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## High school students' attitudes toward single-sex choir versus mixed choir

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HIGH SCHOOL STUDENTS' ATTITUDES TOWARD SINGLE-SEX CHOIR VERSUS  
MIXED CHOIR

A Thesis

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Master in Music

In

The School of Music

by

Jenna Leigh Jackson  
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## ABSTRACT

Participants in this project included high school choral students ( $N = 54$ ) from central Mississippi and their directors ( $N = 3$ ). Participants were enrolled both in a mixed choir and either an all boy or all girl choir. A survey was constructed by the researcher to determine the attitudes of the participants toward singing and participation in choir. The 32 survey statements fell into one of four categories: perception of self as singer, attitude about gender in choir, others' perception of self in choir, and attitude toward choir. In addition, participants were asked to provide demographic data about their gender, age, preference for mixed choir or gender specific choir, and favorite choir song. In order to examine possible differences in music selection that might impact students' attitudes toward choir, teachers for all choirs responded to a questionnaire regarding philosophy of music teaching in choir. All pieces chosen as the favorite song of the students were analyzed for comparison among groups as well as to give some context to the survey responses.

Results indicated singing no significant attitudinal differences between boys and girls in any of the categories,  $p > .05$ . Participants were highly positive in their responses to all four categories of statements. The majority of the participants preferred participating in the mixed choir, with the females (89.47%) indicating an even higher preference for the mixed choir setting than the males (75%). The most common reason offered for preferring the mixed was the sound of the ensemble ( $p < .05$ ). Girls and boys had different preferences when it came to favorite songs, but reasons for preferring one piece over the other was predominantly related to musical elements ( $p < .05$ ). The teachers had a common philosophy that guided their selection of music.

## CHAPTER I

### INTRODUCTION AND REVIEW OF LITERATURE

#### Introduction

With the passage of the *No Child Left Behind Act* in 2001 (United States Congress, 2001) the government imposed a priority for schools to improve students' standardized test scores. It seems that increasingly the focus of education has shifted from a well rounded education to one that focuses on the core subjects of math, language arts, and science. The purpose of the *No Child Left Behind Act* was that schools needed to look for better ways to teach students such that there is an observable growth in achievement. Some educators and psychologists believe that single-sex schools are a possible solution. Many parents are also looking for the best way for their children to learn, so some parents are enrolling their children in single-sex schools or classes. However there are many critics of single-sex education who believe that co-education is the best setting for learning. This topic has sparked heated debates on the benefits and disadvantages of single-sex schools.

The design of this study was to ask specific questions to determine male and female attitude differences toward choir. The choirs that the students participated in were both co-educational choir and single-sex choir. Of interest was whether the students felt more successful or comfortable through participation in single-sex choir.

#### Single-Sex Education

Dr. Leonard Sax, a psychologist and family physician, wrote a book titled, "Why Gender Matters" (2005) which outlines developmental differences between male and female children. His thoughts were further publicized when he was interviewed on the *Today Show* on NBC on February 15, 2008. Sax's philosophy is that boys and girls learn completely differently. Their view of the world is different too. According to Sax, boys see the world in action and respond to

moving objects, while girls see the world through emotions and respond to colors and people. He stated that research has shown that the retina of girls' eyes look for color while boys' eyes look for movement. He also reported that girls have more sensitive hearing than boys. Sax advocates single-sex education because he considers that it is almost impossible for a teacher to cater to the learning styles of males and females simultaneously. He believes that having a single-sex school, or even offering a single-sex course, would benefit both sexes because the teaching could focus on the way male or female learners understand the world.

Asthana Anushka (2006) wrote an article about the United Kingdom's (UK) argument over single-sex education. About the time that Sax's book was released, more than the usual numbers of UK parents were beginning to enroll their children in single-sex schools. This interested Anushka because the concept of single sex education was a trend 30 years ago, but the majority of those schools had either changed into co-education schools or closed their doors. According to Anushka, opponents of the single-sex schools believe that that there are more similarities between the way boys and girls learn than there are differences, and that the benefits attributed to single-sex schooling could be due to other factors such as the students' natural ability, culture, or socio-economic status. No evidence has been found to support that single-sex schooling is harmful to students. Anushka reported that current research shows no difference in learning progress between single-sex schools and co-education schools.

The idea of moving back to single-sex classrooms has been discussed in an article by Rycik (2008). He reported that parents are interested in utilizing the opportunities that single-sex classrooms provide. This perspective comes from the knowledge of the difference between sexes and in particular the way male and female students learn. Supporting this argument is the belief that at the middle school and high school levels, students are less distracted by the opposite gender and pay more attention in school when they are in single-sex classrooms. However, he



also presents the contrasting argument that the single-sex educational environment violates individual rights. Before integration of the sexes in schools, girls received an education that was inferior to that of boys. He concluded that perhaps the biggest downfall of this style of education is that many schools use it as a quick fix to their educational problems.

Gilroy (1990) was interested in whether single-sex education made a difference in students' attitudes toward school. She collected SAT and grade point averages from students' previous school year at six independent non-Catholic schools. There were an equal number of single-sex schools and co-educational schools studied. Through a questionnaire administered to all seniors at the six schools, the results showed that single-sex schooling had no effect on academic scores compared to the co-educational school. However, the students reported that the work ethic was high and the teacher support system was better at the single-sex schools. The girls in the single-sex schools engaged in more math classes and leadership roles than the girls of the co-educational schools. The students in single-sex schools, both boys and girls, had a higher respect for school than the co-educational school students. The majority of the student body at the single-sex schools had plans for further higher education. The results support a positive influence for academic motivation and social development while being in a single-sex school.

Opportunities for selecting single-sex classroom environments for their children are not available to all parents. In the United Kingdom, parents from three schools participated in an interview and questionnaire to determine whether the option to select a single-sex school in addition to a co-education school influenced the parents' decision for the school their child attended. The parents had a choice between two single-sex schools and one co-education school. Jackson and Bisset (2005) prepared a questionnaire and conducted interviews with the parents. The majority of the participants did not choose a school simply because it educated boys and girls in different classrooms. The parents reported that the reputation of a particular school was

the main reason that they chose that school for their child to attend. The selection of schools varied between parents of boys and girls; however, more parents of females chose a single-sex school for their daughter to attend. Survey participants stated that co-educational schools are more beneficial to boys because they cater to male learning styles and interests. Many of the parents believed that educational opportunities are better in single-sex schools, but that co-educational schools have more social benefits.

Schneider, Coutts, and Starr (1988) observed students' attitudes toward school based on the type of schooling they received. Students from both co-educational schools and single-sexed schools completed a survey indicating their perceptions about their teachers, their self-concept, and attitude toward high school. Attitude responses were based on a Likert scale followed by students selecting a preference for type of educational environment. Their choices were co-educational, co-institutional, or complete single-sex schools. Co-institutional is the terminology used when classes are single-sex but activities are co-educational. The attitude results and the school ranking results were uncorrelated in this study. Students in co-educational schools liked being in that environment better than students liked attending single-sex schools. Results also indicated that students in co-educational settings had better attitudes toward teachers and better self-concept than those students educated in single-sex schools.

Some research seem to support single-sex classrooms for general education. The music classroom, in particular the choral classroom, has a unique set of circumstances that may make single-sex education attractive. Especially at the secondary level boys' voices are changing, as might be their attitude toward singing in a choir. A high school choral department in Wisconsin was a role model for the rest of their school implementing single-sex education. Jorgensen and Pfeiler (2008) defined the benefits of single-sex education as avoiding gender-defined stereotypical behaviors, better concentration, and more commitment to the program. When they

first implemented the all male choir; boys were hesitant to join, perhaps because singing is stereotypically considered a feminine activity. The authors stated that more repertoire is explored and students are more accepting of new performance skills in an all male choir. This new setting allowed the male singers to explore the falsetto more comfortably without their female peers around to judge. Because of the success with single-sex choirs, this school in Wisconsin is now offering more courses that are single-sex in other academic areas. Now obtaining membership in the male choir is coveted by others and the members show a great deal of pride in their organization.

