td>Very Feminine</td>
</tr>
<tr>
<td>---</td>
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<td>--------------------</td>
<td>---------</td>
<td>-------------------</td>
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<td>6</td>
<td>7</td>
</tr>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
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<td>5</td>
<td>6</td>
<td>7</td>
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<td>22. Journalist</td>
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<td>4</td>
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<td>6</td>
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<td>7</td>
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<td>24. Professional Athlete</td>
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<td>26. Tour Guide</td>
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<td>27. Bartender</td>
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### Table X.
**Masculinity and Femininity of Professions**

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<thead>
<tr>
<th>Profession</th>
<th>M</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>Construction Worker</td>
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<td>0.81</td>
</tr>
<tr>
<td>Firefighter</td>
<td>1.97</td>
<td>0.86</td>
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<tr>
<td>Police Officer</td>
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<td>0.82</td>
</tr>
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<td>Airline Pilot</td>
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<td>Car Salesman</td>
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</tr>
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<td>Dancer</td>
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<td>Cosmotologist</td>
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<td>Flight Attendant</td>
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<td>Fashion Designer</td>
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<td>Nurse</td>
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<td>0.89</td>
</tr>
<tr>
<td>Kindergarten Teacher</td>
<td>5.67</td>
<td>0.66</td>
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</tbody>
</table>
Appendix E

Participant Recruitment Script

Script

Hello, my name is Jamey Kelley and I am a researcher at the University of Washington. This year, we are conducting a research study investigating the interest in various activities in adolescents and would like to ask all of you to participate. We are hoping to collect data from several classes within this school. The study consists of taking two surveys. One of the surveys is a questionnaire that will ask you questions about different social groups you belong to. The second survey will inquire about your interest in various activities.

The administration of the surveys will take place during this advisory period and take approximately 20 minutes to complete. The surveys will not occur when any regular classroom instruction is being given.

Your participation in this study is completely voluntary. If you do not want to participate, there will be no penalty or negative consequence for you. It will not affect your grade in any way. There will be no special treatment or incentive to take part in this study. Some people may experience a little discomfort when answering questions about themselves. You can discontinue participation in the study at any time.

Today, we will give you an information form to take home to your parents that explains the research study. If you or your parents do not want you to participate in the questionnaire part of the study, you need to return the signed form to me by ________________(insert date).

This information form includes more information about the study; you and your parents are welcome to contact the researchers at any time to ask any questions you may have. My contact information is located on the forms if you have any further questions.
Appendix F
Participant Opt-Out Form

“adolescent identity and activity preferences”

Researcher Information:
Jamey Kelley
University of Washington
Email: jfk6@uw.edu
Phone: 814-441-2020

Researcher’s Statement:
I am conducting a research study investigating the factors, specifically aspects of personal identity, that influence the participation decisions of adolescents. Students in grades 7 through 12 at your child’s school are invited to participate. Please read the following information and feel free to contact me for any further clarification or to answer any questions about the purpose or procedures.

Purpose of the Study
The purpose of this study is to explore the following questions:
1. How pleasurable do adolescents rate various activities?
2. What factors, such as group membership by age, gender, or ethnicity, may influence preferences to various activities?
3. Are factors more influential in preferences when certain group memberships are emphasized?

Study Procedures
Students will be asked to complete two questionnaires. One questionnaire will include questions concerning their preference to various activities (e.g., socializing with friends, playing video games). The other questionnaire will ask questions about the value of memberships to various social groups or categories (e.g., gender, age, or ethnicity). The surveys will be administered during unstructured time during students’ advisory period in their advisory classroom. The anticipated time to complete the surveys will be approximately 20 minutes. The administration of the surveys will not occur during instructional time. Those students who elect to not participate will be allowed to continue with activities that occur in their advisory period (e.g., silent study, homework completion).

The study will be administered to all students who assent to participate and whose parents have not returned this form opting out of the questionnaire portion. Students may choose not to participate at the time that the questionnaire is administered and may refuse to answer any question on the questionnaire at any time. All data collection will be completed within this school year.

Risk, Stress, or Discomfort
There is minimal risk for students who participate in this study. Students could feel uncomfortable answering questions about their identity or relationship to social groups. However, care will be taken to assure that the students will be comfortable if he or she is willing to participate.

Alternatives to Taking Part in this Study
This study is completely voluntary and not related to any course or class assignment so any student may choose not to participate.

Benefits of the Study

200
Though your student may not directly benefit from participation in this study, the primary benefit of this study will be collective as we seek to better understand what factors motivate adolescent participation in various activities.

