

East Tennessee State University

Digital Commons @ East Tennessee State University

Undergraduate Honors Theses

Student Works

8-2022

Female Trombonists' Experiences of Gender Bias

Em Poff

Follow this and additional works at: <https://dc.etsu.edu/honors>



Part of the [Feminist, Gender, and Sexuality Studies Commons](#), and the [Music Commons](#)

Recommended Citation

Poff, Em, "Female Trombonists' Experiences of Gender Bias" (2022). *Undergraduate Honors Theses*. Paper 670. <https://dc.etsu.edu/honors/670>

This Honors Thesis - Open Access is brought to you for free and open access by the Student Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Undergraduate Honors Theses by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.

Female Trombonists' Experiences of Gender Bias

By

Em Isabella Poff

An Undergraduate Thesis Submitted in Partial Fulfillment
of the Requirements for the
Fine and Performing Arts Scholars Program
Honors College
East Tennessee State University

Em Isabella Poff

Em Isabella Poff

5/3/2022

Date

Scott

05/03/22

Dr. Scott Contreras-Koterbay

Date

Alison Deadman

05/05/22

Dr. Alison Deadman, Thesis Mentor

Date

Steph Frye-Clark

Dr. Steph Frye-Clark, Reader

05/03/2022

Date

ACKNOWLEDGMENTS

I would like to acknowledge and thank my mentor, Dr. Alison Deadman, for her encouragement and motivation throughout the entirety of this study. Her advice and guidance helped me through all the stages of this process. I could never thank her enough. I would also like to thank my reader, Dr. Steph Frye-Clark, for being an incredible role model throughout my collegiate career and for their support during this research.

To my current trombone professor, Dr. Justin Waller, thank you for always motivating me and encouraging me when I was overwhelmed throughout this process. I cannot thank you enough for always teaching and treating all of your students, myself included, with equality and respect.

To my family—Freddy, Regina, Koby, and Elliott Poff: Thank you for always supporting me in everything that I do. I love you all more than anything and I would not have been able to do this without your support.

Finally, I must thank my boyfriend, Gabriel Gounaris, and my cat, Steve, for always believing in me. I would have never made it through this without you two.

TABLE OF CONTENTS

ABSTRACT.....	iv
CHAPTER I: EARLY FEMALE TROMBONISTS: HISTORY	1
Early Female Trombonists	2
CHAPTER II: LITERATURE SURVEY	9
Gender Bias and Stereotypes.....	10
CHAPTER III: SURVEY DESIGN AND METHODOLOGY	16
Limitations and Delimitations.....	18
CHAPTER IV: SURVEY FINDINGS.....	20
Discouragement and Encouragement	24
Positive and Negative Affects	26
Underestimated.....	30
Female Role Models.....	34
Measures.....	38
Gender Stereotyping.....	41
CHAPTER V: CONCLUSIONS.....	43
APPENDIX A: STUDIO GENDER RATIOS TABLE	45
APPENDIX B: FEMALE-IDENTIFYING PROFESSORS ROLE MODELS	48
APPENDIX C: FEMALE-IDENTIFYING STUDENTS ROLE MODELS	50
APPENDIX D: STUDENT SURVEY QUESTIONS	53
APPENDIX E: PROFESSOR SURVEY QUESTIONS.....	55
BIBLIOGRAPHY.....	58

ABSTRACT

Female trombonists are underrepresented throughout the United States especially in collegiate teaching positions. Is the underrepresentation of female trombonists as professional musicians and teachers causing less females to pursue playing the trombone? After discussing the expected roles of females and acceptable instruments for women to play during the 1800's, this document mentions many women who were able to surpass the norms of female musicians and make their own musical choices. The purpose of this study is to discover if there is any relevance of gender bias towards female trombonists in society today and potentially determine how these biases affect their musical opportunities. This study and the survey questions were inspired by Melissa Ewing's dissertation, *Examining the Under-Representation of Female Euphonium Players in the USA*, which examined the lack of female euphonium players in the United States. In order to create a trombone-centered survey, I used questions from Ewing's survey as a guide while adding other questions to help gain useful information from trombone professors and female-identifying trombone students in the USA. The names of college trombone professors in the United States were collected from the *College Music Society* directory and this determined the professors who were surveyed and asked to provide their studio gender ratio and questions about identifying as female when applicable. In addition, the professors forwarded the student survey invitation to female-identifying students in their studios to provide their individual experiences as female trombonists in college. This document will serve as a resource for future studies on female-identifying trombonists and gender studies in general regarding music education and performance.

CHAPTER I

EARLY FEMALE TROMBONISTS: HISTORY

In this chapter, I will discuss important female trombonists who have provided the brass community with female role models. In Joanna Hersey's dissertation titled '*Such Unfeminine Instruments,*' *Women Brass Musicians in America Before 1940* she mentions that many women have been left out of history books (Hersey 2006, 6). However, Hersey notes that there are incredible female musicians whose endeavors have been recorded throughout history by advertisements and newspaper articles (Hersey 2006, 51). The accomplishments of these women who went against all odds may provide inspiration for female-identifying trombonists of today. I would like to share the accomplishments of these women and the potential inspiration that they may provide to female trombonists today.

In the 1800's, women were expected to play delicate and "beautiful" sounding instruments, often presumed to be restricted to the piano and the harp. Both of these instruments require the performer to use graceful and delicate hand motions, that were thought of as feminine qualities. At the time, society viewed brass and percussion instruments as the so-called masculine instruments for men to play. A lot of people even assumed that women were incapable of playing the instruments at all (Ellis 1999, 224). In '*Marching Barbies*' : *Influences of Gender Bias in Three Female High School Band Teachers*, Sara Jones found that each woman interviewed for the study had experienced comments regarding gender bias at some point in their professional careers (Jones 2010, 60). Women were not expected to be full time musicians or even part time professional musicians, but they were encouraged to become private teachers (Jones, 7). Jones mentions that women were supported to teach privately, because this would still leave them with plenty of time for taking care of the home and their family (7). These

assumptions on what instruments women should and should not play and a woman's role, mentioned by Jones, were often based on 3 ideas: 1. Feminine outfits or appearance, 2. Personality type, and 3. Women's role in their home/society (5-7).

Early Female Trombonists

While many opposed women playing brass instruments during the nineteenth century, there were a few individuals who saw nothing wrong with women playing brass instruments and even encouraged them. In "The Fair Sax: Women Brass Playing and the Instrument Trade in 1860's Paris," Katharine Ellis mentions musician Alphonse Sax Jr. (1814-1894) in this context. Sax, who is known for inventing pistons to improve tuning of brass instruments, led an experiment to support women brass musicians in Paris (Ellis 1999, 223-224). Ellis mentions that his experiment involved 20 women who were offered free instruments and free lessons for six months (Ellis, 224). Those women who acquired high performing skills and wanted to perform were entered into an all-women brass sextet conducted by Laure Micheli. In the beginning, the experiment was positively reviewed in over a dozen newspapers as a feminist triumph by the press who left out many important details of the women's performance (Ellis, 222). Ellis reports that after the women had performed in public, a few individuals shifted to expressing surprise that the women brass musicians could achieve such high levels of professionalism (238).

While several women in Paris gained access to instruments through Sax's experiment, Hersey reports that women brass players in the United States were gaining paid opportunities to perform (2006). These opportunities were available with Vaudeville touring circuits that paid these women for their performances on brass instruments (Hersey 2006, 54-58). Although the orchestras and concert bands in the U.S. would not allow females in their performing ensembles, the women of this time were determined to perform and make their own money.

Women interested in performing in the post-Victorian era created all-female small ensembles and chamber groups. These all-female ensembles showed their professionalism and musicianship by wearing elaborate costumes and carefully planning their programs (Hersey 2006, 53). They did this by dressing up, having their hair and makeup done, and planning the programs to be interesting with a variety of works. Variety was also present with their instrumentation, the women played more than one instrument on the program or even sang (Hersey 2006, 60-61). These women not only had to perform to the professional standards, but they had to provide these extra elements to attract an audience who would have otherwise discounted their abilities before giving them a hearing.

The situation for aspiring women musicians in the USA became a little easier as the twentieth century dawned. Hersey has noted that women were given more opportunity to have a quality education which led to new careers and opportunities for women (2006). Today this era is referred to as the “New Woman” era, because during this time women who were skilled workers were finally given more opportunity to pursue a career. Orchestras would still not allow females in the ensembles, but Vaudeville touring circuits were willing to allow any gender performer as long as they had the skills and were willing to follow guidelines for outfits and programming that would bring in the most profits (Hersey 2006). Hersey explains that Vaudeville touring circuits gave women real playing opportunities that would have otherwise been impossible. The circuits allowed all-female ensembles and soloists to perform shows and earn money for their performances. Although smaller towns viewed these performances as unusual, Hersey mentions that large cities and venues began to see these female brass players as normal (2006, 28-66). Hersey asserts that, “It has often been assumed women did not work professionally for pay, but for the general love of music itself” (Hersey 2008, 156). In making this comment, Hersey

explains that individuals have assumed women did not work for pay or any professional reason, but that they were doing it for their own enjoyment. I am positive that women during this time had a love for music, because if they did not they would have never endured the struggles they did to play a brass instrument. However, women should have always been paid for their performances just as male brass players were in orchestras during this time.

The International Women's Brass Conference (IWBC) website's "Historical Brass Archive" section reminds individuals of influential female brass musicians in history. It is important that their website and newsletters exist, because the IWBC website includes some of the few records that exist today of early women brass players from the 1900's and years before. The "Historical Brass Archive" includes photos and descriptions of women in music including trombonist Tillie Brohaska (flourished in the first few decades of the twentieth century) and various female ensembles that included female trombonists. The page titled "Delmas House: Brohaska Family in San José" on the History of San José website shares more specific information about Tillie Brohaska and her family of musicians who were known for owning music shops within the San José community. The History of San José website was created to share and preserve the cultural heritage of San José that includes the area where the Brohaska family lived and opened their music shops. According to the website, Tillie Brohaska first performed on the trombone in 1901 with the first Ladies' Brass Band in San José created by her brother, Fred (History San José, "Delmas House"). Along with playing the trombone she was a piano and voice teacher (History of San José, "Delmas House"). Hersey mentioned that in the nineteenth century, women were finally able to work in music if they wished to, because of the shift in attitudes marked by the "New Woman" era (2006, 56-57). Brohaska was positively

affected by the culture change during the “New Woman” era that gave women musicians more musical opportunities and careers.