### Gender Issues

Historically, choral directors have had a difficult time recruiting and keeping male singers in choral ensembles. Harrison (2007) found that even though the majority of the workplace is still masculine dominated, vocal music is the opposite by being female dominated. Males are still, however, choosing more masculine instruments if participating in music but still avoiding participating in choir. Harrison (2006) stated that there are many factors that keep boys from participating in vocal music, the main reason being is that most males feel that participating in choir is an inappropriate activity for a male. According to Harrison, some boys have poor attitudes toward choir participation because they perceive that most songs sung in choir are slow, boring, and unmasculine. Harrison also stated that research supports encouragement of participation, and that cultural belief changes can boost the number of boys who choose to participate in choir. Koza (1993) found through an analysis of articles in the *Music Supervisors' Journal* that in the early 20<sup>th</sup> century much of the discussion on music education was focused on males. Education in music for females was rarely discussed. However she also discussed in the article that today there is a current lack of males in music education, especially in vocal music. More females join choir, and choral ensembles are often unbalanced. One possible explanation is

that boys see participation in choirs as unmasculine. Another is that fathers may discourage sons from participating in music activities but encourage their daughters. Through Koza's research she found that there were more advocacies for men in the business field of music. A recent article (Anonymous, 2007) suggests that there is much literature to support why males are absent from choral programs. Some of the reasons include the males' dislikes of the music literature, too many female choral teachers, and gender stereotypes of singing.

In a qualitative study, Parker (1998) observed the selection of and participation in arts classes in three all boys private schools. Parker's own school was included as one of these three private schools. The students examined were from both the middle school and senior high levels at all the schools. He examined the enrollment list of previous years, interviewed male students about their attitude and view of the arts, and had the boys complete a questionnaire that asked questions about their motivation to study art and music, and perception of the masculinity of art and music. Results indicated that the boys from Parker's school, due to an arts requirement, selected more art or music electives, as opposed to math and science electives, than were reported in other schools. The attitude toward art and music was the same for all three schools and all ages.

In an effort to help teachers develop strategies to increase male involvement in choirs, Demorest (2000) suggested that the main problem is actually getting the males interested in choir. He proposed that male identity is the number one reason middle school students are afraid to join choir. Therefore, he started a program to encourage male singers to select and stay in choir. The program Demorest devised was a weekend workshop for men only. The participants were separated into one of two choirs, depending on their vocal development. The ensembles rehearsed separately and then performed for each other. Once the boys returned to their school, Demorest reported that the boys demonstrated more leadership skills, which appeared to be a

result of participation in this workshop. Demorest advocated placing the older boys in a mentoring role for the younger boys as a motivating strategy.

Attitude toward music appears to be an influential factor as to why males choose or choose not to participate in a performing ensemble. The use of surveys has typically been used to collect attitudinal data. Phillips' (2003) study of middle school students focused on home musical environment, self concept, grade level, gender, and socioeconomic status (SES) and how these attributes affected music attitudes. Survey data indicated that attitude toward music was most closely related to home musical environment (boys) and self concept (girls). All students had a slight decrease in attitude toward music as grade-level increased. This decrease was significant for the low SES students. In addition, girls had a significantly more positive attitude than boys among all grade levels and SES levels. The author suggested that music educators find unique musical experiences for boys to improve attitude toward music at the middle school level.

Sinsel, Dixon and Blades-Zeller (1997) examined elementary students to determine whether children's psychological sex type had an effect on instrument choice. Through the use of a sex role inventory, they categorized students as being masculine, feminine, or androgynous. Students listened to an audio presentation of nine instruments and then completed a survey asking them to choose a most and a least preferred instrument and answer why they chose that instrument. A strong correlation between instrument sex-type and biological sex type was confirmed.

Hart and Cogan (1973) conducted a study to determine whether men and women differed in familiarity with classical music, and if they differed in positive and negative statements about the classical pieces. The men who were more familiar with classical music reported more positive responses. The women were more familiar and had more negative responses with classical music than the men. Abeles and Porter (1978) found that children chose instruments

depending on the gender stereotype of the instrument. Around the third and fourth grade, females choose more feminine instruments while males chose more masculine instruments. However, girls are interested in a greater variety of instruments than boys. Delzell and Leppla (1992) modeled a study after Abeles and Porter and found that after a group of students learned the names of instruments by picture recognition, boys tended to choose the drums and the saxophone. The girls, similar to Abeles and Porter's study, chose a variety of instruments including flute, drums, saxophone, and clarinet. The majority of the students chose a particular instrument due to thinking the instrument was enjoyable. The sound of the instrument was the second reason for their choice.

In summary, many directors and teachers have their own ideas on the benefits of single-sex choir but no actual research is found on the topic. Some research states that there is a need to study the effects or attitudes on students' views of different forms of choirs. There is much research to supports the benefits of participating in a single-sex educational environment. Although the *No Child Left Behind Act* possibly brought more problems to education, a clear potential outcome of the act was to insure that all students were given equal opportunities for the best approaches to learning. Single-sex choir might help in insuring that no child is left behind in music. Therefore in order to determine the difference of students' attitudes toward choir when participating in both a single-sex choir and a mixed choir, specific statements were presented in an attitudinal survey. According to Sax (2005), males and females visually see the world differently, make choices differently, and if events may affect them differently, this would raise the question as to whether males and females attitudes differ according to differences in choir settings.

## CHAPTER II

### MATERIALS AND METHODS

#### Participants

Participants in this project included high school choral students ( $N = 54$ ) from central Mississippi and their directors ( $N = 3$ ). There were 38 girls and 16 boys. All three teachers were female. All choir members were from the same 9-12 high school and were auditioned for membership. In order to be invited to participate in the study, students needed to be enrolled both in a mixed choir and either an all boy choir or an all girl choir. The students enrolled only in a single sex choir did not participate. Participants had contact with all three teachers in the mixed choir setting as the director of the mixed choir was assisted by the two directors of the single-sex choirs. The director of the choral department gave verbal consent to allow choral students and their teachers to participate in the study. Exemption from oversight was granted from the Louisiana State University Institutional Review Board (IRB) (See Appendix A). Prior to taking the survey, consent forms were signed by the parents of the participants. In addition, the students signed an assent form stating they understood the requirements and agreed to take part in the study. Teachers who participated in the questionnaire process also gave written consent to participate. All students in class the day the survey was administered completed the form, however data from participants who did not produce signed consent and assent forms were not included in the analysis and results of the study. Included in Appendices B, C, and D are examples of the parental permission form, student assent form, and music teacher consent form, respectively.

#### Instrumentation

A survey was constructed by the researcher to determine the attitudes of the participants toward singing and participation in choir. The survey was modeled after the Fennema-Sherman

Mathematics Attitude Survey (Fennema & Sherman, 1976). This scale has been modified in other research studies in order to observe attitudes in subjects other than math. For example, Wehr-Flowers (2006) used this survey to determine factors that contributed to anxiety during improvisation. In the current project, many of the questions from the Fennema-Sherman survey were left the same, but language was changed from questions about math to those about music or choir. The 32 survey statements fell into one of four categories: perception of self as singer ( $n=8$ ), attitude about gender in choir ( $n=5$ ), others' perception of self in choir ( $n=6$ ), and attitude toward choir perception of self as a singer ( $n=13$ ). (See Appendix E for complete survey.)

The survey was designed with 12 pairs of opposing (negative and positive) attitudinal statements to which students indicated their agreement or disagreement along a 4-point continuum. These were included in order to calculate internal reliability on the measure. An example of one of the opposing pairs is as follows: "I am a good singer" (positively stated) and "I do not like the way I sing" (negatively stated). There were a total of eight attitudinal statements that were considered independent and non-opposing in design. Four of these independent statements were categorized as statements about singing, and the other four were categorized as statements about choir. Statements were placed in a random order on the survey.

Prior to administration of the attitude survey, face validity of the instrument was determined by two experts, both of whom were vocal music educators enrolled in graduate school. The graduate student researchers agreed that the survey provided adequate coverage of the issues relating to a singer's attitude toward participation in a mixed choir and a single-sex choir. The primary investigator reworded three of the survey attitudinal statements for clarity based on the other two researchers' suggestions. In order to determine reliability of the survey, correlation coefficients were calculated on participant responses to the 12 pairs of opposing attitudinal statements. The independent statements were not included in the correlation analysis.



