“CHOIR IS FOR GIRLS”: INTERSECTIONAL MIXED METHODS PERSPECTIVES ON ADOLESCENT GENDER IDENTITY, SINGING INTEREST, AND CHORAL MUSIC PARTICIPATION

by

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As students progress through adolescent development, researchers have observed a lack of male participation in choral music activities. This male to female imbalance is often attributed to a perception that singing is a feminine activity and results in a lack of balance in choral music ensembles. The purpose of this mixed methods study was to explore adolescent gender identity as it relates to singing interest and choral music participation. An explanatory sequential mixed methods design was used, in which quantitative data were collected and analyzed followed by in-depth qualitative interviews. A group of 9th grade students (n=174) completed the Children’s Sex Role Inventory and the Singing Interest Inventory to gauge their self-perceived levels of masculinity and femininity along with their level of singing interest. Information from the quantitative portion of this study indicated that girls had both a higher interest in singing and a higher rate of participation in choral music ensembles than their male peers. A significant contribution of this study was that although singing is often perceived as feminine, no significant differences were found between categorized gender groups and singing interest.
Qualitative interviews were conducted with two groups of male students who were not enrolled in choir: low singing interest scores (n=4) and high singing interest scores (n=4). Transcribed and coded interviews resulted in the following themes: low singing interest, *Guys are physical, Girls are feminine, Shared perceptions, Guys don’t sing*, and *Calling them names*; high singing interest, *Men want muscles, Girls are expressive, Shared perceptions, Choir is for girls, Get made fun of*, and *No labels*. The shared theme *Shared perceptions* suggests that participant perceptions are the same as their parents and friends. The theme *No labels* was unique to the high singing interest group. Participants in that group demonstrated a higher level of acceptance for atypical gender behavior.

*Keywords*: adolescence, sex, gender identity, singing interest, choral music participation, explanatory mixed methods, quantitative, qualitative, case study
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_Hebrews 11:1 – Now faith is being sure of what we hope for and certain of what we do not see (NIV)_
Dedication

This dissertation is dedicated to my brother Reid; an outstanding musician with a great voice who never joined the school choir.
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Chapter 1: Introduction

“Thanks, but I don't sing.”
"Oh, it's easy! It's just like talking except louder and longer and you move your voice up and down."

– Elf (Alterman et al., 2003)

Statement of the Problem

Over the last century, a shift has taken place in the United States with regard to public singing by men. Men dominated public singing activities in colonial America with little to no participation by women. As time progressed, however, an alteration of mentality and a change in participation by the sexes began to occur (Gates, 1989). A motivating factor for the increase in female involvement was the perceived effeminate nature of singing, which supported the view that women were more suited to vocal music endeavors (Gates, 1989; Szabo, 1999). As public singing by women became more widely accepted throughout our history, their dominating participation began to modify our cultural perception of choral music, leaving many choral ensembles today severely lacking in balance between the sexes (Gates, 1989).

There is a strong perception by men of all ages that singing is for girls or is strongly believed to be a feminine activity (Hall, 2005; Harrison, 2004a, 2007; Kennedy, 2002; Sweet, 2010; Szabo, 1999; Warzecha, 2013). Several studies have been conducted on gender stereotyping, noting that many people have preconceived ideas about what instruments and activities are masculine or feminine. In all cases, singing was viewed as a more feminine activity and therefore an unacceptable avenue of pursuit for many men (Hall, 2005; Harrison, 2007; Szabo, 1999).
In addition to the gender stereotyping that is associated with choral singing, research also suggests that puberty can be a major deterrent for students and their interest in participating in choral music experiences (Mizener, 1993). Of particular concern for many choral directors is the voice change that boys go through during adolescent development. This is often cited and understood as a main deterrent for male singers when choosing whether or not to participate in choral music activities (Freer, 2008, 2010; Mizener, 1993; Szabo, 1999). Killian (1997), however, came to a different conclusion finding more than 80% of study participants had a positive association to the voice change. She noted that participants were eager to begin and complete the voice change process and highlighted that participants held a belief that boys with changed voices received more attention and relational interest from girls.

Additional research has uncovered further deterrents beyond the changing voice that include: harassment from peers, poor teacher relationships, ineffective teaching styles, and a lack of friends participating (Freer, 2007, 2009; Harrison, 2007; Kennedy, 2002; Mizener, 1993; Sweet, 2010). The good news for teachers is that all of these deterrents have the potential to be offset. Although the voice change is inevitable for almost all people, teachers can encourage students through this process with affirmation, understanding, flexibility, and information about the physiology of the voice (Freer, 2006, 2007, 2008, 2009, 2010; Kennedy, 2002; Mizener, 1993). Additionally, teachers can develop positive relationships with students and promote a safe and inviting classroom atmosphere coupled with appropriate challenges for their age and ability level (Freer, 2009; Kennedy, 2002; Sweet, 2010). Some researchers have also found that male
role models who sing can have a strong and positive impact on young male singers (Brinson & Demorest, 2014; Demorest, 2000; Freer, 2010; Hall, 2005). If young boys see other male students actively participating in choral music, specifically men they view favorably, that has the potential to increase their interest and comfort level in future choral music pursuits.

**Deficiencies in the Studies**

Although there is a growing body of research on deterrents that keep men from singing (Demorest, 2000; Freer, 2007, 2009, 2010; Harrison, 2007; Kennedy, 2002; Mizener, 1993), very little research is actually done with boys who do not sing. Most of the research on boys’ perceptions of singing has been done with students currently or previously enrolled in choral music programs (Hall, 2005; Kennedy, 2002; Lucas, 2011; Sweet, 2010). There is a call for additional research to investigate what deterrents keep boys from singing, and to specifically seek that information from boys who do not sing (Freer, 2006; Lucas, 2011). Additionally, there is only one study that investigates gender identity alongside gender stereotypes in music, and the focus of that study was instrumental in nature (Sinsel, Dixon, & Blades-Zeller, 1997).

The long-standing tradition of choral music ensembles in the United States has created an expectation in k-12 schools for quality choral music ensembles to exist. This expectation, when considering mixed choirs, requires proportional voicing across the ensemble in order to achieve a balanced sound. Learning from boys who choose not to sing can not only provide information on a gap in the literature, it can help educators
better understand how to encourage more boys to participate in choral music programs in schools.

In order to ensure an educational future for every student that includes music as a component of the curriculum, vocal music educators must first understand what is standing in the way of balance between the sexes in secondary choral ensembles, and then work to correct those areas of deficiency. Additionally, teachers are called upon to educate their music peers, students, and society on the benefits associated with choral music education. Research is one avenue to help us accomplish this task.

Methodological Approach

Quantitative research, which favors a postpositivist worldview, allows us to observe cause-and-effect relationships, measure variables, and test hypotheses. A postpositivist worldview is about making a determination, reducing presented information, and verifying proposed theories. By contrast, qualitative research favors a constructivist worldview, which posits that information is dependent upon one’s surroundings and experiences. A constructivist worldview is therefore created and favors understanding, multiple experiences and meanings, and theory generation (Creswell & Plano Clark, 2011).

The music education profession has seen great growth in, and acceptance of, qualitative research over the last several years (Lane, 2011). Additionally, over the last decade, research journals in music education, specifically the Journal of Research in Music Education, have encouraged researchers to submit projects with progressive methodologies (Sims, 2012). Despite this push for a larger variety of methodological
representation in music education studies, the majority of research conducted in the music education field has been quantitative in nature (Lane, 2011).

A study that addresses biological sex, gender identity, singing interest, and choral music participation necessitates a methodology that mixes both quantitative and qualitative data. A mixed methods approach would provide additional and valuable information on this complex topic by merging complimentary data from two approaches (Creswell, 2012; Creswell & Plano Clark, 2011) as well as offering additional strength to the weak areas of the alternate methodology (Greene, Caracelli, & Graham, 1989). The pairing of quantitative and qualitative data sources will afford depth and breadth to this topic (Creswell, 2012) in addition to a unique and multi-dimensional view of boys and their musical perceptions and interests during adolescence.

**Purpose of the Study**

The purpose of this mixed methods study was to explore gender identity as it relates to singing interest and choral music participation. An explanatory sequential mixed methods design was used, in which quantitative data were collected and analyzed followed by in-depth qualitative interviews (Creswell & Plano Clark, 2011). In the first, quantitative phase of the study, gender self-perception and singing interest data were collected from 9th grade students in a small Midwestern high school to assess whether sex and gender identity relate to singing interest. The second qualitative phase consisted of follow-up interviews to help explain the quantitative results. In the exploratory follow-up, the researcher investigated adolescent male and female perceptions of singing interest and choral music participation from select members of the previously surveyed sample.
who were not enrolled in choir. Although qualitative data were collected from both boys and girls, only the results from the male participants in the qualitative portion of this study will be presented in this dissertation. The focus of this study was aimed at hearing the voices of boys who choose not to participate in choir, which will fill a gap in the literature.

**Research Questions**

The research questions that guided the quantitative portion of this study included:

1. Is there a difference in choral music participation rates between 9th grade male and 9th grade female students?
2. Is there a difference in level of masculinity between 9th grade male and female students?
3. Is there a difference in level of femininity between 9th grade male and female students?
4. Is there a difference in the level of singing interest between 9th grade male and female students?
5. Is there a difference in students’ levels of singing interest between gender categorizations?
6. Is the interaction between sex and gender categorization significant in terms of affecting 9th grade students’ interest in singing?

Due to the nature of the explanatory design, the direction taken by the qualitative portion of the study was fluid. The central question that guided the qualitative component of this study was:
How do boys perceive singing and choral music participation during adolescence?

The following sub-questions accompanied the central question:

a) What is the perception of singing among your friends?

b) What is the perception of singing in your family?

c) What is your perception of singing within society?

d) What is the perception of choral music participation among your friends?

e) What is the perception of choral music participation in your family?

f) What is your perception of choral music participation within society?

**Definition of Terms**

Many research and non-research publications use the terms *sex* and *gender* synonymously, (Glasser & Smith, 2008) which can be very confusing when discussing the terms as two separate entities. For the purpose of this study, it is important to specify a distinction between the two terms and emphasize their differences. Additionally, the literature reviewed for this study used many terms, some of which did not reflect the definitions listed. Efforts were made throughout this dissertation to clarify and align terminology when appropriate.

*Biological Sex:* “As male or female (typically with reference to chromosomes, gonads, sex hormones, and internal reproductive anatomy and external genitalia)” (Yarhouse, 2015, p. 17).

*Gender:* “The psychological, social and cultural aspects of being male or female” (Yarhouse, 2015, p. 17).
Gender Identity: “How you experience yourself (or think of yourself) as male or female, including how masculine or feminine a person feels” (Yarhouse, 2015, p. 17).

Gender Role: “Adoptions of cultural expectations for maleness and femaleness” (Yarhouse, 2015, p. 17).

Sex Role: Behaviors one demonstrates that are deemed by society as appropriate for males or females (Glasser & Smith, 2008; Meuhlenhard & Peterson, 2011).

Defining these terms is complex because many scholars argue about the biological and psychological foundations of gender (Glasser & Smith). Many researchers believe that gender is a social construct, and therefore heavily influenced by cultural expectations (Bem, 1981; 1993; Eagly, 1987a, 1987b; Eagly, Wood, & Diekman, 2000; Kohlberg, 1966). Other researchers, however, believe that it is directly connected to one’s biological sex (Fitch, and Bimonte, 2002; Hawkins, Pia Miller, & Steiner, 2003; McCredie, 2012; McEwan, 1999; Talbot, 1998).

Theory

Gender Schema Theory (Bem, 1981) posits that young children observe their surroundings and the interactions of those around them. Based on their observations, Bem believed children developed a schema, or cognitive structure, that was influenced by what they experienced in their daily interactions. Bem believed that this cognitive structure, or schema, would color the way children saw the world and therefore impact how they interacted with the world.

As an extension of Bem’s Gender Schema Theory, Social Role Theory points to the idea that beliefs about societal roles or obligations are what drive differences in
behavior between the sexes, and not, as it has been believed, biological difference (Eagly, 1987a, 1987b; Eagly, Wood, & Diekman, 2000). This suggests that variations in behavior are not a true reflection of biological sex differences, but more a reflection of societal expectation. Therefore, activities deemed acceptable by society’s standards are referred to as social roles, and your sex will dictate what behaviors are socially acceptable (Bem, 1974, 1981, 1993; Eagly, 1987a, 1987b; Eagly, Wood, & Diekman, 2000; Kohlberg, 1966).

Although many researchers argue about the foundational catalyst for gender differences, historical evidence suggests that the transition from male dominance to female dominance in regard to choral music participation was based solely on societal norms and expectations, not biological differences. While the physiological elements of the voice change process differ between men and women, which is biological and has been shown to impact choral music participation rates by adolescent boys, the focus of this study revolves around the perception that singing is feminine. For these reasons Social Role Theory will be used as the theoretical foundation for this study.

**Theoretical framework.** The theoretical model for this study can been seen in Figure 1. Seven factors have been considered as influential to the results of this study. The factors under consideration for this study include: program structure, parent involvement, musical involvement, extra-curricular involvement, sex of the music teacher, socioeconomic status, and the reputation of the program. The independent variables in this study were sex and gender identity categorization and the dependent
variable was singing interest. The qualitative portion of this study explored perceptions of singing and choral music from students who did not participate in choir.

Due to the fact that this study was only conducted in one school, program structure and sex of the teacher was the same for all students. Although the program reputation was the same for all students as well, that element is subjective in nature and viewed differently by all students. Likewise, socioeconomic status was reported for the school and not for individuals.
Figure 1. Theoretical model: Factors influencing singing interest and choral music participation.

Parent involvement also differs among students and refers to the degree to which parents are involved in the educational and curricular aspects of their children’s lives. Students were asked questions about their past and present musical involvement as well as their extra-curricular involvement.
Basic Assumptions

1. This study assumes that every person has the capacity to be musical (Hallam, 2006).
2. It is assumed that ninth grade students in American society still function under masculine and feminine ideals that align with the Children’s Sex Role Inventory categorizations.
3. This study assumes that participants will provide truthful and honest responses.

Delimitations

Although the issue of choral ensemble imbalance between the sexes is present throughout junior high and high school, only ninth grade students were considered for this study. Ninth grade was chosen specifically because students are at a pivotal point in their adolescent development. In secondary settings, choral music education is often elective, thereby giving students more opportunities for choosing where they would like to spend their time and effort. The decision to participate or not participate in choral music at the high school level is often highly influenced by peers (Sweet, 2016) and to some degree the voice change process (Freer, 2008, 2010; Mizener, 1993; Szabo, 1999). Ninth grade provides an opportunity to elect choral music participation during the transition to high school, which is when many male students abandon choral music (Ashley, 2013; Collins, 2012). Male students who choose not to participate in choral music experiences could offer valuable insight into this phenomenon.

Methodology

Description of population. The participants in this study were an entire ninth grade class from a high school in a moderately sized Midwestern city. The school
services around 1,100 students where 22% are minority and 16% receive special education services. There is a 17% mobility rate with 48% of students eligible for free or reduced lunch. The average daily attendance rate is 95%. The school offers a breakfast program as well as many after school clubs and activities.

**Personnel and facilities.** The school provides a variety of instrumental and vocal musical experiences for students. The choral program offers single sex ensembles for freshmen through seniors and mixed ensembles for sophomores through seniors. The music program also offers courses in music theory and music appreciation.

**Materials and equipment.** The two quantitative instruments that were used for this study were the Children’s Sex Role Inventory (CSRI) and the Singing Interest Inventory. The CSRI is an instrument designed to measure the level of masculine and feminine characteristics that participants identify with and demonstrate. The Singing Interest Inventory (SII) is a measure created by the researcher during a survey methods course that was designed to measure the level of singing interest in participants. Additional demographic data on participants was collected as well.

**Procedures.** The selected school was secured as the research site, and Institutional Review Board (IRB) approval was granted prior to data collection. The researcher prepared cover letters and notification forms and the school provided monogrammed envelopes. All materials were prepared by the researcher and provided to the school. The school was responsible for mailing the cover letters and notification forms to parents/guardians of all ninth grade students. In order to achieve the necessary number of participants, a notification letter was sent home to all ninth grade
parents/guardians. The notification form indicated that the form needed to be returned to the school within three days of receipt only if they did not wish their child/legal ward to participate in the study.

Students who did not have a notification form returned at the time of the survey distribution were invited to participate in the study. Students were asked to complete the questionnaires and were assured that their results would remain confidential. In the concluding remarks of the survey, students were invited to volunteer to be considered for the qualitative follow-up study.

The qualitative portion of the study took place in a secure, private location and all interviews were audio recorded. Qualitative participants were thanked for their participation and provided with a $10.00 iTunes gift card as an incentive. Following a funding application put forth by the researcher to the Hixson-Lied Grant Committee, the Glenn Korff School of Music at the University of Nebraska-Lincoln provided a $200.00 grant to offset some of the costs of this research project. The money granted was used to purchase the iTunes gift cards and to cover the costs of the printing and mailing associated with this project. All interviews were transcribed, coded, and analyzed. Both the quantitative data and the qualitative data will be presented separately and then merged together.

The IRB approval letter for this project can be found in Appendix A. Additionally, student and parent cover letters along with the consent and assent forms can be found in Appendices B-F.
Design of the study. The design utilized for this study was an explanatory mixed methods design. In this two-phase process, quantitative data were first collected and analyzed. The second phase was qualitative in nature and was used to explain the results of the quantitative phase (Creswell & Plano Clark, 2011).

Quantitative Data Analysis

Research question 1: Is there a difference in choral music participation rates between 9th grade male and 9th grade female students? This question was tested with a chi-square and presented in a 2x2 contingency table.

Research question 2: Is there a difference in level of masculinity between 9th grade male and female students? This question was tested with a t-test.

Research question 3: Is there a difference in level of femininity between 9th grade male and female students? This question was tested with a t-test.

Research question 4: Is there a difference in the level of singing interest between 9th grade male and 9th grade female students? This question was tested with a 2x4, between-subjects analysis of variance (ANOVA).

Research question 5: Is there a difference in students’ levels of singing interest between gender categorizations? This question was tested with a 2x4, between-subjects analysis of variance (ANOVA).

Research question 6: Is the interaction between sex and gender categorization significant in terms of affecting 9th grade students’ interest in singing? This question was tested with a 2x4, between-subjects analysis of variance (ANOVA).
Qualitative Data Analysis

Central question: How do boys perceive singing and choral music participation during adolescence?

Sub question 1: What is the perception of singing among your friends?

Sub question 2: What is the perception of singing in your family?

Sub question 3: What is your perception of singing within society?

Sub question 4: What is the perception of choral music participation among your friends?

Sub question 5: What is the perception of choral music participation in your family?

Sub question 6: What is your perception of choral music participation within society?

All questions in the qualitative portion of the study were answered through in-depth one-on-one interviews.

Significance of the Study

Through the use of this explanatory sequential mixed methods design, I hope to answer the following mixed method question: In what ways do the interview data, reporting the views of 9th grade boys about their singing interest and choral music participation, help to explain the quantitative results about gender identity and singing interest? Gaining a deeper understanding of the perceptions and interests of adolescent boys will help inform future practice and recruitment efforts for choral educators.
Chapter 2: Review of the Literature

“Whoo, that little peanut can sing!”
“He really can. It sounds to me, though, Gail, like his boys haven’t dropped yet, if you know what I mean.”
“If you mean his testicles, then I do, John. I do. I really do.”
– Pitch Perfect (Banks et al., 2012)

Introduction

Choral music educators often struggle to balance mixed ensembles with an equal number of boys and girls (Freer, 2012; Gates, 1989; Harrison, 2004a). Although this is an issue at all levels of choral music participation, the imbalance is most notable during adolescence, specifically as students transition to secondary school (Ashley, 2013; Collins, 2012). In order to better understand this imbalance, recent research has focused on the topic of boys’ interest in choral music (Harrison, Welch, & Adler, 2012). While a number of reasons have been linked to a disinterest in choral music participation by boys during adolescence, the two most consistently reported deterrents that can be found in the literature are gender stereotypes associated with singing and the voice change process (Freer, 2008; Hall, 2005; Harrison, 2004a, 2007; Kennedy, 2002; Mizener, 1993; Sweet, 2010; Szabo, 1999; Warzecha, 2013).

Due to the nature and design of this study, the literature highlighted will focus on all reported aspects of male deterrents related to singing and choral music participation, which includes the voice change process. Special attention and focus will be given to areas related to gender stereotypes associated with music, singing, and choral music participation.
Deterrents for Male Choral Participation

**Miscellaneous deterrents for boys.** People decide not to participate in singing activities for a number of reasons. Some believe music ability is innate and that they do not possess it (Hallam, 2006), while others do not find enjoyment in the activity (Freer, 2015). Research in choral music education focusing on reasons why boys do not participate in choral music has resulted in a variety of responses. Although there are similar themes that appear in the research, this section explores additional deterrents that lack consistency across studies.

The perception men and boys have of choral music participation is of great interest to researchers. A study by Bennetts (2013) explored male perceptions and attitudes toward choral music in Melbourne, Australia. This study was a follow-up to a larger study involving 51 schools that explored male perceptions and attitudes toward musical participation. This study focused on four schools, giving special attention to one school because their results were strikingly different than those of the other schools in the original study. An interesting finding is that in the all-male schools, the gender stereotyping beliefs of instruments and singing were almost nonexistent, whereas in the coed schools, boys aligned with previous notions of the traditionally stereotypical views of music. The interviews from the boys at the focus school revealed several themes. These themes included: valuing music as a component of a well-rounded education, teacher advocacy, teacher versus student centered learning, teacher characteristics, class and ethnic influence, and the single-sex environment. Overall, the culture created by the
school had given boys “permission” to participate in and enjoy singing experiences in a school setting.

Also concerned with the decline of male interest in choral music in the United Kingdom, Ashley (2011) focused on gender justice, which encourages equality between boys and girls, and the need to investigate why an imbalance of boys to girls exists in regard to singing. The Boys Keep Singing project was created to explore the why. Results from the large-scale project indicated that boys had two main concerns: competition from their female counterparts and a lack of knowledge and expectation from their teachers. Factors that encouraged male participation in singing included: a large group of boys who were viewed favorably by their social status and athletic achievements, and a competent and caring teacher.

Considering teacher characteristics as an important factor in choral music participation, Freer (2006) shared his personal experiences in choral music through a self-story. Freer shared his account in an effort to inform teachers about the impact their words can have on young singers. As a child Freer enjoyed singing and participating in musical activities. As he began to age and the process of voice change began, however, he had a teacher tell him that he should not sing, but to stand in the back of the choir and mouth the words. At a young age Freer quit choir only to rediscover his voice during college as a choral music education student. Freer cautioned teachers to choose their words wisely when speaking with students, because as role models in singing, they have the potential to psychologically harm or help their students. He also recommended that teachers learn as much as they can, specifically highlighting information on the
adolescent voice change, for the betterment of their future students. Although elements of this self-story revolve around the voice change process, the focus of the article was on teacher behavior, word choice, and their impact on students.

Additional research by Freer explored the concept of possible selves (Freer, 2010, 2015) in conjunction with choral music education. In a 2010 study, Freer highlighted many of the research-based factors that deter boys from participating in choral music. It was the focus of his literature review to highlight research on Markus and Nurius’s (1986) social construct possible selves within choral music. The possible selves construct considers what a person might become, would like to become, or fears becoming. Freer hoped to utilize this idea to inform and assist choral directors in achieving higher participation rates by males in secondary choral music programs. The study strongly highlighted the need for boys to feel successful and competent at whatever they choose to do. It was suggested that teachers should inform students that they can learn to sing and improve with purposeful effort. Additionally, Freer acknowledged the importance of male role models, which adolescent boys should emulate.

Freer (2015) continued to explore the possible selves framework, and in 2015 conducted a study in which he set out to investigate the perceptions boys have of choral music. This qualitative study utilized 85 school-aged boys who were current participants, former participants, or had never participated in choral music. The following reasons were given in support of singing: “teamwork and shared goals, love of singing, and friendships” (Table 3, p. 96); with participants highlighting friendships as their strongest motivator. Participants also provided reasons why they chose not to participate in choir.
Deterrents included the following: “perception that choral singing is not viewed as masculine, dislike of voice, singing, and repertoire, lack of male peers, lack of focus on individuality, and traumatic loss of child voice” (Table 5, p. 99). Participants also had recommendations for teachers, which included:

- focus on vocal technique specific to male changing voice, develop singing classes and choral ensembles that do not require public performances, share leadership with the singers, value boys as boys; ask about their lives and interests, and relate the curriculum to boys’ other music interests. (Table 6, p. 102)

This research supports other findings that teachers and school culture are the predominant indicators of whether boys will participate in choral music programs during adolescence.

A qualitative study by Kennedy (2002) also aimed to learn about junior high boys’ motivations to sing and highlighted both pros and cons to choral music participation. Four themes emerged from the data: “Motivation to join the choir and remain, acquisition of musical skills, knowledge and attitudes, repertoire considerations, and perception of the choral experience-preferences and benefits” (pp. 28-29). Enjoyment of singing, teacher influence, and friends were the greatest motivators for involvement in the choral program. In addition to the positive associations students had with choral music, Kennedy also highlighted the student belief that singing is for girls. Additionally, although students did comment on their difficulty in reaching notes that were too low or too high, Kennedy found that range-appropriate repertoire did not enhance student participation. Her findings in this study oppose previous research on the topic. Style selections, on the other
hand, were seen as a potential deterrent for choral participation. Students wanted repertoire that met their diverse expectations, which included music with faster tempos, different styles, and a higher level of difficulty. The social aspects of choir were highlighted as the most prominent component of the study. Friendships, group experience, and travel opportunities were cited as strong motivating factors for choral music participation.

In an effort to understand boys’ perceptions of junior high singing experiences and their motivations for singing, Lucas (2011) conducted a survey study with adolescent males enrolled in a choral class. The findings indicated that subjects participated in choir because they enjoy singing or perceive they were talented in that regard. Students also reported that they felt supported by their teachers, coaches, administrators, and families to participate in choral activities. Although most of the findings from this study were positive, the boys in this study reported that they received less support from their male peers compared to the support offered by their female peers.