**Other Information**

You or your student may refuse to participate and are free to withdraw from this study at any time without penalty or loss of benefits to which you are otherwise entitled. All of the data collected from this study will be anonymous and not tied by any identifiable markers to your student. Government or university staff sometimes review studies such as this one to make sure they are being done safely and legally.

**Opt-out procedures:**

If you do **NOT** wish to have your student participate in the questionnaires, please indicate below and return the form to your student’s teacher. Students who fail to return this form will participate in the questionnaire portion, provided that they assent to do so in writing, prior to the administration of the survey.

The study has been explained and:

_____ I (the parent) **do not** give permission for my child to participate in the questionnaire portion of the study and wish to opt-out.

I have had an opportunity to ask questions and if I have any questions at a later date or feel that my child has been harmed by his or her participation in this research, I can contact the researcher at the phone number or email listed above. If I have any questions about my rights (or my child’s rights) as a research participant, I can call the University of Washington Human Subjects Division at (206) 543-0098.

---

**Printed name of student participant**  **Signature**  **Date**

**Printed name of parent**  **Signature**  **Date**

**Printed name of researcher**  **Signature**  **Date**
Appendix G

ASSENT SCRIPT
Adolescent Identity and Activity Interest

My name is Jamey Kelley and I am a researcher in the College of Arts and Sciences at the University of Washington. We are doing a study to learn about activities that adolescents are interested in and how the groups that they belong to may influence their interest. We are asking you to help us better understand how teenagers think.

Participation in this study is completely voluntary. If you do not wish to participate or want to stop participation at any point, there will be no negative consequence. If you agree to be in our study, we are going to ask you some questions about some groups you belong to. We will also ask you how interested you are in various activities.

Some people may experience a little discomfort when answering questions about themselves. You can discontinue participation in the study at any time. Participation in this study will in no way affect your grades or your standing in class.

You can ask questions about this study at any time. If you decide at any time not to finish, you can ask us to stop.

The questions we will ask are only about what you think. There are no right or wrong answers because this is not a test.

If you sign this paper, it means that you have read this and that you want to be in the study. If you don't want to be in the study, don't sign this paper. Being in the study is up to you, and no one will be upset if you don't sign this paper or if you change your mind later.

Are there any questions I can answer at this time?

If no more questions, at this time, if you would like to participate in the study, please sign the front page of the packet and begin taking the questionnaires. If you do not want to participate, just place your packet on your desk, and I will take it. Thank you.
Appendix H
UNIVERSITY OF WASHINGTON
ASSENT FORM
Adolescent Identity and Activity Preferences

Researcher: Jamey Kelley    jfk6@uw.edu
(814) 441-2020

Researcher’s Statement:

We are doing a study to learn about activities that adolescents are interested in and how the
groups that they belong to may influence their interest. We are asking you to help to better
understand how teenagers think.

Participation in this study is completely voluntary. If you do not wish to participate or want
to stop participation at any point, there will be no negative consequence. If you agree to be in
our study, we are going to ask you some questions about some groups you belong to. We will
also ask you how interested you are in various activities.

Some people may experience a little discomfort when answering questions about themselves.
You can discontinue participation in the study at any time. Participation in this study will in
no way affect your grades or your standing in class.

You can ask questions about this study at any time. If you decide at any time not to finish, you
can ask us to stop.

The questions we will ask are only about what you think. There are no right or wrong
answers because this is not a test.

If you sign this paper, it means that you have read this and that you want to be in the study. If
you don’t want to be in the study, don’t sign this paper. Being in the study is up to you, and no
one will be upset if you don’t sign this paper or if you change your mind later.

<table>
<thead>
<tr>
<th>Printed name of study staff obtaining assent</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject’s statement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| This study has been explained to me. I volunteer to take part in this research. I have had a
  chance to ask questions. If I have questions later about the research, or if I have been harmed
  by participating in this study, I can contact one of the researchers listed on the first page of
  this form. If I have questions about my rights as a research subject, I can call the Human
  Subjects Division at (206) 543-0098. I will receive a copy of this assent form. |

<table>
<thead>
<tr>
<th>Printed name of subject</th>
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<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
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## Appendix I

### Activity Preference Scale

Please rate how **pleasant you** would find the following activities?