The researcher used the following system to assign numbers to the participant responses to figure mean values as well as test for reliability: The participant responses to the positive attitudinal statements received a score of 1 for “Strongly Agree,” a score of 2 for “Agree,” a score of 3 for “Disagree,” and a score of 4 for “Strongly Disagree” respectively in association with the Likert-type scale. The participant responses to the negative attitudinal statements received a score of 1 for “Strongly Agree,” a score of 2 for “Agree,” a score of 3 for “Disagree,” and a score of 4 for “Strongly Disagree.” For example, if a participant responded “Strongly Agree” to the positive statement, “I enjoy choir,” a score of 1 was assigned, and if a participant responded “Strongly Disagree” to the negative statement “I wish I was not in choir anymore,” then a score of 4 was assigned. A decision was made to use a four point rather than five point scale to avoid answers that were neutral (Boyle & Radocy, 1987, p. 179). With only four options the participant was required to give an answer leaning toward a positive or negative direction. A neutral option was not available. In addition to the 32 attitude statements, participants were asked to provide demographic data about their gender, age, preference of mixed choir or gender specific choir, and favorite choir song.

#### Song Selection and Analysis

As part of this project, all pieces chosen as the favorite song of the students were analyzed for comparison among groups as well as to give some context to the survey responses. If none were chosen from any particular ensemble, two pieces automatically were analyzed from each ensemble. It was hypothesized that the type of music selected for each choir could affect responses on the survey.

Analysis of these songs was done using the Choral Analysis form found in Appendix F. The analysis form was adapted from one designed by Dr. Sara Lynn Baird, Professor at Louisiana State University, for use in choral methods classes. Information recorded on selected

pieces included title, composer, arranger, publisher, voicing, accompaniment, language, source, translation, tempo, and genre. The ranges of all voice parts are documented, as is the voice part that carries the melody throughout each piece. The difficulty of each piece was determined based on listing by each publishing company.

### Teacher Questionnaire

In order to examine possible differences in music selection that might impact students' attitudes toward choir, teachers for all choirs were asked how the music was selected for their group. It seemed important to determine whether all the teachers had a core philosophy when choosing music or whether that varied by type of ensemble. These questions were asked in a teacher questionnaire form completed by the all the choir directors. The teachers completed this form at the same time the students completed their survey. The interview questions can be found in Appendix G.

### Procedures

The head of the choral department of Pearl High School in Pearl, Mississippi was contacted and she gave verbal consent allowing the three choirs to participate in this study. The principal of the school also gave verbal consent. The same survey was administered to all students during scheduled mixed choir class time with the researcher attending. The entire process for students was completed in 20 minutes. The process was completed during the scheduled mixed choir rehearsal. Surveys from students who did not submit signed parental consent forms and a student assent form were discarded.

## CHAPTER III

### RESULTS

The purpose of this study was to determine if boys and girls participating in both a single-sex choir and a mixed choir at a successful choral program at one public high school would differ significantly in their attitudes toward choir participation. Choir participants ( $N= 54$ ), boys ( $n=16$ ) and girls ( $n=38$ ), participated in a survey that contained 32 attitudinal statements. The attitudinal statements were associated with four categories: perception of self as singer, attitude about gender in choir, others' perception of self in choir, and attitude toward choir. The choir participants expressed agreement or disagreement with the statements via a 4-point Likert-type scale. The choir participants also were asked to select and write preference comments for their favorite ensemble and song. The choral teachers of the choir participants were asked to write responses to a series of questions associated with the teachers' philosophy of the choral program and their selection of choral literature.

In order to look at reliability on the paired survey statements, a Pearson Product Moment correlation was computed for each pair of statements. The survey included 12 pairs of opposing (negative and positive) attitudinal statements to which students indicated their agreement or disagreement along a 4-point continuum. On all statements, a "1" indicated strong agreement and a "4" indicated strong disagreement. The 12 correlation coefficients are presented in Table 1. All of the coefficients were negative (ranged  $-.39$  to  $-.77$ ). Because they were all negative, this indicated that the participants were relatively reliable. Generally they agreed to one statement and disagreed with the paired opposite statement. An example if this is participants responded to "Strongly Agree" to "I think I can learn a song quickly" and responded to "Strongly Disagree" to "It takes some time for me to learn a song."

Table 1.

## Reliability Correlations Between Opposing Questions

Positive and Negative Question	Correlation
<ul style="list-style-type: none"> <li>Females are naturally better than males in singing.</li> <li>Boys can do just as well as women in choir.</li> </ul>	-0.39
<ul style="list-style-type: none"> <li>Choir is a useful subject.</li> <li>Taking choir is a waste of time.</li> </ul>	-0.53
<ul style="list-style-type: none"> <li>I am a good singer.</li> <li>I do not like the way I sing.</li> </ul>	-0.48
<ul style="list-style-type: none"> <li>I am scared to sing alone.</li> <li>I enjoy singing alone.</li> </ul>	-0.68
<ul style="list-style-type: none"> <li>People enjoy hearing me sing.</li> <li>People do not like my singing.</li> </ul>	-0.45
<ul style="list-style-type: none"> <li>I am not successful in choir.</li> <li>I know I can do well in choir.</li> </ul>	-0.40
<ul style="list-style-type: none"> <li>I will join a choir in college or in my community when I finish with high school.</li> <li>When I leave high school choir is no longer in my future.</li> </ul>	-0.74
<ul style="list-style-type: none"> <li>It takes some time for me to learn a song.</li> <li>I can learn a song quickly.</li> </ul>	-0.77
<ul style="list-style-type: none"> <li>My teachers do not think I can succeed in music.</li> <li>My teachers have made me feel I have the ability to succeed in music.</li> </ul>	-0.61
<ul style="list-style-type: none"> <li>My friends and family are not interested in my progress in music.</li> <li>My friends and family have been interested in my progress in music</li> </ul>	-0.62
<ul style="list-style-type: none"> <li>I wish I was not in choir anymore.</li> <li>I enjoy choir.</li> </ul>	-0.68

Table 1. Cont.

	-0.66
<ul style="list-style-type: none"> <li>• Auditioning for a selective choir is something I will never do.</li> <li>• I can audition and make a selective choir.</li> </ul>	

One of the main purposes of this study was to determine whether there was a difference between boys and girls in their attitude toward choir, specifically single-sex choirs as opposed to mixed choir. All of the male responses were included, and a random selection of the female responses was included for the purpose of managing the comparisons with a more equalized distribution between groups. The females' surveys were grouped together according to the participants' age and were then randomly selected for grouping with the males' surveys according to age ( $n=32$ ). This resulted in the following: Five eighteen year old males' surveys were with five eighteen year old females' surveys, six seventeen year old males' surveys with six seventeen year old females' surveys, and four sixteen year old males' surveys with four sixteen year old females' surveys, and one fifteen year old male's survey with one fifteen year old female's survey.

Recall that the participant responses were reported using a 4-point continuum with a total of four possible agreement responses: Strongly Agree, Agree, Disagree, and Strongly Disagree. These responses were then converted to numbers with the number "1" representing the most extreme agreement to positive attitudinal statements and the number "4" also representing the most extreme agreement to negative attitudinal statements. In order for the numbers to reflect the same *meaning* during statistical analysis, a conversion of scores was necessary. For example, the statement "I am a good singer" might result in a "1" for a participant who was confident as a singer. That same participant might respond to "I do not think I am a good singer" with a "4" since the statement was opposite of the first one. Therefore, responses to all negatively worded

statements were reversed. A “1” on a negative statement became a “4,” a “2” became a “3,” a “3” became a “2,” and a “4” became a “1.” When interpreting the mean results, it is important to note that a mean of 1.82, for example, is a more positive response than a 2. Refer back to Table 1 for pairs of statements.

The 32 survey questions fell into one of four categories: perception of self as singer ( $n=8$ ), attitude about gender in choir ( $n=5$ ), others’ perception of self in choir ( $n=6$ ), and attitude toward choir perception of self as a singer ( $n=13$ ). For each category of questions, a mean was calculated for each of the selected participants. Four  $t$ -tests were calculated, one on data from each category, to determine differences in attitudinal mean responses between male and female participants by response category and no significant differences were found. The total mean responses related to singing were found not to be significant between males ( $M = 1.69$ ,  $SD = .52$ ) and females ( $M = 1.84$ ,  $SD = .05$ ),  $t(30) = .58$ ,  $p > .05$ , with both groups indicating a relatively positive attitude toward singing. The statements averaged together to indicate attitude toward singing, when looked at individually, show some differentiation. Responses indicated high attitude to “Singing is fun” ( $M = 1.28$ ), “I think I will never learn to sing well” (converted  $M = 1.38$ ), “I am a good singer” ( $M = 1.56$ ), “I can learn a song quickly” ( $M = 1.72$ ), and “I do not like the way I sing” (converted  $M = 1.72$ ). Responses were more neutral to “I am scared to sing alone” (converted  $M = 2.13$ ), “I enjoy singing alone” ( $M = 2.31$ ), and “It takes me some time to learn a song (converted  $M = 2.0$ ).