Moving into the second half of the twentieth century, women brass players still faced significant challenges including being publicly disparaged. According to Richard Dyer of the *Boston Globe*, Rolf Smedvig (1952-2015), former principal trumpet of the Boston Symphony Orchestra and first trumpet for the Empire Brass, made assumptions and sexist statements towards various female musicians throughout his music career. Dyer reports on one particular instance when Smedvig commented to a female student, “You came out there and it looked like you had your doily dress on and you were going to tiptoe through the tulips, you know, and play this. . . . You can't do that when you have a trumpet in your hands. So basically, my suggestion on that, and this is something I think can help everyone, is to try to widen your emotional response to the music” (Dyer 1991, 1). In making this comment, Smedvig not only disparages the female student’s clothing but also her femininity itself making clear he considers them to be a hinderance to playing the trumpet. Students were not the only ones affected by Smedvig’s comments: Janet Underhill, a graduate student in bassoon, organized a forum on women, brass playing, and sexism to help defuse some of the comments previously made by Smedvig (Dyer 1991). Although the forum’s main purpose was for Smedvig to apologize and explain his comments to the students, he acknowledged that he made a mistake with his previous comments and then continued to insult female brass players, saying: “There is a design problem inherent in the basic personalities of women when it comes to brass instruments...” (Dyer 1991, 2). In response to the statements made by Smedvig at the forum, one student replied, “It’s not the question of being told you can’t play or that you played badly; it’s a question of being told a teacher is having a problem with your playing because you are a woman” (Dyer 1991, 3). The

students were not offended by Smedvig's comments on the quality of their playing or instruction on how to improve it, but they were upset by the fact that being female was a part of his critiques of their playing abilities. Although Smedvig and many others have viewed women as weak and not aggressive enough to play a brass instrument, the many female-identifying trombonists today are proof enough that you can be a woman and play the trombone with the same amount of aggression and power as a man.

For women, there have been many monumental steps toward equality with men such as the first-time women were allowed to vote and the first time that women could join the army. There have been many first steps towards equality in the music world as well. Jared L. Gilbert mentions in his dissertation that trombonist Betty Glover (b. 1923) holds a very important first step for female musicians, because she was one of the first women to have a position in a major symphony orchestra (2020, 1). Most importantly to note, Gilbert states that Glover was the first full-time female bass trombonist in a major United States symphony orchestra (2020, 1). Gilbert's dissertation presents an overview of Glover's professional career as an orchestral musician and music educator (2020, 2). At the young age of 21, Betty Glover won her first position of bass trombonist with the Kansas City Philharmonic where she played from 1944 to 1948 (Gilbert 2020, 2; Siler 2012, 17). This was only the beginning for Glover, she went on to play with various other orchestras overtime including the Cincinnati Symphony Orchestra from 1952 to 1985 and the Columbus Symphony Orchestra for the 1948-49 season (Siler 2012, 17). As a highly skilled performer, Glover was one of the few role models of her day for aspiring young women trombonists. Gilbert mentions that along with performing, she also taught her own music students and conducted various brass ensembles at the Cincinnati Conservatory of Music (CCM) including the CCM brass choir (2020, 42-48).

Women of color who have succeeded as professional trombonists have had even greater challenges. Everyone knows about Duke Ellington and Louis Armstrong, but who remembers the trombone jazz icon Melba Liston (1926-1999)? Liston started playing trombone at only 7 years old and according to Ursel Schlicht's *Grove Music Online* article, she was playing on the radio soon after she learned how to play (2013). Pat Mullan reports in the *IWBC Newsletter* that Liston was writing arrangements at 16 years old, and this led to her collaboration with incredible jazz artists including Dizzy Gillespie, Billie Holiday, and Duke Ellington (1995). By connecting with various jazz performers, she was able to meet other female musicians and create an all-female jazz ensemble in 1979 called Melba Liston and Company (Mullan, 1995). Mullan states that Liston never allowed herself to be affected or underestimated by gender bias and that she never stopped pursuing a career in music (1995). Liston's music career can be very inspiring to female musicians today, because not only was she a female-identifying musician in the 1930's through the 90's, but she was an African American female trombonist. The odds were never in her favor, but she had a positive outlook, and she was able to be one of the first women to perform in big bands during the 1950's.

Conclusion

The IWBC, music students, and music professors can help maintain important information on early female trombonists. The IWBC's "Historical Brass Archive" records early female brass musicians and ensembles that have been left out of history, the archive includes photos and descriptions of women musicians to keep them from being forgotten. Students and professors can help acknowledge and record women musicians by creating documents, such as dissertations and research papers, in order to create records of female trombonists' professional

careers. Jared Lee Gilbert's dissertation on Betty Glover's life and career is a good example of this type of document (2020).

As Hersey stated in her dissertation, "...women brass players in the past often had to overcome surprise and skepticism, many were successful, and their stories inspire us today (2006, 1)." I agree with Hersey's statement, because I am sure that the first female trombonists suffered from their skills being underestimated even more than current women trombonists. This is relevant today because there are still some individuals who are uneducated about the relevance of gender bias and stereotyping in society and how these affect women brass musicians. The brass community will only progress if individuals are educated on the effects of gender bias and stereotyping, so that we can move forward to a community full of instrumentalists who respect all people regardless of gender, race, and/or social status.

CHAPTER II

LITERATURE SURVEY

In preparation for this research project, I conducted a basic search for “female trombonist” on the *Music Index* database. After only having one article result in this search, I decided to try a basic search for “women trombonist” which led to a few results of articles about women trombonists. Further searches using a variety of catalogs and databases looking for material on gender bias and trombonists only revealed two works: Julia M. Broome-Robinson’s dissertation (2020) titled *Three Interviews: Diverse Career Paths of Female-Identifying Professional Trombonists* and Sara Jones dissertation (2010) *‘Marching Barbies’: Influences of Gender Bias in Three Female High School Band Teachers*. These are the only two dissertations from various searches that are pertinent to this study, however, none of them included the experiences of collegiate level female-identifying trombonists. While these scholars focus on in-depth interviews with three professionals each—my research looks at the broader cross-section of trombonists, both professionals and students. My research surveyed professionals and students on their experiences of gender bias from the time they began playing trombone to their present musical career. All participants took a short survey to share their experiences of gender bias during their time as a trombonist. The inclusion of collegiate students in this study not only made it different from existing female trombonist research, but this provided information on a variety of experiences from female trombonists at professional and collegiate levels.

Other relevant sources for this paper include Joanna Hersey’s dissertation (2006) *‘Such Unfeminine Instruments’: Women Brass Musicians in America before 1940*, Sara Jones dissertation *‘Marching Barbies’: Influences of Gender Bias in Three Female High School Band Teachers*, and Melissa Ewing’s dissertation (2020) *Examining the Under-Representation of*

Female Euphonium Players in the USA. The authors of these studies focus on gender bias and the affects they have on band teachers, euphonium players, and brass players in general. Each of these documents inspired me to focus this paper on the effects of gender bias on female trombonists specifically. This research involved similar questions to those used by the researchers in the three dissertations mentioned above, but none of them are limited to female trombonists' experiences of gender bias.

Gender Bias and Stereotypes

Women have been subjected to gender bias, discrimination, and stereotypes for centuries. This fact is highlighted by Myers and Etaugh in their discussion "Reports: Women Brass Musicians in Major Symphony Orchestras; How Level Is the 'Playing' Field?" where they state: "For women brass players, it appears that the "glass ceiling," although cracked, is still firmly in place" (2001). Women are making progress in their acceptance into the professional music scene by cracking the "glass ceiling" but they are still held back by the glass pane of gender bias. Trombonists Melba Liston, Betty Glover, and others have managed to sneak through those cracks in the glass ceiling as soloists, but there are still more male-identifying trombone soloists than females. In the 1970s and 1980s, the introduction of blind auditions led to the increased likelihood of female trombonists winning an orchestral position (Goldin and Rouse, 2000). Although making the change to blind auditions by orchestras in the United States did not eliminate the effects of gender bias on musicians during this time, it did keep judges and conductors from choosing the finalist based on race, gender, and/or any other visual aspect of the performer. While they support and celebrate female musicians and their successes, Myers and Etaugh continue to believe that "The door to acceptance of women musicians into major orchestras may stand ajar, but the door to female brass players is barely cracked open" (2001)

and that female brass players continue to be trapped from full acceptance as professional musicians.

As early as 1862 individuals were interested to see how women brass players fit into society and the music world. Katharine Ellis' article "The Fair Sax: Women, Brass-Playing and the Instrument Trade in 1860s Paris," mentioned in Chapter I, explains the research of Alphonse Sax, Belgian inventor and musician, who started a campaign to prove women's physical capability to play brass instruments (1999). Ellis' article also notes the health benefits of playing trombone mentioned by Sax. He believed that giving women the chance to play a brass instrument may keep them from working as a prostitute or in other potentially dangerous or harmful careers. This is a complete turn-around from the marginalization experienced by professional female performers in the past who were automatically considered to be working as prostitutes and therefore marginalized. The experiment not only offered free instruments and free lessons to 20 women, but it included an incentive of money and/or nice clothing as prizes for those who chose to join (Ellis). After gaining 20 female musicians for the experiment, Ellis explained how Sax developed an all-female brass sextet to perform concerts at various venues. Some reviews of the women's sextet mention how they showed grace with their posture and movements while playing the brass instruments. They did not puff their cheeks or make "masculine" motions that most viewers had expected, but they were able to successfully play the brass instruments with elegance. Other reviewers' comment that their preconceived notions had been challenged by the quality of the performances. Audience members who previously had negative views of female brass players would often leave the performances with a positive attitude towards female-identifying performers (Ellis, 17-18). Sax's experiment was one of the

first attempts to remove gender bias on female brass musicians, because it proved women's capability to successfully perform on brass instruments.

Gender bias and stereotyping can either discourage women from playing brass instruments or encourage them to prove these preconceived ideas as wrong. Sarah Schmalenberger and Patricia Maddox surveyed female brass players in order to learn about their experiences as female brass musicians and determine how certain variables in their lives may affect them sociologically and psychologically (2019). Schmalenberger and Maddox made an interesting discovery:

The range of comments in the optional comment box at the end of the survey highlighted the importance of looking more deeply at equity and parity in the brass world. The open-ended comment box could have been used to discuss anything related to the survey; and yet, a preponderance of participants elected to contribute comments chose to address issues of gender parity and equity as well as experiences with harassment and sexism. (12-13)

Schmalenberger and Maddox did not expect the optional comment box to provide them with as much in-depth information as it did. Although some of the participants shared negative experiences about how gender had affected their career, other participants took the optional box to explain how gender bias and stereotypes drove them to work even harder. One participant in the survey responded, "Women brass players tend to be considered a lesser instrumentalist due to gender. I usually ignore and come back stronger musically" (10). While some people are initially upset by rude comments regarding their gender, a lot of female trombonists use bias comments as fuel to improve their musical abilities.

Sara Jones and Julia M. Broome-Robinson's dissertations include personal interviews with women who have experienced gender bias throughout their musical career. In *'Marching Barbies': Influences of Gender Bias in Three Female High School Band Teachers*, Jones

mentions her own experiences with gender bias in high schools, stating, “When I finally got my first job teaching high school band, numerous people let me know that I was not one of the boys, and that I was not to be taken seriously” (17). Sara Jones perceived that she was not taken seriously by various people at her first job simply because of her gender. Teachers who have experienced gender discrimination, however, are more likely to create a positive environment for their own students, because they know how it feels firsthand to be underestimated based on their gender. Broome-Robinson mentions her experiences with gender discrimination: “The instances of overt gender discrimination in the music world seem to be decreasing over time...However, the more subtle, insidious microaggressions remain a part of the landscape for women trombonists today” (48). These comments by Broome-Robinson explain how females are becoming more accepted in the music industry, but there are still subtle comments and actions against female musicians as a result of previous gender bias and stereotypes in society. Jones and Broome-Robinson are important to mention in this dissertation, because the interview responses from their studies suggest that women brass players should not be underestimated. An important corollary to these studies is that the information presented may provide female music students with answers to questions that their music teacher or professor may not be able to answer based on their experiences, gender, and/or career choice.