With a similar purpose, Sweet (2010) conducted an intrinsic case study with five middle school boys to learn about their perceptions of singing. Findings from her study aligned with the research regarding the perceived femininity of singing as a deterrent for choral participation. An additional element uncovered during her interviews revealed that harassment from peers was common toward students who chose to participate in choir. Sweet highlighted the fact that the harassment suffered by the participants only came from other boys, never girls. Although all students were enrolled in choir and were successful, they were unsure about their futures in singing, citing a desire to pursue other
interests. Sweet noted that students choose to join choir for a variety of reasons, and the same was true as to why they departed.

Although Sweet (2010) highlighted a level of interest and proficiency from the participants in her study, the students themselves were unsure about music’s place in their future academic careers. As students seek to establish their identity during adolescence, they choose to engage in or disengage in a variety of activities. The expectations placed on students by their teachers, parents, and peers can have a powerful impact on their choices (Sweet, 2016). In some cases, the physiological changes associated with adolescent development can have a negative impact on singers as well, which is often highlighted as one of the main reasons boys forfeit singing activities during adolescence.

**Adolescent voice change.** As children approach adulthood, they enter a stage of biological development that brings with it many modifications to their physiological being (Cooksey, & Welch, 1998). A specific development associated with puberty is the increase of vocal fold length for both boys and girls, and an increase in vocal fold thickness for boys (Davids, & LaTour, 2012). These changes occur at various times and at various rates of speed, often leaving adolescents with a new voice to explore (Cooksey, & Welch, 1998; Fitch, & Geidd, 1999). Although this change happens in boys and girls, the audible difference is more prominent in males (Fitch, & Geidd, 1999). This is because their larynx will grow larger than their female counterparts and their vocal folds will become thicker (Davids, & LaTour, 2012). Due to the potential difficulty associated with controlling the vocal mechanism during the voice change, research points to the changing
voice as a cause for boys forfeiting choral activities (Freer, 2008; Mizener, 1993; Szabo, 1999).

Freer (2008) highlighted what we know about the boys’ changing voice by reviewing information found in *Music Educators Journal* articles from 1914-2007. Freer stressed the importance of teaching voice physiology to students, which was mentioned as a potential aid to assist students during the voice change process. The article also mentioned teaching and recruitment strategies that have been used to encourage male participation in choir, which included single-sex ensembles for student comfort during vocal exploration, and repertoire and pedagogy to enhance the overall choral experience.

Addressing masculinity within the choral ensemble was specifically highlighted, along with the need to enhance the masculine experience for male choir students. Several featured articles encouraged teachers to emphasize the masculine elements of choral music participation or to incorporate masculine elements, like sports analogies, in an effort to retain boys in choral music ensembles. Additional resources were offered for teachers as a way to help alleviate concern for adolescent boys, and to educate teachers to be better equipped to work through potential problems associated with the voice change. Boys approaching puberty know little about the voice change process (Ashley, 2008) and research has revealed the importance of teaching boys about the physiology of the voice throughout the voice change experience (Freer, 2008). This educational practice was reported to help them better understand what was happening physically, and allow them opportunities to correct and control the vocal mechanism (Freer, 2007, 2008, 2009; Mizener, 1993).
Mizener (1993) found similar results, again highlighting the imbalance of males to females in choral participation and noted that this trend seemed to establish itself during adolescence. This study surveyed 542 third through sixth-grade students about their attitudes toward singing and choral music participation as well as their singing skill. Results indicated that a large majority of students enjoy singing, 78%, but that singing interest declined with the progression of age. Mizener also found that a significantly larger proportion of girls than boys were interested in choral music participation. Not having friends in choir was also highlighted as a major hindrance for choral music participation. Like Freer (2008), the results from this study also addressed the importance of educating young singers, especially males, about the physiology of the voice change in an effort to enhance their choral music experience.

In order to better understand boys’ reluctance to participate in choral music, Freer (2009) continued his research and conducted a study utilizing Csikszentmihalyi’s (1975, 1990) flow theory to explore its impact on choral music participation. The idea behind flow theory is that it provides enough challenge for students that they are not bored or overwhelmed but not so much challenge that they feel unable to meet expectations.

Six adolescent males were interviewed about their views on choral singing. The six males were comprised of three groups: current singers, former singers (who had dropped out), and those who never sang. Participants relayed that self-consciousness during the voice change was a large concern to overcome in their development as singers. The insights offered by the subjects were quite fascinating, again highlighting the importance of teaching voice physiology. Additionally, participants commented on the
desire for challenging musical experiences as well as the need for feedback from their teachers. Participants wanted to know specifically what needed improvement along with strategies for how they could advance their musicianship.

In a more recent study, Ashley (2013) investigated the problem of the boys changing voice in British schools. He commented on the unpredictable nature of boys’ changing voices and suggested that the voice change process is largely to blame for the lack of male participation in school choral music programs. Drawing information from a larger multiple case study that included 25 schools, he illustrated the findings using five case study vignettes. Schools that had a successful track record with boys who sing were selected in order to better understand what was happening in those programs to encourage boys’ singing. The results indicated that the success was mostly due to the following situations: single-sex opportunities for singing, a school culture that supported singing for both boys and girls, and singing experiences that supported and encouraged the exploration of the singing voice.

Another factor that was found to be beneficial was an enthusiastic and knowledgeable educator working one-on-one with students and utilizing a systematic approach to developing the adolescent changing voice. There was also a marked difference in singing comfort and participation by boys in independent schools as opposed to state schools; the former having a higher rate of participation. Independent schools were highlighted as having strong ties to the English choirboy approach to choral music education, which encouraged a greater participation rate in choral music by boys.
Although some research suggests that the adolescent changing voice is a main deterrent for boys choosing not to participate in choral music, some researchers have found differing results. In a study by Fisher (2014), sixty male students from grades six through eight participated in a study on how the voice change, grade level, and experience impact singing self-efficacy. The results indicated that participation in choir increased singing self-efficacy, but the changing voice seemed to have no impact on singing self-efficacy. The author noted that his findings could indicate that students may choose to leave choir for reasons other than the voice change process.

Killian (1997) found similar results by investigating the voice-change process of adolescent boys as well as adult men. Participants were asked to speak about their voice-change experiences. Both singers and self-identified non-singers were selected for this process, and contrary to previous research on this topic, Killian found that more than 80% of the men from this study had a positive or neutral reaction to the voice-change experience. The author found that this positive association was largely due to an increased interest from women after their voices had changed. Killian also highlighted that singers were much more sensitive and aware of the voice change process than their non-singing peers. The author recognized that the voice change experience was different for every individual and that may have accounted for the differing responses from participants on the male changing voice.

Another factor related to the changing voice that has had an impact on the participation rates of boys during adolescent development is the historical treatment of the voice change process. Many educators argue about whether or not boys should be
singing while their voices are experiencing such a dramatic change (Brinson & Demorest, 2014; Davids & LaTour, 2012). There is a rich tradition of all-boy choirs in the United Kingdom (Ashley, 2006) with many choral instructors having advocated that their male students cease singing activities during the process of voice change. (Davids & LaTour, 2012). Teachers who discourage their adolescent male students from singing during the voice change process would negatively impact the number of boys singing during the early stages of adolescence. Since the primary function of most choral ensembles is public performances, the representation of boys who would be allowed to sing would be much smaller than that of girls who were able to continue singing throughout the voice change process. This lack of choral participation by males at such a pivotal time in development may have contributed to the perception that singing is for girls.

Fortunately, not all teachers encourage their male students to forfeit singing activities during the voice change process (Davids & LaTour). Many teachers fully support the notion of singing through vocal development (Brinson & Demorest, 2014; Cooksey, 1993; Davids & LaTour). It is, however, important that teachers be patient when working with their students and work to acquire sufficient knowledge about the voice change process. Research on the topic of male voice change encourages choral educators to teach their students about the physiology of the voice so students can better understand the overall process and how they might overcome vocal difficulties (Freer, 2007, 2008, 2009, 2015). Students who understand what is happening to them and how best to approach vocal troubles will find greater success through and beyond the process of voice change.
Gender stereotypes in music. Although the voice change process has garnered much attention from the choral education community, more recent research has offered an alternate viewpoint for the lack of men in choral ensembles. Gender stereotyping in choral music has been cited as a major deterrent for boys (Hall, 2005; Harrison, 2004a, 2007; Kennedy, 2002; Sweet, 2010; Szabo, 1999; Warzecha, 2013). Research has found that many men view choral music as a feminine activity, and are therefore not interested in participating, as it seems incongruent with their masculine identity (Hall, 2005; Harrison, 2004a, 2007; Kennedy, 2002; Sweet, 2010; Szabo, 1999; Warzecha, 2013). Hall (2005) found that students as young as five years of age already have established gender stereotypes about instruments and the singing voice, and Harrison (2007) found similar results in a study of the same nature.

Abeles and Porter (1978) conducted the first study to investigate gender associations with musical instruments. Their approach was to investigate instrument preferences by sex, as well as explore the gender associations people have of different instruments. Although the authors pointed to the fact that sex-stereotyping of instruments could be clearly seen among adolescents in their instrument selections, this study utilized children and adults to answer their research questions. This study included four components. Study one asked adults to select top instrument recommendations for females and males respectively. Clarinet, flute, and violin were dominantly selected for girls, whereas drums, trombone, and trumpet were selected for boys. The second study used the same instruments from the first study (which also included cello and saxophone, but were not significantly sex-stereotyped) and asked college students to rank them on a
masculine/feminine continuum using a paired-comparison ranking. The results indicated the following order from feminine to masculine; flute, violin, clarinet, cello, saxophone, trumpet, trombone, drum. The third study asked children to rank their instrument preferences. The results indicated that boys and girls differed significantly on instrument preferences, but that the interaction was weak with kindergarten students and strengthened as children aged. Study four built on the information from study three and presented instruments to young children in a non sex-stereotyped manner. Results indicated that both boys and girls predominantly selected masculine typed instruments, while girls chose a wider variety of instruments. The authors concluded that gender stereotypes associated with instruments are consistent with children and that a contributing factor could be the way in which the instruments are presented to students.

Based on the work of Abeles and Porter (1978), Griswold and Chrobach (1981) reexamined the sex-role associations of musical instruments and found that harp, flute, and piccolo were rated as feminine, while the trumpet, string bass, and tuba were rated as masculine. The article also warned of the dangers instrument stereotypes could hold in regard to future musical pursuits, specifically citing music professions. In addition to the instruments included in the original Abeles and Porter (1978) study, additions were made, most notably, including categories for instrumental conductor and choral conductor. Instrumental conductors were viewed as masculine while choral conductors were viewed as feminine.

Zervoudakes and Tanur (1994) conducted a nationwide study to investigate whether student instrument selections continued to match those found in Abeles and
Porter’s (1978) study. Concert programs from the previous 30 years were requested from elementary, high school, and institutions of higher education. Student names were coded according to instrument type and biological sex. Results indicated that the number of females playing all instruments increased over time, which indicated that girls were increasing in their involvement in instrumental music. However, when controlling for that increase in participation, the researchers found that for high school and college aged students, girls playing “female” instruments increased, while girls playing “male” instruments either remained the same or decreased over time. This study indicated an increase in the gender stereotypes associated with instrument selection for high school and college students, but not for elementary students.

In an effort to determine if these predominantly held gender stereotypes exist in young children, Marshall and Shibazaki (2001) conducted a study with very young children. This study explored the interactions between gender, instrument, and musical style. Gender stereotypes associated with instrument selection were consistent with previous research. This is interesting to note because this study was conducted more recently than some of the others, and the participant group utilized in this study was three and four year olds. This study extended the range beyond instrument selection to also consider musical style preferences when paired with the different sexes.

In a 2002 study, Cramer, Million, Perreault aimed to see if gender stereotypes of certain instruments still existed. The authors found that although there did seem to be a shift in perceptions of atypical gender instrument selection, gender stereotypes associated with instrument selection continued to persist. Additionally, females were seen as having
more instrument options than their male counterparts. The findings indicated that it was more acceptable for females to make instrument selections atypical to their sex than it was for their male counterparts.

A number of years later, Abeles (2009) conducted another two-fold study on the gender stereotyping of instruments. It first examined changes in gender stereotyping with regard to instrument selection, and then looked at instrument selection by sex across three studies, spanning a 30-year range. Results indicated that gender stereotypes were losing strength over time and that females had a wider pool of accepted instrument choices than males. Although the gender stereotyping of instruments was not found to be as strong as it once was, sex-by-instrument distribution failed to show differences across the three studies, which were from 1978, 1993, and 2007.

Wych (2012) found similar results in a review of the literature, which highlighted several studies on the gender stereotyping of instruments. The article included sections on gender typing, instrument preference, opinions on gendered stereotypes of instruments, instrument selection influences, gender stratification, and gender typed perceptions and theories. The author concluded that gender stereotypes associated with instrument selection still existed. However, like Abeles (2009), the results suggested that those stereotypes were weakening over time.

In an effort to further study gender stereotypes associated with instrumentation that persist during adolescence, Abeles, Hafeli, & Sears (2014) examined computer-mediated communications (CMC). Examples of CMC included blog posts and YouTube comments, which were studied qualitatively to discern adolescent attitudes toward
musicians playing atypically gendered instruments. Harassment from peers was discussed as well as the social perception among adolescents about gender stereotypes pertaining to instruments. Six themes emerged from the data and included:

- provide mutual support, seek out role models, highlight the relationship between physical appearance and playing a specific instrument, comment on musicians of the opposite sex, examine the relationship between music genre and musicians’ gender, and debate sexual orientation issues related to instrument choice (p. 352)

This research study found that gender stereotypes for instruments still exist in youth culture. However, they also found that these forums provided some positive reinforcement for atypical gender instrumental performances and interests.

In looking to connect the idea of gender stereotyping to instrument selection, Sinsel, Dixon, & Blades-Zeller (1997) used the Children’s Sex Role Inventory (CSRI) to identify, what they call, psychological identity or psychological sex type, and paired it with instrument preferences. The results indicated that those who identified as masculine preferred masculine typed instruments, those who identified as feminine preferred feminine typed instruments, and those who identified as androgynous students had a preference for neutral typed instruments. A noteworthy point made by the authors was that females tended to dislike low instruments and males tended to dislike high instruments. The authors believed this could be associated to the voice type of the different sexes and a preference for the sound, high or low, associated to your sex.

**Gender stereotypes in singing.** As gender-stereotyping research in instrumental music began to indicate that certain instruments, including the voice, were viewed as
feminine (Harrison, 2007), researchers began to explore this idea more fully within the realm of choral music (Ashley, 2006; Elorriaga, 2011; Green, 2001; Hallam, Rogers & Creech, 2008; Hall, 2005; Hanley, 1998; Harrison, 2004b, 2007; Koza, 1993; Powell, 2014; Turton and Durrant, 2002).

Turton and Durrant (2002) wanted to explore the lack of singing happening in secondary British schools. In an effort to uncover valuable insights, sixty adults aged 20-40 were interviewed about their perceptions of singing experiences during adolescence. When asked to provide reasons for not enjoying their school singing experiences, the highest response from male participants regarded insecurities about the singing voice, specifically being asked to sing in a higher register. This finding can be tied to the results from the Sinsel, et al. (1997) study in which girls associate more closely with high-pitched instruments while boys prefer low-pitched instruments. Despite the variety of responses from the random sample used, every respondent stated that they thought singing in schools was a worthwhile endeavor.

A study by Hallam, Rogers, & Creech (2008) echoed the sentiments offered in other similar studies, stating that gender stereotypes associated with instrument selection exist across a range of ages and cultures. Although the authors of this study were primarily gaining information about gender preferences across multiple instruments, the most interesting information pertained to the voice. In looking at the results, boys and girls in the first stage, ages five to seven, viewed the voice equally, to suggest a gender-neutral perception. However, as age increased, there was a substantial shift in how the voice was perceived, with a final result of girls dominating in voice interest with an 80%
female participation rate. The authors highlighted three reasons why gender stereotypes associated with instrument selection may exist: social, individual, and instrument factors.

Harrison (2007) conducted a study also aimed at investigating gender stereotyping with instruments, where singing was included. This explanatory mixed methods study contained two parts and included college aged men and women who both did and did not participate in music. First, a quantitative phase was conducted to survey participant perceptions of instrument gender stereotypes. After data analysis, a group of male participants were selected for a case study follow-up where they discussed their experiences with school music. The results pointed, again, to the idea that choral music was viewed as a feminine activity. In addition to the femininity perception, qualitative results showed that harassment from classmates was highlighted as a major deterrent for several students. Harrison noted several strategies to help overcome the feminine gendered perception of choral music, which included: a variety of role models, proper training, high quality and respectable music, and varied musical opportunities for both boys and girls.

An article by Hall (2005) echoed findings on the gender stereotyping that is prevalent in choral music. The focus of the study was to examine whether or not gender stereotypes existed and to learn if peer-models could have a positive impact on the ability level of singing and perception of choral music in young singers. Gender stereotypes were found to exist in these young students who were 5 years old. However, in this study peer modeling was found to be an effective and useful technique for improved singing ability and acceptance of singing by boys and men.
A 1993 article by Koza addressing the “Missing Males” problem in music education provided an overview of information related to gender issues in music education from ten years of the Music Supervisors Journal. Although the article focused on the years 1914-1924, the author highlighted several instances where boys were encouraged to participate by some form of masculine encouragement. The author noted that although the discussion on the missing males problem was noteworthy, females were noticeably absent from discussions or recruitment efforts. This lack of coverage, and in some cases negative byproducts of male encouragement efforts, was highlighted as problematic.

Moore (2008) emphasized the imbalance in choral programs between boys and girls and echoed Koza’s (1993) sentiments that the continued focus on boys in choir could be detrimental to the female singing population. Her autobiographical narrative focused on her gender identity as both a female trombonist and a female choral musician. She recounted her feelings in each respective ensemble experience as well as her experiences as a music educator. She concluded that it was important for students to develop their own sense of gender identity, regardless of musical stereotypes.

In response to the surge in research coverage over females in choral music education in the 1990’s, Harrison (2004b) investigated gender research in music education during that time. The article mentioned a larger body of research geared towards females in music education and cited a lack of focus on males and their musical education needs. The author was not looking to pull focus from research on females, but rather hoped to encourage equal coverage between the sexes in an effort to provide
quality and equal music education experiences for all students. The author mentioned the devalued nature of femininity in the hierarchy of school culture and acknowledged the difficulty, especially for boys, to engage in activities or behaviors seen as atypical to one’s sex. It was noted that musical ensembles that contained an element of competition were seen as more masculine because they afforded the opportunity to assert oneself over others. Additionally, highly select ensembles offered the same type of challenge and reward system and were also seen as providing a level of masculinity beyond the perceived feminine nature of the activity in question. The authors pointed toward the need for educators to create a sense of community within their programs and to educate students, parents, and teachers about the benefits and positive experiences students could have in choral music.

As the perception of choral music lacking a masculine element began to surface, Ashley (2006) conducted a study on “doing boy”. This idea aimed to explore how boys were able to represent their masculinity in a choral setting. Unchanged voices were viewed by some as very feminine in nature and could lead boys who want to align to masculine standards disinterested in choral pursuits. The author noted the strong, all-male choral tradition in the United Kingdom (UK), but recognized that it was beginning to wane. The author concluded that the male choral tradition, which historically excluded females, might have helped establish singing as a masculine activity. However, with rising interest in equality, many church choirs who once held to an all-male tradition were beginning to allow females to participate. This advancement in equality between the
sexes was suggested by Ashley to have potentially led to the decline of male participation in choral music.

Elorriaga (2011), like Ashley (2006), also found that boys disliked their high, unchanged voices because they associated it with femininity. The boys interviewed in this study also favored the changed voice, enjoyed singing with their male peers, and sought approval from their female counterparts. Elorriaga investigated the impact of one’s self-concept on singing interest, citing a need for success in order to continue with singing activities. He went on to discuss the development of vocal identity and how that can influence one’s gender identity. Through a qualitative grounded theory analysis, the author explored why boys did not seem to be as interested in singing as their female counterparts. An action research follow-up to the study showed that boys value the experience of singing with other boys as it offered them more confidence in their own singing voice.

As mentioned previously, teachers can have a large impact on the successful choral experiences of their students (Ashley, 2011, 2013; Freer, 2006, 2015). Green (2001) recounted a study she completed in 1992 (Green, 1993), which explored the perceptions of boys and girls in relation to choral music. In her research, she found that the majority of teachers believed girls were better at singing and that participation rates were far higher for girls than boys. Teachers also commented on boys’ excellence in composition and found girls to be lacking in compositional creativity. Student participation in choral music as well as student perceptions were in alignment with the observations made by teachers. In fact, students echoed the same teacher beliefs with
commentary to the effect that singing was for girls.

Green’s qualitative inquiry also supported research on the gender stereotyping of instruments. Many girls in this study reported playing flute and violin while many boys reported playing, or had an interest in playing drums or other vernacular instruments. This section of the research is particularly interesting since in the mid-eighteenth-century women pursued voice and guitar while men studied viol and flute (Labuta & Smith, 1997). This information provides further evidence that the gendered perceptions of both instruments and the voice are due to societal expectations and not biological foundations.

Additional dichotomous findings from the Green (2001) study showed girls preferring slow, classical music with an interest in the affective properties of music. Boys, by contrast, were more interested in up-tempo, pop music and an avoidance of their music lessons. Participants indicated that avoiding music lessons was important as to not offer their peers an opportunity to question their masculinity.

Hanley (1998) conducted a replication of Green’s (1993) study, which sought to elicit the perceptions teachers held of boys and girls in music. Questionnaires were distributed to all music teachers in British Columbia. Regarding gender, respondents stated that musical opportunities for boys and girls were equal, regardless of whether or not students elected to participate. The author echoed similar findings that singing was viewed as feminine and therefore, unmanly and not to be pursued by boys.

A case study by Powell (2014) investigated the perceptions of students regarding masculinity as it pertained to singing in a choral setting. The author echoed similar findings commenting on the feminine perception boys have of singing and pointed to this
perception as a major deterrent for boys to pursue singing endeavors. Powell conducted individual and focus group interviews with four different choirs; three all male and one mixed. The choirs spanned a large range of ages, from junior high through age 70.

Emerging themes included: stereotypes, physicality, and mateship. The theme *stereotypes* highlighted labels often associated with choral music participation like “unmanly” (p. 5) or “boys only” (p. 5). The stereotypes highlighted were dependent on the ensemble culture with some being positive and some being negative. The second theme, *physicality*, highlighted an interest by boys and men to be physically active, whether that was manifested through general movement or participation in sporting activities. The final theme of *mateship* represented a feeling of closeness and a sense that the choir members were all part of a brotherhood of men.

Highlighting the final theme of *mateship*, the men in the fourth choir commented on their interest in close male relationships and stated that their choral experience provided a safe, heterosexual environment in which to build those relationships. It is important to note, however, that the participant age range in that choir, which was 40-70, was significantly higher than the junior high group. Additionally, perceptions were largely dependent on the context and whether or not participants were willing to redefine gender norms, which was more likely as age increased.

Also interested in better understanding the feminine perception of the singing voice, Legg (2013) utilized qualitative data from a mixed methods study to provide a fictional narrative account of the experiences of adolescent boys regarding gender and singing. Although the narrative was fictional, it captured the perceptions of male students
in secondary schools. The emergent themes from this study indicated that adolescents often struggle to find the balance between vulnerable exploration and the anxiety they feel which was often tied to fear and humiliation. Legg also noted that although participants had an awareness of the perceived feminine nature of singing, they did not fully adhere to that belief. The author concluded by highlighting the need for continued research regarding singing and gender within schools.

Although a variety of participants offered perceptions from across the UK, it is clear that many view singing as a feminine activity. For boys who are working to assert their own masculinity during adolescent development, engaging in an activity that is pervasively viewed as feminine can be difficult. The next area of exploration is whether or not differences in femininity and masculinity are a matter of biology or societal expectations.

**Gender Identity Development**

Throughout the history of research in the field of psychology, there has been a debate about how best to define the terms *sex* and *gender* (Glasser, & Smith, 2008; Meuhlenhard, & Peterson, 2011). The debate about gender lies in how the term is understood and defined. Some feel that gender is the social representation of what is expected from you based on your sex (Bem, 1981; 1993; Eagly, 1987a, 1987b; Eagly, Wood, & Diekman, 2000; Kohlberg, 1966), while others would categorize it as a personal psychological distinction which is sometimes influenced by cultural expectations and sometimes by the hormonal byproducts of one’s biological development (Fausto-Sterling, 2012; Fitch, and Bimonte, 2002; Hawkins, Pia Miller, & Steiner, 2003;
McCredie, 2012; McEwan, 1999; Talbot, 1998). Others simply use the two terms interchangeably leading to increased confusion (Meuhlenhard, & Peterson, 2011). Part of the reason why there is such a debate about the terms *sex* and *gender* is because researchers cannot agree whether the psychological distinctions between boys and girls are due to biological factors or societal influence.

**Gender as a social construct.** In an effort to clarify some of the confusion, Bem (1981) set out to test her Gender schema theory. She suggested that young children develop a schema, or cognitive structure, from a variety of sources. In turn, that learned belief system affects cognitive processing and can alter the way information is perceived from person to person. This theory was tested during a research study by asking participants to recall words that contained gender associations. Participants completed the Bem Sex Role Inventory (BSRI) and were selected into sex-typed categories prior to completing the word recall activity. Those whose results on the BSRI matched their sex were considered sex-typed, while those whose results were opposite were categorized as cross-sex-typed. Participants who scored high on masculinity and femininity were categorized as androgynous while those who scored low on both masculinity and femininity were categorized as undifferentiated. The sex-typed group showed significantly better recall than the other groups. The speed of response from sex-typed individuals was also quicker for congruent responses and slower on incongruent responses than the other groups. These results indicated support for Bem’s gender schema theory.
In an effort to further support her gender schema theory, Bem (1993) continued her research and discussed the construction process of one’s gender identity. She cited historical precedence as a potential catalyst for the behavioral distinction between the sexes. When considering American history, Bem noted a distinction between the types of jobs deemed appropriate for men and women, which encouraged the solidification of gender-polarizing social behaviors. The culture, based on labor options for men and women, dictated how boys and girls were to be raised. Adults encouraged children to act in gender appropriate ways, and reprimanded them when they did not act accordingly. Bem reiterated her gender schema theory as something learned by children that colors how they view themselves, their surroundings, their relationships, and ultimately affects how they will conduct themselves as children, adolescents, and adults. Bem also noted the cultural acceptance for girls and women to participate in atypical gender behavior, but a strict expectation for boys and men to adhere to masculine gender norms. Bem called for a more neutral stance on gender between the sexes. She believed the overall distinction between boys and girls was biological, and that the psychological differences seen between boys and girls, and men and women, were driven by societal expectations.