The total mean responses relating to gender were found not to be significant between males ( $M = 1.54$ ,  $SD = .3$ ) and females ( $M = 1.73$ ,  $SD = .3$ ),  $t(30) = .97$ ,  $p > .05$ , with both groups indicating a relatively positive attitude toward males’ singing abilities, and co-educational singing environments. Mean responses for individual statements include, “Boys can do just as well as women in choir” ( $M = 1.28$ ), “I enjoy singing with boys and girls” ( $M = 1.34$ ), “Men who

love choir are a little strange” (converted  $M = 1.47$ ), “Females are naturally better than males at singing” (converted  $M = 1.88$ ), and “I enjoy singing with all boys or all girls” ( $M = 2.19$ ).

The total mean responses related to others’ views were found not to be significant between males ( $M = 1.62$ ,  $SD = .43$ ) and females ( $M = 1.66$ ,  $SD = .42$ ),  $t(30) = .18$ ,  $p > .05$ , with both groups indicating a positive attitude toward how others, such as parents and teachers, seem to support, evaluate, and view the participants’ singing abilities and experiences. Mean responses for individual statements include, “My teachers have made me feel I have the ability to succeed in music” ( $M = 1.38$ ), “My teachers do not think I can succeed in music” (converted  $M = 1.47$ ), “My friends and family are not interested in my progress in music” (converted  $M = 1.63$ ), “My friends and family have been interested in my progress in music” ( $M = 1.66$ ), “People do not like my singing” (converted  $M = 1.78$ ), and “People enjoy hearing me sing” ( $M = 1.91$ ).

The total mean responses related to choir were found not to be significant between males ( $M = 1.39$ ,  $SD = .51$ ) and females ( $M = 1.46$ ,  $SD = .39$ ),  $t(30) = .29$ ,  $p > .05$ , with both groups indicating a highly positive attitude toward choir participation. Mean responses for individual statements include, “I wish I was not in choir any more” (converted  $M = 1.25$ ), “I enjoy choir” ( $M = 1.25$ ), “Taking choir is a waste of time” (converted  $M = 1.28$ ), “I am in choir because I like to sing” ( $M = 1.28$ ), “Being in choir makes me uncomfortable” (converted  $M = 1.28$ ), “I am not successful in choir” (converted  $M = 1.34$ ), “I know I can do well in choir” ( $M = 1.38$ ), “Choir is useful” ( $M = 1.44$ ), “I am in choir because my parents insist ” (converted  $M = 1.5$ ) “When I leave high school choir is no longer in my future” (converted  $M = 1.56$ ), “Auditioning for a selective choir is something I will never do” (converted  $M = 1.56$ ), “I can audition and make a selective choir” ( $M = 1.59$ ), and “I will join a choir in college or in my community when I finish with high school” ( $M = 1.78$ ).

As a secondary portion of the survey, the participants were asked to indicate which choir they most preferred to sing in and why. The participants overwhelmingly preferred participating in the mixed choir, with the females (89.47%) indicating an even higher preference for the mixed choir setting than the males (75%). Only 10.53% of the females preferred singing in the all-girls choir while 25% of the males preferred singing in the all-boys choir.

The participants' reasons for their preferred choir selection were given as a free operant response. Responses were typed, and emerging common themes were identified. The themes were literature, sound, rehearsal environment, musical skills, and other. The responses that fell into the literature category included style of songs and selection of songs. The sound category included blending, chords, dynamics, fullness of voices, and harmony. Rehearsal environment included focusing better in choir and a structured or unstructured environment. Musical skills included the development of better technique and range. All responses were categorized by two independent observers. Reliability was established with another experienced music educator. The reliability coefficient, calculated by agreements divided by agreements plus disagreements, was  $r = .92$ .

There were a total of 93 responses from the 54 participants. All but one participant responded appropriately to the question, and some participants listed more than one reason. A Chi-Square two sample test (five categories and two choral settings) was calculated and resulted in a significant difference,  $X^2(4, N= 93) = 91.22, p < .001$ . Table 2 displays the tabulations by cell. It is clear that sound was the main reason for choir preference for both types of choir.



Table 2.

Frequency of Responses to Reasons for Choir Preferences.

	Literature	Sound	Rehearsal	Skills	Other
Mixed	8	63	0	8	3
Gender specific	2	4	2	2	1

Participants were asked to state which song was their favorite song to sing during the semester. If any choir member chose more than one song as their preferred song, the first song stated was used in the results. The other choices were not considered. Table 3 displays all of the song choices by title, with the percentage of boys and girls who chose each piece. Only one non-mixed choir song was chosen and it was a song from the girl's ensemble songs (*Dream Keeper*). All other songs chosen were a representation from the mixed choir. The girl's favorite song was "Now Shout" with 23.68% of the girls choosing this song. The boy's favorite song was "Lay a Garland" with 31.25%.

Table 3.

Percentages of Song Preference by Boys and Girls

Song	Boys	Girls
Caritas et Amor	18.75	15.79
Now Shout	12.5	23.68
Ave Maria	12.5	10.53
Dream Keeper	0	18.42
Hold On	25	15.79
Lay a Garland	31.25	15.79

The students were then asked to state three reasons for their choice of song. The students were allowed to use any terms to describe why the song was their favorite. Responses were typed, and emerging common themes were identified. The themes were musical elements, difficulty, lyrics, enjoyment, and other. The responses that are in the musical elements category included statements about chords, rhythm, dynamics, and harmony. The difficulty category included statements about the challenge provided by the music. The lyrics category included responses regarding the text or the theme of the text. Responses labeled as enjoyment included statements about the song as a whole, and their liking the song or finding the song fun. Responses were categorized by two independent observers. Reliability was established with another experienced music educator. The reliability coefficient, calculated by agreements divided by agreements plus disagreements, was  $r = .91$ .

There were a total of 162 responses from the 54 participants. All but one participant responded appropriately to the question, and some participants listed more than one reason. A Chi-Square two sample test (five categories and six songs) was calculated and resulted in a significant difference,  $X^2(20, N= 162) = 303.82, p < .001$ . Table 4 displays the tabulations by cell. It is clear that musical elements played the most prominent role in determining preference for both their favorite song choice.

A descriptive analysis of a selection of nine songs performed by all choirs over the course of the semester was completed (Appendix H). The head of the department selected these pieces as the best representation of the style that the choirs typically sing. All six of the pieces selected as favorites of the participants were included in this group of song. Each piece was described in relation to the voicing, accompaniment, language, tempo, genre, range, and difficulty.

Table 4.

Frequency of Responses to Reasons for Song Preferences.

Name of Piece	Musical elements	Difficulty	Lyrics	Enjoyment	Other
Now Shout	12	6	4	9	2
Hold On	18	3	1	7	1
Carita et Amor	18	2	1	9	1
Ave Maria	6	3	1	7	1
Lay a Garland	17	4	0	11	0
Dream Keeper	5	2	3	7	1

The songs are all of high standards for the students to learn. Difficulty levels, determined from the listing of the publishing company, were found to be are similar for all choirs. Selections for all choirs were between medium easy and advanced. The ranges are not too difficult or out of range for any voice part of the high school level. All but three pieces are a cappella. The remaining three have piano accompaniment, however “Dream Keeper” includes a vibraphone and wind chimes. A variety of languages including English, French, and Latin are represented. Also a variety of tempos are represented.

In the teacher questionnaire that was completed by all three teachers during the completion of the student survey a common philosophy was stated and reported in the questionnaire. Responses to the questionnaire can be found in Appendix I. All teachers responded by stating that the teachers follow a common philosophy. The teachers presented a copy of the philosophy that is followed by the teachers and printed in the student choral handbook.