Joanna Hersey notes that people have had negative attitudes toward female brass musicians, citing as evidence a comment made in 1991 by American trumpet player Rolf Smedvig: “Women have trouble playing brass instruments because your basic nature is not terribly aggressive” (2006). By making this statement, Smedvig suggested that aggression is required to play the trombone. Although some pieces of music may call for a loud and aggressive part to be performed, I know from experience that being an aggressive person does not help

someone play aggressively. A musician's skills require practice and training to perform in various styles, this does not require a certain personality type. Smedvig's comment is one example of a whole host of misinformation about women which scientific study can debunk. The English journalist Helen Gardener was interested in the study of female intelligence and challenged many assumptions in the 1880's regarding the relation of brain size to intelligence (Hersey, 16). Hersey states, "Gardener succeeded in forcing wellknown scientist Dr. Edward Spitzka to admit that under a microscope, there could be no way to distinguish a man's brain tissue from a woman's" (16). Gardener was determined to prove that brains could not be differentiated by sex (Hamlin 2020). She did this by reaching out to scientist Dr. Edward Spitzka, the nation's premier neurologist at the time, who was committed to science more than his own personal assumptions and beliefs about women. Although Spitzka and Gardener were able to disprove many false assumptions about brain tissue during the 1880's, Hersey reminds us of some individuals opinion: "One or two superstar women musicians might be accepted as being unusual and interesting, without threatening a belief that generally women are not capable..." (16). The essence of Hersey's point is that the amazement and enjoyment of a female brass players performance was all it took for people to overlook the fact that the performer was a female. Unfortunately, the scientific proof that women were intellectually capable was not enough for everyone to view female and male brass musicians as equals or dispose of gender bias and stereotypes on musical instruments, however, this was an important step in general for all female-identifying individuals.

The impact of the male-dominated profession and instrument gender stereotypes on female euphonium players, has been studied by Melissa Ewing (2020). These same ideas can be considered in relation to the small number of female trombonists at the collegiate and

professional levels in the United States. Ewing's research on female euphonium players found that: "Progress is being made for women in euphonium, but the field is still male-dominated leading to continued discrimination against females" (43). In making this comment, Ewing urges us to notice the constant progress in society's acceptance of women brass players while also mentioning that the field remains male-dominated. My survey varies from Ewing's research as I examined how female trombonists are affected by gender bias, and why they believe the trombone is a male-dominated instrument.

CHAPTER III

STUDY DESIGN & METHODOLOGY

After reading Melissa Ewing's dissertation, which explores the reasons behind the low numbers of professional female euphonium players and teachers compared to their male counterparts, I began to reflect on the equivalent male-female ratio in the professional trombone world. From my experience, the situation would seem to be similar. This is what inspired my research project. Ewing's study made me think more about female trombonists and the challenges they may face by being one of the few or the only female in their trombone studio. While Ewing concentrated on surveying professional performers and teachers, I wanted to broaden my reach and include those who would form the next generation of professionals - college students. In this chapter, I will discuss my study design and explain how information has been collected and retrieved.

Survey Design and Distribution

Objectives

One objective of this study was to examine the ratio of female-identifying to male-identifying students in college trombone studios. Another goal of the study was to examine if female-identifying trombonists today feel accepted as members of college trombone studios or as professionals teaching college trombone students. However, this study's main purpose was to examine both the positive and negative effects that identifying as female had on trombone professors and college students and by extension to examine the ways that the music community had remained mired in or moved beyond the discrimination discussed in Chapter I.

Survey Design

Two surveys were created and distributed for this study using the academic survey and database management tool REDCap. One survey was geared to professors of any gender and contained extra questions for professors who identified as female, while the other survey was for female-identifying students.¹ The professor survey consisted of questions about the gender ratio of the studio, the professor's experiences of gender bias, and questions about how they teach based on those experiences. The professors were also asked to share their own gender identity. In addition, female-identifying professors were asked extra questions similar to those asked on the female-identifying student survey. The survey for female-identifying students was a questionnaire about the individual's music career and any experiences with gender bias as a female trombonist. While the questions on the professor and student survey did not differ much, they were set up to gain as much useful information as possible. The purpose of each survey was to determine if women are affected by gender bias in college and at the professional level or if gender bias is retreating.

Distribution

Individuals eligible to participate in this study must be either college trombone professors or female-identifying trombonist college students over the age of eighteen. The exclusion criteria for the study were minors under the age of 18 and male-identifying college trombone students. This study had minimal risks because there will be no identifiers collected. Any person meeting the inclusion/exclusion criteria of this study was eligible to participate in the survey regardless of

¹ For the purpose of this study the term "professor" is used for all applied instructors of trombone no matter their employment rank at the university or college at which they teach.

gender, age, ethnicity, or any other classifications. Prospective college professor participants were identified on the *College Music Society* Directory (College Music Society, <https://www.music.org/>). Trombone professors at four-year universities and colleges in the United States were emailed and invited to participate in the survey and encouraged to forward an invitation to any female-identifying trombonists in their studio.

Limitations and Delimitations

Delimitations

The student survey for female-identifying trombonists at four-year colleges or universities included questions about being female trombonists. Some of the same questions from the student survey were used in the female professor survey as well. These questions were re-worded and adjusted for professors' responses. The professor survey was intended to be taken by all trombone professors who received the email. There was no gender specification for the professors because the professors were asked about questions aside from their own experiences of gender bias and stereotyping. Professors were asked about their studio and music department.

Limitations

This study has possible limitations. The first limitation is that I could not share the survey with every college professor. I used the *College Music Society* (CMS) directory to establish a list of trombone professors to invite to participate, therefore, I had no way of discovering the names and institutions of trombone professors who were not members of the CMS. In addition, I could not guarantee that the professors who received it would fill out the survey. Another limitation of the study was the paucity of female-identifying trombone professors in the United States. The study also did not include professional performers who are not college professors as well. They may have different experiences of gender bias from being professional performers and not being

collegiate teachers. A fourth limitation of my research is that I did not collect personal information from the participants. While this protects all survey participants, this does not provide information for follow-up questions. In addition to protecting survey participants by not collecting any identifiers, the many short-answer questions mean that it was up to the participants to decide how much information they chose to share. The format of the study may not provide the most information possible on the topic of gender bias and experiences with gender bias. However, this format does give people the chance to anonymously share these experiences which may result in more lengthy responses. The last limitation of this study is that it was an undergraduate honors thesis with a one-year time frame. The short time frame did not affect the accuracy of the survey, but it meant that some areas which I might have pursued were not practical within the allotted timeframe.

Assumptions

It is assumed that participants answered the survey questions honestly, especially since there are no identifiers that will be linked to the survey participants and their responses.

CHAPTER IV

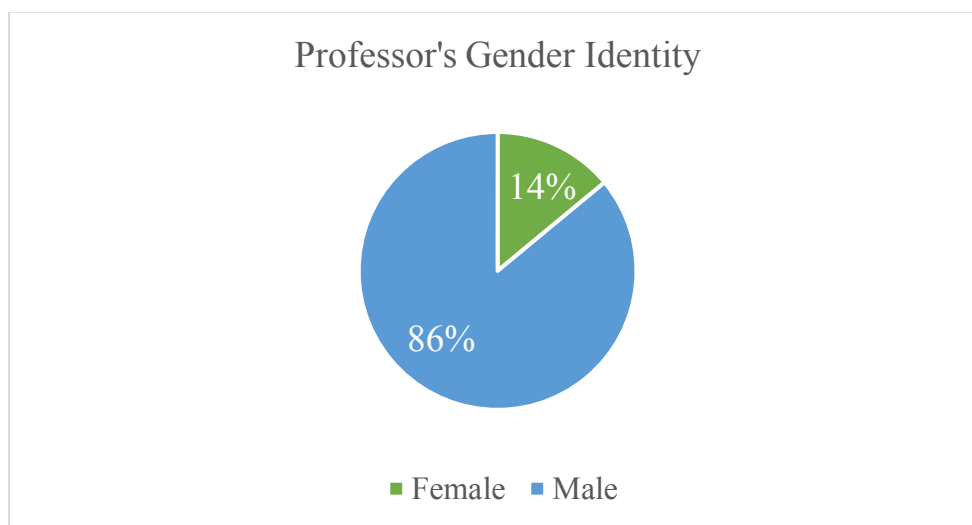
SURVEY FINDINGS

As explained in Chapter III, the main purpose of this survey is to determine if trombone studios in the United States are mostly male and find if female trombonists are affected by gender bias and stereotypes today. The surveys for professors and students were completed by 150 participants overall: 98 professors and 52 female-identifying students. In Figure 1, the table shows the genders of professors and students involved in the survey, including 4 male-identifying trombone students who were not eligible for this study. As you can see in Figure 2, the professors who participated in the survey were mostly male identifying. These professors were able to answer questions about their school's music department, the location of the school, the students in their studio, and a question asking if they have measures in place to provide equal opportunities for their students. Female-identifying professors who participated were asked the same questions plus questions about encouragement and discouragement, positive and negative effects, and their role models (see Appendix E for professor survey). Female-identifying professors were also asked if they had previously identified as another gender, and none responded "yes" to this question. Students involved in the study were asked similar questions to those in the female-identifying professor survey regarding encouragement and discouragement, positive and negative effects, and their role models (see Appendix D for student survey).

Figure 1: Survey Participants

	Overall	Female	Male
Trombone Professors	98	14	84
Trombone Students	56	52	4

Figure 2: Professor Participants Gender Identity



In the professor survey, trombone professors indicated the size of their music departments which are illustrated in Figure 3. You will notice from Figure 3 that most departments involved in the study had 150 or less students. Only 4 professors confirm that they have 800 or more students in their music department. It is important to know the size of the music departments, because the data is more likely to be an accurate representation of the actual situation if a variety of institutions are studied. Along with the department, the location of the school plays a role in this study as well. As can be viewed in Figure 4, the study participation

comes from a fairly well-balanced cross-section of studios located in rural, suburban, and urban areas.