Following the early work of Bem, Biddle (1986) outlined developments in role theory, citing differing views by various researchers concerning definitions, assumptions, and explanations used to describe role theory. Among many types of role theory, Biddle highlighted cognitive role theory. Cognitive role theory suggests the idea of role expectations, in many different areas, and how those expectations can influence or dictate
behavior. Lindsey (2015) agreed by pointing out that "Sex is an ascribed status because a person is born with it, but gender is an achieved status because it must be learned" (p. 4).

Eagly (1987) also focused her efforts in the cognitive area and created, what she termed, Social Role Theory. Social Role Theory contended that the behavior differences observed in men and women were the result of expectations prescribed by a given society. This theory was in agreement with the work of Bem by supporting the notion that society has played a crucial role in the dichotomous nature of behavior differences in America between boys and girls. These expectations, which are set by each culture, result in men and women conforming to socially acceptable, but differing roles (Eagly, 1987a; Eagly, 1987b; Eagly, Wood, & Diekman, 2000).

Speaking specifically to the idea of masculinity, Connell (2008) highlighted a line of research that indicated numerous characteristics for how different cultures define masculinity across different periods of time. The author reported that there was no set definition or group of characteristics to define masculinity, which offered support to the idea that masculinity and femininity are socially constructed ideals. The different cultures mentioned represented a number of experiences; from country to localized community, and from school to different social groupings within that school. The author noted that not only does the representation of masculinity change across time periods, it also has the potential to change throughout one’s lifetime.

**Gender as a biological construct.** In contrast to gender schema theory and social role theory, is the belief that biological differences can and do affect psychological processes, and by extension, responses, actions, and social interactions. Cognitive
research focusing on differences in male and female brains provides evidence that hormonal differences in men and women are byproducts of their biological differences. These differences in brain chemistry, as well as the hormonal differences in testosterone and estrogen output, influence the behaviors and interactions of people within society (Fausto-Sterling, 2013; Fitch, and Bimonte, 2002; McCredie, 2012; McEwan, 1999).

In an effort to support the notion that behavioral differences between men and women are the result of biological sex differences, a 2014 study (Ingaghalikar et al., 2014) investigated white matter differences between men and women. Diffusion imaging was used to study the brain mapping patterns of participants (n=949, m=428, f=521) in this study who ranged in age from eight to 22 years of age. Results indicated distinct differences in white matter between men and women with men having higher levels of connection within brain hemispheres and women having higher levels of connection between the two hemispheres. Additionally, behavioral studies were conducted with all participants and revealed that women performed better on memory exercises and men performed better on tests of spatial processing and motor and sensorimotor speed. An important contribution by this study indicated that the observed differences in brain mapping and behavioral performance became more pronounced at the onset of puberty.

Hormonal changes that occur naturally during puberty have been shown to enhance differences between men and women. In highlighting the impact of biology on gender development, McCredie (2012) recounted the famous John/Joan story. This story featured twin brothers, one of whom suffered a surgical accident in infancy resulting in the loss of his penis. John Money, a specialist in gender psychology, encouraged his
parents to raise him as a female believing nurture and societal expectations would allow Joan to grow happily as a female. Throughout Joan’s childhood, she reported that she didn’t feel right being raised as a female and, without knowledge of her past, struggled to maintain her feminine gender identity. This became increasingly more difficult for her at the onset of puberty despite the fact that she was receiving hormone therapy to maintain her feminine identity. Eventually she was told the truth and made the choice to transition back to a man. Due to the fact that Joan was an identical twin who provided a baseline, this experimental story offered support for the idea that sex and gender can be linked biologically and psychologically.

Another story presented by McCredie (2012) offered perspectives from Aram, a biological female who chose to transition to a male. He recalled his transitional experience and noted having a hard time controlling his emotions due to the testosterone injections he was receiving. This verbal account of his struggles, again, offered support for the idea that the biological differences between men and women and the associated chemical differences in testosterone and estrogen output have an impact on behavior, and ultimately each person’s role within society. Aram specifically mentioned that prior to his transition he believed that gender was a social construct, but after his transition, he was no longer sure that that was the case.

Although Lindsey (2015) favors the belief that societal influence has an impact on behavior differences between genders, she does acknowledge the difficulty in attempting to separate influences of biology and society. Simply put: "There is consensus among biologists and social and behavioral scientists, however, that sex differences in behavior
involve a complex mosaic of nature and nurture. Biological inheritance and social experience cannot be independent of one another" (p. 34).

**Gender intensification.** Another important element to consider in regard to gender identity is its level of growth or maintenance over one’s lifespan. Hill and Lynch (1983) discussed the intensification of gender-specific role expectations during adolescence in what was called gender-intensification. The hypothesis revolved around the idea that as boys and girls approach and navigate through puberty, they become more aware of social expectations associated with their sex. As a result of this heightened social awareness, adolescents were more likely to conform to social-role expectations. Although the authors stated that their findings support the gender-intensification hypothesis, they did acknowledge that many factors could have impacted the results.

In an effort to test the gender-intensification hypothesis, Galambos, Almeida, and Petersen (1990) explored the relationship of sex, pubertal timing, and sex-role stereotyping beliefs in adolescent children. The results of this longitudinal study supported previous findings of gender intensification as children age, especially in regard to boys aligning more closely with masculine traits and sex role attitudes. The authors also found that although boys aligned with masculinity and females with femininity, the masculinity scores of boys increased significantly as they aged, but the same was not true for girls, who maintained a similar level of femininity over time.

In a more recent study, Priess, Lindberg, and Hyde (2009) also investigated the dichotomous nature of gender-role identity between boys and girls during adolescence. This study utilized the CSRI to measure gender-identity in grades 5, 7, & 9 as part of a
longitudinal study, which explored Hill and Lynch’s (1983) gender intensification hypothesis. The gender intensification hypothesis contended that as adolescents go through puberty they face greater pressure to conform to socially prescribed sex-roles and therefore adhere to demonstrating appropriate behaviors and the accompanying socially appropriate actions based on their sex.

The results from this study, however, did not align with the gender intensification hypothesis and found that gender-role identity did not increase during adolescence. They also found that it was more common and socially acceptable for girls to take on “masculine” traits than it was for boys to take on “feminine” traits. The authors also mentioned that society had evolved since the time of the gender intensification hypothesis (1983) and that gender stereotypes were beginning to lessen over time. The authors contended that societal changes could have led to the results of this study. However, less than a decade before, Lueptow, Garovich-Szabo, and Lueptow (2001) studied sex-role stereotyping trends from 1974-1997 and found that social acceptance of atypical behavior did not impact stereotypical sex-role expectations. This research indicated that changes in behavior between men and women remained constant in the face of societal acceptance of atypical gender behavior.

In an effort to further study changes in the attitudes and perceptions of adolescents, Wells and Twenge (2005) conducted a meta-analysis of research articles published on the topic of young people’s sexual behavior and attitudes between 1943-1999. Although the article focused on sexual behavior and attitudes, the authors found significant differences in both the sexual behavior of adolescents as well as their views on
sexual activity. Results indicated that as time progressed across the span of research, young people’s attitudes became less rigid in regard to the social expectations surrounding sexual activity.

In a more recent study, Galinsky, Aumann, & Bond (2012) also found that attitudes were changing in regard to work and family interest and responsibilities. This was found to be specifically true among the Millennial generation. Their study indicated that women and men of the Millennial generation were equally interested in pursuing jobs with more responsibility, which was in contrast to previous research findings. Additionally, this study found that men and women were less likely to conform to traditional gender roles related to family responsibilities and Millennials were more open to either spouse being the primary earner and primary caregiver.

**Measurement Instruments**

An important distinction to ponder moving forward is whether or not biological changes during adolescence are the primary catalyst for difference, or if heightened social awareness and societal expectations meant to increase the gender divide are responsible. In an effort to explore gender differences between boys and girls, it was important to locate a measurement tool that would allow such differences to be recognized. One of the instruments used in this study was the Children’s Sex Role Inventory (CSRI). This instrument is based on a well-known test designed to measure self-reported levels of masculinity and femininity, the Bem Sex Role Inventory (BSRI). Background information on both instruments is provided here in detail.
**Bem Sex Role Inventory.** The Bem Sex Role Inventory (BSRI) was an instrument created by Sandra Bem (1974) to independently measure masculinity and femininity. The instrument differed from other masculinity-femininity scales because it included separate masculine and feminine scales while also signifying that the different scales were based on the social desirability of different sex-typed characteristics. The instrument was created by generating lists of personality characteristics and surveying people about whether, from societal standards, they were viewed as masculine or feminine. Masculine characteristics were identified if both men and women rated them significantly more desirable for men. Likewise, feminine characteristics were identified if both men and women rated them significantly more desirable for women. Neutral items were also included in the inventory and were selected for that scale if they were found by both men and women to be neither masculine nor feminine.

Once the desirability rating had concluded, the final inventory consisted of 20 traits that were viewed by society’s standards as masculine, 20 characteristics that were societally viewed as feminine, and 20 traits that were neutral. Once the inventory items were selected, they were randomly ordered for use. Each question was answered using a seven point Likert scale ranging from one to seven, with one indicating never or almost never true, and seven indicating always or almost always true. Participants were asked to identify how well each item described them, signifying the gender norms they associated with most. The original instrument was designed to provide a masculine score, a feminine score, and a social desirability score (Bem, 1974).
Females scoring high on femininity and low on masculinity were categorized as feminine, while males scoring high on masculinity and low on femininity were categorized as masculine. Participants falling into one of those two categories were deemed sex-typed while those who scored similarly but to the opposite sex were categorized as cross-sex-typed. With masculine scores on a negative spectrum and feminine scores on a positive spectrum, androgyny scores were calculated by how close scores were to absolute zero. Therefore, participants were categorized as androgynous if they had high masculinity scores and high femininity scores (Bem, 1993; 2005). This, however, did not account for participants who scored low on masculinity and femininity.

Shortly after the creation of the BSRI, Whetton and Swindells (1977) conducted a factor analysis of the BSRI to check its validity and reliability as a measure of androgyny. Although the results of their analysis supported Bem’s idea of male and female differences, the authors believed her argument was weak and simplistic. Following the criticism of her inventory, Bem (1993, 2005) later redefined the scoring system to assign participants into one of four categories: androgynous, undifferentiated, masculine, or feminine. Those with high scores for masculine and feminine characteristics were categorized as androgynous, while those with low scores for masculine and feminine characteristics were undifferentiated. Subjects who had low femininity scores, but high masculinity scores were categorized as masculine, and conversely, those with low masculinity scores and high femininity scores were categorized as feminine (Bem, 1993; 2005).
Due to the fact that the BSRI was designed in 1974 and was based on American societal standards at that time for masculinity and femininity, Holt and Ellis (1998) set out to investigate the validity of the BSRI. The aim was to determine if the adjectives selected by Bem were still deemed an accurate reflection of masculinity and femininity. The results indicated that all of the masculine adjectives were still stereotypically masculine and all but two of the feminine adjectives were viewed as feminine (childlike and loyal). The authors concluded that the BSRI was a valid measure for sex typing, but found that the difference scores between the original instrument and their study were decreasing; meaning that although the gender stereotypes still existed, they were not as strongly held as they once were. The authors, therefore, believe continued validity checks would be necessary in the future.

Two years later Auster and Ohm (2000) sought to validate the BSRI instrument given new trends in gender stereotyping beliefs. Like Holt and Ellis (1998) the authors found that the difference scores were lessening and that for male respondents, 18 of the 20 feminine traits (excluding childlike and yielding) were identified as stereotypically feminine. All 20 traits were identified by women as significantly feminine. Additionally, female respondents found 18 out of 20 masculine traits (excluding analytical and makes decisions easily) to be categorized as masculine. However, this study found that for male respondents only eight out of twenty masculine traits were identified as stereotypically masculine. The authors also found that the data trend indicated that both men and women believed stereotypically masculine characteristics were desirable for both men and women. It was interesting to note, however, that these findings were stronger for male
respondents than their female counterparts, suggesting a stronger adherence by women to traditional gender roles. Overall, the authors found that gender stereotyped beliefs about sex-typed characteristics still hold true in American society.

Hoffman and Borders (2001), however, were not so forgiving of the BSRI. They conducted a study on the validity of the instrument and found that only the descriptors masculine and feminine were characterized with their respective headings. This study’s participants did not find statistical significance for the other 19 masculine and feminine descriptors. The authors questioned both Bem’s gender schema theory, and the validity of the BSRI.

**Children’s Sex Role Inventory.** As mentioned, the BSRI is an instrument designed to measure a person’s self-perceived level of stereotypically masculine and feminine characteristics. However, that measure was designed for adult populations. Boldizar (1991) set out to create an instrument based off of the BSRI that could be used with children and adolescents. The CSRI was created to measure stereotypical masculine and feminine characteristics in children and adolescents. The 20 items from each list (masculine, feminine, and neutral) were changed from the single words used in Bem’s (1974) model, to self-statements. Additionally, instead of using a seven-point scale, a four-point scale was used where participants were asked to indicate how true or not true each statement reflected them personally. A score of one indicated *not true of me,* whereas four indicated *very true of me.*

Construct validity was first established by having 47 adults complete both the BSRI and the CSRI. Results were correlated and resulted in a .86 correlation for the
masculinity scale and a .89 correlation for the femininity scale. Internal consistency was established by 145 students in third, fourth, sixth, and seventh grades. The results of their study indicated that the CSRI was a valid and reliable instrument to measure children’s self-reported adherence to societally perceived masculine and feminine characteristics.

Despite the varying results on the timelessness of the BSRI and CSRI measurement tools, a 2013 study by Verhofstadt and Weytens utilized the BSRI as a measure of gender identity. It was also used for the same purpose in a 2014 study by Dinella, Feulcher, & Weisgram. As mentioned previously, Sinsel, et al. (1997) and Priess, Lindberg, and Hyde (2009) also used the CSRI to measure gender-role identity. These studies offer support for the continued acceptance of the BSRI and CSRI as measures of self-reported adherence to masculine and feminine gender norms.

**Summary**

Research has uncovered a number of factors that can influence boys in their decision to participate or not participate in choral music experiences during adolescence. A lack of friends and male role models, poor teaching and teacher relationships, and harassment from peers have all been shown to negatively impact boys in their pursuit of choral music participation. Additionally, the voice change process has been repeatedly highlighted as a significant deterrent for boys who wish to excel in choral ensembles. The unstable nature of the singing voice throughout adolescence can cause many singers to feel insecure and inadequate, which in turn has been shown to cause students to abandon their choral music pursuits. The main emphasis of this study, however, was focused on the perceived feminine nature of singing. Although research suggests that stereotypical
gender perceptions are decreasing across time, there remains a pervasive view that singing, when tied to choral music participation, is viewed as feminine.

While the focus of this study concentrated on gender stereotypes associated with singing and choral music participation, it is important to understand what hinders students from participating in choral music experiences throughout adolescence. Examining gender identity and how that relates to singing interest and choral music participation could provide valuable insight to educators. If choral educators knew the potential challenges that adolescents face when choosing whether or not to participate in choral music, they could work to alleviate student concerns and encourage more student involvement in choral music activities.
Chapter 3: Method

“Just sing.”

– Sing (Healy, Hoffman, Khait, Meledandri, & Taylor, 2016)

Mixed Method Overview

There is growing body of quantitative and qualitative research in music education related to the perceived lack of men in choral performing ensembles (Freer, 2008, 2009, 2010; Gates, 1989; Lucas, 2011; Mizener, 1993; Sweet, 2010; Warzecha, 2013), but very little where the two strands are integrated. Additionally, few studies go beyond male choral participants to identify or understand non-participant’s disinterest in choral music participation. Although the field of music education is open to a variety of methodological approaches (Sims, 2012), the utilization of mixed methods research is limited.

Mixed methods research is a methodology that utilizes both quantitative and qualitative data to study a research problem from multiple perspectives (Creswell & Plano Clark, 2011). There are many benefits to incorporating both quantitative and qualitative data. Among them are triangulation, complementarity, development, initiation, and expansion (Greene, Caracelli, & Graham, 1989). Triangulation seeks to offer support for one method, while complementarity seeks additional evidence. This additional evidence is obtained through development by utilizing data from one method to inform and develop the other method. Initiation looks for differing perspectives and expansion seeks to extend our scope of knowledge on the subject (Greene, Caracelli, & Graham, 1989).
The idea behind each of the previously listed benefits is that the strengths of one methodological strand will help to offset the shortcomings of the other. This not only occurs independently in each strand, it also occurs across methods as well (Jick, 1979; Greene, Caracelli, & Graham, 1989). Mixed methods research goes beyond simply using quantitative and qualitative strands of data; the value in a mixed methods design is the merging of the two strands in a meaningful and purposeful manner to better explore and answer research questions (Creswell, 2012; Creswell & Plano Clark, 2011).

In terms of this study, the choice to engage in a mixed methods approach was influenced by the nature and diversity of the research questions. In order to answer these questions as completely as possible, a pragmatic approach, which allows the researcher to engage in both qualitative and quantitative traditions, will be used. The advantage to pragmatism is that it allows the ability to move between two differing worldviews to see each strand through a lens that is appropriate and utilizable for each component of the design (Morgan, 2007; Tashakkori & Teddlie, 1998).

**Design.** The design that was used for this study was an explanatory sequential design. In this design, two distinct phases of data collection were utilized. First, quantitative data were collected and analyzed. The information gained from the first quantitative phase informed the second phase of the design, the qualitative portion. The qualitative data were then used to help explain the results of the quantitative phase (Creswell & Plano Clark, 2011). The rationale for choosing this design was that the quantitative data would provide an overview of the research problem. The qualitative
data and their subsequent analysis would help to provide more depth and understanding by seeking the views of select participants (Creswell & Plano Clark, 2011).

Ivankova and Stick (2007) provide an excellent example of the explanatory sequential design in their research study on students’ persistence in a distributed doctoral program in educational leadership in higher education. In their study they first collected quantitative data through the use of a survey instrument. Upon completion of the data analysis, they selected members of the sample to participate in a case study. This case study was done in order to further explain the quantitative results. Additionally, the quantitative data yielded necessary categorical information on which to base the qualitative follow-up (Ivankova & Stick, 2007). This explanatory model was highlighted for its excellence in Creswell and Plano Clark’s (2011) textbook on mixed methods research and provided the researcher with a stable foundation for how to carry out explanatory sequential mixed methods research.

The timing in an explanatory design is sequential and as such utilizes the information gained from the quantitative portion to drive the second qualitative phase (Creswell & Plano Clark, 2011). The explanatory sequential design typically places a higher priority on the quantitative portion (Creswell & Plano Clark, 2011). However, due to the fact that the results of both phases were unknown at the outset of the study, and the qualitative portion would provide depth of understanding, both strands carried equal weight in helping to answer the research questions. The qualitative portion of this study consisted of in-depth, one-on-one interviews that yielded substantial and rich descriptions of participant views. Data were analyzed separately and merged together during
interpretation (Creswell & Plano Clark, 2011). Utilizing Morse’s (1991) system of notation, the notation for this study was QUAN→QUAL. A more detailed visual diagram of the design for this study is illustrated in figure 2.

![Diagram of the explanatory sequential mixed method design.](image)

**Figure 2.** Diagram of the explanatory sequential mixed method design.

Although the explanatory nature of this design was ideal for this study, it did present some challenges. The major obstacles were time and obtaining participants. Due to the sequential nature of this design, the quantitative data had to be collected and analyzed before the second phase could be constructed and carried out. This required more time than a concurrent design, but the sequential nature of this design was
necessary in order to answer the research questions. The advantage of the explanatory design, however, was that a smaller team could complete this type of design because it occurred in two separate phases (Creswell & Plano Clark, 2011).

An additional challenge in the explanatory design was in obtaining IRB approval. With the qualitative portion depending on the quantitative results, it was difficult to prepare for how the qualitative portion would be carried out. Additionally, participant selection was dependent on the quantitative portion and could not be prepared for in advance. Another challenge to overcome was reduced anonymity for the qualitative participants, previously afforded them in the quantitative portion of this study (Creswell & Plano Clark, 2011).

Although the anonymity of all students could not be protected in this study, all research materials were kept confidential. Interviews were conducted in a private room and interview recordings and print data were kept secure by the researcher. Additionally, research results and interview transcripts were kept on a password protected computer to further enhance the confidentiality of the data and the anonymity (when possible) of participants. Approval for this project was obtained through the IRB.

**Quantitative Strand**

**Overview and participants.** The quantitative portion of this study was designed to explore the effect of sex and gender identity on adolescent interest in singing. Participants in this study included a sample of 9th grade students from a purposefully selected high school in the Midwest.
All students from a 9th grade class who did not have a returned notification form on file with the school were invited to participate in the study. Cover letters and notifications forms were prepared by the researcher and provided to the school. The school labeled and mailed materials to parents and guardians of all 9th grade students. Three days after parent notification had occurred, participants were invited to participate in the study. The school coordinated the distribution of the survey via a link on their webpage. Freshman advisors were provided with instructions and proctored the survey.

In order to be contacted for the qualitative follow-up portion of the study, all students were asked to provide their student ID numbers. A confidentiality and anonymity statement accompanied that request so students could feel secure about their responses. Students who indicated an interest in participating in the qualitative follow-up did so on their survey. Students of interest for the qualitative portion were contacted through the school for their participation in the follow-up. A list of ID numbers for potential qualitative participants was prepared and provided to the school. The school delivered consent forms to potential qualitative participants that were to be signed by their parents and returned via a pre-stamped envelope to the researcher. The administration summoned students to a secluded location where they participated in one-on-one interviews. The researcher did not have access to student ID numbers, and therefore did not know which ID number went with which student. This was done to ensure the confidentiality of the quantitative results for all students.

**Data collection (Measurement instruments).** The Bem Sex Role Inventory (BSRI) is an instrument designed to acquire continuous data about a subject’s perceived
level of masculinity or femininity. The BSRI is a sixty-item questionnaire equally divided into three categories of question type: stereotypically masculine, stereotypically feminine, and neutral. Each question is answered using a seven point Likert scale, and final scores indicate one of four categories for each subject: androgynous, undifferentiated, masculine, or feminine (Bem, 2005).

The BSRI, however, was designed for adult populations and was not ideal for the 9th grade sample for this study. The Children’s Sex Role Inventory (CSRI), which was designed from the BSRI, validated against it, and intended for use with a younger population (Boldizar, 1991), was used for this study. The CSRI is more appropriate for the 9th grade population tested in this study as it was created specifically for that age group.

The CSRI, like the BSRI, also measures one’s perceived levels of masculinity and femininity, and is scored similarly to the BSRI to determine one’s propensity for stereotypically masculine and feminine characteristics. Those with high scores for masculine and feminine characteristics were androgynous, while those with low scores for masculine and feminine characteristics were undifferentiated. Participants who have low femininity scores, but high masculine scores were categorized as masculine, and conversely, those with low masculinity scores and high femininity scores were categorized as feminine (Bem, 2005).

Results from the CSRI were paired with data obtained from a Singing Interest Inventory. The Singing Interest Inventory (SII) was developed during a survey methods research course. The questionnaire included questions regarding current choral music
participation as well as interest in future choral music participation. Additionally, students were asked to rank their interest in singing in a number of different contexts.

**Data analysis.** Research question one regarded only participant sex and current choral music participation. A 2x2 contingency table was used and tested with a Chi-Square to see if differences between male and female participants exist within choral ensembles. This information was reported in both raw scores as well as percentages. The second and third research questions considered participant sex and their categorized gender. Raw scores from the CSRI were used as the continuous data for analysis with two t-tests. Due to the nature of the CSRI, students were first grouped according to their masculinity score and then to their femininity score.

The final three research questions were tested with a 2x4, two-factor between-subjects ANOVA. Raw scores from the CSRI were used to categorize students into one of four categories; androgynous, undifferentiated, masculine, or feminine. Those categorizations were made from the average score of all participants in this study. Raw data from the Singing Interest Inventory was used as the dependent variable to test mean scores and look for significant differences across participant sex and categorized gender, as well as interactions between the two variables.

**Validation strategies.** The Children’s Sex Role Inventory (CSRI) is a valid and reliable measure used as a self-assessment tool to report one’s stereotypically masculine and/or feminine behaviors (Bolzizar, 1991). This test was designed from the Bem Sex Role Inventory, which was a previously existing and widely used measure used to assess sex typing and androgyny in adults (McCredie, 2011). The CSRI utilizes self-statements
and a four-point Likert scale as opposed to the descriptive words and seven-point Likert scale used in the Bem Sex Role Inventory (Boldizar, 1991).

The Singing Interest Inventory (SII) was tested for reliability and validity during a pilot study in the spring of 2016 prior to its use in this dissertation study. Face validity checks were performed first by faculty, colleagues, and a small group of age appropriate students to ensure that the questions were not biased and could be easily understood by the intended population. Additionally, during the pilot study, a series of questions appeared at the conclusion of the questionnaire and elicited student feedback on the instrument. Some of the questions asked at the conclusion of the survey were: “Were any questions confusing to answer? Did answering any of the questions make you feel uncomfortable?” There was also an open-ended question where students could share any additional thoughts about their experience with the survey. Several participants from the pilot study commented on the fact that they enjoyed taking the survey. One student stated “It really helped me check myself on some of the questions” while another student commented, “This was an interesting servery [sic] that made me think about who I am”.

Once the pilot study was conducted, Cronbach’s alpha was used to test the internal consistency of the items on the SII. Cronbach’s alpha (10 items, $\alpha=0.8$) indicated that all items on the SII had acceptable internal consistency. Due to the fact that all items on the original inventory had a high level of internal consistency, all items were included in the SII for the dissertation study. In order to ensure the internal consistency remained for the items on the singing interest inventory, responses from this study were
used to test Cronbach’s alpha (N=174, \( \alpha = 0.923 \)). Results from this study again indicated that all items on the SII had acceptable internal consistency.