Our philosophy is to fulfill the musical needs of students who enjoy singing. Each choir is devoted to the diligent study, rehearsal and performance of choral music. Students will

be exposed to a variety of choral literature, representing different styles and culture. We offer opportunities for individual and team relationships. Through a strong work ethic, commitment, and a passion for music, all students will succeed.

Teacher One teaches only the mixed choir. Teacher Two teaches the freshman choir, men's choir, and contributes to the mixed choir. Teacher Three teaches the sextet, women's choir, and general music. In responding to who chooses the music of each choir, all three teachers stated that it is determined by collaboration of the directors or by the director of the particular choir. Teacher Three added to her response that she chooses music by listening to other choirs at the Southern Division Convention or National Division conventions. Teacher One stated that her reasons for choosing a particular piece are based on the students participating in the choir. Teacher Two stated she chooses music based on an aspect of choral music that can focus on certain musical skills, such as phrasing, breath, or difficult rhythms. Teacher Three chooses music because she enjoyed the piece and the advancement of the students participating that particular year.

## CHAPTER IV

### DISCUSSION

Much research supports that students benefit from a single-sex style of education (Rycik, 2006; Sax, 2005). There has not been any research on the benefits of single-sex choirs. This research set out to determine whether boys' and girls' attitudes differed when participating in both a mixed choir and a single-sex choir. Through a 32-question survey about students' attitudes toward each choir, the results demonstrate that there was no significant difference between the girls' and boys' mean attitudes towards statements regarding perception of self as singer, attitude about gender in choir, others' perception of self in choir, and attitude toward choir. Possibly both the girls and boys experienced the same education in choir. According to the teacher questionnaire, all three teachers stated they have the same philosophy about teaching choral music. Also, the participating choral program has very high standards. In the past years, the choirs have won many competitions and continue to prepare for more success in other competitions. Regardless of choir participation, either mixed or single-sex, the boys and girls have equal opportunities to be successful. The idea that both the boys and girls are practicing positive and successful experiences could lead to the boys and girls enjoying both choirs. In other instances schools might implement a single-sex program to help build a failing choral program (Jorgensen & Pheiler, 2008). A single-sex choir can aid in the selection of more interesting and gender specific literature and staying on task during rehearsal time. If the literature is more fun, this can aid in the possibility of the experience in choir to be more enjoyable. All choirs in this study performed high quality literature. Through looking at the selection of pieces performed by both single-sex and mixed choir, one can see that there is no choir in this study learning poor quality music.

In looking at responses to the teacher questionnaire, teachers believe in selecting excellent music for all choirs to use. As part of the design of the study, all students participated in both single-sex choir and mixed choir. This led to insuring that all students received similar experiences. The idea that all students received similar experiences, however, can lend to the result that there was no significant difference between the boys' and girls' attitudes toward choir. Apparently, the gender of ensemble classmates had little impact on preference for ensemble.

Both boys (75%) and girls (89.47%) preferred singing and participating in the mixed choir. Unlike other courses in education (Gilroy 1990), the educational environment was not the reason for the students' choosing a choir over another as their favorite. An overwhelming reason for selection of favorite choir was the sound of the choir. The students preferred the larger texture and the fuller sound of a mixed choir or the addition of the opposite sex in the total sound of the choir. One student stated she preferred participating in the mixed choir because "We need bass voices. With an all girl choir the altos aren't always enough." A boy stated that he preferred singing in a mixed choir because "The chords are fuller and generally have a better sound." In general education the environment of the educational setting is the reason and the benefit of using a single-sex style of education (Jackson & Bisset, 2005). Very few students stated this as the reason for preferring a choir over another. The number one reason was sound. The texture of the mixed choir is more enjoyable and overshadows the gender of class members. Music education strives to be more about the enjoyment of the sound of music. It is music education for the love of music. As seen in this study the participants preference for choir was based on the sound of the music and not the social benefits of the educational environment.

All three teachers at this high school in central Mississippi worked with a similar philosophy to teaching choral music to their students. The director of the choral department instructed the other two teachers to submit the philosophy statement provided in the students'

handbook. However, none of the teachers provided further information to their own personal music educational philosophy. One teacher teaches the SATB and the other two teachers teach one or the other single-sex choirs. This shows that all participating students receive similar education from all three teachers through the same educational philosophy. Perhaps the fact that the students encounter all three teachers in the students' choral experience, the attitude toward choir between the girls and boys do not differ. The three teachers all stated independently that they choose music based on students' ability level in any given year. For this question, the teachers were not prompted by the director of the department for the answer; however, the three teachers stated that they collaborate during the selection of music. Only one teacher stated that she chooses music based on her enjoying the piece. This collaboration probably resulted in similarity among the groups with regard to difficulty, style, and musical objectives. All teachers in this choral department chose music based on the students' ability level. This would add to the possibility of the boys and girls having the same attitude toward choir because the students were not bored by music that was too easy, yet the students found success in performing the music because the music was not too hard to accomplish.

With the two independent questions at the end of the survey the students were not reliable with themselves. The two independent questions were "Which choir do you prefer to singing in" and "What is your favorite song from this semester." Several students chose one choir as their favorite choir, but their favorite song was performed by the other choir. For example one student preferred to sing in the all boys' choir but his favorite song was from the mixed choir. All the boys that preferred singing in the all boys' choir chose a mixed choir song as their favorite. One girl preferred singing in the mixed choir but her favorite song was a piece sung by the all girls' choir. Some girls who chose the mixed choir as the preferred choir chose an all girls' choir song as their favorite. The boys did not do this. The boys tended to enjoy the songs of the mixed choir

more. This is in contrast to the Harrison article (2006), possibly because of the careful selection of literature by the teachers participating in this study. Maybe the boys enjoy participating in the all boys' choir because of the environment and are more comfortable singing in the all boys' choir but prefer the dense texture of the songs in the mixed choir due to the fact that the number one reason for choir preference was the sound of the choir. This assumption can be supported by the fact that the songs for the gender specific choirs had a maximum of three parts while the songs for the mixed choir had up to eight parts.

With more boys than girls choosing a single-sex choir as their favorite, possibly there are some benefits for boys participating in single-sex choir. According to research students in a single-sex classroom environment have more pride and show more leadership in the school (Gilroy, 1990). In this case, it could be speculated that boys might be more comfortable singing and rehearsing when they are separated from the girls. While this was not apparent in their responses to the survey, perhaps it is indicated by a quarter of them preferring the boy choir environment over the mixed choir environment. Further research is needed to determine the affects of single-sex choir to the students' musical achievement. Possibly through success in single-sex choir students are more confident in singing and will have more successful choral experiences.

In summary, a good reason single-sex music programs might be beneficial is that single-sex choirs can focus on gender specific literature and gender specific techniques. The advantage of one educational setting over the other, however, is controversial. In music, single-gender ensembles may have some musical benefits. However in this study both males and females preferred mixed over single-gender choirs. More empirical research needs to be done to identify the musical and social benefits over one setting or the other in order to support their place in curriculum.



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# APPENDIX A IRB REQUEST FOR EXEMPTION

## Application for Exemption from Institutional Oversight

Unless qualified as meeting the specific criteria for exemption from Institutional Review Board (IRB) oversight, ALL LSU research/projects using living humans as subjects, or samples or data obtained from humans, directly or indirectly, with or without their consent, must be approved or exempted in advance by the LSU IRB. This Form helps the PI determine if a project may be exempted, and is used to request an exemption.



Institutional Review Board  
Dr. Robert Mathews, Chair  
203 B-1 David Boyd Hall  
Baton Rouge, LA 70803  
P: 225.578.8692  
F: 225.578.6792  
irb@lsu.edu | lsu.edu/irb

- Applicant, Please fill out the application in its entirety and include the completed application as well as parts A-E, listed below, when submitting to the IRB. Once the application is completed, please submit two copies of the completed application to the IRB Office or to a member of the Human Subjects Screening Committee. Members of this committee can be found at <http://www.lsu.edu/irb/screeningmembers.shtml>
- A Complete Application Includes All of the Following:
  - (A) Two copies of this completed form and two copies of parts B thru E.
  - (B) A brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts 1 & 2)
  - (C) Copies of all instruments to be used.
    - If this proposal is part of a grant proposal, include a copy of the proposal and all recruitment material.
  - (D) The consent form that you will use in the study (see part 3 for more information.)
  - (E) Certificate of Completion of Human Subjects Protection Training for all personnel involved in the project, including students who are involved with testing or handling data, unless already on file with the IRB.  
Training link: ( <http://phrp.nihtraining.com/users/login.php>.)