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<tr>
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<th>Very Unpleasant</th>
<th>Unpleasant</th>
<th>Somewhat Unpleasant</th>
<th>Neutral</th>
<th>Somewhat Pleasant</th>
<th>Pleasant</th>
<th>Very Pleasant</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Learning to juggle</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2.</td>
<td>Learning to play the guitar</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>Singing in a choir</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4.</td>
<td>Reading a magazine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
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<tr>
<td>5.</td>
<td>Studying for an exam</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>6.</td>
<td>Singing in a garage band</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7.</td>
<td>Taking a dance class</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>8.</td>
<td>Working out</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9.</td>
<td>Creating mixes, loops, mashups, or playlists</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>10.</td>
<td>Performing in a musical</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11.</td>
<td>Learning to play the flute</td>
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<td>3</td>
<td>4</td>
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<td>6</td>
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<tr>
<td>12.</td>
<td>Playing a music video game like Guitar Hero</td>
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<td>3</td>
<td>4</td>
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<td>6</td>
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<tr>
<td>13.</td>
<td>Learning to play the piano</td>
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<td>3</td>
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<td>6</td>
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<td>Drawing</td>
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<td>6</td>
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<td>15.</td>
<td>Working the soundboard at a theatrical show</td>
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<td>5</td>
<td>6</td>
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<tr>
<td>16.</td>
<td>Singing Karaoke</td>
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<td>4</td>
<td>5</td>
<td>6</td>
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<td>17.</td>
<td>Participating in a drum circle</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
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</tbody>
</table>
Please rate how pleasant people like you (your friends or classmates) would find the following activities?

<table>
<thead>
<tr>
<th></th>
<th>Very Unpleasant</th>
<th>Unpleasant</th>
<th>Somewhat Unpleasant</th>
<th>Neutral</th>
<th>Somewhat Pleasant</th>
<th>Pleasant</th>
<th>Very Pleasant</th>
</tr>
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<tr>
<td>1.</td>
<td>Reading a magazine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>2.</td>
<td>Performing in a musical</td>
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<td>6</td>
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<tr>
<td>3.</td>
<td>Participating in a drum circle</td>
<td>1</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4.</td>
<td>Learning to juggle</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5.</td>
<td>Singing in a garage band</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6.</td>
<td>Singing Karaoke</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7.</td>
<td>Taking a dance class</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>8.</td>
<td>Working out</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<td>9.</td>
<td>Creating mixes, loops, mashups, or playlists</td>
<td>1</td>
<td>2</td>
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<td>10.</td>
<td>Learning to play the guitar</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11.</td>
<td>Learning to play the flute</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12.</td>
<td>Drawing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13.</td>
<td>Learning to play the piano</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14.</td>
<td>Playing a music video game like Guitar Hero</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15.</td>
<td>Working the soundboard at a theatrical show</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16.</td>
<td>Studying for an exam</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17.</td>
<td>Singing in a choir</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Appendix J

Collective Self-Esteem Scale: Gender Version

**INSTRUCTIONS:** We are all members of different social groups or social categories. We would like you to consider your gender group (e.g., women or men) in responding to the following statements. We are interested in your honest reactions and opinions. Please read each statement carefully, and respond by using the following scale from 1 to 7.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Disagree Somewhat</th>
<th>Neutral</th>
<th>Agree Somewhat</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am a worthy member of the gender group I belong to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2.</td>
<td>I often regret that I belong to my gender group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3.</td>
<td>Overall, my gender group is considered good by others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4.</td>
<td>Overall, my gender group has very little to do with how I feel about myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5.</td>
<td>I feel I don't have much to offer to the gender group I belong to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6.</td>
<td>In general, I'm glad to be a member of the gender group I belong to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7.</td>
<td>Most people consider my gender group, on average, to be more ineffective than the other gender group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8.</td>
<td>The gender group I belong to is an important reflection of who I am.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9.</td>
<td>I am a cooperative participant in the gender group I belong to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>10.</td>
<td>Overall, I often feel that the group of which I am a member is not worthwhile.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>11.</td>
<td>In general, others respect the gender group that I am a member of.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>12.</td>
<td>The gender group I belong to is unimportant to my sense of what kind of a person I am.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>13.</td>
<td>I often feel I'm a useless member of my gender group</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>14.</td>
<td>I feel good about the gender group I belong to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>15.</td>
<td>In general, others think that the gender group I am a member of is unworthy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>16.</td>
<td>In general, belonging to my gender group is an important part of my self image.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Appendix K

Student Name ____________________________ Teacher Name________________________
Birthday: Month ____ Day ____ Year ______ Study ID# ____________

Please circle: Girl or Boy

Music Background

1. Have you ever taken instrumental lessons at school?  Yes  No
   If yes, what instrument? ____________________ Are you taking lessons now? Yes  No