In addition to the reliability and validity checks on the instruments being used in this study, an external statistical evaluator was utilized for the quantitative data analysis. In order to be as thorough as possible in obtaining accurate data and results, it was important to work with someone more knowledgeable in statistical analysis. A statistical analyst from the NEAR center assisted the researcher to ensure the results of the pilot test were accurate. This process was repeated for the quantitative data analysis for this study.

**Ethical issues.** IRB approval was obtained prior to data collection. Only students who did not have a returned notification form on file with the school were invited to participate. Additionally, all students had to assent to participating in the quantitative portion on the first page of the survey. Due to the personal nature of the qualitative portion of the study, any student participating in the follow-up interviews had to obtain signed parental consent.

All results from this study remained confidential. The identity of each student remained anonymous on the quantitative portion of the study. However, due to the nature of the qualitative portion, which included face-to-face interviews, anonymity could not be guaranteed to qualitative participants. Every effort was made to protect the identity of qualitative participants, including conducting all interviews in a private location and providing pseudonyms for each participant.
Qualitative Strand

Overview and participants. The qualitative portion of this study sought to discover additional information from a small sample of participants about their views on singing interest and how that related to their interest in choral music participation. In-depth qualitative interviews were conducted with select individuals to provide descriptive data to pair with the quantitative findings. The value of the qualitative component was that it would help to explain the results from the quantitative portion (Creswell & Plano Clark, 2011).

The participants for the qualitative portion of this study were selected from the sample that completed the quantitative portion. Due to the fact that students had to volunteer to be included as potential participants for the qualitative portion of the study, there were 71 volunteers for the qualitative follow-up interviews. Although this number might seem substantial, these students varied on their responses. In order to maintain a sense of focus for the follow-up case study, only students with a specific similarity were invited to participate. The commonality selected for this study was non-choir students with both a low interest in singing and a high interest in singing. Since the focus of this dissertation was understanding why students, specifically boys, choose not to sing or participate in choir, boys who are not enrolled in choir and whose scores represented a low interest in singing or a high interest in singing were invited to participate. In order to maintain equity in responses, girls with low singing interest scores were also invited to participate in the interview process. Their responses will be presented in a separate study and will follow the publication of this research.
In order to preserve the anonymity of the subjects, there was no identifying information on the questionnaires. In order to be eligible for the qualitative portion, however, students had to volunteer identifying information in the form of their student ID to be eligible for participation in the qualitative strand. Parents also had to sign a consent form for their child to participate in the qualitative follow-up portion of the study.

**Data collection procedures.** The methodological approach selected for the qualitative portion of this study was case study. Richards and Morse (2013) define case study as a method “that seeks understanding of a social situation or process by focusing on how it is played out in one or more cases” (p. 76). Case studies are bound by a specific element; time, place, and/or a situation that is in need of exploration (Litchman, 2013). Case study differs from the other methodologies because “it is defined by the location and focus of the study, not by an intellectual and methodological tradition (Richards & Morse, 2013, pp. 77-78).

Individual follow-up interviews were conducted with interested participants who were selected based on the results of the quantitative data analysis. As mentioned previously, the element that associated the interview participants was their singing interest score. Interview questions were created from the quantitative data and all interviews were audio recorded. Once the researcher reached saturation and no new information was acquired from the follow-up interviews, the researcher ceased the follow-up interviews.

**Data analysis.** The audio recordings of each interview were transcribed verbatim. Print data were coded first by reading each transcript and writing a code along the left
hand margin that best reflected the main idea in each response. In vivo codes (words of the participants) were used as often as possible to relay the most accurate description. Potential quotes were identified during this process in a similar manner, but were signified as a quote rather than a code and then highlighted within the text. Once coding was completed, the researcher collapsed the codes into groups, working to match similar ideas and concepts. After the groups were established, themes were assigned to each group (Creswell, 2012, 2016).

**Validation strategies.** Triangulation, member checking, and disconfirming evidence were utilized for the qualitative portion of this project to validate the data. Triangulation is the process of using multiple perspectives to support a thematic idea that is present in the interviews. Triangulation in this sense was achieved by including a number of participant perspectives in an effort to get a more holistic view of the central phenomenon (Creswell, 2012). Another validation strategy employed was member checking. Member checking is having the participants review the information to ensure that it accurately reflects their views (Creswell, 2012; Marshall & Rossman, 2014). Disconfirming evidence was also reported, as it provided additional information and insight on the topic that was contrary to other findings in the study (Creswell & Plano Clark, 2011).

**Ethical issues.** Potential ethical issues related to the qualitative portion included anonymity. Due to the face-to-face element of the individual interviews, the researcher could identify the qualitative participants. Additionally, because the interview questions were related to individual responses on the quantitative portion, participants may have
been reluctant to participate in the qualitative portion. Any student who chose to participate in the qualitative follow-up forfeited the anonymity of their qualitative responses. However, every effort was made to protect the identity of the participants and all information remained confidential.

Another potential problem was obtaining unhindered responses from the students. Given that this study was only run in one school, some students may not have commented as freely if they felt they could be individually identified within their school. As previously stated, every effort was made to provide privacy during interviews and all response data were kept confidential.

**Mixed Methods**

**Integration.** The point of interface in a mixed methods design is where the two methodologies meet to aid in the answering of the research questions. Due to the nature of the design there were several points of integration. First, the results from the quantitative data influenced the participants who were selected for the qualitative portion of the study. Second, although interview transcripts from the qualitative portion were open-coded initially, the two strands were integrated again by separating the interview participants into different groups for cross-case analysis. The groups were split high and low based on singing interest. Following the independent presentation of results, the two strands were merged together and the results presented collectively.

**Resources and skills.** The Glenn Korff School of Music provided a grant of $200.00 to help offset some of the costs associated with this project. The gift was used
for printing and mailing costs and the purchase of iTunes gift cards as an incentive for qualitative participants.

Another helpful step in this process was having an opportunity to pilot test the quantitative portion of this project prior to its use in this dissertation. Validation of the Singing Interest Inventory paired with the Children’s Sex Role Inventory was carried out and allowed for correction and ease of use in the dissertation phase. Additionally, the assistance offered by the NEAR center at the University of Nebraska-Lincoln to aid in the completion of this project, specifically the data analysis of the quantitative results, was incredibly helpful.

Summary

Quantitative data were collected from 9th grade students and provided information relating to participant sex, gender identity, and singing interest. Data were analyzed, and a select group of non-choral students interested in participating in the qualitative follow-up interviews were chosen. Although this project had the potential to offer valuable information regarding gender stereotyping related to choral music, there were limitations associated with this project. First, the results from this study are not generalizable to the entire population. The results could only be generalized to a group that had the same characteristics under which the sample itself was selected. Furthermore, the qualitative results of this study are not generalizable, as the purpose of the qualitative strand is to provide deep, rich descriptions of the specific individuals who participate in the follow-up interviews.
Gaining insight into the adolescent mindset about gender identity, its associated stereotypes and how those relate to singing interest and choral music participation has the potential to unlock barriers that keep students from participating in school choral programs. Music, specifically singing, provides people with an opportunity to connect to and express what makes them human. Although the overall focus of this project was on adolescent males, the unique contribution of this study was to elicit information from students who choose not to participate in choral music; boy or girl. It was the hope of the researcher that examining the quantitative results and providing an avenue for adolescents to express their views would provide valuable information that can be used to encourage a higher rate of choral music participation for all students.
Chapter 4: Presentation and Analysis of Data

“If you wanna be cool, follow one simple rule, don’t mess with the flow, no, no. Stick to the status quo.”

– High School Musical (Borden, Rosenbush, & Schain, 2006)

Introduction

The purpose of this mixed methods study was to explore gender identity as it relates to singing interest and choral music participation. This project was guided by six quantitative questions and four qualitative questions. In considering the quantitative portion of the study, the first question examined choir participation rates of students at the research site to determine if, in fact, participation in choral music varied between boys and girls. The second and third research questions investigated whether or not students reported differences in their self-reported masculine and feminine behaviors. Research question four explored differences in singing interest between boys and girls, while research question five considered singing interest according to gender categorizations. The final research question examined any possible interactions between biological sex, gender categorization, and singing interest.

The qualitative portion of this study was guided by one central question and six sub questions. The central question for this study aimed to gain insight into how boys perceive singing and choral music participation during adolescence. As adolescents begin the transition from childhood to adulthood it is important to consider the impact parents, peers, and society can have on personal perception. Therefore, the sub-questions that supported the central question were: a) What is the perception of singing among your friends? b) What is the perception of singing in your family? c) What is your perception
of singing within society? d) What is the perception of choral music participation among your friends? e) What is the perception of choral music participation in your family?

And, f) What is your perception of choral music participation within society?

This chapter begins with a presentation of the quantitative data and is followed by the results from the qualitative portion of the study.

**Quantitative Results**

**Overview and participants.** Participants in this study included an entire 9th grade class from a moderately sized Midwestern high school. Demographic data were collected from participants (n=174), which, aside from the variable sex, were primarily used to aid in the selection of qualitative participants. Student demographic variables included: sex, self-identified gender, and choral music participation. Table 1 presents a data summary of this information.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>84</td>
</tr>
<tr>
<td>Female</td>
<td>90</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>81</td>
</tr>
<tr>
<td>Female</td>
<td>87</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
<tr>
<td><strong>Choral Music Participation</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>No</td>
<td>150</td>
</tr>
</tbody>
</table>

Table 1

*Demographic Data from Participants (n=174)*
**Measurement instruments.** Data were acquired through the use of two separate questionnaires that were presented in one online format. The two instruments used for this study were the Children’s Sex Role Inventory (CSRI) and the Singing Interest Inventory (SII). The CSRI is a sixty-item questionnaire based on the Bem Sex Role Inventory (BSRI), revised to accommodate its use with a younger sample (Boldizar, 1991). Like the BSRI, the CSRI is equally divided into three categories of question type: stereotypically masculine, stereotypically feminine, and neutral. A breakdown of the items from the CSRI can be found in Table 2. Questions from the SII can be seen in Table 3. The permission letter to use the CSRI can be found in Appendix G and the full survey can be found in Appendix H.
Table 2
*Items from the Children’s Sex Role Inventory (CSRI) (Boldizar, 1991)*

<table>
<thead>
<tr>
<th>CSRI Masculine Items</th>
<th>CSRI Feminine Items</th>
<th>CSRI Neutral Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>It’s easy for me to make up my mind about things.</td>
<td>I care about what happens to others.</td>
<td>I am an honest person.</td>
</tr>
<tr>
<td>I can take care of myself.</td>
<td>When someone’s feelings have been hurt, I try to make them feel better.</td>
<td>I think I’m better than most of the other people I know.</td>
</tr>
<tr>
<td>I can control a lot of the kids in my class.</td>
<td>I usually speak softly.</td>
<td>People like me.</td>
</tr>
<tr>
<td>I like to do things that boys and men do.</td>
<td>I am a warm person.</td>
<td>I am a serious person.</td>
</tr>
<tr>
<td>When a decision has to be made, it’s easy for me to take a stand.</td>
<td>I am a kind and caring person.</td>
<td>I have many friends.</td>
</tr>
<tr>
<td>I get pretty angry if someone gets in my way.</td>
<td>It’s easy for people to get me to believe what they tell me.</td>
<td>I usually get things done on time.</td>
</tr>
<tr>
<td>I am a leader among my friends.</td>
<td>Sometimes I like to do things that younger kids do.</td>
<td>It’s easy for me to fit into new places.</td>
</tr>
<tr>
<td>I’d rather do things my own way than take directions from others.</td>
<td>I don’t like to say “bad” words or swear.</td>
<td>I’m always losing things.</td>
</tr>
<tr>
<td>When I play games, I really like to win.</td>
<td>I like babies and small children a lot.</td>
<td>I am careful not to say things that will hurt someone’s feelings.</td>
</tr>
<tr>
<td>I’m willing to work hard to get what I want.</td>
<td>I am a gentle person.</td>
<td>I like to do things that other people do.</td>
</tr>
<tr>
<td>I am sure of my abilities.</td>
<td>When there’s a disagreement, I usually give in and let others have their way.</td>
<td>I like to help others.</td>
</tr>
<tr>
<td>I stand up for what I believe in.</td>
<td>I am a cheerful person.</td>
<td>I am a moody person.</td>
</tr>
<tr>
<td>I would rather do things on my own than ask others for help.</td>
<td>I feel shy around new people.</td>
<td>I’m the kind of person others can depend on.</td>
</tr>
<tr>
<td>I am good at sports.</td>
<td>When I like someone, I do nice things for them to show them how I feel.</td>
<td>I like acting in front of other people.</td>
</tr>
<tr>
<td>It’s easy for me to tell people what I think, even when I know they will probably disagree with me.</td>
<td>I feel good when people say nice things about me.</td>
<td>I am happy person.</td>
</tr>
<tr>
<td>I make a strong impression on most people I meet.</td>
<td>I am faithful to my friends.</td>
<td>I never know what I’m going to do from one minute to the next.</td>
</tr>
<tr>
<td>I can get people to do what I want them to do most of the time.</td>
<td>I like to do things that girls and women do.</td>
<td>I always do what I say I will do.</td>
</tr>
<tr>
<td>I like to think about and solve problems.</td>
<td>It makes me feel bad when someone else is feeling bad.</td>
<td>I feel bad when other people have something that I don’t have.</td>
</tr>
<tr>
<td>I am good at taking charge of things.</td>
<td>I can usually tell when someone needs help.</td>
<td>I try to tell the truth.</td>
</tr>
<tr>
<td>I am willing to take risks.</td>
<td>I’m good at understanding other people’s problems.</td>
<td>I like to keep secrets.</td>
</tr>
</tbody>
</table>
Table 3  
*Items from Singing Interest Inventory (SII)*

**Singing Interest Inventory**

- **How would you rate your interest in singing in general?**
  - Very high (1)
  - Somewhat high (2)
  - Average (3)
  - Somewhat low (4)
  - Very low (5)

- **How would you rate your interest in singing alone?**  
  *Singing alone when others are not around*  
  - Very high (1)
  - Somewhat high (2)
  - Average (3)
  - Somewhat low (4)
  - Very low (5)

- **How would you rate your interest in singing a solo?**  
  *Singing by yourself in front of others*  
  - Very high (1)
  - Somewhat high (2)
  - Average (3)
  - Somewhat low (4)
  - Very low (5)

- **How would you rate your interest in singing with classmates?**  
  *In a choir class setting*  
  - Very high (1)
  - Somewhat high (2)
  - Average (3)
  - Somewhat low (4)
  - Very low (5)

- **How would you rate your interest in singing with friends?**  
  *When you are just hanging out with your friends*  
  - Very high (1)
  - Somewhat high (2)
  - Average (3)
  - Somewhat low (4)
  - Very low (5)
Each question on the CSRI was answered using a self-statement and measured on a four-point Likert scale ranging from Very true of me to Not at all true of me. Final scores indicated one of four categorizations for each participant: androgynous, undifferentiated, masculine, or feminine. The categorizations for the CSRI were scored similarly to the BSRI. Those who aligned with both masculine and feminine characteristics were categorized as androgynous, while those who did not align with masculine or feminine characteristics were categorized as undifferentiated. Participants who didn’t align with femininity statements, but did align with masculine statements
were categorized as masculine, and conversely, those who did not align with masculinity statements, but did align with femininity statements were categorized as feminine (Bem, 2005). To determine the midpoint for categorizations for this project, the group mean from this population was used. In considering the age of the CSRI instrument as a measure of feminine and masculine characteristics, the population group mean, as opposed to the instrument mean, was determined to be a more accurate representation of the categorizations of this population. Using the midpoint for the instrument, which reflected views of masculinity and femininity 25 years ago, not necessarily the current views of the participants, may have skewed the results and would not have provided the researcher with an accurate representation of the current masculine and feminine adherence by participants. Utilizing the responses from this population provided a midpoint that was specific to this group of participants and reflected their adherence to masculine and feminine traits.

Results from the CSRI were paired with data obtained from the SII. The researcher created the SII during a survey methods research course. The questionnaire included questions regarding past choral music participation as well as interest in future choral music participation. Additionally, participants were asked to rank their interest in singing in a number of different contexts. Tests of validity and reliability were performed on this instrument during a pilot study prior to its use in this project and again after the quantitative data had been collected.

**Data collection procedures.** The research site utilized for this study had a protected homeroom class period that met for 25 minutes each regular school day. The
school placed a link to the survey on their school webpage that was inactive until the appointed data collection time. The school provided instructions to all homeroom teachers about how to access the link and also made arrangements for all 9th grade students to have access to a computer or chrome book in order to complete the survey. The researcher was on site during data collection to answer any questions and offset problems.

**Research question 1.** *Is there a difference in choral music participation rates between 9th grade male and 9th grade female students?*

Research question one aimed to discover whether or not a difference existed in the number of boys and girls that choose to participate in choral music. Due to the fact that not every student from the freshman class completed the survey, this information was gathered directly from the school and presents the choral music participation rates and sexes for the entire 9th grade class. The entire class contained 273 students (m=130, f=143). Of those students, 30 participated in a choral music ensemble (m=4, f=26). This information was placed in two, 2x2 contingency tables; one table contains raw data, while the other contains percentages. This data can be seen in Tables 4 and 5.

Table 4
*Contingency Table for Raw Differences in Male and Female Choral Music Participation*

<table>
<thead>
<tr>
<th>Source</th>
<th>Yes</th>
<th>No</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4</td>
<td>126</td>
<td>130</td>
</tr>
<tr>
<td>Female</td>
<td>26</td>
<td>117</td>
<td>143</td>
</tr>
</tbody>
</table>
Table 5

*Contingency Table for Percentage Differences in Male and Female Choral Music Participation*

<table>
<thead>
<tr>
<th>Source</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3%</td>
<td>97%</td>
</tr>
<tr>
<td>Female</td>
<td>20%</td>
<td>80%</td>
</tr>
</tbody>
</table>

A chi-square was run on the information gathered in the contingency tables and describes differences between males and females and their participation or non-participation in a choral music ensemble. A significant difference was found between male and female participation in choral music ensembles; $X^2[1, n=273] = 14.377$ $p<.001$. Results from this test indicate that choral participation by girls is significantly higher than participation by boys.

**Research questions 2 and 3.** Question 2: *Is there a difference in level of masculinity between 9th grade male and female students?* Question 3: *Is there a difference in level of femininity between 9th grade male and female students?*

Research questions two and three investigated differences between boys and girls in their masculinity and femininity scores. Two t-tests were used to look for significant mean differences from the raw data on the Children’s Sex Role Inventory. An a priori power analysis was conducted to determine the necessary sample size for this t-test. With power set at .8, alpha=.05, and a medium effect size of .5, the total sample size needed to run this analysis under those parameters was 179 participants. Although 218 of the 273 students were available the day of the survey distribution, only 174 of the 218 students chose to participate in or complete the survey. That is a 64% response rate from the
whole class and an 80% response rate from the students who were in attendance the day of the survey distribution.

For this study, scores that were closer to zero on the CSRI indicated a greater adherence to the self-statements listed on that scale. For example, if a student indicated that a masculine scale item was *Very true of me* that would be scored as 1. If a student indicated that a masculine scale item was *Not at all true of me* that would be scored as a 4. Lower scores on the different scales indicate a truer representation of their alignment to stereotypical gender characteristics.

Levene's Test for Equality of Variances was run before interpreting the results of the t-test. Because the significance value was less than .05 in Levene's test (.011) for the masculine scale, equal variances were not assumed. The same was true for the femininity scale with the significance level for Levene's test (.004) again being less than .05 indicating equal variances were not assumed.

To answer research question two, an independent samples t-test was used and indicated no significant difference in masculinity scores between boys (n = 84, M = 2.0036, SD = .60995) and girls (n = 90, M = 2.1394, SD = .41492), t(172) = -1.706, p = .090. There was not a significant difference in masculinity scores between males and females.

Research question three was also run with an independent samples t-test, but compared mean scores for boys and girls on the femininity scale. In this instance there was a significant difference between femininity scores for boys (n = 84, M = 2.1732, SD = .61880) and girls (n = 90, M = 1.8539, SD = .38228), t(172) = 4.061, p < .001. These
results indicated that girls identified with the femininity statements of the CSRI more than boys. This information is presented in Table 6.

Table 6
Descriptive Statistics for Male and Female Masculinity and Femininity Scales

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculinity Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>84</td>
<td>2.0036</td>
<td>0.60995</td>
</tr>
<tr>
<td>Girls</td>
<td>90</td>
<td>2.1394</td>
<td>0.41492</td>
</tr>
<tr>
<td>Femininity Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>84</td>
<td>2.1732</td>
<td>0.6188</td>
</tr>
<tr>
<td>Girls</td>
<td>90</td>
<td>1.8539</td>
<td>0.38228</td>
</tr>
</tbody>
</table>

Research questions 4, 5, and 6. Question 4: Is there a difference in the level of singing interest between 9th grade male and 9th grade female students? Question 5: Is there a difference in students' levels of singing interest between gender categorizations? Question 6: Is the interaction between sex and gender categorization significant in terms of affecting 9th grade students’ interest in singing?

The final three research questions explored the effect of sex and gender categorization on interest in singing. Raw scores from the CSRI were grouped into four categories: androgynous, undifferentiated, masculine, and feminine. In order to determine the midpoint for categorization, mean scores from the sample were used. In this case, the masculinity mean was 2.0726 and the femininity mean was 2.0057. These figures were a better representation of the midpoint for this sample.
Participants scoring below 2.0726 on the masculinity scale and below 2.0057 on the femininity scale were categorized as androgynous, indicating that statements in both categories were very true of them. Participants scoring above those numbers were categorized as undifferentiated, signifying that the statements in both categories were not very true of them. Students scoring below 2.0726 on the masculinity scale and above 2.0057 on the femininity scale were categorized as masculine, indicating a stronger alignment only to masculine statements, while students scoring above 2.0726 on the masculinity scale and below 2.0057 on the femininity scale were categorized as feminine, representing a greater orientation to only feminine statements. A breakdown of the different categorizations can be seen in Table 7.

Table 7
*Gender Categorization Numbers Broken Down by Male, Female, and Total*

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Androgynous</td>
<td>27</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Undifferentiated</td>
<td>30</td>
<td>52</td>
</tr>
<tr>
<td>Male</td>
<td>Masculine</td>
<td>19</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Feminine</td>
<td>8</td>
<td>38</td>
</tr>
<tr>
<td>Female</td>
<td>Androgynous</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Undifferentiated</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Masculine</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feminine</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Androgynous</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Undifferentiated</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Masculine</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feminine</td>
<td>38</td>
<td></td>
</tr>
</tbody>
</table>
These four category distinctions, along with sex, were used as the independent variables in this analysis of variance (ANOVA). In addition to completing the CSRI, students were also asked to complete the SII. Data from the SII served as the dependent measure for this analysis.

A two-factor between-subjects ANOVA was used to test mean differences in the raw scores from the Singing Interest Inventory. An a priori power analysis was conducted to determine the necessary sample size for this two-factor ANOVA. With power set at .8, alpha=.05, a medium effect size of .25, and eight crossed group cells, the total sample size needed to run this analysis was 179 participants.

In first considering student interest in singing between the first factor, sex, boys (n = 84, M = 3.6894, SD = .99758) had higher mean scores than girls (n = 90, M = 2.8687, SD = 1.00312). Lower scores indicate a higher interest in singing, therefore, girls reported a higher interest in singing than boys. Additionally, with F(1,166) = 22.929, p = .000, r² = .113, we see that the main effect for sex is significant when considering singing interest between boys and girls.

Regarding the second factor, gender categorizations, with F(3, 166) =2.146, p = .096, r² = .032, we see that there is not a significant difference in the main effect of gender categorization between androgynous, undifferentiated, masculine, and feminine groups pertaining to singing interest.

The final consideration from this statistical model regarded interaction effects between sex and gender categorizations on singing interest. With F(3, 166) = .062, p = .980, r²=.001, results indicated that there was not a significant interaction between sex
and gender categorizations in regard to interest in singing. Due to the lack of an interaction effect, the focus for the ANOVA shifted to the two main effects of sex and gender category where the main effect sex had a small effect size ($r^2 = .113$) and the main effect gender category had a small effect ($r^2 = .032$). The ANOVA summary table from this analysis can be seen in Table 8.

Table 8
ANOVA Summary Table for Sex Differences in Singing Interest, Gender Categorizations in Singing Interest, and the Interaction

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>22.787</td>
<td>1</td>
<td>22.787</td>
<td>22.929</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender Category</td>
<td>6.399</td>
<td>3</td>
<td>2.133</td>
<td>2.146</td>
<td>0.096</td>
</tr>
<tr>
<td>Interaction</td>
<td>0.186</td>
<td>3</td>
<td>0.062</td>
<td>0.062</td>
<td>0.980</td>
</tr>
<tr>
<td>Within Groups</td>
<td>164.970</td>
<td>166</td>
<td>.994</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>201.419</td>
<td>173</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Short answer responses.** Participants from the quantitative portion of the study who were not enrolled in a choir class were asked to answer two open-ended questions. Those questions were designed to obtain information on why participants chose not to participate in choir and what, if anything, could be done to enhance their interest in choral music participation in the future. The three primary reasons given for choosing not to participate in choir were: a belief that they couldn’t sing, a dislike for singing, and scheduling conflicts. Unfortunately, when asked what choral music programs could offer to enhance student participation rates, the overwhelming majority of students responded, “Nothing”. Beyond that response, the three primary recommendations given for potential
choral program enhancements included offering students money, food, and more contemporary song selections.

**Quantitative Summary**

This study employed several statistical analyses to investigate the quantitative data collected for this research project. The results from this study indicated that there was a significant difference in the number of boys and girls who chose to participate in choral music, with girls participating at a much greater rate than boys. Additionally, there was a significant difference in the level of singing interest between boys and girls with girls, again, having a higher preference for singing activities.

Although some might assume that girls would align to feminine characteristics and boys would align to masculine characteristics, the results of this study indicated otherwise. A great deal of research on the topic of gender roles supports the notion that boys have less freedom to explore non-masculine behaviors than girls do to display non-feminine behaviors (Bem, 1993). The results from this study align with previous research on the topic. Additionally, when considering girls and their alignment with stereotypical masculine and feminine characteristics, no significant difference appeared when considering only masculine traits. Although research suggests that girls have more freedom to fluidly explore gender roles, it is interesting that there was no difference between boys and girls when considering scores on the masculinity scale.