1) Principal Investigator: Jenna Jackson Rank: \_\_\_\_\_  
Dept.: Music Education Ph: 225-955-0638 E-mail: jjack45@lsu.edu

2) Co Investigator(s): please include department, rank, phone and e-mail for each  
\* If student, please identify and name supervising professor in this space  
Dr. Jane Cassidy, chairman  
Music Education  
jcassid@lsu.edu

3) Project Title: High School Students' Attitudes Toward Single-Sex Choir Versus Mixed Choir

4) LSU Proposal?(yes or no) \_\_\_\_\_ If Yes, LSU Proposal Number \_\_\_\_\_  
Also, if YES, either ☐ This application completely matches the scope of work in the grant  
OR ☐ More IRB Applications will be filed later

5) Subject pool (e.g. Psychology Students) High School Students  
• Circle any "vulnerable populations" to be used: (children <18; the mentally impaired, pregnant women, the aged, other). Projects with incarcerated persons cannot be exempted.

6) PI Signature Jenna Jackson \*\* Date 2/16/09 (no per signatures)  
\*\*I certify my responses are accurate and complete. If the project scope or design is later changed I will resubmit for review. I will obtain written approval from the Authorized Representative of all non-LSU institutions in which the study is conducted. I also understand that it is my responsibility to maintain copies of all consent forms at LSU for three years after completion of the study. If I leave LSU before that time the consent forms should be preserved in the Departmental Office.

Screening Committee Action: Exempted ☒ Not Exempted \_\_\_\_\_ Category/Paragraph 1

Reviewer S. Kim MacGregor Signature S. Kim MacGregor Date 2/5/09

Study Exempted By: \_\_\_\_\_  
Dr. Robert C. Mathews, Chairman  
Institutional Review Board  
Louisiana State University  
203 B-1 David Boyd Hall  
Baton Rouge, LA 70803  
Phone: 225-578-8692 | [www.lsu.edu/irb](http://www.lsu.edu/irb)  
Exemption Expires: 2-15-2009

IRB# E4409 LSU Proposal# \_\_\_\_\_  
☒ Complete Application  
☐ Human Subjects Training

## Part 1: Determination of "Research" and Potential For Risk

- This section determines whether the project meets the Department of Health and Human Services (HHS) definition of research involving human subjects, and if not, whether it nevertheless presents more than "minimal risk" to human subjects that makes IRB review prudent and necessary.

**1. Is the project involving human subjects a systematic investigation, including research, development, testing, or evaluation, designed to develop or contribute to generalizable knowledge?**

(Note some instructional development and service programs will include a "research" component that may fall within HHS' definition of human subject research).

☒ YES

☐ NO

**2. Does the project present physical, psychological, social or legal risks to the participants reasonably expected to exceed those risks normally experienced in daily life or in routine diagnostic physical or psychological examination or testing? You must consider the consequences if individual data inadvertently become public.**

☐ YES Stop. This research cannot be exempted--submit application for IRB review.

☒ NO Continue to see if research can be exempted from IRB oversight

**3. Are any of your participants incarcerated?**

☐ YES Stop. This research cannot be exempted--submit application for IRB review.

☒ NO Continue to see if research can be exempted from IRB oversight.

**4. Are you obtaining any health information from a health care provider that contains any of the identifiers listed below?**

A. Names

B. Address: street address, city, county, precinct, ZIP code, and their equivalent geocodes. Exception for ZIP codes: The initial three digits of the ZIP Code may be used, if according to current publicly available data from the Bureau of the Census: (1) The geographic unit formed by combining all ZIP codes with the same three initial digits contains more than 20,000 people; and (2) the initial three digits of a ZIP code for all such geographic units containing 20,000 or fewer people is changed to '000'. (Note: The 17 currently restricted 3-digit ZIP codes to be replaced with '000' include: 036, 059, 063, 102, 203, 556, 692, 790, 821, 823, 830, 831, 878, 879, 884, 890, and 893.)

C. Dates related to individuals

- i. Birth date
  - ii. Admission date
  - iii. Discharge date
  - iv. Date of death
  - v. And all ages over 89 and all elements of dates (including year) indicative of such age. Such ages and elements may be aggregated into a single category of age 90 or older.
- D. Telephone numbers;
- E. Fax numbers;
- F. Electronic mail addresses;
- G. Social security numbers;
- H. Medical record numbers; (including prescription numbers and clinical trial numbers)
- I. Health plan beneficiary numbers;
- J. Account numbers;
- K. Certificate/license numbers;
- L. Vehicle identifiers and serial numbers including license plate numbers;
- M. Device identifiers and serial numbers;
- N. Web Universal Resource Locators (URLs);
- O. Internet Protocol (IP) address numbers;
- P. Biometric identifiers, including finger and voice prints;
- Q. Full face photographic images and any comparable images; and
- R. Any other unique identifying number, characteristic, or code; except a code used for re-identification purposes; and
- S. The facility does not have actual knowledge that the information could be used alone or in combination with other information to identify an individual who is the subject of the information.

☐ **YES Stop.** This research cannot be exempted--**submit application for IRB review.**

☒ **NO** Continue to see if research can be exempted from IRB oversight.

**Part 2: Exemption Criteria For Research Projects  
Can be found on the next page.**



## Part 2: Exemption Criteria For Research Projects

Please select any and all categories that relate to your research. Research is exemptible when all research methods are one or more of the following five categories. Check statements that apply to your study:

- ☒ 1. In education setting, research to evaluate normal educational practices.

- ☐ 2. For research not involving vulnerable people [prisoner, fetus, pregnancy, children, or mentally impaired]: observe public behavior (including participatory observation), or do interviews or surveys or educational tests:

*The research must also comply with one of the following:*

- ☐ a) The participants cannot be identified, directly or statistically;  
or that
- ☐ b) The responses/observations could not harm participants if made public;  
or that
- ☐ c) Federal statute(s) completely protect all participants' confidentiality;

- ☐ 3. For research not involving vulnerable people [prisoner, fetus, pregnancy, children, or mentally impaired]: observe public behavior (including participatory observation), or do interviews or surveys or educational tests:

- ☐ All respondents are elected, appointed, or candidates for public offices.

- ☐ 4. Uses only existing data, documents, records, or specimens properly obtained.

*The research must also comply with one of the following:*

- ☐ a) Subjects cannot be identified in the research data directly or statistically, and no-one can trace back from research data to identify a participant;  
or that
- ☐ b) The sources are publicly available

- 
- ☐ 5. Research or demonstration service/care programs, e.g. health care delivery.

*The research must also comply with all of the following:*

- ☐ a) It is directly conducted or approved by the head of a US Govt. department or agency.

*and that*

- ☐ b) It concerns only issues under usual administrative control (48 Fed Reg 9268-9), e.g., regulations, eligibility, services, or delivery systems;

*and that*

- ☐ c) Its research/evaluation methods are also exempt from IRB review.
- 

- ☐ 6. For research not involving vulnerable volunteers [see "2 & 3" above], do food research to evaluate quality, taste, or consumer acceptance.

*The research must also comply with one of the following:*

- ☐ a) The food has no additives;

*or that*

- ☐ b) The food is certified safe by the USDA, FDA, or EPA.

**Part 3: Consent Forms**

**Can be found on the next page.**

### Part 3: Consent Forms

- The consent form must be written in non-technical language which can be understood by the subjects. It should be free of any exculpatory language through which the participant is made to waive, or appears to be made to waive any legal rights, including any release of the investigator, sponsor, institution or its agents from liability for negligence. (Note: the consent form is not a contract.)
- For example consent forms, please refer to our website, [www.lsu.edu/irb](http://www.lsu.edu/irb)
- The IRB prefers using signed informed consent. However, if that is impractical, an application to waive signed consent can be requested below. However, even if this waiver is requested, the **IRB must be provided with the consent script** that will present the information to human subjects regarding the study/research. All consent forms or scripts must include a statement that the study was approved or exempted by the IRB and provide IRB contact information to participants.

I am requesting waiver of signed Informed Consent because:

- ☐ (a) Having a participant sign the consent form would create the **principal risk** of participating in the study.  
or that
- ☒ (b) The research presents **no more than minimal risk** of harm to subjects and involves no procedures for which having signed consent is normally required.