Figure 3: Size of Music Departments Involved in Study

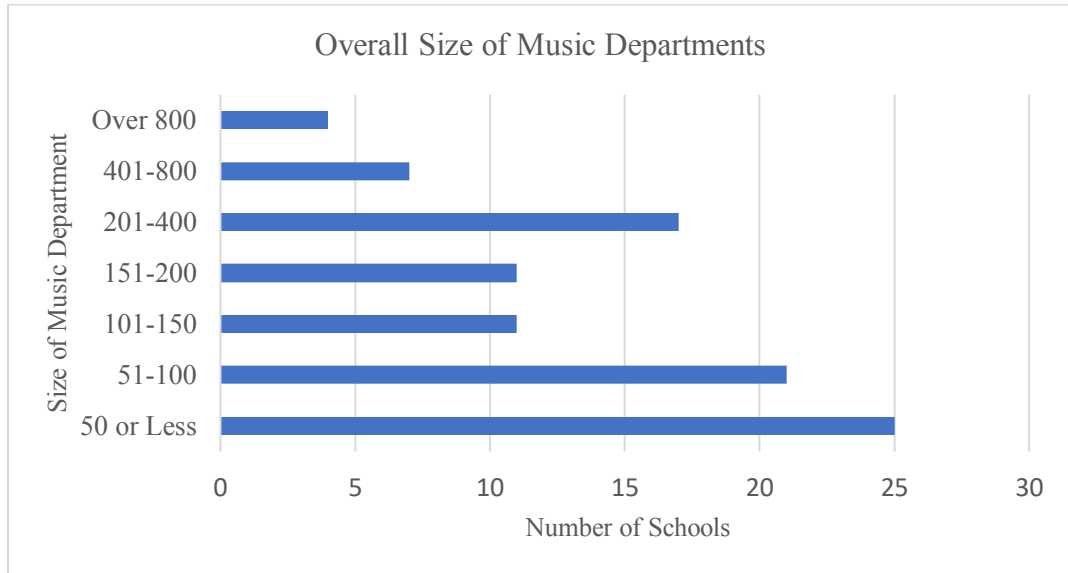
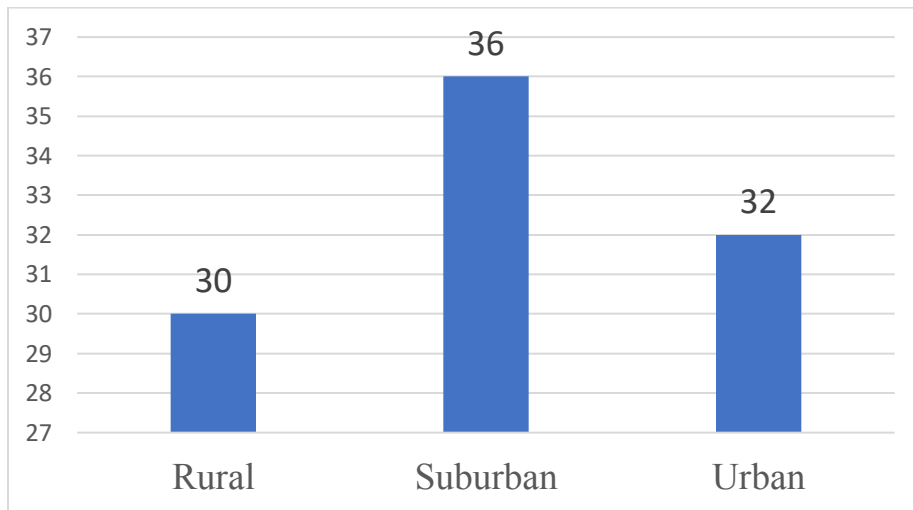


Figure 4: Location of Universities Involved in Study



After asking professors about the trombone studio specifically, the data shown in Figure 5 illustrates that only one studio has more than 20 trombone students. The rest of the studios

consist of 20 or fewer trombone students. The ratio of male-identifying to female-identifying students can be seen in Figure 6 which shows that the majority of trombone studios have less than half the number of females in comparison to male students. Since most studios have fewer female-identifying trombonists in total, this lowers the chances that the freshman and sophomore female-identifying trombonists will have upperclassmen female role models in their studio. While the male-identifying students have plenty of peers in the studio to have as role models, those who are female-identifying in the studios are lacking that connection with upperclassmen trombonists.

Figure 5: Students in Trombone Studios

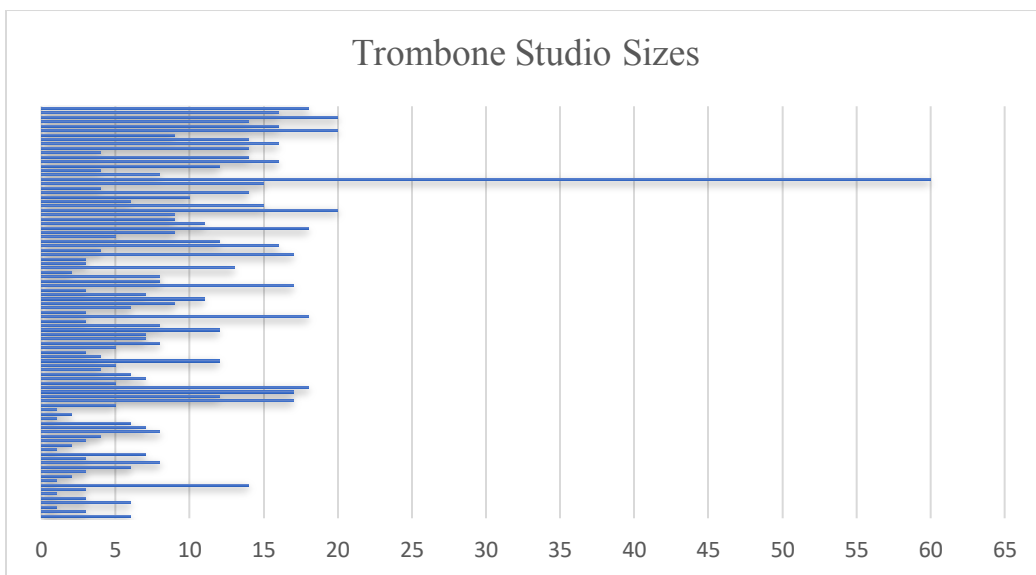
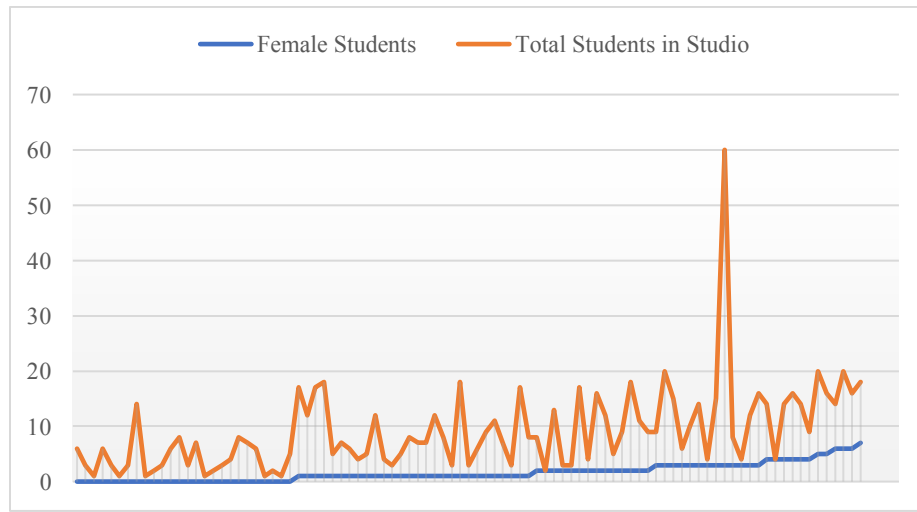


Figure 6: Studio Gender Ratios



The student participants in this research study consist of 52 female-identifying trombone students, only one participant responded that they had previously identified as another gender. This participant indicated that they previously identified as a cisgender woman and now they identify as an AFAB non-binary (This participant was assigned female at birth and used to identify this way, but they now identify as non-binary). This participant did not mention any discouragement or effects based on gender stereotyping, but they did mention the trombone being “daunting” to non-male musicians. They explained their idea that this relates to the way that the trombone is viewed as being strong and present much like men are in society.

Discouragement and Encouragement

One of the most important aspects of this study was to determine if students are being discouraged to play the trombone, because there are fewer female trombonists than male. As can be viewed in Figure 7, the survey answers show that a higher percentage of participants were encouraged than discouraged to play the trombone. In addition, 89% of students encouraged to play the trombone confirmed that the encouragement that they received had nothing to do with

their gender identity. On the other hand, Figure 8 shows that majority of the students who were discouraged to play the trombone indicated that this did relate to identifying as female. The students who related discouragement to their gender mentioned that they were told they are too small to play the trombone or that their lungs aren't large enough to play it. There were three students who said they were told to play a "prettier" instrument. One of these students stated, "I was always told that I was too small to play trombone/tuba and that woodwind instruments were 'prettier.'" Similarly, other participants mentioned parents telling them that low brass instruments are not pretty like woodwinds or that low brass instruments should be played by boys. Four of these students said their parents told them only boys play the trombone. One of these students explained, "...my mom said only boys play brass instruments. I actually wanted to play the tuba but she said only fat or ugly girls play it and refused to let me play it." This is a good representation of what a lot of parents could potentially think because there are more male trombonists in the field than female.

Figure 7: Participants Encouraged and Discouraged to Play Trombone

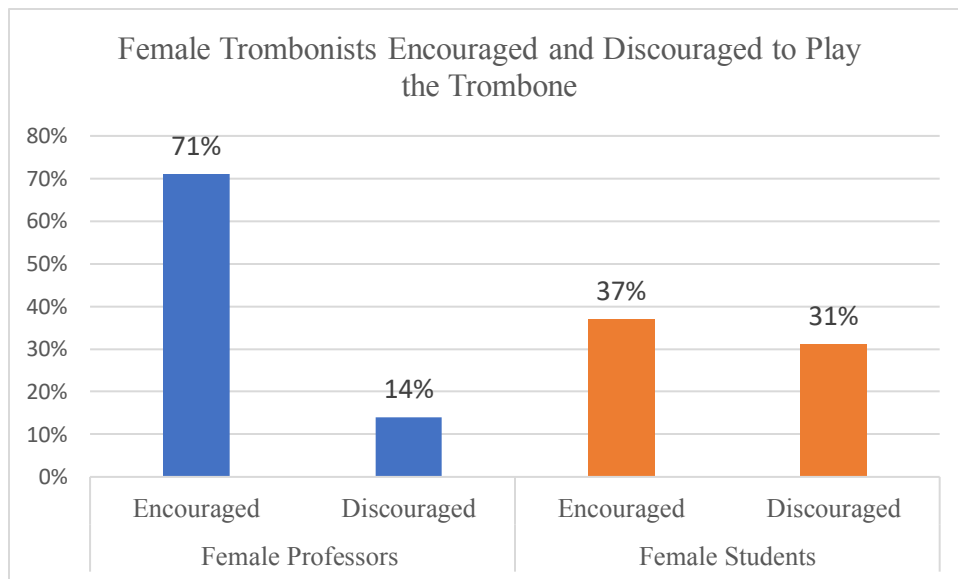
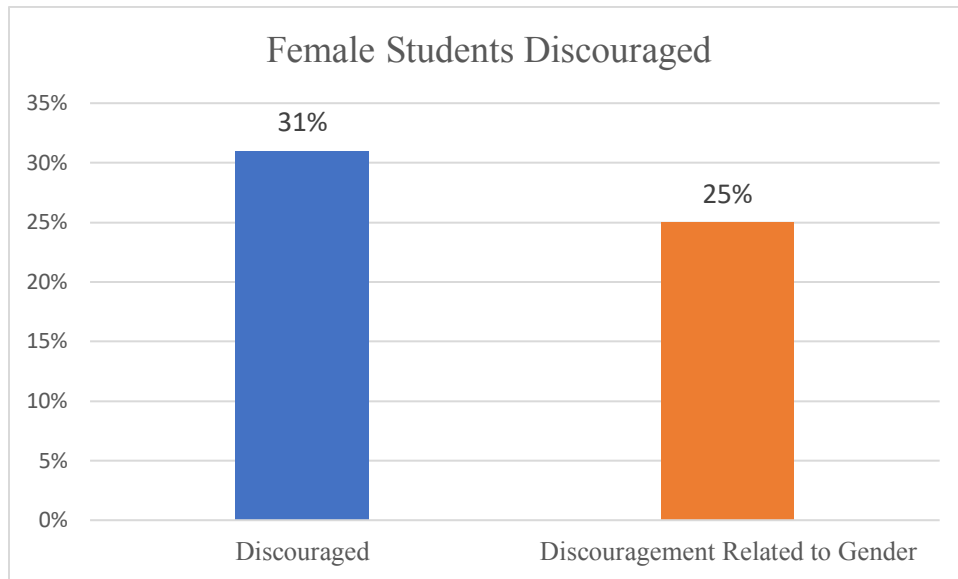