**Integration**

One purpose for employing a mixed methods research design is to provide additional support to each individual methodology (Greene, Caracelli, & Graham, 1989).
Mixed methods designs provide not only breadth on research topics but depth as well (Creswell, 2012). For this research study quantitatively analyzing data from a large group of people and then qualitatively exploring a specific phenomenon with a small group of individuals provided the researcher a holistic view of the research problem.

An important element in mixed methods research is the point of interface. This is the point at which the two methodologies are integrated or mixed together to provide support for one another. Creswell and Plano Clark (2011) highlight four different times when data can be integrated: “interpretation, data analysis, data collection, and design” (p.66). In this research study there were multiple points of interface.

The first integration occurred at data collection when the results from the quantitative portion of the study highlighted specific participants that would be selected for the qualitative portion. Two distinct sets of participants were chosen based on the results from the quantitative portion of the study. The two groups selected were males who had low singing interest scores and did not participate in choir and males who had high singing interest scores and did not participate in choir. A third group was also interviewed, however, due to the focus of this study, their results will not be presented in this dissertation. The third group consisted of girls with low singing interest scores who did not participate in choir.

The second point of interface occurred at data analysis. The qualitative data analysis selected for this project, which included within-case and cross-case analysis (Creswell, 2013), was informed by the results obtained from the quantitative portion. Cases were split by singing interest, where all participants with low singing interest were
analyzed followed by all participants with high singing interest. Splitting these two groups for analysis provided the within-case results. Upon completion of the within-case analysis a cross-case analysis was conducted. Results from each group, which included low singing interest and high singing interest, were compared to explore similarities and differences between the two groups.

The final point of interface occurred at interpretation where all results were merged together. Merging at this stage helped to highlight how each element of the design worked together to answer the mixed methods research question. Integrating the results at the interpretation stage allowed the researcher to add insight and draw conclusions from the results of the study (Creswell & Plano Clark, 2011).

**Qualitative Results**

Data for the qualitative portion of this study was obtained through participant observations and one-on-one in-depth interviews. The qualitative methodology selected for this portion of the project was multiple case study. Taking advantage of the qualities of case study research, which explore bounded systems and offer deep insight and exploration into a phenomenon (Creswell, 2013; Litchman, 2013), was the best methodological choice for this project.

Due to the fact that there were no significant interactions between sex and gender categorization, the researcher chose to explore male perceptions of singing and choral music from two distinct groups. The two cases that were investigated independently and then cross-analyzed were non-choir participating boys with low singing interest scores and non-choir participating boys with high singing interest scores.
Overview and participants. Participants for the case study were selected based on their quantitative survey data. Out of the 174 quantitative participants, 71 (m=20, f=51) volunteered for the qualitative follow-up. Of those 71, 18 (m=3, f=15) participants who volunteered for the qualitative follow-up were enrolled in choir at the time of the study and were not considered for the follow-up interviews. Due to the researcher's interest in qualitatively exploring male perceptions of singing interest and choral music participation, the researcher chose to invite non-choir participant boys with low singing interest scores and non-choir participant boys with high singing interest scores to partake in the interviews. A group of non-choir participating girls with low singing interest scores were also invited to participate in the qualitative interviews, but their results will not be presented at this time. None of the participants selected were involved in choral music at the time of the interviews.

Based on singing interest scores, choir participation, biological sex, and interest in the qualitative follow-up, 16 boys and nine girls were invited to participate in the study. Of the nine girls, seven returned the required signed parent permission form and assented to participate in the study. Of the 16 boys who were invited, 10 had low singing interest scores and six had high singing interest scores. Four participants from each group returned the necessary signed parent permission form and assented to participate in the follow-up interviews.

In order to better elicit accurate data for the quantitative portion of the study, the data were de-coupled so the researcher did not know which quantitative data went with which qualitative participant. The researcher provided student ID numbers to the school
and the school coordinated the interviews with qualitative participants. An informant from the high school helped the researcher group the students for qualitative data collection and analysis. Individual scores for Singing Interest, Masculinity, Femininity, and Gender Category for the two different groups can be seen in Table 9.

Table 9
Quantitative Results for Boys with Low Singing Interest Scores and High Singing Interest Scores Featuring Scores for Singing Interest, Masculinity, Femininity, and Gender Category

<table>
<thead>
<tr>
<th>Low Singing Interest</th>
<th>Participants</th>
<th>Singing Interest</th>
<th>Masculinity</th>
<th>Femininity</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#1a</td>
<td>3.55</td>
<td>2</td>
<td>1.9</td>
<td>Androgynous</td>
</tr>
<tr>
<td></td>
<td>#2a</td>
<td>4.09</td>
<td>2.2</td>
<td>1.7</td>
<td>Feminine</td>
</tr>
<tr>
<td></td>
<td>#3a</td>
<td>4.82</td>
<td>1.5</td>
<td>2.8</td>
<td>Masculine</td>
</tr>
<tr>
<td></td>
<td>#4a</td>
<td>4.36</td>
<td>2.2</td>
<td>1.6</td>
<td>Feminine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High Singing Interest</th>
<th>Participants</th>
<th>Singing Interest</th>
<th>Masculinity</th>
<th>Femininity</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#1b</td>
<td>2.73</td>
<td>2.4</td>
<td>2.1</td>
<td>Undifferentiated</td>
</tr>
<tr>
<td></td>
<td>#2b</td>
<td>2.64</td>
<td>1.7</td>
<td>1.8</td>
<td>Androgynous</td>
</tr>
<tr>
<td></td>
<td>#3b</td>
<td>2.09</td>
<td>2.35</td>
<td>2.4</td>
<td>Undifferentiated</td>
</tr>
<tr>
<td></td>
<td>#4b</td>
<td>1.91</td>
<td>2.1</td>
<td>1.85</td>
<td>Feminine</td>
</tr>
</tbody>
</table>

Data collection procedures. This project was a multiple case study designed to gain in-depth understanding of male perceptions of singing interest and choral music participation from boys who do not sing. Additionally, in exploring responses from two different groups of students, comparisons could be made across cases to look for group differences as well as similarities (Creswell, 2013). Although case study typically utilizes
several points of data to understand the case in question (Baxter & Jack, 2008; Creswell, 2013), interviews were the primary form of data collection.

Each participant who was selected for the interview portion of the study and had a returned, signed parent permission form was invited to participate in the second phase of the study. All students who had met the aforementioned parameters chose to participate in the one-on-one interview. Participants accompanied the researcher to a private location within the school building during the school day and indicated their interest in participating by checking yes or no on an assent form.

Initial interviews took place in one sitting and lasted anywhere from 13 minutes to 32 minutes. The interviews were transcribed verbatim within the first few days following each interview. Once interviews had been transcribed and coded, the researcher returned to the research site to complete member checks with each participant. Member checking is a process by which the researcher reviews the interview content to ensure that the interpretation of information is an accurate reflection of the beliefs and perceptions of each participant (Marshall & Rossman, 2011; Stake, 1995). Each member check varied in length with some taking five minutes and others taking 20 minutes. The varying time frames were dependent on the number of questions or clarifications requested by the researcher and the length of the initial interview. The interview protocol form, which includes the list of qualitative interview questions, can be found in Appendix I.

**Data analysis.** Data were analyzed by hand coding the interviews. In vivo codes (words of the participants) were used as often as possible. As transcripts were being coded, possible quotes were also highlighted in the text and the word “QUOTE” was
written in the left-hand margin as well. Transcript excerpts and coded samples can be found in Appendices J and K.

Once coding had been completed, all codes were compiled into two spreadsheets; one for participants with low singing interest scores and one for participants with high singing interest scores. For each group independently, codes were color highlighted according to likeness across subjects and collapsed into groups. After the codes were grouped, redundant codes were removed, and then themes were named and assigned (Creswell, 2016). Spreadsheets featuring the final codes and themes for each group can be found in Appendices L and M.

A concept map, which ordered the themes in a meaningful way, was created from the themes and then a write-up of the findings for each group concluded the within-case analysis process (Creswell, 2016). After the data for each group was analyzed independently a cross-case analysis between the two groups was completed (Creswell, 2013).

**Validation strategies.** Triangulation, member checking, and disconfirming evidence were employed to enhance the validity of this project. Triangulation was accomplished by obtaining perceptions from multiple participants, which allowed a broader collection of data with which to glean information. The transcript codes for each participant were member checked during a follow-up interview to ensure that their thoughts and perceptions were accurately reflected. Disconfirming evidence, a process of including contrasting information, was also reported to ensure that all participant views
were included. A reflexivity statement is included in this study to enhance the validity of the accounts reported in this project (Creswell, 2013; Stake, 1995).

**Reflexivity.** The reflexivity statement will break from the previous third person narrative and be presented in first person. At the conclusion of the reflexivity statement, third person will be reinstated.

Having taught secondary choral music for 12 years, I had many preconceived ideas about what factors play into the decision whether or not to participate in choral music. Research aligns with my years of observation, but bias may have been present while coding the data, thereby forcing information into preconceived bins of information; specifically, the belief that choir is for girls. However, I did notice a few surprising themes that I had not expected, which made me believe that I was truly interested in uncovering new information, specifically information that went against my prior assumptions.

I have always believed that the voice change played a role in discouraging some boys in their singing pursuits. I knew the literature as well as several strategies to overcome potential problems. My greater concern, however, and one that I felt was a greater deterrent, was that boys thought they would be made fun of for singing, or that people would perceive them as more feminine. The research, and the information from this project, helped me to see that the feminine association is not only a fear posed by external factors like peers and societal expectations, but an internal perception that most men have about singing. Additionally, some participants commented on a fear of failure
related to singing, which, although not surprising, was an interesting byproduct of this research.

**Qualitative research questions.** Qualitative research is more fluid than quantitative research in that all observations made during the data collection process go to answering each of the questions. For this reason, the qualitative questions will be outlined here and the qualitative results presented in narrative form. Information gained during the data gathering process is meant to provide a holistic picture of the phenomenon under study with all responses working toward a greater depth of understanding (Creswell, 2013).

The central question for this study was: *How do boys perceive singing and choral music participation during adolescence?* The following sub-questions accompanied the central question: a) *What is the perception of singing among your friends?* b) *What is the perception of singing in your family?* c) *What is your perception of singing within society?* d) *What is the perception of choral music participation among your friends?* e) *What is the perception of choral music participation in your family?* And f) *What is your perception of choral music participation within society?*

**Qualitative Findings: Low Singing Interest**

Information gleaned during the interview process for each participant in the low singing interest group resulted in several codes. Those codes were split into like categories and then collapsed, eliminating repeated ideas or phrases. The results from that process formed five themes, which were as follows: *Guys are physical, Girls are feminine, Shared Perceptions, Guys don’t sing, and Calling them names.*
In order to protect the anonymity of participants in the qualitative follow-up, each student chose or was assigned a psynoneum to protect their identity. Jon, Chad, Travis, and Robert were the participants in the low singing interest group.

**Guys are physical.** Since one focus of this dissertation was to explore gender stereotypes associated with singing, all students were asked to describe masculinity and femininity. The first code within the theme, *Guys are physical* dealt with the physical aspects of what these participants perceived as representing masculinity. Jon described masculinity as “Tall, abs, muscular” while Travis described it (while laughing) as “Being a guy”. He did, however, go on to add facial hair, strong, and immature. Robert commented more on activities that he associated with masculinity like ballgames, cars, and sports and added that he thought guys were “Probably more arrogant than girls.”

Chad echoed some of the statements offered by the other participants like strong and athletic but highlighted the fact that he felt guys could be either masculine or feminine. “It can go either way. It depends on the person.” His perception of masculinity was in contrast to answers offered by the other students, who all had clear boundaries for what it means to physically represent masculinity.

Travis pointed out that guys are physical. “We run around. We try to see how high we can jump on the ceiling and stuff.” He also mentioned “Being physical is fun” and that he looks forward to going to football practice everyday. However, he pointed out a lack of physical activity in choir and commented, “I wouldn’t want to stand in place just to…sing.” Several of the other students in the low singing interest group commented on the fact that sports are more often deemed a masculine activity.
When asked to describe masculine singers or musical styles, participants highlighted rock and roll, heavy metal, rap, and musical instruments like guitar. Participants pointed out that although those styles of music can often be louder and more aggressive, artists who perform “soft songs” can also be seen as masculine. Travis defined soft songs as “Stuff by The Police, ‘Every Breath You Take’. Stuff like that, that’s softer.” Robert mentioned George Straight, while Travis highlighted Paul McCartney. In addition to stylistic elements Travis commented on song tempo for masculine songs stating, “Masculine is a little bit faster.”

All participants acknowledged masculine singers as having deep voices, singing with a darker tone, and being responsible for singing the lower notes. Jon also pointed out that boys “Do the beat” indicating that in a cappella music, boys are responsible for the vocal percussion. While most students in the low singing interest group seemed to have a strong perception about vocal range being low and quality being dark, Chad pointed out that guys can sing both high and low.

**Girls are feminine.** In much the same way that participants had perceptions about masculinity that resulted in physical aspects, the same was true for femininity. The physical aspects that participants associated with femininity were, long hair, long eye-lashes, shorter than men, good posture, and that they care about their appearance. Robert associated femininity with girls and pointed out that they tend to have “A lot of drama” while Travis stated that feminine people, who he sees as girls, are “More mature” than guys. Once again, Chad pointed out that guys and girls can be both masculine and feminine and it really just depends on the person.
Although participants offered musical styles when asked about masculine singers, they didn’t seem to have coordinated responses when asked about feminine singers. Although they did highlight specific singers like Miley Cyrus, Lindsey Sterling, and Taylor Swift, it seemed that they could not think of musical styles that were feminine. Instead, any type of music with a female lead singer was considered feminine. Additionally, Travis highlighted the fact that he would generally avoid listening to female artists when in the presence of his friends “’Cuz they don’t listen to that.” He did, however, go on to say “At the same time they’d probably listen to it alone, but they don’t listen to it when we’re with our group.”

When asked about their perceptions of girls in choir the participants commented that girls sing higher and that they have nice voices. Travis pointed out that girls are “Just more serious about it; more calm” and that “They need to have more feeling into it.” Chad noted that he thought his friends preferred females in choir, but also commented on the fact that his friends did not care if boys joined choir.

**Shared perceptions.** As stated previously, parents, peers, and society can have a profound impact on our perceptions of the world around us. The theme *Shared perceptions* was apparent in all interviews conducted for this study. Although there were some variations as to the specific words used, it was clear that participants in this study aligned to the musical and gendered stereotypes held by their friends and parents.

Although students tended to answer "Same", or "Same way" when asked about their parents’ perceptions of masculine singers, feminine singers, boys in choir, and girls in choir, the alignment with their peers proved to be much stronger. This was not
surprising as the timing of this study aligned with adolescent development and an increased interest in peer relationships as students continuously seek validation from those within their circle of influence (Martin & Dinella, 2002; Moshman, 2011; Sweet, 2016).

Qualitative inquiry tends to avoid quantifying information, however, it was important to note that the phrase "Same way" was repeated 14 times across subjects in the low singing interest group. Although other words like “same” or “like me” were used, most students chose “Same way” when describing the perceptions of their parents, friends, and the student body as a whole. The theme Shared perceptions was assigned to provide a clearer representation of participant responses. Additionally, there was usually no additional elaboration on the subject. Participants would state their own perceptions about singing and choir, and the order of questions would then ask them about their friends and parents, which would repeatedly be met with the response “Same way.”

Although the words "Same way" were used frequently, the meaning held was dependent on the question being asked. Sometimes the theme would indicate that the perception among their parents and friends was the same as theirs but other times it would mean the perception between boys and girls was seen the same way. For example, Robert was asked about his perception of boys who sing after being asked about his perception of girls who sing and stated, “the same way, just kinda, good for you!” And, when Chad was asked how his friends perceived singers he said, “I think they…like it the way I do and think the way I do, that it’s fine that they’re singing.”
Guys don’t sing. Although Chad had an open-minded view of singing as being an option for both boys and girls, a common perception held by many is that singing is a feminine activity. Some participants in the low singing interest group echoed similar perceptions. Chad, however, continued to champion for equality when it came to singing and choral music participation.

Unlike Chad, Travis seemed to hold to a much more rigid stance on gender stereotypes and expectations regarding singing and choral music participation. He eluded to the fact that different was bad and students should stick to the status quo. When asked how his friends perceived choir, he responded “Boring. They prolly [sic] just think that it’s just not fun to do or listen to.” He also felt that from a school perspective singing was more expected from the girls and “They want to be in choir more than guys, ‘cuz guys want to be doing other things.” When discussing boys in choir, he stated “If they still want to sing, that’s good, but I don’t think other guys would support it. I don’t think they would be against it, but I don’t think they would support it.”

Robert felt similarly stating that his friends “Kind of perceive the girls as…the normal” for choir. He had some friends who were in the school choir and pointed out that they “Perceive themselves as…different” and not with “The majority of society.” In considering his own perceptions of boys and girls in choir, he went on to say that girls were “The normal” in choir and boys were “Just a little bit different” because “They’re just not doing the popular…thing.”

Unlike Travis and Robert, Jon and Chad had different perceptions of choral music participation by boys and girls. Jon commented that his friends saw singers as “Cool” and
his parents viewed singers as having beautiful voices. His perception of choir was that it was “Really amazing” how they “Don’t use instruments.” He thought the school as a whole saw the choir as cool and that there was no difference between guys and girls participating.

Likewise, Chad had a positive perception of singers and choral music participation. However, he did acknowledge that some people believe “Guys can’t sing.” He didn’t agree with those students and thought “It’s fine for both genders no matter what they are or what they look like; they can still do it if they believe in themselves.”

**Calling them names.** In talking with the research participants, it was clear that Chad had paid the price for a more progressive and inclusive view of the world. Although most participants acknowledged the harassment that has been known to follow boys who step out of alignment with stereotypical behaviors and extra-curricular interests, Chad spoke of his own experiences with bullying. He said it helped him develop a thick skin and to ask for help when needed. When trying to understand what keeps boys from participating in choir he pointed out “Most guys don’t want to sing ’cuz they might feel like they’re embarrassed.” He mentioned that some people he knows have thought about doing choir, but decided not to stating, “I’m trying to think of what my friends will think of me.” When asked what he thinks has kept people from participating in choir at the high school, he mentioned bullying and name calling and noted “Some male singers in choir have been called gay most of the time.” When asked if he thought the same thing happened to girls he said, “It could happen to girls, but I don’t really see it happening often.”
Jon didn’t make any comments related to negative social pressure related to choir, but mentioned that he liked listening to the choir. When asked if he would ever consider participating he said he wouldn’t participate because he believed he had “A horrible singing voice.” That is a common belief held by many adolescent students and has often been attributed to the voice change process (Freer, 2008; Mizener, 1993; Szabo, 1999). In Jon’s case, he believed the range was a problem and stated, “Whenever I try to reach that high note, my voice just gets all scratchy.” Although Jon believed that practice could help students improve, he did not have an interest in improving his singing skills.

Much like Jon, Robert had little interest in choir participation pointing out, “I just don’t really want to get up in front of people and just start singing, really.” He also noted that he was an insecure singer and couldn’t identify pitches with his voice. He did mention that he played an instrument and he could match pitch on his instrument, he just couldn’t coordinate the voice to create the same result, which caused his insecurity with singing.

Unlike the other students who may have considered participating in choir if they felt they had a talent for it, Travis simply wasn’t interested. He initially cited the crowds as something he didn’t like about choir, but when asked about playing football in front of a crowd altered his answer to include a fear of failure. As he was speaking, however, he realized that he could just as easily fail in football in front of a crowd stating, "With choir, if you squeak your voice or something, same with football, if you miss a pass [pause]. I'm not sure..."
Ultimately he decided that he simply wasn’t interested in choir because it wasn’t physical enough. Travis preferred to be physically active and didn’t feel that choir could provide that outlet. Likewise, he didn’t have an interest in supporting friends in choir because he enjoyed the rowdy atmosphere of sports and didn’t think that would be allowed or encouraged in a choir setting. He included his friends in this perception stating, "They don't want to listen. They want to cheer and stuff and you can't do that while they're singing."

**Low Singing Interest Summary**

Although there were varying perspectives within some of the themes of the low singing interest group, responses indicated that friends as well as society have a strong ability to influence one’s perceptions of the world around them. This societal pressure to conform to peer groups has the ability to affect day-to-day interactions with one another. The adolescent population has great power to stand up and work to alter the cycle of stereotypical perceptions.

**Qualitative Findings: High Singing Interest**

Qualitative data analysis encourages using participant words, known as in vivo codes, to represent the information gleaned during the interview process. Although similar codes and thematic ideas emerged from the second data set, they were labeled according to the responses from this group of participants. The six themes that emerged from the high singing interest group are as follows: *Men want muscles, Girls are expressive, Shared perceptions, Choir is for girls, Get made fun of,* and *No labels.* The
students from the high singing interest group, whose names were also changed to protect their identity, included Edward, Willis, Anthony, and Zane.

**Men want muscles.** For the high singing interest group the word *muscles* was used very frequently as a descriptor for masculinity. When asked to describe masculinity, Edward replied, “Being a male” and went on to include muscularness, a deep voice, and facial hair as additional traits that he felt represented masculinity. Anthony also commented on the physical and cognitive aspects associated with masculinity and stated, “Masculinity is something that’s more strong but not necessarily smart…” He also thought masculinity was represented by “More fighting activities like boxing or wrestling.” Zane also thought masculinity could be described by the characteristics bigger, braver, and broader.

Willis presented a more stereotypical view of masculinity or what he felt represented masculinity. Due to the fact that the question merely asked participants to describe masculinity, the responses did not necessarily reflect the personal perceptions of the participants, which was the case for Willis. When asked to describe masculinity he stated, “Basically, big muscles, really jerky attitude I would say. Yeah. Tryin’ to be…the leader, I guess. Alpha male.” He also acknowledged that he felt popularity and favorable social standing were characteristics associated with masculinity.

When asked to describe masculine singers, participants responded with “Deeper voices,” “Bigger groups,” “Lower notes,” “Booming voices,” and “Powerful.” By contrast, one respondent, Anthony, stated simply, “They’re just male singers.” Anthony had a more gender-neutral view of singers in general. Musical styles that participants
highlighted as being associated with masculinity were rock, heavy metal, punk, rap, and jazz.

Kurt Cobain and Frank Sinatra were highlighted as examples of masculine singers. Edward liked Kurt Cobain for his straight-forward and blunt lyrics that got right to the heart of the issue, while Willis thought Frank Sinatra exuded masculinity with his booming voice and classic look of a suit and tie. Although Willis highlighted a classier appearance, Edward thought, in general, that guys cared less about their appearance than girls.

**Girls are expressive.** In considering Edward’s thoughts between boys and girls in reference to wardrobe, he believed women tended to care more about their appearance than men. Other physical attributes that the participants felt represented femininity included long hair, wearing make-up, being agile, and having the ability to move freely.

Willis again pointed out the more stereotypical responses by saying that femininity represents those that are weak, fragile, follow others, and have no job. Edward also stated “A lot of women like being in the spotlight and having the attention.” Anthony saw femininity as “Abstract, going with what you think is right at the moment.”

Zane was the only participant to highlight musical styles as being feminine and chose pop and musical theatre. Although none of the other participants could think of a feminine musical style, they did highlight some artists that they felt represented femininity; they were Mariah Carey and Taylor Swift. No follow-up information was provided on either artist as to why the participants felt those artists were feminine; they were simply included because they were girls. During member checking participants
were asked if they had anyone to add and Edward chose Beyoncé. When asked why he felt she represented femininity he said, “People idolize her because of how her body looks and how her face looks.” He went on to say, “Some girls wanna look like her” but mentioned that was only for her physical appearance, not her musical influence.

Participants felt that feminine singers were represented by anyone famous they could think of that was a girl singer/performer. They also each stated that girls were responsible for singing the high notes in a choir setting. Zane also believed that they were more comfortable singing solos than boys and were more creative in their singing. Additionally, feminine singers were seen as more expressive than masculine singers, and for artists that wrote their own music, tended to sing more about their feelings than boys.

**Shared perceptions.** The theme *Shared perceptions*, appeared in the high singing interest group and represented a belief from participants that their friends, peers, and parents think similarly to them in regards to singing activities and choral music participation by boys and girls. In addition to similar beliefs among friends and parents, the high singing interest group highlighted the fact that, to them, the theme *Shared perceptions* also encompassed the idea that they saw boy and girl singers and choir participants the same way. To many of them there was no difference between a boy participating in choir or a girl participating in choir. Additionally, that same viewpoint was shared by many of their friends and parents.

Anthony had the most fluid responses to dichotomous questions and when asked to describe feminine singers stated, “Pretty much the same way I would describe masculine singers; they’re simply female singers that have their dreams of what they
wanna do. If they wanna sing, they can sing!” Edward commented on the fact that for his family it had more to do with talent than with whether or not they were masculine or feminine saying, “If you can sing, you can sing. It doesn’t really matter your gender.”

Willis wasn’t sure how his friends perceived singers, but when asked how he thought his friends perceived choir stated, “I would say…the same way I do.” His parents, on the other hand, had more varied responses. He pointed out that his mom didn’t really have a preference and that it depended on the persona of the singer, but that his dad preferred rock and associated rock with male singers. Zane had similar responses, highlighting the fact that his parents were both really into music. He also pointed out that his dad had a preference for heavy metal and was also more interested in instruments than the singing aspect of popular music.

**Choir is for girls.** The perception that singing is feminine and that choral music is dominated by girls was also present with the high singing interest group. When asked to clarify how students seemed to assert their masculinity, Willis said, “I think they’d try to do more sports-like activities, you know, football, basketball, you know.” He elaborated by saying, “Because I think they don’t see choir as anything that would require any physical activity, you know.” Zane had similar thoughts pointing out that “Guys are in other…sports and stuff, or they do other…physical activities more than females.” He didn’t feel, however, that that was due to biological differences because he felt that the differences were due to “Societal expectations.”