Now that your application is complete, please send two copies of it to the IRB office for review, the address is listed below, OR you can send it to one of the Human Subjects Screening Committee Members. The list of Committee Members can be found here "<http://www.lsu.edu/irb/screeningmembers.shtml>"



Institutional Review Board  
Dr. Robert Mathews, Chair  
203 B-1 David Boyd Hall  
Baton Rouge, LA 70803  
P: 225.578.8692  
F: 225.578.6792  
[irb@lsu.edu](mailto:irb@lsu.edu) | [lsu.edu/irb](http://lsu.edu/irb)

Print Form



APPENDIX B  
PARENTAL PERMISSION FORM

Project Title: High School Students' Attitudes Toward Single-Sex Choir Versus Mixed Choir

Performance Site: Pearl High School choral room

Investigators: The following investigators are available for questions:

Jenna Jackson  
Master's Student, LSU  
(225) 955-0638

Dr. Jane Cassidy  
Professor of Music Education, LSU  
(225) 578-3258

Purpose of the Study: The purpose of this research project is to determine if attitudes toward choir and singing differ between students in single sex choir than the students in a mixed choir.

Inclusion Criteria: Approximately 120 students enrolled in choral ensembles at Pearl High School

Exclusion Criteria: General student body at Pearl High School and students who do not have parental permission

Description of the Study: Choir members will anonymously complete a survey that asks them to respond "Strongly Agree," "Agree," "Disagree," or "Strongly Disagree" to 36 questions about choir participation and their own singing. Demographic information regarding age and gender will be collected. Choir members will also be asked to list their favorite choral pieces.

Benefits: None, outside of knowledge gleaned from data that might enhance curricular choices in high school choral programs.

Risks: There are no known risks.

Right to Refuse: Participation is voluntary, and a child will become part of the study only if both child and parent agree to the child's participation. At any time, either the child may withdraw from the study or the child's parent may withdraw the child from the study without penalty or loss of any benefit to which they might otherwise be entitled.

Privacy: Results of the study may be published, but no names or identifying information will be included for publication. Subject identity will remain confidential unless disclosure is required by law.

Financial Information: There is no cost for participation in the study, nor is there any compensation to the subjects for participation.

**Signatures:**

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigator. If I have questions about subjects' rights or other concerns, I can contact Robert C. Mathews, Chairman, Institutional Review Board, (225) 578-8692, [irb@lsu.edu](mailto:irb@lsu.edu), [www.lsu.edu/irb](http://www.lsu.edu/irb). I will allow my child to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

Parent's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

The parent/guardian has indicated to me that he/she is unable to read. I certify that I have read this consent form to the parent/guardian and explained that by completing the signature line above he/she has given permission for the child to participate in the study.

Signature of Reader: \_\_\_\_\_ Date: \_\_\_\_\_

**Study Exempted By:**

Dr. Robert C. Mathews, Chairman  
Institutional Review Board  
Louisiana State University  
203 B-1 David Boyd Hall  
(225) 578-8692 | [www.lsu.edu/irb](http://www.lsu.edu/irb)

Exemption Expires: 2-15-2012

APPENDIX C  
STUDENT ASSENT FORM

I, \_\_\_\_\_, agree to be in a study to determine the attitudes of high school students in either single-sex choir or mixed choir. I will have to complete a survey given in class. I can decide to stop being in the study at any time without punishment.

Student Signature: \_\_\_\_\_ Age: \_\_\_\_\_ Date: \_\_\_\_\_

Witness (Choir Director)\* \_\_\_\_\_  
Date: \_\_\_\_\_

\* (N.B. Witness must be present for the assent process, not just the signature by the minor.)

APPENDIX D  
MUSIC TEACHER CONSENT FORM

Project Title: High School Students' Attitudes Towards Single-Sex Choir Versus Mixed Choir

Performance Site: Pearl High School choral room

Investigators: The following investigators are available for questions:

Jenna Jackson  
Master's Student, LSU  
(225) 955-0638

Dr. Jane Cassidy  
Professor of Music Education, LSU  
(225) 578-3258

Purpose of the Study: The purpose of this research project is to determine if attitudes toward choir and singing differ between students in single sex choir than the students in a mixed choir.

Inclusion Criteria: Approximately 120 students enrolled in choral ensembles at Pearl High School and choral teachers.

Exclusion Criteria: Directors of Pearl High School Choral Department

Description of the Study: -Students in choral ensembles will complete surveys asking the questions about their participation in your choir as well as attitude toward their own singing. Music teachers agree to be interviewed regarding music selection and curriculum philosophy.

Benefits: None, outside of knowledge gleaned from data that might enhance curricular choices in high school choral programs.

Risks: There are no known risks.

Right to Refuse: Participation is voluntary. At any time, either the teacher may withdraw from the study without penalty or loss of any benefit to which they might otherwise be entitled.

Privacy: Results of the study may be published, but no names or identifying information will be included for publication. Subject identity will remain confidential unless disclosure is required by law.

Financial Information: There is no cost for participation in the study, nor is there any compensation to the subjects for participation.

**Signatures:**

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigator. If I have questions about subjects' rights or other concerns, I can contact Robert C. Mathews, Chairman, Institutional Review Board, (225) 578-8692, [irb@lsu.edu](mailto:irb@lsu.edu), [www.lsu.edu/irb](http://www.lsu.edu/irb). I will allow my child to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Study Exempted By:**  
Dr. Robert C. Mathews, Chairman  
Institutional Review Board  
Louisiana State University  
203 B-1 David Boyd Hall  
225-578-8692 | [www.lsu.edu/irb](http://www.lsu.edu/irb)  
Exemption Expires: 2-15-2012

## APPENDIX E STUDENT SURVEY

**Gender:**

- ☐ **Male**
- ☐ **Female**

**Age:**

- ☐ **15**
- ☐ **16**
- ☐ **17**
- ☐ **18**
- ☐ **Other**

	Strongly Agree	Agree	Disagree	Strongly Disagree
Females are naturally better males than in singing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Choir is a useful subject.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a good singer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am scared to sing alone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People enjoy hearing me sing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am not successful in choir.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will join a choir in college or in my community when finished with high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boys can do just as well as women in choir.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking choir is a waste of time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't like the way I sing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy singing alone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People do not like my singing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know I can do well in choir.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I leave high school choir is no longer in my future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I enjoy singing with all boys or all girls.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It takes some time for me to learn a song.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am in choir because I like to sing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teachers do not think I can succeed in music.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Singing is fun.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being in choir makes me uncomfortable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Men who love choir are a little strange.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am in choir because my parents insist.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can learn a song quickly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends and family are not interested in my progress in music.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I was not in choir anymore.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Auditioning for a selective choir is something I will never do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teachers have made me feel I have the ability to succeed in music.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I will never learn to sing well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can audition and make a selective choir.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy singing with boys and girls.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends and family have been interested in my progress in music.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy choir.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you are a girl,  
Which choir do you prefer to sing in? All Girls or Mixed? Why?

If you are a boy,  
Which choir do you prefer to sing in? All Boys or Mixed? Why?

What is your favorite song you are singing this year and give 3 reasons why?  
Name of Song\_\_\_\_\_

- 1.
- 2.
- 3.