Figure 8: Female Students Discouraged to Play the Trombone



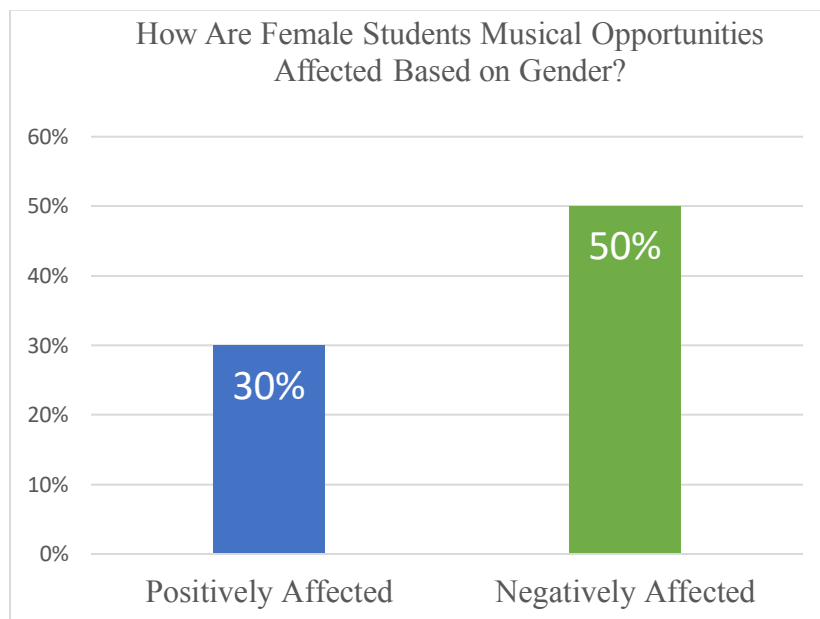
After asking professors the same question about being encouraged or discouraged to play the trombone, Figure 7 shows that like the students more professors were encouraged than those who were discouraged. Only 14% of female-identifying professors were discouraged to play the trombone which is less than half the percentage of students discouraged to play the trombone! These professors indicated that the discouragement they received was based on gender. This question is proof that encouragement helps female trombonists to become trombone professors in the future, because these women are now working as music educators. Although some students and professors indicate being discouraged based on gender, the majority of participants were encouraged to play the trombone.

Positive and Negative Affects

The survey asked students and female-identifying professors if their musical opportunities have been positively or negatively affected based on identifying as female. As Figure 9 indicates, 50% of female-identifying student participants respond that their musical

opportunities have been negatively affected, however, 30% of students do mention positive effects on musical opportunities based on their gender. The students who said their musical opportunities have been positively affected mention gaining other female trombone friends from various universities and being a part of the International Women's Brass Conference (IWBC). The students who mention the IWBC explain that this provides them with a community of other female brass players and the opportunity to perform with female brass players within the community. Although this is a positive experience for many students, one student mentioned that even though the IWBC provides them with connections at other colleges, their own studio still lacks female-identifying colleagues and role models. Some students made comments about the feeling of empowerment and being different as one of the few female-identifying trombonists in their studio which has positively affected their experiences as a brass musician.

Figure 9: Students Gender Effects on Musical Opportunities



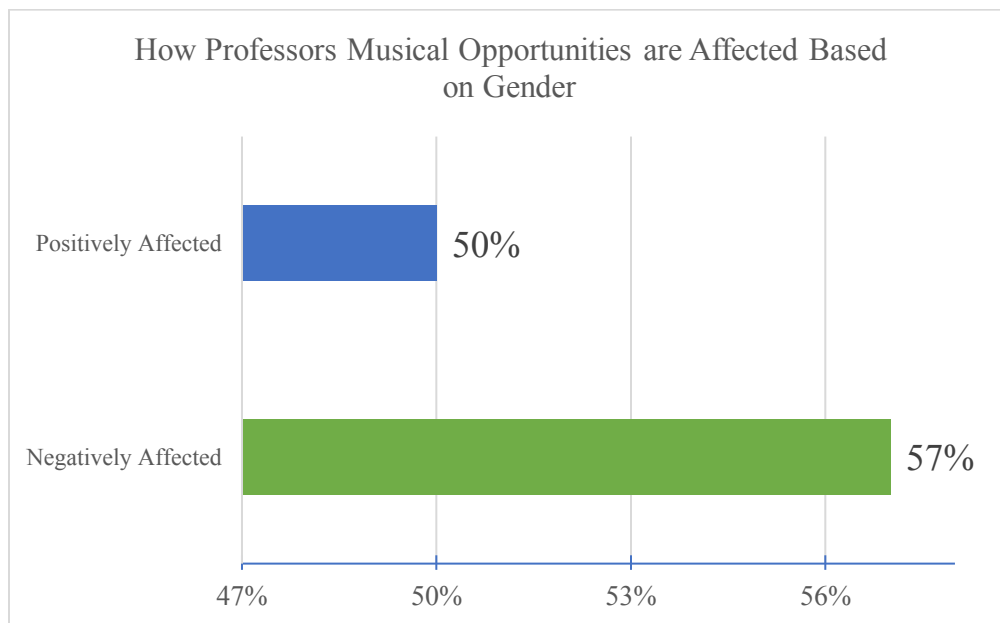
When students were asked if their musical opportunities have been negatively affected based on gender, 50% of students said yes. The students who confirm that their musical

opportunities have been negatively affected mention various situations where they perceived that they have been underestimated or left out because of identifying as female. A few students note the language their professor has used with them including saying things like “play more like a woman” or “your lungs are smaller than a man’s.” The student who said their professor asked them to “play more like a woman” explained that this professor was wanting them to play more elegantly. This comment caused the students to feel disrespected and uncomfortable, because the professor related the terms elegance and quiet to being a female. Other students mention similar scenarios where professors or male trombonists expect them to be a reserved player simply for identifying as female. One participant explained, “I am often underestimated and stereotyped in my playing. As a kind woman, I am almost expected to have a gentler, quieter sound.” Another student relates, “...always being seen as weak, shy, innocent has affected the language some of my teachers have used when approaching my playing.” Although many students note that they have been left out and underestimated, the most common response to this question was that female-identifying trombonists perceived that they have been denied a seat, solo, or opportunity simply because the other applicant was a male-identifying trombonist. One participant stated, “I feel as though some people think my skills on my instrument are limited due to my gender. For example, I could be a significantly better player than someone else, but HE would still get first part and all the solos and credit. (yes this actually happened multiple times.)” There were five students who mentioned similar scenarios where they believed that a male trombonist with less skills won the spot instead of them, because they were not male identifying.

When female-identifying professors were asked the same questions about their musical opportunities, Figure 10 shows that 57% of female-identifying professor’s musical opportunities have been negatively affected while 50% of female-identifying professor’s opportunities have

been positively affected due to their gender. The professors who have been positively affected relate this positivity to the opportunity to play in all-female ensembles, being a part of female brass organizations, and specifically, being a part of the IWBC where all brass players are accepted.

Figure 10: Professors Gender Effects on Musical Opportunities



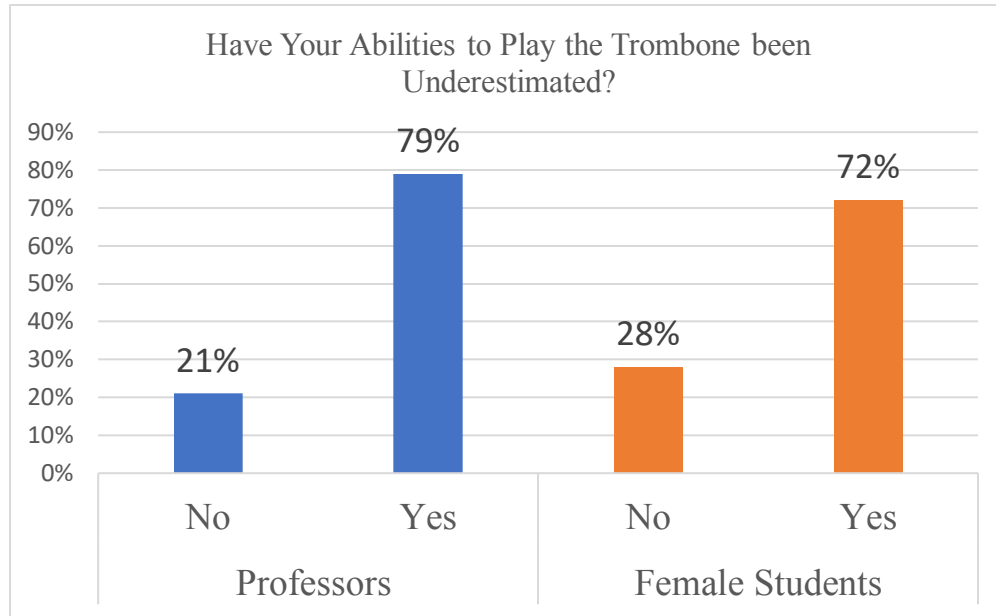
As illustrated in Figure 10, there are more female-identifying professors negatively affected in comparison to the positive effects. Most of the female-identifying professor participants explained that the negative effects on their musical opportunities related to the higher expectations for trombonists who identify as female in comparison to male-identifying trombonists. In sum, the majority of female-identifying professors noted in this answer that they feel like they must play way better than everyone else (males) to be accepted or even acknowledged at the professional level. One female-identifying professor mentioned, “I don't have proof to this, but freelancing is often a boys club. I've done well despite this, but I think they enjoy hanging out with each other more and this can affect professional opportunities. I

don't let it affect me, but I do feel like I have to play even better than everyone else.” Like the students’ responses to this same question, the professors also mention being left out of what feels like a “boys club” at times in trombone studios and sections. Although female-identifying professors have been underestimated by male colleagues and are expected to try even harder just to be taken seriously, some professor participants mentioned positive effects resulting from these experiences. One of these participants shared that the negative effects to their musical opportunities did not set them back, but that they motivated them to continue improving and playing to the best of their abilities.