2. Have you ever been in choir at school?  Yes  No
   Are you in choir now? Yes  No

3. Have you ever taken private piano, organ, or keyboard lessons?  Yes  No
   If yes, how long? _________________________ Are you taking lessons now? Yes  No

4. Have you ever taken private instrumental lessons (other than piano, etc.)?  Yes  No
   If yes, how long? _________________________ Are you taking lessons now? Yes  No

5. Have you ever taken private voice (singing) lessons?  Yes  No
   If yes, how long? _________________________ Are you taking lessons now? Yes  No

6. How many brothers and sisters do you have?  Number of Brother(s)______ Age(s)_______
   Number of Sister(s)_______ Age(s)_______

7. Do any members of your family participate in music?  Yes  No
   If yes, please describe:
   Relationship to you (for example, mother):  Musical Activity (for example, sings):

   ________________________________  ________________________________
   ________________________________  ________________________________
   ________________________________  ________________________________

8. Do you listen to music at home?  Yes  No
   If yes:
   a) Is it primarily _____ live music, _____ radio, or _____ recorded (CD, ipod)? (check only one)
   b) Please circle the types of music played in your home:

   Rock/Pop           Hip-Hop/Rap          Country         Classical         Other _____________

   c) Please estimate the number of hours music played in your home in one week:
9. How important would you rate the role of music in your home?

1 2 3 4 5 6 7 8 9 10
Not Important Somewhat Important Very Important

10. Have you ever attended a live musical concert?  Yes  No

If yes, what was the last concert you attended? ____________________________

11. Do you plan to take a music class next year?  Yes  No

12. How much do you like to sing?

1 2 3 4 5 6 7 8 9 10
I Don’t Like it I Like it Sometimes I Really Like Singing

13. Circle ALL the places you sing:

I don’t sing anywhere
Singing in a choir or music class
Singing in a choir outside school
Singing in religious services
Singing with friends
Singing doing chores/shower
Singing while listening to music
Singing while walking places
Other: ______________

14. How often do you sing in a week? (circle your answer)

None  less than an hour  1 to 3 hours  More than 3 hours

15. Have you ever sung in front of an audience, as a soloist or in a choir?  YES  NO

If YES how often?

Never  Once a year  Several times a year  Once a month  Once a week or more
Student Music Questionnaire

Please indicate how much you agree with each of the following statements by circling a response:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Don't Know</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>D</td>
<td>??</td>
<td>A</td>
<td>SA</td>
</tr>
</tbody>
</table>

1) I like to sing whenever I can.
   SD                D          ??     | A     | SA             |

2) I would like to join choir in middle school if my friends do.
   SD                D          ??     | A     | SA             |

3) I enjoy listening to music.
   SD                D          ??     | A     | SA             |

4) People like to hear me sing.
   SD                D          ??     | A     | SA             |

5) Singing is fun.
   SD                D          ??     | A     | SA             |

6) Singing makes me feel good inside.
   SD                D          ??     | A     | SA             |

7) I am not a very musical person.
   SD                D          ??     | A     | SA             |

8) I can sing in choir and participate in other school activities.
   SD                D          ??     | A     | SA             |

9) I believe a person can have the time to do their schoolwork and be in choir.
   SD                D          ??     | A     | SA             |

10) I would join choir in junior high to meet people from other schools.
    SD                D          ??     | A     | SA             |

11) My elementary school music teacher believes I am a good singer.
    SD                D          ??     | A     | SA             |

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12) A person can play sports and have time to do music.
   SD D ??? A SA

13) Being in choir would give someone a place to belong.
   SD D ??? A SA

14) I am talented in music.
   SD D ??? A SA

15) Music helps me take my mind off troubles.
   SD D ??? A SA

16) I do whatever my friends like to do.
   SD D ??? A SA

17) A student can sing in choir and do many other things.
   SD D ??? A SA

18) I would do well in a choir class.
   SD D ??? A SA

19) I believe being in choir in junior high would help get me involved in middle school.
   SD D ??? A SA

20) I think I am tone deaf.
   SD D ??? A SA

21) I like to perform for other people.
   SD D ??? A SA

22) Choir does not take up too much time outside of class.
   SD D ??? A SA

23) Being in choir would help a person make new friends.
   SD D ??? A SA

24) A person can be in choir and have time for all the things they like to do.
   SD D ??? A SA

THANK YOU FOR PARTICIPATING!

Please check and be sure that your name and birthday are included on the first page.