APPENDIX F  
CHORAL LITERATURE ANALYSIS FORM

Title\_\_\_\_\_

Composer\_\_\_\_\_

Arranger\_\_\_\_\_

Publisher\_\_\_\_\_No\_\_\_\_\_

Voicing \_\_\_\_\_Accompaniment\_\_\_\_\_

Source\_\_\_\_\_

Language\_\_\_\_\_Translation\_\_\_\_\_

Tempo\_\_\_\_\_Genre\_\_\_\_\_

Ranges:

Difficulty:

## CHORAL LITERATURE ANALYSIS FORM

Title Carita et Amor

Composer Z. Randall Stroppe

Arranger \_\_\_\_\_

Publisher Alliance Music Publications No. 0050

Voicing SATB Accompaniment piano

Source 10<sup>th</sup> century antiphon

Language Latin Translation English

Tempo  = 56 Genre Secular

Ranges:



Difficulty: Medium

## CHORAL LITERATURE ANALYSIS FORM

Title Lay a Garland

Composer Robert Pearsall


Arranger \_\_\_\_\_

Publisher Oxford University Press No. 3302353

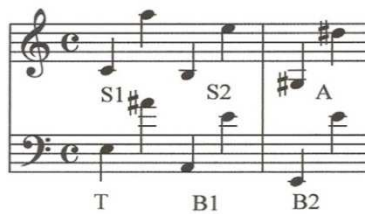
Voicing SSAATTBB Accompaniment a cappella

Source \_\_\_\_\_

Language English Translation none

Tempo  = 66 Genre Madrigal

Ranges:



Difficulty: Medium

## CHORAL LITERATURE ANALYSIS FORM

Title Now Shout

Composer Gerald Kemner

Arranger \_\_\_\_\_

Publisher Lawson-Gould No. 5228

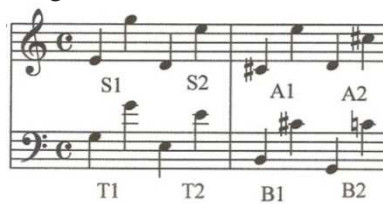
Voicing SSAATTBB Accompaniment a cappella

Source Psalm 47, 98, 100, 103, 104, 114

Language English Translation none

Tempo  = 132 Genre Sacred

Ranges:



Difficulty: Medium Advance

## CHORAL LITERATURE ANALYSIS FORM

Title Ave Maria

Composer R. Nathaniel Dett

Arranger \_\_\_\_\_

Publisher Hinshaw Music Inc. No. 333

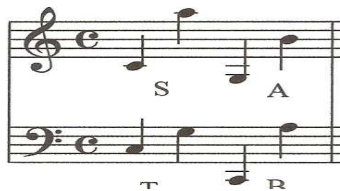
Voicing SATB- baritone solo Accompaniment a cappella

Source \_\_\_\_\_

Language Latin Translation English

Tempo molto moderato Genre Sacred

Ranges:



Difficulty: Medium

## CHORAL LITERATURE ANALYSIS FORM

Title Hold On

Composer \_\_\_\_\_

Arranger Marques L.A. Garrett

Publisher Walton Music Inc. No. 1402

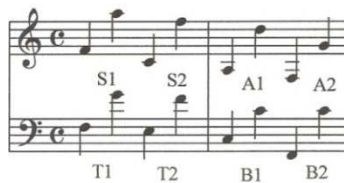
Voicing SSAATTBB Accompaniment a cappella

Source Negro Spiritual

Language English Translation none

Tempo  $\text{♩} = 80$  Genre Spiritual

Ranges:



Difficulty: Medium Advance

# CHORAL LITERATURE ANALYSIS FORM

Title Dream Keeper

Composer Langston Hughes

Arranger Andre Ramsey

Publisher Colla Voce Music No. 10011858

Voicing SSAA Accompaniment piano, vibraphone, wind chimes

Source \_\_\_\_\_

Language English Translation none

Tempo  = 70 Genre Secular

Ranges:



Difficulty: Medium Easy

# CHORAL LITERATURE ANALYSIS FORM

Title In Remembrance from Requiem

Composer Eleanor Daley

Arranger \_\_\_\_\_

Publisher Gordon V. Thompson Music No. 10011858

Voicing SSAA Accompaniment a cappella

Source Requiem

Language English Translation none

Tempo  = 108 Genre Secular

Ranges:



Difficulty: Medium



# CHORAL LITERATURE ANALYSIS FORM

Title Dirat-on

Composer Morten Johannes Lauridsen

Arranger \_\_\_\_\_

Publisher Southern Music Publishing No. 10011858

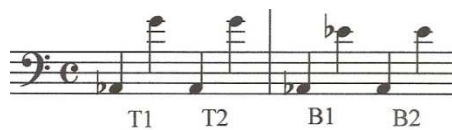
Voicing TTBB Accompaniment piano

Source \_\_\_\_\_

Language French Translation English

Tempo  = 108 Genre Secular

Ranges:



Difficulty: Intermediate- Advance

# CHORAL LITERATURE ANALYSIS FORM

Title Swing Down Chariot

Composer \_\_\_\_\_

Arranger Andre J. Thomas

Publisher Heritage Music Press No. 15/177811-2

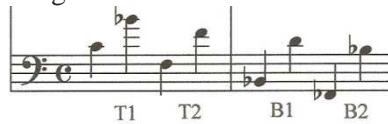
Voicing TTBB Accompaniment a cappella

Source Traditional spiritual

Language English Translation English

Tempo  $\text{♩} = 108$  Genre Spiritual

Ranges:



Difficulty: Medium Advance

APPENDIX G  
QUESTIONNAIRE FOR TEACHERS

Who teaches which choir?

Who chooses the music for each choir?

Is there a common philosophy of style, quality and level by all choral teachers in your department?

What is that philosophy?

How do you choose the music?

What are your reasons for choosing any particular piece for your ensemble?

## QUESTIONNAIRE FOR TEACHERS

Teacher 1:

Who teaches which choir?

I teach SATB

Who chooses the music for each choir?

The director

Is there a common philosophy of style, quality and level by all choral teachers in your department?

Yes

What is that philosophy?

Our philosophy is to fulfill the musical needs of students who enjoy singing. Each choir is devoted to the diligent study, rehearsal and performance of choral music. Students will be exposed to a variety of choral literature, representing different styles and culture. We offer opportunities for individual and team relationships. Through a strong work ethic, commitment, and a passion for music, all students will succeed.

How do you choose the music?

Music is selected based on the students participating in the choir and the genre and level of difficulty is based on the choir. Performances venues also factor in selection of music.

What are your reasons for choosing any particular piece for your ensemble?

Particular pieces are selected based on the students in the ensemble.

## QUESTIONNAIRE FOR TEACHERS

Teacher 2:

Who teaches which choir?

I teach freshman mixed and men's chorus

Who chooses the music for each choir?

The director

Is there a common philosophy of style, quality and level by all choral teachers in your department?

Yes

What is that philosophy?

Our philosophy is to fulfill the musical needs of students who enjoy singing. Each choir is devoted to the diligent study, rehearsal and performance of choral music. Students will be exposed to a variety of choral literature, representing different styles and culture. We offer opportunities for individual and team relationships. Through a strong work ethic, commitment, and a passion for music, all students will succeed.

How do you choose the music?

I find music by listening to other groups, CD's etc. But I have to choose what is appropriate for my singer's ranges, ability, etc.

What are your reasons for choosing any particular piece for your ensemble?

For my younger choir, I'll choose some things based on an aspect of choral music where the students need attention, i.e. long phrasing/ sustaining the breath, etc.

## QUESTIONNAIRE FOR TEACHERS

Teacher 3:

Who teaches which choir?

I teach women's choir, sextet, women's ensemble, general music

Who chooses the music for each choir?

Either collaboration or we choose for our own individual groups

Is there a common philosophy of style, quality and level by all choral teachers in your department?

Yes

What is that philosophy?

Our philosophy is to fulfill the musical needs of students who enjoy singing. Each choir is devoted to the diligent study, rehearsal and performance of choral music. Students will be exposed to a variety of choral literature, representing different styles and culture. We offer opportunities for individual and team relationships. Through a strong work ethic, commitment, and a passion for music, all students will succeed.

How do you choose the music?

I choose music by listening to other choirs at Southern Division Convention or National Division conventions. I also collaborate with other directors around the state about pieces of music.

What are your reasons for choosing any particular piece for your ensemble?

I usually choose octavos based on the voices in my group and what I have recently heard that I listened to and enjoyed.

## VITA

Jenna Leigh Jackson is a candidate for the degree of Master of Music in music education at Louisiana State University. She obtained a Bachelor of Music Education degree and Mississippi Teaching Certificate in 2006. She taught choral music to adults at a church in Sumner, Mississippi from fall of 2004 to spring of 2006. In 2004 she received an Associates of Arts degree from Mississippi Delta Community College. From 2003-2004 she was the student director of the show choir "Ambassadors" at Mississippi Delta Community College. She is a member of the ACDA: American Choral Directors Association, MENC: The National Association for Music Education, Mu Phi Epsilon, Pi Kappa Lambda, and Kappa Delta Pi. Her areas of special interest include learning the benefits of the single-sex choir to students at the middle school and high school area and showchoir. She is recently employed by Baker School district as the choral director of 6-8 grades and will pursue a music education career in the fall of 2009.