Underestimated

Most female-identifying trombonists surveyed reported that they have been underestimated based on their gender at some point in their musical career (as can be seen in Figure 11). Participants were not only asked if they have been underestimated, but they were also asked to share how being underestimated has affected their musical careers. Students who were underestimated were asked if this caused them to doubt themselves or encouraged them to try harder. Likewise, professors were asked a similar question about the effects of being underestimated. It was interesting to find that the professors and students have different experiences of being underestimated.

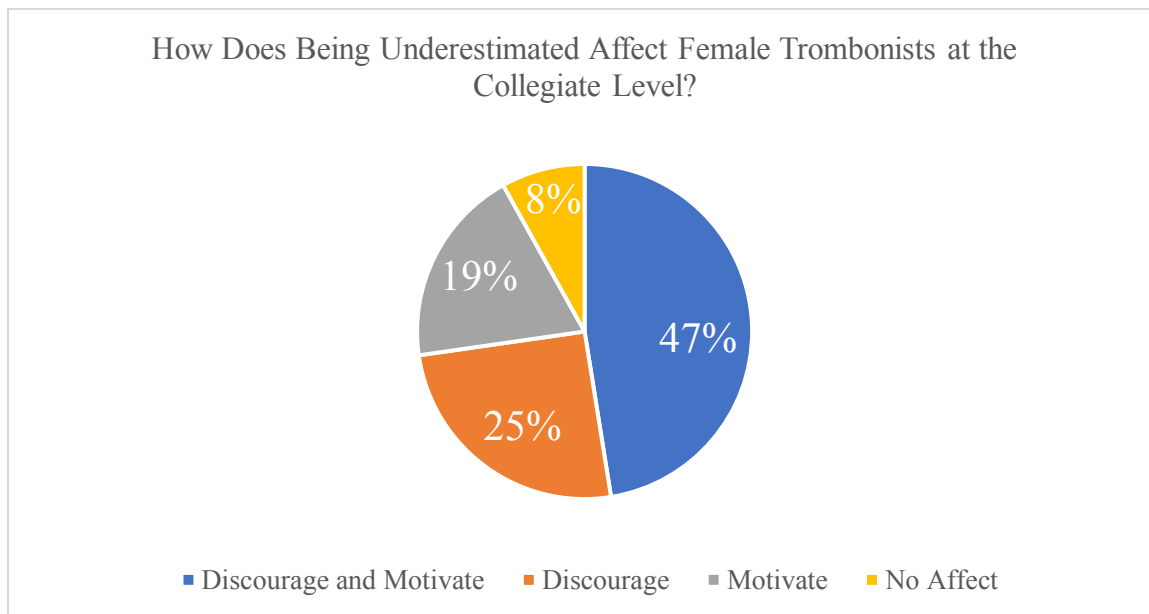
Figure 11: Underestimated Female Trombonists



As Figure 12 shows, students who were underestimated based on their gender were more likely to feel both discouraged and motivated than encouraged, just motivated, or having no effect. The 47% of students who were both motivated and discouraged reported experiences where they were told that they were not good enough or should not be playing the trombone. Other students who have felt both explained that they were discouraged at first then later fueled by that discouragement and doubt to be better and practice more. Some student participants indicated experiencing the opposite of this, because they initially felt motivation to improve then as they reached a phase of frustration, like a roadblock, they instantly lost motivation to improve. Participants who were discouraged after being underestimated mentioned that the doubt made them feel like they were never going to improve. These individuals were defeated by the anger and sadness resulting from being underestimated by others. Along with defeat, being underestimated caused some students to believe that they will never be able to prove their skills to people who will most likely never change their perceptions of female brass players. One

female-identifying student trombonist mentions that being underestimated made them feel that they were “never going to play like the great players who are all men.” This quote goes to show how the paucity of female role models and the perception that all great trombonists are men can have a negative effect on students at the collegiate level. Along with never expecting to reach the level of other great players, female-identifying students who have been underestimated have questioned their choice to play the trombone. While some people may view sexist comments as funny or just a joke, it is obvious that most of these female-identifying students have been negatively affected by comments regarding their skills and gender. Even the students who have experienced both motivation and discouragement explain that over time these comments on and doubts of their abilities get tiring and frustrating to hear. While people may not intentionally mean to impact others with their words, these microaggressions can be hostile and they could potentially have a negative impact on individuals. According to Wikipedia, “Microaggressions are common, everyday slights and comments that relate to various intersections of one’s identity such as gender, sex, race, ethnicity, and age, among other aspects.” Along with this description, Wikipedia also mentions specific ways in which people have used microaggressions towards females, “Microaggressions based on gender are applied to female athletes when: their abilities are compared only to men, they are judged on "attractiveness", and individuals are restricted to or requested to wear "feminine" or sexually attractive attire during competition.” Female trombonists experience these same microaggressions, but a lot of people are unaware of how much these small comments affect musicians.

Figure 12: How Female Students are Affected by Being Underestimated



Female-identifying students are not the only ones tired of being underestimated, because female professors are experiencing anger and frustration as well when it comes to people doubting their musical abilities. As Figure 11 shows, the majority of female-identifying professors who participated in the survey have been underestimated based on gender at some point in their career. Most of these professors mention that they are never taken seriously until someone hears them play. Along with this, participants mention that they are constantly proving people wrong. While this may seem fun to prove people wrong based on their assumptions, the findings show that most of these women are frustrated that they must constantly prove their abilities to others. One participant even mentioned that this makes them wonder why people assume they were incapable in the first place. Unfortunately, I believe that most people are biased, because they do not believe that a woman can play the trombone as well as a man can. Another participant stated, “I can’t count the number of times I’ve heard variations of ‘you play well for a girl/ I didn’t know girls could play this, etc.’...They clearly mean it as a

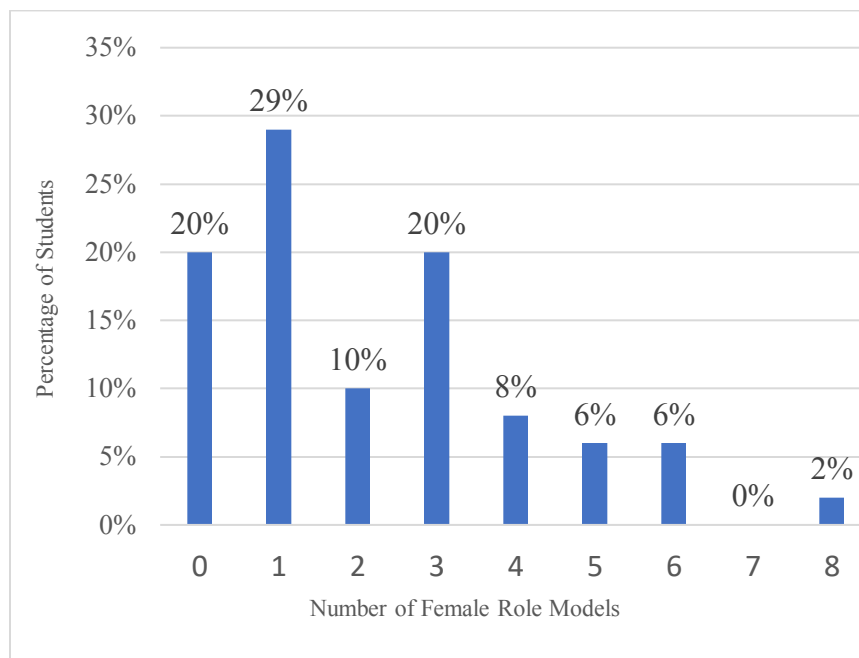
compliment...They are genuinely surprised I can play and I hate it.” The essence of this comment is that people think they are doing a good thing by mentioning their surprise about female trombonists’ skills, but this is actually negatively affecting them. It is one thing when someone compliments your skills or an ability in general, but when they say that it was good “for a girl” that takes the positivity out of the comment.

Female Role Models

Although there are plenty of female trombonist role models in the world, the majority of female-identifying trombone students cannot name more than four female role models. The survey question asking about a student’s female role models provided a slider where students could indicate any number of role models from zero to 15+. As Figure 13 illustrates, the most female role models that a student had was eight. Only 13% of participants indicated having five or more female trombonist role models. This leaves 87% of participants who have less than 5 female role models and 39% who have 1 or no female role models. One participant relates their lack of female role models to the paucity of female-identifying trombonists in the field by saying, “I know there are female trombonist out there but I never see them. I don’t see much representation. It’s hard to look for a role model when there aren’t very many in the field.” Another student relates to the same ideas by stating, “I can’t name 5 female trombonists that teach or play, but I can name tens of men who teach and/or play trombone.” Ultimately, both students explained that they have fewer female role models, because there are fewer females who play the trombone professionally in comparison to males. In addition, these students, along with others, wish that they had more female role models. I agree that it is hard to find female role models in this field because my own short list of female role models confirms this. Since there is

a smaller number of females who play trombone professionally, this lessens students' chances of having female-identifying role models.

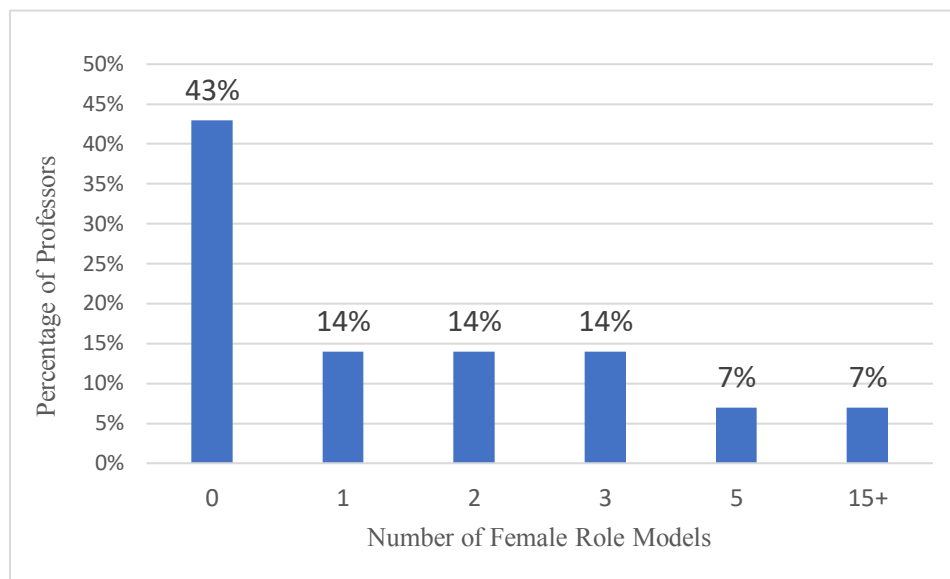
Figure 13: Students Number of Female Role Models



The lack of female trombonist role models is not only relevant regarding students. According to the survey findings, illustrated in Figure 14, the majority of female-identifying professors indicate that they have one or zero female role models and 43% of professors have zero female role models at all. Rebecca Cherian, co-principal trombonist for the Pittsburgh Symphony Orchestra, has experienced the same paucity of mentors during her musical career. In a blog post titled “The Women in the Brass Section: How They Found Success,” Cherian shared that she always had trouble naming a female mentor, because she was the only girl in her middle and high school band who played the trombone (Rogelstad 2019). Like the trombone professors involved in this survey, she lacked female mentors from the very start of her musical career. After asking professors how many role models they had, they were asked to list five role models.