Based on the quantitative data obtained from this study, showcasing a significant difference in the number of boys and girls that participate in choir, students offered
insight into their perceptions about that imbalance. Zane, Willis, and Edward all seemed to have an awareness of the stigma surrounding boys who participate in choir, while Anthony thought “It’s an activity anyone can participate in.” Edward pointed out that in his middle school “Guys were always outnumbered” and Zane mentioned that “More girls would go out for it than guys.” Although Willis personally disagreed with the perception that singing was feminine, he did say, “I think it’s more for like…perceived as…feminine to the people who are not in a musical activities [sic].” Edward agreed by stating that his friends “Might think that it’s kinda like a feminine thing to do, that…guys aren’t…supposed to be in choirs or whatever.” He also mentioned that he felt “Like guys don’t wanna do those things…feminine, things ‘cuz they’ll feel like they’ll be criticized for it, called gay or whatever, I guess.”

Edward also noted that girls weren’t judged as harshly for doing masculine things as boys were for doing feminine things. Zane had a different perspective and pointed out that in his experience girls also seemed to get made fun of for participating in more masculine activities like sports. Despite getting made fun of for participating in sports, he noted that girls “Tend to do it still” and associated that to them having a thicker skin.

**Get made fun of.** As the feminine association to singing continues to be a concern, boys seem to be encountering additional hurdles to overcome in their pursuit of singing and choral music activities. Although some participants commented on a dislike for previous choral experiences, the main deterrents for this group of students seemed to revolve around a fear of getting made fun of. Edward specifically pointed out that the insigators of maintaining and policing gender stereotypes are boys. He noticed that they
were generally the leaders of teasing and worked to keep the status quo geared toward a binary view of gender and the acceptable behaviors and activities associated with each. Since these students had a high interest in singing, but chose not to participate in choir, this particular section of the research was of interest.

Anthony was highly interested in choral music participation and simply could not fit the course into his schedule. He hopes to join in the coming years as his schedule allows, but that was the only reason given by him for his lack of participation in choral music.

When Willis was asked if he would ever considering participating in choir he said that he was “Not one to do that.” He highlighted “The fear of messing up” as the main reason for not wanting to participate in choir. He stated, “Singing has always just been a bit more beautiful, and it’s a little bit harder to cover up mistakes the more beautiful it is.” Although he plays an instrument in the band he believed “Singing is definitely more exposed.”

Zane shared some of Willis’s concerns and seemed to have a real fear of failure connected to singing. He pointed out that “It looks fun and stuff. It just-it’s a lot more work and you gotta get everything right and be ready and be on time.” His biggest concern, however, was “Getting in front of crowds” because “There’s so much that could go wrong.” When asked to explain what kinds of things he thought could go wrong he pointed out, “Getting made fun of or messing up or saying the wrong words.” Zane also mentioned that one of his classmates got made fun of for having the wrong sound. “They had...a really high-pitched voice and they were singing a more masculine song and it
didn’t sound right and he was getting made fun of because he was not singing it right.” He went on to say “He knew the words, he just didn’t…sing it how it was supposed to [sound].”

Edward said that he would consider participating in choir stating, “It’s always struck my interest, I’ve just never done it.” When asked to highlight the most valuable part of a choir class he said “Meeting new people I think, seeing…how good of a singer I could be, I guess.” Although some students were fearful of harassment from classmates, Edward felt a disconnect with the music teacher. He pointed out “The main thing in middle school was I just didn’t really like the music teacher. She didn’t really like me I didn’t think, so I never really did it.” He also commented on the fact that his parents, who are both musicians, would support his decision to join choir. He pointed out that “They think I should…try it one year and…see what happens, I guess, since they’re both in bands.”

Despite the high singing interest scores from this group, their interest in choral music participation was split. One aspect of this research project was to highlight the difference between singing interest and its ability to draw students to participate in choral music programs. Responses from these participants indicated that there is more to consider than just singing interest with whether or not students will choose to participate in choral music in high school, or as we learned from Edward, in middle school as well.

No labels. The high singing interest group conveyed that stereotypes in high school seem to carry more weight than necessary and that students and society would be better served by having No labels. Willis offered some insight when he said, “Well, I
don’t think that we should just be…bound to being a masculine or feminine person, you know. There’s more ways…you can be different.” When prompted to elaborate further, he stated, “Like you can be fragile, but still want to be a leader, you don’t have to just fall into one of two categories, you know. You can be something different.”

Anthony expressed a similar feeling when asked about which gender label, masculine, feminine, or another option he would like to be labeled as. He mentioned that he would “Like to be referred to as the neutral one in between.” Additionally, throughout the course of his interview he did not see distinctions between activities that were more acceptable for boys or more acceptable for girls. In his view, all activities were acceptable for all people regardless of whether they were a boy or a girl.

Unlike Willis and Anthony, Edward wanted to be viewed as masculine, but he pointed out that that was because he was born a male and associated gender with biological sex. During the member checking process he was asked to clarify his position and he said that he did not necessarily understand gender disphoria due to the fact that his biological sex and gender identity were in alignment, but that he would not judge others who were investigating their own, more progressive gender identity.

Like Edward, Zane also preferred to be labeled as masculine. His perception was that males and females were both equally susceptible to harassment from peers. He also thought boys could be more creative and expressive, which were two traits he highlighted as incentives for girls choosing to participate in choir. He pointed out that boys avoid being creative and expressive because they are “Scared to get made fun of.” His view was that girls and boys crossing gender stereotypical lines was fine, but that from a societal
perspective it seems to be more acceptable for girls to participate in masculine activities than it is for boys to participate in activities that are viewed as feminine.

**High Singing Interest Summary**

Although several codes and themes were repeated from the first to the second group, the theme names along with participant perceptions were slightly different from one group to the next. The most notable difference between the two groups was the added theme, *No labels*, which came from the high singing interest group and showcased a more open view of gender fluid behavior and an acceptance for peers to cross stereotypical gender boundaries.

**Cross-Case Analysis**

Due to the fact that the research questions were the same for both groups, there were overlapping codes and thematic ideas between the two groups. Similarities could be seen between the following themes: *Guys are physical* and *Men want muscles*, *Girls are feminine* and *Girls are expressive*, *Shared perceptions* and *Shared perceptions*, *Guys don’t sing* and *Choir is for girls*, *Calling them names* and *Get made fun of*, and the standalone theme from the high singing interest group, *No labels*.

**Cross-case analysis: Guys are physical vs. Men want muscles.** Responses from both groups of participants indicated that the physical stature of a person has a direct correlation to their masculinity. Each participant had a clear vision for what represented masculinity and it was often tied to physical characteristics, most notably, size and muscles. Despite the fact that most of the participants did not physically represent that
which they thought represented masculinity, all but two of them wanted to be labeled as masculine.

The codes or ideas that most represented the two different groups are listed below. Although several code groups are the same, there are differences to be observed. The theme for the low singing interest group was *Guys are physical* and included the following codes: [masculine] characteristics, physicality, [masculine] musical styles, [masculine] vocal qualities, [masculine] singers are rappers, physical is fun, and guys are physical. The overall theme for the high singing interest group was *Men want muscles* and included the following codes: being a male, [masculine] characteristics, [masculine] musical styles, [masculine] vocal qualities, sports are masculine, men want muscles, and guys care less.

Although there was overlap between the two groups the main focus from one group to the other was a bit different. The low singing interest group had a stronger focus toward the necessity that boys have to be physically active. Although the high singing interest group discussed physical traits and physical activities, they had a much greater focus on the physical characteristics of how masculinity should be showcased. In their minds there was a strong correlation between muscles and masculinity.

**Cross-case analysis: Girls are feminine vs. Girls are expressive.** In much the same way that participants had preconceived ideas about masculinity, the same was true about their perceptions of femininity. Within the theme *Girls are feminine* from the low singing interest group the following codes were presented: [feminine] characteristics, [feminine] artists, [feminine] vocal qualities, girls sing about feelings, soft song, reserved,
drama, appearance, and girls are feminine. The high singing interest group theme was *Girls are expressive* which included the codes: being a female, [feminine] characteristics, expressive, feelings, attention seeking, girls like to sing, high notes, and girls singing is beautiful.

Although both groups provided names of female performing artists, the high singing interest group offered a fewer number and also presented fewer characteristics for feminine singers, which included high notes, lighter voices, and a purer sound. When commenting on specific characteristics of the female artists that were highlighted, neither group provided follow-up information to support their selections. The artists chosen were simply included because they were girls.

**Cross-case analysis: Shared perceptions vs. Shared perceptions.** When considering the responses from both groups, the words "Same way" were presented by both singing interest groups and therefore indicated a high level of consistency with this theme across all subjects. As stated previously, however, although the words "Same way" were used most often, they failed to provide enough context, so the theme *Shared perceptions* was assigned. The codes for the *Shared perceptions* theme from the low singing interest group included same and same way. In addition to those codes the high singing interest group also included: same attitudes from friends, same way I do, and same as me.

Although the theme was present in both groups, the use of the theme differed in use and focus. Both groups aligned with the musical tastes and perceptions of their peers and parents, however, the high singing interest group had one small difference to the
codes within this theme. Both the low singing interest group and the high singing interest group used the phrase "Same way" to indicate that their friends and parents had views that were similar to theirs. However, the main difference between the two groups came in how often and in what way the phrase "Same way" was used. Unlike the low singing interest group, the high singing interest group presented a much stronger representation of statements pointing to the idea that there was or should be no difference between the perception of boy and girl singers and boys and girls who choose to participate in choir.

**Cross-case analysis: Guys don’t sing vs. Choir is for girls.** In considering the participants from this study, the two different groups often overlapped. However, in the low singing interest group there seemed to be more diversity in the responses compared to the high singing interest group. The theme *Guys don’t sing* which came from the low singing interest group had the following codes: cool, guys don’t sing, anyone singing is fine, different is bad, girls singing is the normal, guys singing is abnormal, status quo is good, guys do sports, and boys are accepted in choir. Although there are more codes within this theme, disconfirming evidence must be presented as a validation strategy. Due to the fact that there were differing viewpoints from the low singing interest group, the number of codes for that theme increased. This also highlighted some inconsistencies within the perceptions of the members of the low singing interest group.

The high singing interest group shared similar ideas with the low singing interest group under their theme, *Choir is for girls*, but their responses were more aligned with one another as a group. The codes for the high singing interest group included: choir is for girls, guys do sports, guys outnumbered, guys lack interest [in choir], guys do
physical activities, choir’s not physical, and talented singers are popular. As a group their responses were more cohesive than the low singing interest group.

The focus of this research revolved around the perceived feminine nature of singing. Although previous research has been done on this topic, an important contribution of this study was the fact that each qualitative participant chose not to participate in choir. When considering the interest level of the two groups, an important distinction was present for the high singing interest group in that they tended to state the stereotypes as existing but did not necessarily agree with them.

**Cross-case analysis: Calling them names vs. Get made fun of.** The final shared thematic idea between the two groups dealt with harassment for participating in singing activities. The theme *Calling them names* from the low singing interest group included the following codes: disinterest, unsure of voice, embarrassed, calling them names, bullying, peer influence, peer pressure, and fear of failure. The codes for the theme *Get made fun of* from the high singing interest group included: fear of failure, get made fun of, disliked choir, some people are better, criticized, exposed, bullied, and wrong sound.

Although both groups seemed to recognize the peer harassment often bestowed upon boys who choose to engage in choral music experiences, there was also a very real fear of failure from several of the participants. Peer harassment is an external force put upon individuals that can cause an internal fear of participation. For some of the participants, however, the fear they felt was more closely tied to failure, which originated internally and can, and often is, fueled by external forces.
**Cross-case analysis: No labels.** The most distinct difference between the two interest groups can be found in the responses from the theme, *No labels*. The codes presented by the high singing interest group under the theme *No labels* included: no labels, no difference, do what you want, depends, equal, everyone can sing, and shouldn’t make choir masculine. Some research related to choral music highlights the importance of making the choral experience more masculine to better connect with boys in the choral music classroom (Freer, 2008). Willis both recognized that and disagreed with it stating, “I don’t think you need to turn it into masculine…it already sounds pretty good…Beautiful. I don’t think anyone should need to change that.”

There are many benefits related to choral music participation, most notably its ability to draw people into the affective domain. Although there is a negative social stigma for men attached to emotional expression, the high singing interest participants did not view those stereotypes with such rigidity. Each of the participants from the high singing interest group expressed views that were more open to and interested in the idea of removing labels associated to gender and choir stereotypes.

**Supplementary Analysis**

In addition to the material coded for each group, participants offered additional commentary and insight. Due to the coding process, some of the individual responses lacked repetition among the other members of their singing interest group but crossed cases with participants from the other group. The thematic ideas that resulted from the individual cross coding were *lyrics, support, and listening.*
**Cross-case analysis: Lyrics.** Lyrical content was discussed by three of the participants; two from the high singing interest group and one from the low singing interest group. From the high singing interest group, Zane offered a simple statement about female singers by stating, “They’ve experienced what they’re singing about.” When asked what he thought guys sang about he replied, “…They sing about the same, just not as much as females.” Edward highlighted the fact that male singers were blunt in their lyrical choices and stated that Kurt Cobain would “…Say what his feelings were and a lot of times women don’t wanna say stuff like that.” When asked to elaborate he used the example, “…Like, if you’re in a relationship, a lot of times one person might not wanna say something that the other person does that they don’t like.” He pointed out that men speak “…Truthfully, versus…speaking their mind.”

Travis was discussing the characteristics of a masculine singer and pointed out, “The lyrics are a little bit lighter too because it’s about…love and stuff….” When asked if he would still consider softer songs masculine, or a guy doing something feminine he stated, “I’d still consider it a masculine, [sic] unless if it got, like, really, really deep, then it would probably be more on the feminine side.” When asked to elaborate further he said, “…Not too much talking about feelings…” When asked to summarize what guys sing about Travis bluntly stated, “Sex! That’s pretty much a lot of it.” He also pointed out that girls sing about “How they feel about relationships.”

**Cross-case analysis: Support.** Due to the fact that parental perception questions were included in the qualitative portion of this study, a few students from each group commented on the support and encouragement they receive from their parents in regards
to their extra-curricular interests. Although several students commented on parental support, the overwhelming thematic idea from the interviews regarding conversations about parents resulted in the theme, *Shared perceptions*, thus its exclusion from the previous analysis.

**Cross-case analysis: Listening.** Although several students who participated in the qualitative portion of this study were current members of the instrumental music program, when asked how participants used music in their daily lives, every participant responded with “listening.” Regardless of extra-curricular involvement and any previous or current musical experiences, all participants indicated that their primary engagement with music took the form of listening. Additionally, every participant indicated an interest in music and consistent, daily engagement. Participants from the high singing interest group went a bit further with the theme, *Listening*, and highlighted music’s ability to help them “cope with stuff,” “calm down,” and “relax.” This theme was excluded from the original results because the question was only in the interview as an icebreaker to help participants feel more comfortable with the interview process. However, since every student aligned in their response when asked about their primary engagement with music, it was necessary to include it in the results.

**Qualitative Results Summary**

Hearing the voices of adolescent students, who are just beginning the journey through high school, provided valuable insight and depth on a topic that has proved difficult to understand. Although students provided similar responses to research questions regardless of their singing interest scores, differences emerged from the data.
The low singing interest group aligned more closely to stereotypical views of masculinity, femininity, and choral music participation. The high singing interest group expressed a more open-minded view of what it means to be masculine and/or feminine. Additionally, the high singing interest group expressed a greater level of acceptance for peers who cross stereotypical gender boundaries.
Chapter 5: Conclusions, Implications, and Recommendations

“You play ball like a girl”

– The Sandlot (Burg et al., 1993)

Overview of the Study

The purpose of this mixed methods study was to explore gender identity as it relates to singing interest and choral music participation. An explanatory sequential mixed methods design was used, in which quantitative data were collected and analyzed followed by in-depth qualitative interviews (Creswell & Plano Clark, 2011). The focus of this study was aimed at hearing the voices of boys who choose not to participate in choir, which not only provided additional understanding on a complex topic, but also fulfilled a gap in the literature.

Conclusions: Quantitative Strand

In order to provide a musical education for every person, it is important to understand potential barriers that keep students from electing to participate in choral music during adolescence. The quantitative portion of this study utilized inferential statistics to investigate femininity as it relates to singing and how that association might act as a possible deterrent for some students.

Research question 1. Is there a difference in choral music participation rates between 9th grade male and 9th grade female students?

The average participation rate by senior students in music programs in secondary schools in the United States was 21% in a 2004 follow-up survey (Elpus & Abril, 2011). It is important to note that the results from their study covered all participation in music,
not just choral music participation. In considering the results from the 2004 study, the choral participation rates from girls in the current study was in alignment with a participation rate of 20%. The participation rate of boys in the current study was 3%, well below the average in the 2004 study. This could, however, be consistent with other choral music programs (Elpus & Abril, 2011). The different performing groups were not isolated for the 2004 study, so it is not possible to know the male to female breakdown of students in choral ensembles.

An article by Gates (1989) that was published nearly 30 years ago highlighted a 5:2 ratio between girls and boys and their participation in choral music programs. In looking at the results from this study with a 7:1 ratio that favors female participation, it appears that the imbalance in this school not only continues to favor a higher number of girls participating in choral music programs, but that the disparity for this group of students has widened over time as well.

It is important to note, however, that this is one class within one school and that the ratio seen here is not an accurate reflection of the entire choral music program. A number of students indicated scheduling conflicts that kept them from participating in choral music. As students progress through high school it is possible that they have more elective freedom to select a choral music ensemble in which to participate. Additionally, as students navigate the social structures of high school, they may gain a greater sense of social stability among their peers to pursue additional areas of interest. Choral music could be one such avenue, which could help to provide better balance between males and females in choral music programs.
Research questions 2 and 3. Question 2: Is there a difference in level of masculinity between 9th grade male and female students? Question 3: Is there a difference in level of femininity between 9th grade male and female students?

From a societal perspective it might have been assumed that there would be differences between boys and girls in relation to their levels of masculinity and femininity, with girls aligning to feminine traits and boys aligning to masculine traits. However, the results of this study indicated otherwise. Although significant differences were found between femininity levels of boys and girls, indicating that boys were less likely to align with stereotypically feminine characteristics, there were no significant differences between boys and girls when considering adherence to masculine traits.

Research suggests that it is more acceptable socially for girls to engage in stereotypical masculine behaviors, but that boys receive much greater pressure to adhere only to masculine stereotypes (Chiu et al., 2006; McCredie, 2012). Boys who choose to engage in behaviors that are viewed as feminine, like singing, often receive harassment from peers and are encouraged to align with stereotypical masculine behaviors (Sweet, 2010). In considering the results of this study in regard to girls and boys and their interest in singing and choral music participation, the participants in this study align with previous research on the topic. Girls aligned with both masculine and feminine traits while boys held to masculine traits and did not align with feminine traits.

Although the United States is beginning to grow in its acceptance of a more gender fluid society (Galinsky, Aumann, & Bond, 2012), adolescents still hold to stereotypical expectations for boys and girls (Hill and Lynch, 1983). Additionally, it is
worth noting that the ideal in American culture has historically been tied to men and their achievements. This is not only true in the workplace, which Bem (1993) highlighted as the catalyst for the sex-role divide, but in other areas as well.

Think of the phrase “You throw like a girl”. This is often meant as an insult to both boys and girls, but is specifically intended by boys as a way to highlight something seen as a negative attribute in their male and female peers. Perhaps the strong adherence by boys to masculine characteristics has more to do with seeing females and/or femininity as somehow beneath them or a step backwards than it actually does with the more affective elements often associated with femininity.

People living in the United States are constantly encouraged to reach the pinnacle, whatever that may be, which can create great pressure throughout one's lifetime to meet the societal expectations of the American Dream. It seems rare in our culture to be content with less "stuff" and fewer accolades, which is a likely catalyst for children, adolescents, and adults to blindly climb the social hierarchy in the pursuit of what they believe is society's view of perfection. Encouraging everyone to live in a way that feels authentic and true to themselves as individuals is sorely lacking in many areas within American society. Unfortunately, societal expectations for masculinity and femininity have had, and continue to have, an impact on interest in choral music participation.

Although instrumental music programs have also struggled to eliminate gender stereotypes associated with instrument selection (Abeles and Porter, 1978; Griswold and Chrobach, 1981; Zervoudakes and Tanur, 1994), the nature of instrumental music does not depend on equality between the sexes to achieve ensemble balance. Choral music is
unique in that in order to create balance across mixed ensembles, the number of boys and girls needs to be relatively equal. Ideally, due to the way listeners perceive sound, males should outnumber their female peers in order to create a fully balanced choral ensemble. Choirs of this make up typically exist only at the collegiate and professional levels with very few balanced choral programs at the secondary level.

Junior high and high school students are also becoming increasingly aware of transgender individuals and the difficulties they face in navigating the traditional gender expectation set forth within American society (Lindsey, 2015). Although many students still hold to traditional gender norms themselves, society, and by extension these adolescent students, are becoming increasingly more accepting of non-traditional behavior (Wells and Twenge, 2005). Although the male participants in this study showcased a distinction between their own alignment to stereotypically feminine and masculine behavior, it would be interesting to study their beliefs and perceptions about the gender expectations they hold for their peers. The qualitative results from this study indicated that although students may align in biological sex and gender, they are accepting of their transgender peers.

**Research questions 4, 5, and 6.** Question 4: Is there a difference in the level of singing interest between 9th grade male and 9th grade female students? Question 5: Is there a difference in students’ levels of singing interest between gender categorizations? Question 6: Is the interaction between sex and gender categorization significant in terms of affecting 9th grade students’ interest in singing?
One avenue of attention in this research was decoupling choral music participation with singing interest. It is clear from the research and observations of choral music programs across the United States that there is a difference in the number and boys and girls who choose to participate in choral ensembles at the secondary level (Ashley, 2013; Collins, 2012). However, it is not clear if that imbalance is due specifically to a lack of interest in singing.

Research suggests that a number of factors contribute to non-participation in choral music ensembles at the secondary level. Some factors that have been known to discourage males from participating in choir are the voice change process (Freer, 2008, 2010; Mizener, 1993; Szabo, 1999), the effeminate nature of singing (Hall, 2005; Harrison, 2004a, 2007; Kennedy, 2002; Sweet, 2010; Szabo, 1999; Warzecha, 2013), the teacher, a lack of friends participating in choral music, and/or peer harassment (Freer, 2007, 2009; Harrison, 2007; Kennedy, 2002; Mizener, 1993; Sweet, 2010). Although each of the deterrents listed have been shown to impact choral music participation, they do not necessarily indicate a disinterest in the act of singing.

There were no significant differences found between gender categorizations and singing interest, indicating that the level of alignment to stereotypical masculine and feminine characteristics did not indicate a certain level of singing interest. This suggests that although there is a strong perception that singing is feminine, it is an external perception and not an internal misalignment. The good news for music educators is that modifying program objectives and outcomes to better meet the needs and interests of
students can help to change the perceptions students hold of choral music programs in schools.

Although no interactions were found between sex, gender categorization, and singing interest, there was a significant difference between boys and girls and their interest in singing. This is an indicator that there is a difference in singing interest between boys and girls. Furthermore, based on the results from question one, which indicated a higher level of choral music participation from girls, interest in singing appeared to have an influence on the decision to participate in choral music ensembles. If interest in singing is correlated to choral music participation, music educators at all levels have a responsibility to assist singers in gaining confidence and proficiency in using and understanding the voice during all stages of development. Additionally, creating a safe, encouraging, and exciting classroom atmosphere will likely have a positive influence on the number of students who choose to join, and ideally remain in, choral music programs throughout their lifetimes.

Conclusions: Qualitative Strand

Central question. How do boys perceive singing and choral music participation during adolescence?

The simple yet complex answer is, differently. Participants brought their own unique life experiences and worldviews, which resulted in differing perspectives on singing interest and choral music participation. Some held to a more stereotypical view of singing and choral music participation while others had a less rigid view. Individual difference is expected in qualitative research, as the focus is to gain a depth of
understanding from each individual. However, there were many similarities between the two groups as well as one main difference.

Although the participants in this study identified several overlapping characteristics to describe masculinity and femininity, the focus of this question and the research project as a whole revolved around singing interest and choral music participation. In focusing the qualitative results around that theme, it is important to consider all viewpoints. All qualitative participants had an awareness of the sex imbalance in choral ensembles noting a higher participation rate from females when compared to males. Not all participants, however, believed singing was a feminine activity but did acknowledge that it was viewed that way by many of their peers.

The biggest difference in responses to perceptions of gender stereotypes and choral music participation came from the high singing interest group. Their responses, as well as the coded data, indicated that they had a more liberal view of gender and a disregard for stereotypical expectations associated to activities. Additionally, they displayed a disinterest in adhering to stereotypical norms. Noteworthy information also came from the high singing interest group due to their singing interest scores and lack of choral music participation. Responses from that group indicated that their decision to abstain from choral music participation was influenced by either a fear of failure or a belief that they did not possess the necessary level of vocal skill to be successful.

Far too often teachers are cited as the reason students abandon singing activities (Freer, 2006). Music education has also done a disservice to students by creating a perception that in order to participate in musical ensembles at the secondary level
students must have a predetermined level of proficiency that is strongly tied to Western Classical Music traditions. Whether intended or not, adolescents feel inadequate and deficient in many areas and when coupled with the voice change process can be lead to believe that choral music programs at the secondary level cannot accommodate them. When and if students are able to overcome those obstacles, the literature selected for performance is often void of personal connection to students. Helping students to understand and connect with the texts of chosen pieces is an important responsibility for choral music educators. Unfortunately, it is often abandoned in pursuit of gaining a higher level of proficiency in the technical elements of the selected repertoire. Choral music educators should be sensitive to the personal perceptions and interests of their adolescent students and work to provide varied, accessible, and meaningful choral music options for all students.

Sub questions 1 and 4. What is the perception of singing and choral music participation among your friends?

When considering responses from friends, participants overwhelmingly reported that their friends viewed things the “Same way” they did. For the low singing interest group this most often meant that their friends held similar views to the responses they had offered. The high singing interest group responses indicated the same, but also held an additional component. In addition to shared views about singing and choral music participation among their peers, the high singing interest group also reported no perceived differences between boys and girls and their participation in singing activities or choral music participation.
There was something about the high singing interest group and their ability to push beyond societal expectations that set them apart from the low singing interest group. A difficult question to answer, but one worth considering, would be whether their liberal view was a result of their greater comfort level with atypical sex and gender behaviors, or whether that worldview gave them “permission” to have a higher interest in singing. Unfortunately, much like the topic of gender identity, it seems impossible to decouple that information to broadly determine the foundation.