This question did not ask for any specific gender of role models. After examining the responses to this question, there were only four female role models mentioned by professors: Angie Hunter, Jan Kagarice, JoDee Davis, and Kate Jenkins. This is less than a fourth of the female role models mentioned by the students when they were asked the same question. This data suggests that there are more female role models for students today than there were when current faculty were starting to play. As can be seen in Appendix C, the student participants were able to list 18 different female role models. Of those, trombonist Megumi Kanda was mentioned four times being the most common role model followed by Jan Kagarice and Melba Liston who were each mentioned by three female-identifying trombone students. It is obvious that female trombonists are unaware of female role models that they can look up to, relate to, and communicate with about their future career goals. Most female-identifying trombonists have not been celebrated for their accomplishments as professional trombonists and this keeps other trombonists from seeing female representation on the trombone. While there may not be as many female trombonists in the world as most female trombonists would like, there are definitely more than have been listed by the respondents to this survey.

Figure 14: Professors Number of Female Role Models



Some people may ask, “Why is it important to know about female trombonists’ role models?” To answer this question, I think it is important to determine if females are being supported by other females in the field or if they are lacking support from other females in the field. Some students involved in this research mention having no female colleagues and mentors at their school while others mention the incredible role models they look up to from the IWBC and female ensembles. Are students lacking role models in general or is it just female role models that they are lacking? The findings illustrated in Appendix C show that the students listed 74 different male-identifying trombone mentors or role models. This proves that students do have role models, they just do not have many female role models in comparison to males. Similarly, the professor participants role models, shown in Appendix B, also show that they have more male role models than female. To sum up the role model findings of this study, students, and professors both indicated that they have more male role models than females overall. There is nothing wrong with having plenty of male role models for students and professors to look up to, but I believe that more students would be motivated and encouraged to continue playing the

trombone if they have role models that are the same gender identity as they are. It would be interesting to study this idea further in future research by asking male-identifying professors and students if they look up to female trombonists as role models.

Measures

One of the survey questions asked professors if they have measures in place to provide students with equal opportunities and if so, to describe them. As Figure 15 shows, 47% of professors said they have measures in place. After examining the descriptions of professors' measures 17% of professors who responded "yes" did not describe actual measures in place. The majority of these professors mention wanting their students to be treated equally, teaching each student based on their individual skills, and wanting all students to succeed. While these views are important and necessary to have, these are not measures, but they are simply the professors' desires. Taking this into consideration, the data shows that only 30% of professors who indicated that they do have measures in place actually mention measures. The actual measures used by professors include blind auditions, anonymous student feedback surveys, and rotating students on different parts. Another measure mentioned by one participant was to have individuals outside of the college visit and judge auditions.

For the professors who answered that they do not have measures in place, they were asked to provide any initiatives that they have wanted to add or want to add after taking the survey. While some participants mentioned that they would like to implement blind auditions or have students rotate parts, others stated that "gender bias is not a problem" at their specific school. Some of these professors indicated that they believe the school is too small for gender bias to be a problem. Unfortunately, the majority of these responses indicate that they do not need any measures or initiatives in their studio to promote equality for all students, because they

state that they already treat all students equally or that they want all students to succeed. When someone denies that sexism occurs, this can be equated with denying that racism occurs. In their article on *Color-Blind Racial Ideology: Theory, Training, and Measurement Implications in Psychology*, Neville, Awad, Brooks, Flores, and Blumel note that claiming to treat all people equally (being “color-blind”) is problematic. They “...argue that racial color-blindness is unattainable, reinforces racial prejudices and/or inequality, and is actually an expression of ultramodern notions of racism among White Americans and of internalized racism or the adoption of negative racial stereotypes among people of color” (455). In other words, when a group of people are told “you are treated equal” this does not help their situation, it can actually reinforce the idea that the person is opposing. Neville et al defined power-evasion as the “denial of racism by emphasizing the belief that everyone has the same opportunities” (457). This is very similar to the professors who emphasized that their studio is fine and that everyone has equal opportunities when they may not. If professors deny that sexism exists, then this could potentially reinforce it. This is not true for all participants, but it is important to consider that these professors may not realize that measures are needed. Instead of just believing students should be treated equally and stating that they are treated equally there should be measures in place to provide equal opportunities for all students.

When looking at the gender identity of faculty responses on the question concerning measures in place, the data shown in Figure 16 indicates that only 31% of male professors actually mention measures in comparison to 49% of males who responded that they have measures in place. As Figure 16 also illustrates, out of 57% of female professors who responded “yes” to having measures in place, 50% of these participants mention measures such as blind auditions and/or rotating parts. Overall, after considering the professors who did not mention

measures, 69% of male professors have no measures in place and 50% of females do not. This means that only 31% of male professors have measure in place compared to 50% of female professors who do. This data shows that male-identifying professors are less likely to have measures in place to provide equal opportunities for students compared to female-identifying professors.

Figure 15: Do Professors have Measures in Place to Provide Equal Opportunities for All Students?

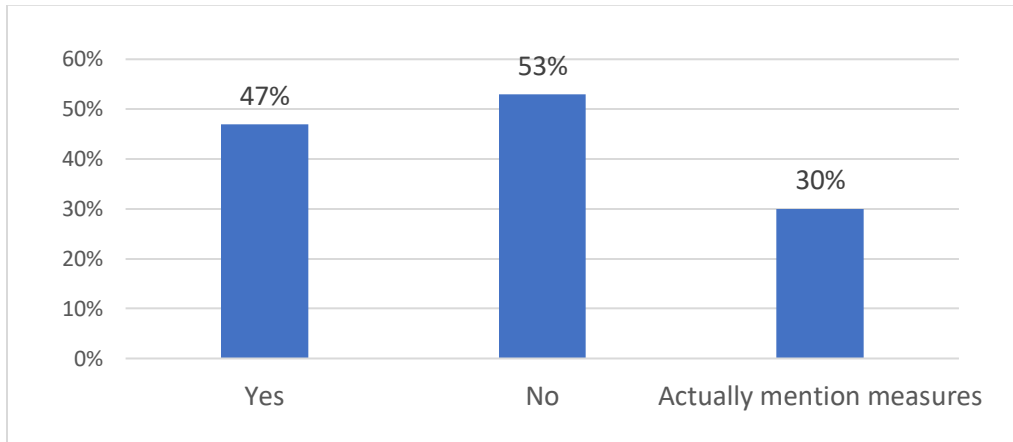
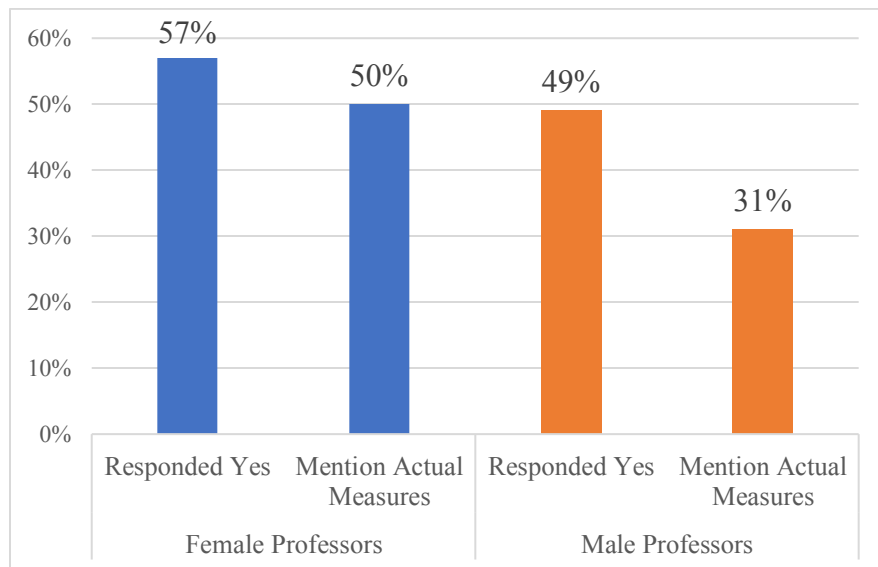


Figure 16: Measures in Place Based on Professor Gender (Percentage out of Total Professors)



Gender Stereotyping

Near the end of the survey, participants were asked why they believe that the fields of trombone teaching and performance are male-dominated. All of these answers were very similar. Every participant mentioned at least one of these reasons for the trombone being played most commonly by men:

- Gender stereotypes and biases
- Paucity of female role models
- Size of instrument and female bodies
- The introduction to instruments by elementary school music teachers

Before finishing the survey, participants were given the opportunity to add any comments they wanted to about the survey, being a female trombonist, gender bias, or anything else related to the study. Schmalenberger and Maddox's study of "Female Brass Musicians, Gender Equity, and Sexual Harassment" mentioned in Chapter II had a similar question and they found, like I did that many participants responded with additional information (2019). The majority of the women mentioned that we cannot change sexism or gender stereotyping overnight, but that they have personally been very accepted and welcomed in the field during their musical career so far. Most students indicated that although they are treated equally, they are part of a male-dominated studio that leaves them without female role models to look up to. One student took the opportunity to share some motivation to all female trombonists, "Us female trombonists need to stick together and make sure that we keep supporting one another in this male-dominated industry and one day, we will be considered equal with them rather than less than them." The data showed that most female trombonists are being more accepted and having positive

experiences playing the trombone today, because they have found friendships with other members of the IWBC and female ensembles like Seraph Brass. Since these were the most mentioned positive effects on female trombonists' musical opportunities, without them most professors and students would have no positive affects to their musical career based on their gender. One professor responded to the optional question explaining their own perception on recent changes towards female trombonists, "The landscape for women trombonists has changed a lot in the last few years. I'm not that old, but I've already seen the changes and for that I'm grateful."

CHAPTER V

CONCLUSIONS

The findings of this research were able to show more than simply how female-identifying students and professors have been affected based on gender bias and stereotypes. The data showed that aside from being underestimated and discouraged, most female-identifying trombonists are lacking female role models in their studio and in general. To study this further, it would be interesting to ask male students and professors about their trombone role models in order to determine if they would mention the same female mentors, less, or more than the female trombonists did in this study. Another idea to expand on this portion of the study would be to ask students about the variety of guest artists who perform and/or give masterclasses at their university.

Another section of this study that would be interesting to study further would be the professors' measures questions. In the future, it would be fascinating to determine how the students are positively or negatively affected by the inclusion or exclusion of measures. For example, the survey could ask students what measures are in place then ask how these provide them with equal opportunities or not. The survey could also include a question asking what measures they think would help them (as students) have a more equitable experience in their studio.

Our understanding of gender identity has changed significantly in the past decades. People are assigned a sex at birth, but today, notions of gender as a spectrum rather than a binary division are common and many people do not identify with either of the binary categories (male

or female) or have a fluctuating relationship with them (gender fluid). An important area for future research would be to study gender bias in this population.