**Sub questions 2 and 5.** *What is the perception of singing and choral music participation in your family?*

Many of the interview participants indicated that their parents viewed singing and choral music the “Same way” they did, indicating a high level of parental influence on participant perceptions. Several responses indicated that fathers tended to listen only to male artists and certain styles of music like rock and roll and heavy metal, while mothers were often reported as liking anything. Additionally, many of the students commented on the fact that regardless of their parents’ perceptions of choral music participation and singing, parents would support their child’s decision to sing or participate in a choral ensemble.

Parents are often the first primary musical influences on their children so, much like societal expectations regarding gender roles and perceptions of singing, their tastes in music and personal perceptions about gender appropriate behavior and activities can have a profound effect on student activity choice and adolescent development. As stated previously, while students move through adolescent development, their influential focus
shifts from parents to peers (Martin & Dinella, 2002; Moshman, 2011). Although musical interests and identity have often been established by the beginning of adolescent development, peers can have a much more dominant impact on musical tastes and perceptions.

Travis mentioned that he would listen to female artists, but only when he was alone. He also noted that his friends would do the same, again specifying that listening to female artists was not acceptable in a group of guys. He pointed out that girls sing about their feelings, which guys avoid in a group context. It is interesting to note that although Travis and his friends avoided discussions of feelings in a group setting that he and his friends would listen to female artists when they were alone, away from the watchful eyes of their peers. This is particularly important because it could indicate that boys and girls have an equal interest in expressing and understanding their feelings, but that many boys do not feel they have the societal "permission" to engage in such behaviors publicly. This lack of permission could have a direct connection to boys avoiding choral music activities during adolescent development. If boys do not feel that society has given them "permission" to participate in activities that are viewed as feminine, they are less likely to go against societal norms, especially when feminine activities are concerned.

Sub questions 3 and 6. What is your perception of singing and choral music participation within society?

The inclusion of this question was particularly necessary to the overall study because it provided an opportunity for participants to state shadow beliefs. The other questions asked them about their own perceptions as well as those of their parents and
friends. It is possible that their responses may have been altered as to not come across with answers that may have been deemed politically incorrect. The inclusion of this line of questioning allowed students to state the perception of singing and choral music participation from an outside view and often provided a greater level of detail in participant responses.

Questions along this strand resulted in most of the statements revolving around singing being an activity in which girls participate or the feminine nature of singing. Many of the participants were reluctant to provide this information when asked about their own perceptions or those of their friends and parents. However, when provided with an opportunity to state perceptions that could be removed from them, participants were more than willing to point out that boys in choir are sometimes viewed as gay, girly, different, or not normal.

**Conclusions: Mixed Methods**

**Mixed methods question.** *In what ways do the interview data, reporting the views of 9th grade boys about their singing interest and choral music participation, help to explain the quantitative results about gender identity and singing interest?*

Due to the fact that there were no significant interactions between gender categorizations and singing interest, the qualitative participants were chosen based on their singing interest scores rather than their gender categorization scores. Additionally, due to the number of students who volunteered for the qualitative follow-up, participants could not be grouped according to their gender categorization. However, in considering the results from both strands of data a few conclusions can be drawn.
In looking at the gender categorizations of the two groups of qualitative participants, there were no consistent categorizations from one group to the other. The low singing interest group did not predominantly align with only masculine traits; in fact, two of the four participants were categorized as feminine. Although it was not expected that gender categorization patterns could be seen in the two groups of qualitative participants due to their small sample sizes, it is interesting to note that an increased level of femininity was not tied to singing interest; females, yes, femininity, no. That is particularly noteworthy since a large portion of this line of research holds that society has a feminine perception of singing and choral music participation.

However, an important distinction should be made about femininity in this study. The femininity discussed here in relation to the quantitative strand of data is not an external perception of femininity; it is a personal adherence to characteristics that are stereotypically viewed as feminine. Singing and choral music are external to an individual, while femininity, in this case, was an internal perception of one's self. Although external factors have the ability to impact perception, which includes self-perceived levels of femininity as well as perceptions of external activities like sports and choir, they are, regrettably, not possible to study independent of one another.

It is also important to reiterate the difference between singing and choral music. These are two different things and generally viewed by the population as two different entities. Although singers are incredibly variant, certain singers and styles of music hold greater value in the minds of many adolescents. Solo or small group artists that perform Rock and Pop music are viewed favorably among American teenagers, whereas
professional artists that perform what is considered Classical music are often not even considered. Each qualitative participant was able to identify a masculine singer and did not question their masculinity within their broader identity as a singer. They did, however, acknowledge the feminine perception associated with choral music participation and the unfavorable societal opinion of boys who choose to participate in choral music during adolescence.

Many high school choral programs work to overcome feminine stereotypes by incorporating more contemporary songs into their choral repertoire. Additionally, some schools also offer show choir, vocal jazz, and contemporary a cappella groups to help increase the acceptance of choral music ensembles within the overall landscape of high school society. These specialty ensembles offer an element of competition and social relevance to students, which helps to increase student participation from both boys and girls.

Communication with students who do and do not participate in choir is key to understanding the adolescent population and what choral music educators could do to enhance their existing programs. Furthermore, modifying choral music programs at the secondary level to better meet the needs and interests of all adolescent students has the potential to increase participation by all students, thus creating a more inclusive musical model.

Implications for Music Education

Although some results from this study were found to be in alignment with existing research and literature, emerging information that can be of value to choral
music educators was also found. Despite the fact that there were no significant
differences in gender categorizations and singing interest, which would have supported
the notion that people who align to stereotypical feminine behaviors have a higher
interest in singing, there was a significant difference in singing interest between boys and
girls. Working to better understand the feminine perception some people have of singing
and whether or not that perception is actually shared by adolescent boys was an important
avenue of exploration in this research project.

Although the qualitative participants in this study did acknowledge the feminine
perception of singing and choral music participation, they did not all share that view.
Several participants commented on a desire to limit stereotypes and social pressure
associated with sex-role and gender-role expectations. In much the same way that gender
stereotypes and societal expectations regarding gender-roles are losing strength, perhaps
the rigid views adolescents hold about the feminine nature of singing are also decreasing.

The elements of music often associated with femininity should not be altered or
covered up, for that is foundational to its beauty. However, it is clear that students still
view singing as an activity whose primary participants are girls. In acknowledging the
fears, concerns, and perceptions that boys hold in abstaining from choral music, teachers
can better structure their programs to be more welcoming and encouraging to all students.
The results from this study indicate that boys enjoy activities that have an element of
physicality, but that they also appreciate the beauty offered by music as well.

In an effort to recruit boys, some choral programs offer show choir, which is a
vocal performance option that includes a high level of physical movement as well as an
element of competition. For teachers unable to provide such course offerings, general
movement can and should be incorporated into the choral rehearsal. Physical gesture and
movement can have a positive impact on the overall quality of the musical product as
well as the choral experience for participants (Galvan, 2008; Shenenberger, 2008).

Structured learning sequences designed to aid in student vocal and musical
development would also be beneficial for uncertain singers. Helping to allay student fears
by creating safe and inviting spaces is also encouraged. Teachers may also benefit from
offering general music courses at the secondary level that incorporate a variety of musical
styles and exploratory singing experiences. If students are provided with opportunities to
engage with music from a seemingly more approachable avenue, they may be more
inclined to investigate choral music ensembles at the secondary level.

**Limitations**

The largest limitation in this study was the use of the Children’s Sex Role
Inventory in measuring stereotypical masculine and feminine characteristics. The
instrument itself was created in 1991, and was 25 years old at the time of the study.
Additionally, the CSRI was based on the BSRI, which was created in 1974. Many
behaviors that were deemed stereotypically masculine or feminine may not be viewed
that way today. A lower adherence to the rigid lines dividing gender characteristics may
indicate a shift in societal perspectives, however, that also decreases the validity of the
instrument. At the time of this project, the CSRI was the best instrument available to
measure differences in masculinity and femininity for a group of 9th grade students. An
additional limitation of this study was that only the voices of boys were presented in the qualitative portion of this dissertation.

**Recommendations for Future Research**

1. The first recommendation for this study would be to expand the quantitative portion to include all levels of high school. In considering the gender intensification hypothesis as well as other elements associated with adolescent development, it would be interesting to investigate differences across grade levels as students develop stronger bonds with their peer groups and establish themselves within the social hierarchy of high school. Additionally, it would also be beneficial to complete the quantitative portion of this study with 6th-8th graders as well. This would provide an opportunity to investigate how the different stages of adolescent development impact, not only singing interest, but gender stereotypes as well.

2. Locating or creating a new measure of masculinity and femininity scales would be beneficial. Although the BSRI is still being used to assess persons with intersex conditions (McCredie, 2011), several of the scale items may not accurately reflect society’s current views of masculine and feminine characteristics.

3. If the CSRI is utilized again, it is recommended that the intended population complete the original study run by Boldizar. This will ensure that the participants who will complete the survey view masculine and feminine traits as masculine and feminine. This will allow students to place external value on the characteristics prior to acknowledging what they feel best describes them personally. In order to ensure valid
responses from students, several months should separate the CSRI validation and its use in a replication study.

4. In addition to expanding the grade levels for the quantitative portion of this study it would be beneficial to include additional schools from a variety of communities. School culture can play a role in the perception student’s hold of school choral music programs. Many show choir programs are able to draw larger numbers of male participants, seemingly due to their inclusion of a physical component to the choral experience. If the school culture has a different perspective of choral music participation, those schools should be included in the discussion as well.

5. Another recommendation would be to expand the qualitative portion of this study to include the perceptions of girls. Although the focus of this dissertation was aimed at understanding non-choir participating boys’ perceptions of singing and choral music participation, girls offer valuable insight as well. The voices of girls who choose not to participate in choir are of equal interest to boys who choose not to participate in choir. If educators are to provide a musical education for every student it is vital that the voices of all students be heard. Understanding barriers faced by both boys and girls is important to the future of music education.

6. A qualitative study focused on adolescent fear in regard to singing activities would also be recommended.

7. A large body of research related to boys' reluctance to participate in choral music is coming from outside the United States, specifically from the UK, Canada, and Australia (Adler, 2012; Ashley, 2006, 2011, 2013; Harrison, 2004a, 2004b, 2007).
Although there is great value in those studies, culture has often been shown to impact choral music participation. Additional studies from the United States on boys’ avoidance of choral music participation would be beneficial.

8. A continued investigation of the perceptual differences between singing and choral music participation would also be recommended. Additionally, exploring differences in the types of choral ensembles offered in schools (show choir, vocal jazz, contemporary a cappella) and their impact on the feminine perception of choral music participation in those specific schools would also help to provide valuable information to educators.

Summary

The imbalance between men and women in choral ensembles is a global issue that has garnered attention from researchers, choral music educators, and patrons of the arts. In much the same way that researchers cannot agree on the biological and psychological influences on the development of gender, music educators find themselves in a difficult position to balance effectively the traditionally viewed masculine and feminine elements of choral music. Society as a whole, unfortunately, has great power to influence people during all stages of development, which in turn, can have negative consequences for choral music educators.

Although many may view singing as a feminine activity because of its connection to the affective domain, there is also great power and strength exhibited within the realm of choral music. That strength and power is perhaps not often seen from high school students who are at the beginning stages of their vocal development. However, it is
imperative that choral music educators continue to celebrate all aspects of music, both light and dark, feminine and masculine, to create a holistic art form. Choral music educators must celebrate all elements of music; not only encouraging students to engage in musical experiences during adolescence, but also equipping them with the necessary knowledge and skills to find success and lifelong engagement with music.
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Inventory. *Sex Roles, 39*(11/12), 929-941.


Appendix A: Institutional Review Board Approval Letter
Official Approval Letter for IRB project #16199 - New Project Form

October 14, 2016

Briana Nannen
Glenn Korff School of Music

Rhonda Fuelberth
Glenn Korff School of Music
WMB 347, UNL, 68588-0100

IRB Number: 20161016199EP
Project ID: 16199
Project Title: "CHOIR IS FOR GIRLS": INTERSECTIONAL MIXED METHODS PERSPECTIVES ON ADOLESCENT GENDER IDENTITY, SINGING INTEREST, AND CHORAL MUSIC PARTICIPATION

Dear Briana:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution's Federal Wide Assurance #0002518 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46).

- Review conducted using expedited review categories 6 & 7 at 45 CFR 46.110
- Date of Approval: 10/14/2016
- Date of Expedited review: 10/09/2016
- Date of Acceptance of Revisions: 10/14/2016
- Funding: N/A
- Consent waiver: Yes, parental consent documentation waiver for Phase I of the research (i.e., quantitative portion) approved under 45 CFR 46.116(d)(1-4).
- Review of specific regulatory criteria (contingent on funding source): N/A
- Subpart B, C or D review: Subpart D review, research involving children not greater than minimal risk at 45 CFR 46.404.

You are authorized to implement this study as of the Date of Final Approval: 10/14/2016. This approval is Valid Until: 10/13/2017.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:
* Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
* Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
* Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
* Any breach in confidentiality or compromise in data privacy related to the subject or others;
* Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research protocol. Your study will be due for continuing review as indicated above. The investigator must also advise the Board when this study is finished or discontinued by completing the enclosed Protocol Final Report form and returning it to the Institutional Review Board.

If you have any questions, please contact the IRB office at 402-472-6965.

Sincerely,

Rachel Wenzl, CIP
for the IRB

University of Nebraska-Lincoln Office of Research and Economic Development
nugrant.unl.edu
Appendix B: Parent/Guardian Cover Letter (Quantitative)
Dear [Name],

My name is Briana Nannen and I am a current PhD student in music education at the University of Nebraska-Lincoln. I am currently working on a research project and need the assistance of your 9th grade student. I have created a questionnaire to measure student interest in singing, along with self-perceived masculine and feminine traits and need a group of students to complete the questionnaire. Although the questionnaire is related to singing and choral interest, I am looking for input from all students in the 9th grade class, not just those involved in the choral program.

Participation in this study will require approximately 10-15 minutes of your child’s/legal ward’s time. Your child/legal ward will be asked to complete a questionnaire about participation in and interest in singing and choral music and rate themselves on how true or not true sets of statements represent them. Example questions related to singing interest include: How would you rate your interest in singing alone? How would you rate your interest in singing with your friends? Example statements related to masculine and feminine characteristics include: I can take care of myself, I am a cheerful person, I am good at taking charge of things, I am a leader among my friends.

The completion of the survey will take place at [School] during [Classroom] All information collected during the study period will be kept strictly confidential. No publications or reports from this project will include identifying information on any participant.

At the conclusion of the survey, students will be invited to select whether or not they would like to participate in a follow-up interview. Only a small group of students will be invited to participate in the follow-up interviews, so even if your child/legal ward indicates an interest in participating, they may not be selected. Parental consent forms with additional information will be sent to parents/guardians of prospective interview participants at a later date. Only those students who indicated interest in participating in the interview and obtained signed parental consent will be invited to participate in that portion of the study.

If you have any questions at any time, please contact me, Briana Nannen. Please review the attached notification form to allow your child/legal ward to participate in the study. Please return the form only if you DO NOT want your child to participate in the study.

Thank you for your time and consideration of this project.

Sincerely,

Briana Nannen
Graduate Student
Graduate Fellow

[Email]
Appendix C: Parent/Guardian Notification Form (Quantitative)
Parent/Legal Guardian Notification Form

Project Description:

The purpose of this study is to investigate adolescent gender identity and interest in singing and choral music participation. A researcher at the University of Nebraska-Lincoln (UNL) is conducting this study in order to understand how students view singing and choral music during their adolescent years and to look for interactions between biological sex and gender identity. The researcher will use the results to guide future research decisions and projects.

Procedure and Risks:

Participation in this study will require approximately 10-15 minutes of time. A researcher from UNL will ask your child/legal ward to complete a questionnaire about their participation in and interest in singing and choral music. Participants will also be asked to rate themselves on how true or not true sets of statements represent them. Example questions related to singing interest include: How would you rate your interest in singing alone? How would you rate your interest in singing with your friends? Example statements related to masculine and feminine characteristics include: I can take care of myself. I am a cheerful person. I am good at taking charge of things. I am a leader among my friends.

Completion of the survey will take place at [insert location] during [insert time]. Only students with parental consent will be invited to participate in the study. Remaining students will do other work or an alternate teacher-led activity designated by the classroom teacher. Your child/legal ward may decide not to participate, or to stop at any time they want. Their questionnaire responses will become the property of the project and will remain confidential. No one will be able to identify your child/legal ward in any written reports. The information gathered during this study will be used to inform future research and will be presented at research conferences.

At the conclusion of the survey, students will be invited to select whether or not they would like to participate in a follow-up interview. Only a small group of students will be invited to participate in the follow-up interviews, so even if your child/legal ward indicates an interest in participating, they may not be selected. Parental consent forms with additional information will be sent to parents/guardians of prospective interview participants at a later date. Only those students who indicated interest in participating in the interview and obtained signed parental consent will be invited to participate in that portion of the study.

There are no known risks associated with participation in the study.

Benefits:

The researcher hopes that the results of this study lead to a better understanding of how choral music and singing are viewed by adolescent students.

Confidentiality:

All information collected during the study period will be kept strictly confidential. No publications or reports from this project will include identifying information on any participant. If you agree to allow your child/legal ward the option to join this study, no further action is needed on your part.
Compensation:
Participants will receive no compensation for their participation.

Opportunity to Ask Questions:
Should you have any questions about the project or my interest in using the results, I encourage you to contact me, Briana Namen.[Redacted]

Freedom to Withdraw:
Participation in this study is voluntary. Your child/legal ward may refuse to participate or withdraw at any time without harming their relationship with the researcher, the University of Nebraska-Lincoln.[Redacted], or in any other way receive a penalty or loss of benefits to which they are otherwise entitled.

Parent Notification Form
I have read the information about the research being conducted by the University of Nebraska-Lincoln. Please check the box below only if you do not want your child/legal ward to take part in the research.

[ ] My child does not have permission to participate.

Name of student[Redacted] Grade[Redacted]
Signature of parent/guardian[Redacted] Date[Redacted]

Please have your child/legal ward return this form to Michele Hollingsworth in the Principal’s Office within the next three days ONLY if you DO NOT wish them to participate.

Thank you so much for your assistance with this important project.

Investigator Information:

Name and Phone number of investigator
Briana Namen.[Redacted]
Rhonda Fuelberth[Redacted]

If you have questions or concerns about your rights as a study participant that have not been answered by the investigators, or to report any concerns about the project, please contact the University of Nebraska-Lincoln Institutional Review Board at 402-472-6965.
Appendix D: Student Cover Letter (Quantitative)
October 14, 2016

Dear [blank] student,

My name is Briana Nannen and I am a current PhD student in music education at the University of Nebraska-Lincoln. I am currently working on a research project and need your assistance. I have created a questionnaire to measure student interest in singing, along with self-perceived masculine and feminine traits. I need a group of students who do and do not participate in choir to complete the survey. I am also looking for a group of students who do and do not participate in choir to interview after the results of the questionnaire have been analyzed. Although only a small group of students will be selected for the interview portion, those selected will receive a $10.00 iTunes gift card for their participation. You will have an opportunity to volunteer for that option at the end of the survey.

Participation in the questionnaire portion of this study will require approximately 10-15 minutes of your time. You will be asked to complete a questionnaire about participation in and interest in singing and choral music and rate yourself on how true or not true sets of statements represent you (e.g., I can take care of myself, I am a cheerful person). This will take place at your school during [blank].

All information collected during the study period will be kept strictly confidential. No publications or reports from this project will include identifying information on any participant.

Your parents/guardians were notified about this project and [blank] advisors have been provided with a list of students not eligible for participation. If you have any questions about your eligibility for this project, please speak with your [blank] advisor or the researcher.

Thank you for your time and consideration of this project.

Sincerely,

Briana Nannen
PhD Student-University of Nebraska-Lincoln
Cynthia Olson Fellow
Glenn Korff Fellow
Appendix E: Parent/Guardian Informed Consent Form (Qualitative)
Parent/Legal Guardian Informed Consent Form

Project Description:

The purpose of this study is to investigate adolescent gender identity and interest in singing and choral music participation. A researcher at the University of Nebraska-Lincoln (UNL) is conducting this study in order to understand how students view singing and choral music during their adolescent years and to look for interactions between biological sex and gender identity. The researcher will use the results to guide future research decisions and projects.

Procedure and Risks:

Participation in this study will require approximately 25-40 minutes of time. A researcher from UNL will ask your child/legal ward to participate in a qualitative interview about their participation in and interest in singing and choral music. Participants will also be asked questions related to masculinity and femininity. It is possible that the students selected for the interview do not participate in choir, which is expected. Example questions related to singing interest include: How do you use music in your daily life? What is your perception of choir? Example statements related to masculine and feminine characteristics include: How would you describe someone masculine? How would you describe someone feminine?

Completion of the interview will take place at your child’s/legal ward’s school during regular business hours. Only those students with signed parental consent will be invited to participate in this portion of the study. Remaining students will do other work or an alternate teacher-led activity designated by the classroom teacher. Your child/legal ward may decide not to participate, or to stop any time they want. Their responses will become the property of the project and will remain confidential. No one will be able to identify your child/legal ward in any written reports. The information used in this study will be used as the basis of my dissertation, to inform future research, and will be presented at research conferences.

There are no known risks associated with participation in the study.

Benefits:

The researcher hopes that the results of this study lead to a better understanding of how choral music and singing are viewed by adolescent students.

Confidentiality:

All information collected during the study period will be kept strictly confidential. No publications or reports from this project will include identifying information on any participant. If you agree to allow your child/legal ward the option to join this portion of the study, please print your child’s/legal ward’s name and sign your name on the following page.

Compensation:

Participants will receive a $10 iTunes gift card for their participation.
Opportunity to Ask Questions:

Should you have any questions about the project or my interest in using the results, I encourage you to contact me. Briana Nammen

Freedom to Withdraw:

Participation in this study is voluntary. Your child/legal ward may refuse to participate or withdraw at any time without harming their relationship with the researcher, the University of Nebraska-Lincoln, or in any other way receive a penalty or loss of benefits to which they are otherwise entitled.

Consent, Right to Receive a Copy:

You are voluntarily making a decision whether or not your child/legal ward may choose to participate in this research study. Your child/legal ward will also agree to be included within the study by providing assent prior to the interview. Your signature certifies that you have decided to allow them to participate having read and understood the information presented. You will be given a copy of this parental/legal guardian consent form to keep.

Name of Child to be Included:

(Name of Child. Please Print)

Name and Signature of Parent/Legal Guardian:

(Name of Parent/Legal Guardian. Please Print)

(Signature of Parent/Legal Guardian) Date

Name and Phone number of investigator
Briana Nammen

Name and Phone number of investigator
Rhonda Fuelberth
Appendix F: Youth Assent Form (Qualitative)
Youth Assent Form

You are being invited to participate in the follow-up interview because you are a 6th grader, and I am interested in your views on singing interest, choral music participation and your perception of masculine and feminine characteristics. You are not required to be enrolled in choir or to have ever participated in choir in order to be considered for this portion of the research project. The interview will take you about 25-40 minutes to complete. You will be asked a series of questions about singing, choir, and your perceptions of masculine and feminine traits. Your comments will help me gain a better understanding of your perception of choral music participation.

Your responses will be strictly confidential. There will be no way for anyone to know which statements were yours or someone else’s. I may present a summary of everybody’s responses at a conference, but your identity and your responses would be totally confidential.

I have also notified your parents and obtained their permission for you to participate in this study. If you choose not to participate, you will return to your regularly scheduled class activities. If you choose to participate, you will complete the interview and receive a $10.00 iTunes gift card for your participation.

If you have any questions at any time, please contact me, Briana Nannen.

If you check “yes,” it means that you have decided to participate and have read everything that is on this form. You will be given a copy of this form to keep.

_____ Yes, I would like to participate in the study.

_____ No, I do not want to participate in the study.

INVESTIGATOR
Briana Nannen
Cynthia Olson Fellow
Glenn Korff Fellow

briananannen@gmail.com

Rhonda Fueberth
Faculty Advisor
Glenn Korff School of Music
Appendix G: APA Permission Form for the Children's Sex Role Inventory
IF THE TERMS STATED BELOW ARE ACCEPTABLE, PLEASE SIGN AND RETURN ONE COPY TO APA. RETAIN ONE COPY FOR YOUR RECORDS. PLEASE NOTE THAT PERMISSION IS NOT OFFICIAL UNTIL APA RECEIVES THE COUNTERSIGNED FORM AND ANY APPLICABLE FEES.

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File: Nansen, Brian (author)

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ACCEPTED AND AGREED TO BY: ____________________________

APPLICANT

March 8, 2016

I wish to cancel my request for permission at this time.
Appendix H: Quantitative Strand Survey
Thank you for taking the time to fill out this questionnaire. Please answer each question honestly. I have no way of identifying your responses and all results will remain confidential.
How would you rate your interest in listening to music?
- Very high (1)
- Somewhat high (2)
- Average (3)
- Somewhat low (4)
- Very low (5)

Please list the extra-curricular activities in which you participate:

__________________________________________________________________________

What is your sex?
- Male (1)
- Female (2)

What grade are you in?

________

What is your self-identified gender?
- Male (1)
- Female (2)
- Other (3) ____________________

Do you currently sing in the school choir?
- Yes (1)
- No (2)

If Yes Is Selected, Then Skip To How would you rate your interest in c...

What made you decide not to join choir?

__________________________________________________________________________

How would you rate your interest in choir participation?
- Very high (1)
- Somewhat high (2)
- Average (3)
- Somewhat low (4)
- Very low (5)

How would you rate your interest in singing in general?
- Very high (1)
- Somewhat high (2)
- Average (3)
- Somewhat low (4)
- Very low (5)
How would you rate your interest in singing alone?
_Singing alone when others are not around_
- Very high (1)
- Somewhat high (2)
- Average (3)
- Somewhat low (4)
- Very low (5)

How would you rate your interest in singing a solo?
_Singing by yourself in front of others_
- Very high (1)
- Somewhat high (2)
- Average (3)
- Somewhat low (4)
- Very low (5)

How would you rate your interest in singing with classmates?
_In a choir class setting_
- Very high (1)
- Somewhat high (2)
- Average (3)
- Somewhat low (4)
- Very low (5)

How would you rate your interest in singing with friends?
_When you are just hanging out with your friends_
- Very high (1)
- Somewhat high (2)
- Average (3)
- Somewhat low (4)
- Very low (5)

How many hours a week do you sing for enjoyment in the following settings?
_Just estimate_

- In class (choir) (1)
- In the community (Church choir, Community choir, etc) (2)
- With the radio/Pandora/iTunes/etc (3)
- In the shower (4)

In the future, do you plan to participate in a school choir?
- Yes (1)
- Maybe (2)
- No (3)

If Yes Is Selected, Then Skip To How interested are you in singing in ...
What, if anything, could the choral program offer you to encourage your participation?

How interested are you in singing in general?
- Very interested (1)
- Somewhat interested (2)
- No preference (3)
- Somewhat uninterested (4)
- Not interested (5)

How interested are you in singing when you are alone?
- Very interested (1)
- Somewhat interested (2)
- No preference (3)
- Somewhat uninterested (4)
- Not interested (5)

How interested would you be to sing a solo in front of others?
- Very interested (1)
- Somewhat interested (2)
- No preference (3)
- Somewhat uninterested (4)
- Not interested (5)

How interested would you be in singing with classmates during a choir class?
- Very interested (1)
- Somewhat interested (2)
- No preference (3)
- Somewhat uninterested (4)
- Not interested (5)

How interested would you be to sing with your friends while hanging out?
- Very interested (1)
- Somewhat interested (2)
- No preference (3)
- Somewhat uninterested (4)
- Not interested (5)
Please indicate the years you have participated in a choir class where singing was the primary activity.

*Check all that apply*
- 5th Grade (1)
- 6th Grade (2)
- 7th Grade (3)
- 8th Grade (4)
- I have never participated in a choir class (5)

Were you required to participate in a choir class where singing was the primary activity? *(The title of the class would be choir, not general music).*
- Yes (1)
- No (2)

**If No Is Selected, Then Skip To Do you sing in a choir outside of sch...**

What years?
*Check all that apply*
- 5th Grade (1)
- 6th Grade (2)
- 7th Grade (3)
- 8th Grade (4)

Do you sing in a choir outside of school?
- Yes (1)
- No (2)

**If No Is Selected, Then Skip To End of Block**

What type of choir?
*Check all that apply*
- Church choir (1)
- Community choir (2)
- Other (3) ____________________
Please identify how the following statements represent you

<table>
<thead>
<tr>
<th></th>
<th>Very true of me</th>
<th>Mostly true of me</th>
<th>A little true of me</th>
<th>Not at all true of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am faithful to my friends. (1)</td>
<td>○</td>
<td>○</td>
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<tr>
<td>It’s easy for me to make up my mind about things. (2)</td>
<td>○</td>
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<tr>
<td>I have many friends. (3)</td>
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<tr>
<td>I care about what happens to others. (4)</td>
<td>○</td>
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<tr>
<td>I like to keep secrets. (5)</td>
<td>○</td>
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<tr>
<td>I am good at taking charge of things. (6)</td>
<td>○</td>
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<tr>
<td>I am a gentle person. (7)</td>
<td>○</td>
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<tr>
<td>I am sure of my abilities. (8)</td>
<td>○</td>
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<tr>
<td>I am an honest person. (9)</td>
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<tr>
<td>When I play games, I really like to win. (10)</td>
<td>○</td>
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<tr>
<td>I like to do things that other people do. (11)</td>
<td>○</td>
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<tr>
<td>When there’s a disagreement, I usually give in and let others</td>
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<tr>
<td>Statement</td>
<td>1</td>
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<tr>
<td>have their way. (12)</td>
<td>♦</td>
<td>♦</td>
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</tr>
<tr>
<td>It makes me feel bad when someone else is feeling bad. (13)</td>
<td>♦</td>
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</tr>
<tr>
<td>I think I’m better than most of the other people I know. (14)</td>
<td>♦</td>
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</tr>
<tr>
<td>I am willing to take risks. (15)</td>
<td>♦</td>
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</tr>
<tr>
<td>It’s easy for me to tell people what I think, even when I know they will probably disagree with me. (16)</td>
<td>♦</td>
<td>♦</td>
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</tr>
<tr>
<td>I feel good when people say nice things about me. (17)</td>
<td>♦</td>
<td>♦</td>
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</tr>
<tr>
<td>I try to tell the truth. (18)</td>
<td>♦</td>
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<tr>
<td>I feel shy around new people. (19)</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
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</tr>
<tr>
<td>I stand up for what I believe in. (20)</td>
<td>♦</td>
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<tr>
<td>I am a moody person. (21)</td>
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</tr>
<tr>
<td>I’m the kind of person others can depend on. (22)</td>
<td>♦</td>
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<td>Statement</td>
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<tr>
<td>I can get people to do what I want them to do most of the time. (23)</td>
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<tr>
<td>I like to do things that girls and women do. (24)</td>
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<tr>
<td>I like to do things that boys and men do. (25)</td>
<td></td>
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</tr>
<tr>
<td>It’s easy for me to fit into new places. (26)</td>
<td></td>
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<tr>
<td>I am always loosing things. (27)</td>
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<tr>
<td>I am a cheerful person. (28)</td>
<td></td>
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<tr>
<td>I like to think about and solve problems. (29)</td>
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<tr>
<td>I don’t like to say “bad” words or swear. (30)</td>
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<tr>
<td>I make a strong impression on most people I meet. (31)</td>
<td></td>
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<tr>
<td>People like me. (32)</td>
<td></td>
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<tr>
<td>I can usually tell when someone needs help. (33)</td>
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<tr>
<td>I usually speak softly. (34)</td>
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<tr>
<td>I’m willing to work hard to</td>
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get what I want. (35)

I am a serious person. (36)

Sometimes I like to do things that younger kids do. (37)

I feel bad when other people have something that I don’t have. (38)

I’m good at understanding other people’s problems. (39)

I can take care of myself. (40)

I am a happy person. (41)

I get pretty angry if someone gets in my way. (42)

I like acting in front of other people. (43)

I am a warm person. (44)

I am a leader among my friends. (45)

When I like someone, I do nice things for them to show them how I feel. (46)

I am careful not
<p>| | | | | |</p>
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</tr>
</thead>
<tbody>
<tr>
<td>to say things that will hurt someone’s feelings. (47)</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>I’d rather do things my own way than take directions from others. (48)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I like babies and small children a lot. (49)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>I always do what I say I will do. (50)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I usually get things done on time. (51)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When someone’s feelings have been hurt, I try to make them feel better. (52)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When a decision has to be made, it’s easy for me to take a stand. (53)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am good at sports. (54)</td>
<td>☐</td>
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</tr>
<tr>
<td>I am a kind and caring person. (55)</td>
<td>☐</td>
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</tr>
<tr>
<td>I never know what I’m going to do from one minute to the</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
It's easy for people to get me to believe what they tell me. (57)
I like to help others. (58)
I can control a lot of the kids in my class. (59)
I would rather do things on my own than ask others for help. (60)

Follow-Up Questions

What is your student ID Number? I, the researcher, do not have access to your student ID numbers. This information will only be used to contact you for participation in the follow-up study should you choose to participate. Your answers to the previous questions will remain anonymous and confidential.

Would you be interested in participating in a follow-up interview about this study? We would have a 30-40 minute meeting where I would ask you questions and record your responses. Our meeting will be very laid back. If selected, you would be given a $10 iTunes gift card for your participation in that portion of the study. All students who complete this survey are eligible to be selected, not just students who participate in choir.
☐ Yes (1)
☐ No (2)

What additional comments do you have about the survey?
Appendix I: Interview Protocol
Interview Questions

*PRESS RECORD*

What activities do you participate in?
   What is it about those activities that you enjoy?

*ARE YOU RECORDING?*

How do you use music in your daily life?

How would you describe masculinity?
   What characteristics do you associate with masculinity?

How would you describe femininity?
   What characteristics do you associate with femininity?

Which label, masculine, feminine, or other, would you prefer to be identified as?
   What makes you say that?

How would you describe masculine singers?
   Examples?

How would you describe feminine singers?
   Examples

What is your perception of singing?
   Would you consider yourself a singer?
   What makes you say that?
What is your perception of girls who sing?

What is your perception of boys who sing?

How do you think your friends perceive singers?
   How do you think your friends perceive boys who sing?
   How do you think your friends perceive girls who sing?

How do you think your parents perceive singers?
   How do you think your parents perceive boys who sing?
   How do you think your parents perceive girls who sing?

What is your perception of choir?
   Would you ever consider participating?
   What makes you say that?

What is your perception of girls who participate in choir?

What is your perception of boys who participate in choir?

How do you think your friends perceive choir?
   How do you think your friends perceive boys in choir?
   How do you think your friends perceive girls in choir?

How do you think your parents perceive choir?
   How do you think your parents perceive boys in choir?
   How do you think your parents perceive girls in choir?

Do you have any other statements you would like to offer?

Do you have any questions for me?

Thank you for your time! I will be back in a few weeks to meet with you again and will have your gift card at that time. Thank you again!
Appendix J: Transcript Excerpt-Codes and Quotes
Not a good singer
R: I'm just not good at it. Just not. It's not very fun unless you're like going with a song. That's pretty fun, then.

Singing not fun
I: *Um*, what is your perception of girls who sing?

Singing is annoying
R: I have a little sister who sings all the time. It's very annoying. But, it depends on what they sing if they're singing about their feelings all the time it gets kind of annoying. But it's not always terrible. *Cuz* some girls like to sing more like with the recent stuff, if they can rap to it it's pretty impressive. It's, *You* think it's more impressive if a girl can do it than a guy can do it.

Girls sing about feelings

QUOTE
I: What makes you say that?

Girls rapping is impressive
R: *Cuz* girls don't usually listen to the new rap stuff, they listen to Taylor Swift and stuff.

QUOTE
I: *Um*, what's your perception of boys who sing?

Rapping. Pretty much. Like if you know all the lyrics to a rap song that's pretty impressive.

QUOTE
I: How do you think your friends perceive singers?

Friends think singers are rappers
R: *As* rappers, like... they, when they think of a singer they'll probably think of a rapper, most likely.

I: How do you think your friends perceive boys who sing?

R: Rapper, yeah still the same way.

I: Do they hold them in high esteem? Do they think they're cooler or not cool?

R: They're pretty cool, they think they're pretty cool.

Rappers are boy singers
I: How do you think your friends perceive girls who sing?

R: About the same way, like, with Taylor Swift again, she, they, they go someone like that who sings about their feelings and stuff.

“Same way”
I: *Um*, how do you think your parents perceive singers?

R: They... listen to the old music too, so, or... rockers and stuff.

Pretty cool
I: How do you think your parents perceive boys who sing?

Same way
R: As the spiked hair with the guitar and *rockin’* their head and stuff
I: Both of your parents?

R: Yeah.

“listen”
I: How do you think your parents perceive girls who sing?

R: *Mmm*, probably actually the same way. *Cuz* they’re *they* don’t listen to most of the new music
I: Older stuff?

R: Yeah

spiked hair guitar
I: *Um*, what is your perception of choir?

choir is singing softly
R: *Um*, just a lot of people getting together to sing softly. It’s not a lot of... newer stuff. *Cuz* if you could get a whole choir together to rap the same way and keep going, that would be pretty impressive.

choir is rapping impressively
I: *Um*, would you ever consider participating?

choir is old music
R: *Mmm*, maybe if it was like a one time thing. But I probably wouldn’t do it over and over again.

I: What makes you say that?

choir’s not interesting
R: *Cuz* going to a practice every other day, would not... I wouldn’t be very interest in that.

I: What if it’s every day during school and you wouldn’t have an after school practice.

R: I still probably wouldn’t because... then that’s still committing to a choir, which, I wouldn’t do.
Appendix K: Full Transcript
Transcript #13
21:55

I: What activities do you participate in?
R: Marching Band
I: What is it about those activities that you enjoy?
R: Just, uhh, makin’ music I guess. Plus it’s pretty fun. Get to travel, see a few things.
I: See a few things like what?
R: Well, umm, BOA we actually played at Colts, I believe, stadium and it was pretty awesome just seein’ all that you know.
I: How do you use music in your daily life?
R: Eh, listen to it just about everyday. Helps me calm down. Listen to it on the way to school. Yeah.
I: How does it help calm you down?
R: Ah, I don’t know it just does. Helps me take my mind off of school.
I: What kinds of music do you listen to?
R: Just about any kind actually. I actually have music that actually kinda older than my parents on here. [Indicates listening device in pocket]
I: What’s your favorite kind of music to listen to?
R: Indie.
I: Indie current, Indie old?
R: Current.
I: Umm, how would you describe masculinity?
R: Basically, big muscles, really jerky attitude I would say. Yeah. Tryin’ to be, uh, the leader, I guess. Alpha male.
I: What characteristics do you associate with masculinity? Or mannerisms?
R: Umm, trying to be popular would be one. Even if that means abandoning some friends of yours.
I: So social standing over…
R: Yeah, social standing over friendships.
I: What do you think gives masculine people higher social standing?
R: I would say the way we’re raised really. You know? Maybe, uh, I don’t know, it’s just the way they were born.
I: How would you describe femininity?
R: Well, someone bein’ weak or…umm…someone who’s not able to do things like go out and work or do jobs, you know. I really don’t see the point in either, you know…
I: What do you mean you don’t see the point in either?
R: Masculinity and feminism-and femininity. Femininity? Yeah.
I: Are there characteristics or mannerisms that you associate with femininity?
R: Fragile, weak. Letting the masculine person, like, be the leader of you.
I: So follower?
R: Yeah, I would say that.
I: And, when you said you don’t see the point to that, what does that mean?
R: Well, I don’t think that we should just be, like, bound to being a masculine or feminine person, you know. There’s more ways, like, you can be different. It’s hard to explain.

I: Can you try to explain a little more?
R: Like you can be fragile but still want to be a leader, you don’t have to just fall into one of two categories, you know. You can be something different.

I: Different like what?
R: Well, maybe you don’t want to be a leader, but you also don’t want to follow anybody. You don’t want anyone following you either.

I: Which label, masculine, feminine, or another would you prefer to be identified as?
R: I really don’t know any other labels, but I definitely don’t like masculine or feminine.

I: So, no label?
R: No label. No.

I: And what makes you say that?
R: Well, I don’t like just, uhh, I don’t try and be the leader unless I have to be, which is only usually for a class thing. And I’m not someone who’s always capable of just following someone, you know, but once again, I can do it if I have to, you know.

I: So, and just—I’m just making sure I understand what you’re saying.
R: Yeah, sorry if it’s hard.

I: Oh no! It’s part of the process. Umm, you have certain characteristics that you see in your mind that reflect masculinity or femininity.

R: Yeah.

I: And you don’t want to be placed into one specific category.
R: Exactly.

I: Ok. Umm, do you feel like some people classmates, friends, parents, feel that people should be put into one category or another?
R: I can’t say for sure. I do know one guy who could possibly fit that description. Me and him were friends for a good 10 years and now, umm, he doesn’t even talk to me, unless he’s, you know, making fun of something I did in the past. So, I don’t know…

I: So you would like to be able to demonstrate feminine characteristics and masculine characteristics?
R: Actually I’d rather not demonstrate either of the characteristics.

I: OK. You would prefer to just not have labels at all?
R: Well, just the two labels, yeah.

I: Ok, oh! So you would be ok with other labels?
R: It depends on the label.

I: What kinds of labels would you be ok with?
R: [Long pause] I’ve been a weirdo before, never really got to me. Outsider, sometimes, well they’re’ve been-recently I’ve not really been like that. It was more middle school.

I: How would you describe masculine singers?
R: Mm, God. I would have to say, big booming voice, you know. Suit and tie or punk outfit, depends on what they’re singing, you know. Could be a rock song, could be any…

I: Do you have examples of musical styles or artists?
R: Musical artists…oh, well, umm, actually I’m having trouble thinking of that. I would have to say maybe Frank Sinatra almost, you know. Voice can boom, and he always wears a suit and tie and just, you know, it just seems like it. I like his music.
I: So jazz music?
R: Oh, yeah, I also like that. Don’t listen to it a lot, but, you know, when I do it’s nice.
I: And then you’d also mentioned rock.
R: Yeah.
I: Other musical styles that you associate with masculinity?
R: Punk.
I: K. How would you describe feminine singers?
R: More light, I would say.
I: Do you have examples of artists or musical styles?
R: Taylor Swift I would think. I don’t listen to it often, but once again, when I do it’s what I hear.
I: Are there certain musical styles that you think represent femininity?
R: Not really though, more depends on the song and the singer.
I: What is your perception of singing?
R: Making music with, basically, what God gave ya.
I: Would you consider yourself a singer?
R: I think I’m an OK singer, I don’t know.
I: And what makes you say that?
R: Mm, I don’t know, just, kinda sounds good when I hear it.
I: And there are no right or wrong answers, just say whatever you think. What is your perception of girls who sing?
R: Beautiful.
I: What is your perception of boys who sing?
R: Powerful.
I: How do you think your friends perceive singers?
R: I really don’t know actually, mm.
I: How do you think your friends perceive boys who sing?
R: Once again, not sure, so…
I: Girls?
R: Mm-mm [shrugged]
I: How do you think your parents perceive singers?
R: Mm-mm, that’s a tough one. I know my mom she doesn’t really care, you know. Umm, I know my dad’s more into rock, you know. Clear-Credence Clearwater Revival, Rolling Stones…yeah…
I: How do you think your parents perceive boys who sing?
R: I would say my dad sees them more as rock and roll singers, you know. Once again with my mom, I don’t think she’s ever really thought with that-err about that.
I: So mom, any?
R: Depends on the singer.
I: K. So what do you think it depends on?
R: Depends on what?
I: You said it depends on the singer, so what is it about the singer?
R: Well just the way they umm, the way they sing, the way they are publicly or on stage, you know. Like, you know, you got the singers that are trashing hotel rooms and, you know, doing drugs and all that and then you, you know, you got the ones that, well, don’t.
I: And which one do you think your mom prefers?
R: Either.
I: Oh, ok.
R: Yeah, I mean she doesn’t condone obviously the first one but she still listens to the music if it’s good.
I: How do you think your parents perceive girls who sing?
R: My mom, once again, probably doesn’t care and my dad, I’m not actually completely sure, you know.
I: What is your perception of choir?
R: Of choir? Uhh, I guess a group of people singing, you know, usually sounds pretty nice.
I: Would you ever consider participating?
R: Ah, nah, I’m not one to do that.
I: What makes you say that?
R: Hmm…I’m just…I can sing in front of some people, but I do-I don’t know I don’t like the fear of messing up with all that. ‘Cuz let’s think about marching band it’s usually there’s at least-you can usually kinda cover up your mistake.
I: And why don’t you think your-a mistake could get covered in choir?
R: I’m not sure, just…singing is always just been a bit more beautiful, and it’s a little bit harder to cover up mistakes the more beautiful it is.
I: Do you think that there are less people that would sing your voice part to kind of buff you out, or do you think it’s just more exposed?
R: What?
I: Do you think that there are less people that would sing the voice part that you’re singing or do you think singing is just more exposed than instrumental music?
R: I think singing is definitely more exposed these days, you know. You rarely see songs that are just, you know, instruments, you know.
I: What is your perception of girls who participate in choir?
R: Higher notes, you know.
I: And boys?
R: Lower notes.
I: How do you think your friends perceive choir?
R: Ooo, umm…I guess I don’t know that much about my friends now do I? I would say maybe the same way I do.
I: How do you think your friends perceive boys in choir?
R: Same way, the ones singing the low notes, you know, and then there’s the ones singing the high notes.
I: Was that for girls? [high notes]
R: Yeah, sorry.
I: That’s ok. That was the next question so it’s all good!
I: How do you think your parents perceive choir?
R: Something that would go along with band, you know.
I: Go along with band how?
R: Well in middle school they were always the ones that kinda went first, you know, during the concerts.
I: How do you think your parents perceive boys in choir?
R: Same as me, low notes.
I: How do you think your parents perceive girls in choir?
R: High notes.
I: How do you think the school perceives students who participate in choir?
R: Hmm [Long pause] ugh, well, I’d say they treat ‘em just about as any other extracurricular activity, you know.
I: Do you think that there’s a difference between boys and girls participating in choir and how they’re treated?
R: Like, treated how?
I: [Shrugged] Can’t respond
R: Umm…ah, I’m not…I don’t think there would be, you know.
I: [Long pause-reviewing responses] So one of the things that you said about masculinity was trying to be popular.
R: Mm-mmm.
I: Do you feel like students who are trying to assert their masculinity by being popular would choose to do choir or other activities?
R: I think they’d try and do more sports-like activities, you know, football, basketball, you know.
I: And what makes you say sports as opposed to choir?
R: Ehh, because I think they don’t see choir as anything that would require any physical activity, you know. ‘Cuz they don’t usually see the work either activity has to do, but when you’re watching basketball you see them running, you see them, you know, jumping and shooting and all that, you know. So…you know it makes them seem more powerful when they’re actually playing it in front of people.
I: Would you say that singing or choir is, umm, more masculine or more feminine or would you prefer to have it have no label, what do you think?
R: No, ah, no label.
I: Is that how you think it’s perceived?
R: I think that’s how it should be perceived.
I: How do you think it is currently perceived?
R: I think it’s more for like-perceived as umm feminine to the people who are not in a musical activities [sic].
I: What is it about it that you think makes it feminine? Makes it seem feminine?
R: Uhll, I guess I’d say how nice it sounds.
I: So it’s nice, has the beautiful quality.
R: Yeah,
I: Umm, so, I just wanna make sure I’m understanding. Masculine doesn’t necessarily have the beautiful kind of…
R: No.
I: …nice connotation.
R: Nah, it’s always more about powerful, like…
I: So do you-if there was a choir that sang really powerfully do you think that that would, or are there other kinds of things that you think would-could make choir more masculine? Or should it be?
R: I don’t think you need to turn it into masculine, you know.
I: Can you talk about that a little more?
R: Well, it already sounds pretty good, you know. Beautiful. I don’t think anyone should need to change that.
I: Change that for…
R: For the people listening, you know.
I: Do you have any other statements you would like to offer?
R: Uhh, no.

[STOP RECORDING]
Appendix L: Spreadsheets for Codes and Themes-Group A
<table>
<thead>
<tr>
<th>Girls are feminine</th>
<th>Guys are physical</th>
<th>Same way</th>
<th>Guys don’t sing</th>
<th>Calling them names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feminine Characteristics: “Happy”, “Timid”, “long hair”, “long eye lashes”, “shorter than men”, mature, good posture, make-up, serious, calm, muscular, athletic, skinny, women knit</td>
<td>Masculine Characteristics: Tall, abs, muscular, sleek, strong, athletic, physical, arrogant, immature, Guys can be masculine or feminine</td>
<td>same</td>
<td>cool</td>
<td>“horrible singing voice”</td>
</tr>
<tr>
<td>Feminine Artists: Miley Cyrus, Lindsay Sterling, Taylor Swift</td>
<td>Physically: Wrestler, lighting, Sports</td>
<td>“Same way” (10)</td>
<td>Guys can’t/don’t sing</td>
<td>Disinterest</td>
</tr>
<tr>
<td>Vocal qualities: Girls have nice voices, Girls sing higher, Lighter, Purer sound</td>
<td>Musical Styles: Rock n roll, heavy metal, rap, guitar</td>
<td>anyone singing is fine</td>
<td>Unsure of voice</td>
<td></td>
</tr>
<tr>
<td>Girls sing about feelings</td>
<td>Vocal qualities: Guys sing darker, Low notes, Guys have deep voices, Boys do the beat, Boys sing high and low</td>
<td>Different is bad</td>
<td>Embarrassed</td>
<td></td>
</tr>
<tr>
<td>Soft song</td>
<td>Singers are rappers</td>
<td>Girls singing is “the normal”</td>
<td>“Calling them names”</td>
<td></td>
</tr>
<tr>
<td>Reserved</td>
<td>Physical is fun</td>
<td>Guys singing is abnormal</td>
<td>Peer influence</td>
<td></td>
</tr>
<tr>
<td>Drama</td>
<td>Boys are physical</td>
<td>Status quo is good</td>
<td>Peer pressure</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Boys do sports</td>
<td>girls doing masculine things is acceptable</td>
<td>fear of failure</td>
<td></td>
</tr>
</tbody>
</table>

"girls are feminine" | girls are accepted in choir | boys are accepted in choir
Appendix M: Spreadsheets for Codes and Themes-Group B
<table>
<thead>
<tr>
<th>Girls are expressive</th>
<th>Men want muscles</th>
<th>Same way</th>
<th>Choir is for girls</th>
<th>Get made fun of</th>
<th>&quot;No labels&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;being a female&quot;</td>
<td>&quot;being a male&quot;</td>
<td>some nuances from friends</td>
<td>&quot;same way&quot; (6)</td>
<td>fear of failure</td>
<td>No labels</td>
</tr>
<tr>
<td>Physical: long hair, make-up, look nice, agility, moves freely, weak, fragile</td>
<td>Physical: muscles, facial hair, physical, bigger, broader, louder, strong, leader, powerful, Straight-forward</td>
<td>guys do sports</td>
<td>get made fun of</td>
<td>no difference</td>
<td></td>
</tr>
<tr>
<td>Expressive</td>
<td>deep voice, lower notes</td>
<td>&quot;same&quot; (4)</td>
<td>guys outnumbered</td>
<td>disliked choir</td>
<td>&quot;do what you want&quot;</td>
</tr>
<tr>
<td>Feelings</td>
<td>sports are masculine</td>
<td>&quot;same way I do&quot;</td>
<td>guys lack interest in choir</td>
<td>Some people are better</td>
<td>depends</td>
</tr>
<tr>
<td>attention seeking</td>
<td>Men want muscles</td>
<td>&quot;same as me&quot; (3)</td>
<td>guys do physical activities</td>
<td>Criticized</td>
<td>equal</td>
</tr>
<tr>
<td>Physical appearance</td>
<td>Guys care less</td>
<td>choir's not physical</td>
<td>exposed</td>
<td>shouldn't make choir masculine</td>
<td></td>
</tr>
<tr>
<td>Girls like to sing</td>
<td>Rock, heavy metal</td>
<td>Talented singers are popular</td>
<td>bullied</td>
<td><em>everyone can sing</em></td>
<td></td>
</tr>
<tr>
<td>High notes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>wrong sound</td>
</tr>
<tr>
<td>girls singing is &quot;beautiful&quot;</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>