The survey findings showed that female-identifying trombonists are still being affected by gender bias and stereotypes today. Most female-identifying trombonists are still experiencing negative effects on their musical opportunities based on gender, being doubted by others, and the paucity of female trombonist role models. Fortunately, a lot of students and professors are experiencing more encouragement than discouragement, and many students are having positive experiences relating to their involvement with the IWBC. We cannot change the number of male-identifying trombonists in this field, and we shouldn't want to, but if we encourage more female-identifying students to play the instrument then this will provide others with more female role models in the future.

APPENDIX A

STUDIO GENDER RATIOS TABLE

Females Students	Total in Studio
0	6
0	3
0	1
0	6
0	3
0	1
0	3
0	14
0	1
0	2
0	3
0	6
0	8
0	3
0	7
0	1
0	2
0	3
0	4
0	8
0	7
0	6
0	1
0	2
0	1
0	5
1	17
1	12
1	17
1	18
1	5
1	7
1	6
1	4
1	5
1	12
1	4

1	3
1	5
1	8
1	7
1	7
1	12
1	8
1	3
1	18
1	3
1	6
1	9
1	11
1	7
1	3
1	17
1	8
2	8
2	2
2	13
2	3
2	3
2	17
2	4
2	16
2	12
2	5
2	9
2	18
2	11
2	9
3	9
3	20
3	15
3	6
3	10
3	14
3	4
3	15
3	60
3	8
3	4

3	12
3	16
4	14
4	4
4	14
4	16
4	14
4	9
5	20
5	16
6	14
6	20
6	16
7	18

APPENDIX B

FEMALE PROFESSORS ROLE MODELS

	Professional Female Role Models	Professional Male Role Models
1	Angie Hunter	Alain Trudel
2	Jan Kagarice (2)	Ashley Alexander
3	JoDee Davis	Bill Waltrous
4	Kate Jenkins	Brad Edwards
5		Carl Fontana (2)
6		Carl Lenthe
7		Christian Lindberg (5)
8		Dan Bachelder
9		Dan Poupard
10		Dave Steinmeyer
11		David Langlitz
12		David Milburn
13		David Schmidt
14		Dennis Smith (2)
15		Devin Bennett
16		Doug Wright
17		Earle Louder
18		Frank Rosolino
19		Gaylon Bledsoe
20		Gunhild Carling
21		Ian Bousfield
22		Jeremy Wilson
23		Jiggs Wigham
24		Jimmy Clark
25		JJ Johnson
26		Joe Alessi (5)
27		John Drew
28		Jorgen van Rigen

29		Larry Zalkind
30		Mark Lawrence
31		Marshall Gilkes
32		Matt Vaughn
33		Michael Davidson
34		Milt Stevens
35		Pat Gulotta
36		Per Brevig
37		Peter Ellefson
38		Ralph Sauer
39		Ray Conklin
40		Rick Simmerly
41		Rob McConnell
42		Robert Szabo (2)
43		Scott Hartman (2)
44		Stephen Parsons
45		Steve Weist
46		Tim Riordan
47		Toby Oft (2)
48		Vern Kagarice

APPENDIX C

STUDENTS ROLE MODELS

	Professional Female Role Models	Professional Male Role Models
1	Alexis Smith	Mike Stroeher
2	Abbie Conant	Aaron LaVere
3	Aubrey Logan (2)	Alex van Durren
4	Ava Ordman	Altin Sencalar
5	Brittany Lasch	Andy Post
6	Elisabeth Shafer	Bard Mackey
7	Helen Jones Woods	Ben McIlwain
8	Hollie Pritchard	Ben van Dijk
9	Jan Kagarice (3)	Billy Bargetzi
10	Jessica Sneeringer	Brad Edwards (3)
11	Joanna Ross Hersey	Brandt Attema
12	Julianna Hinton	Chris Nigrelli
13	Kirsten Warfield	Chris Sharpe
14	Megumi Kanda (4)	Christian Lindberg (5)
15	Melba Liston (3)	Christopher Bill (2)
16	Natalie Mannix (2)	Craig Hancock
17	Rita Payés	Curtis Fuller
18	Sara Goldberg	David Beatty
19		Drew Leslie
20		Elliot Mason
21		Eric Henson
22		Frank Rosolino
23		Glenn Miller
24		Gunhild Carling
25		Gus Brockmann
26		Ian Bousfield
27		J.J. Johnson (4)
28		Jack Kotze

29		James Markey (2)
30		James Wheat
31		James Whitis
32		Jamey Morgan
33		Jemmie Robertson
34		Jeremy Smith
35		Jeremy Wilson (5)
36		Jesper Juul
37		Jim Decker
38		Joe Alessi (10)
39		Joe Dixon
40		Joe Tiemann
41		John Ilika
42		John Ross
43		Jorgen Van Reijen (2)
44		Justin Cook
45		Lucas Borges (3)
46		Mark Babbitt (3)
47		Mark Williams (2)
48		Marshall Gilkes
49		Martin Schippers
50		Matthew Guilford (2)
51		Micah Everett
52		Michael Dease
53		Mike Kris
54		Mike Roylance
55		Nathaniel Brickens
56		Norman Bolter
57		Patrick Casey
58		Peter Steiner
59		Phil Ostrander (2)
60		Richard Linn
61		Sam Chen

62		Sammy Nestico (2)
63		Scott Whitfield
64		Shawn McNamara (2)
65		Slide Hampton
66		Steve Davis
67		Steve Lange
68		Steve Wiest
69		Ted Neely
70		Tim Conner (2)
71		Tim Higgins
72		Timothy Francis
73		Toby Oft (2)
74		Tom Polett

APPENDIX D

STUDENT SURVEY QUESTIONS

1. Are you a faculty member or student?
2. Are you a trombonist who currently identifies as female?
3. Have you ever identified as another gender?
 - a) How did you previously identify? Have you noticed a difference in the way you have been treated in musical settings since identifying as female? Please explain.
4. Did anyone encourage you to choose the trombone as your main instrument?
 - a) To your knowledge, do you feel your gender was a factor in this?
5. Did anyone discourage you to choose the trombone as your main instrument?
 - a) To your knowledge, do you feel your gender was a factor in this? Please explain.
6. Please list 5 trombonists whose playing and/or pedagogy has influenced your approach most significantly, either directly or indirectly.
7. How many of your role models are female brass players?
8. Has identifying as female positively affected your musical opportunities?
 - a) Please explain how identifying as female has positively affected your musical opportunities.
9. Has identifying as female negatively affected your musical opportunities?
 - a) Please explain the negative effects.

10. Has your ability to play the trombone ever been underestimated based on your gender?
 - a) Did this cause you to doubt yourself or did it encourage you to try harder? Please explain or elaborate on how the situation made you feel/react.
11. Has your gender ever caused you to doubt your choices to play and/or teach trombone?
 - i) Please explain the situation(s) or reason(s) why you have doubted your choice?
12. Statistics show that male trombonists significantly outnumber female trombonists. Why do you think that more trombonists are male than female?
13. OPTIONAL: This is a chance to share any information you would like to add relating to this survey/project. This can be information about being female trombonists, gender bias, or anything that is related to this study.

APPENDIX E

PROFESSOR SURVEY QUESTIONS

1. Are you a faculty member or student?
2. Approximately how many music majors are in your department or school of music?
3. Is your university located in a rural, suburban, or urban area?
4. How many trombonists are currently in your college studio?
 - a. Of those, how many identify as female?
5. Do you identify as female?

(If yes, females professors continue with the rest of the survey. If no, male professors skip to Question 18)

6. Have you ever identified as another gender?
 - a. How did you previously identify?
 - b. Have you noticed a difference in the way that you have been treated in musical settings since identifying as female?
 - i. Please explain.
7. Did anyone encourage you to choose the trombone as your main instrument?
 - a. To your knowledge, did gender have a factor in this?
8. Did anyone discourage you to choose the trombone as your main instrument?
 - a. To your knowledge, did gender have a factor in this?

9. Please list 5 trombonists whose playing and/or pedagogy has influenced your approach most significantly, either directly or indirectly.
10. How many of your role models are female brass players?
11. Has identifying as female positively affected your musical opportunities?
 - a. Please explain.
12. Has identifying as female negatively affected your musical opportunities?
 - a. Have the negative effects changed your views on performing or teaching? Please explain. (Have they made you regret playing trombone or being a teacher? Have they inspired you to try different teaching methods? Etc.)
13. Statistics show that male trombonists significantly outnumber female trombonists. Why do you think that more trombonists are male than female?
14. Has your ability to play the trombone ever been underestimated based on your gender?
 - a. How was your ability underestimated and how did this make you feel?
15. Have your abilities to teach trombone students ever been underestimated based on your gender?
 - a. How were your abilities to teach trombone students underestimated? Please explain.
16. Did any pre-professional experiences of gender bias have an impact on your future career?

17. Did your experiences of gender bias influence the way that you teach your studio, recruit new members, or any other aspect of your career?
18. Do you have any measures to ensure equal opportunities for all students?
 - a. Explain how you ensure equal opportunities for all students in your studio.
19. Are there any initiatives that you would like to implement to promote equality for students, but have not been able to?
20. OPTIONAL: The space below is for anything you would like to add regarding the survey, being a female trombonist, gender bias, or anything else related to this study.

BIBLIOGRAPHY

- Abeles, Hal. "Are Musical Instrument Gender Associations Changing?" *Journal of research in music education* 57, no. 2 (2009): 127–139.
- Aube, Meghan Georgina. "Women in Percussion: The Emergence of Women as Professional Percussionists in the United States, 1930–present". ProQuest Dissertations Publishing, 2011.
- Broome-Robinson, Julia M. "Three Interviews: Diverse Career Paths of Female-Identifying Professional Trombonists". ProQuest Dissertations Publishing, 2020.
- Buzzarte, Monique. "We Need a Man for Solo Trombone: Abbie Conant's Story." *Journal of the IAWM*. February (1996), 8-11.
- College Music Society. "Directory of Music Faculties." (n.d.). Accessed January 24, 2022, https://www.music.org/index.php?option=com_blankcomponent&view=default&Itemid=2856.
- Dyer, Richard. "Of gender, bravado, and brass; A trumpet star's blare at female students stirs debate over stereotyping." *The Boston Globe*. 21 April (1991), 1-5.
- Ellis, Katharine. "The Fair Sax: Women, Brass-Playing and the Instrument Trade in 1860s Paris." *Journal of the Royal Musical Association* 124, no. 2 (1999): 221–54. <http://www.jstor.org/stable/766474>.
- Ewing, Melissa. "Examining the Under-Representation of Female Euphonium Players in the USA". University of North Texas, 2020.
- Gilbert, Jared Lee. "Betty Glover (b. 1923): Trombone Pioneer." ProQuest Dissertations. 2020.

- Goldin, Claudia, and Cecelia Rouse. "Orchestrating Impartiality: The Impact of 'Blind' Auditions on Female Musicians." *The American Economic Review* 90, no. 4 (2000): 715-741.
- Graham, Brenda J. "Relationships Among Instrument Choice, Instrument Transfer, Subject Sex, and Gender-Stereotypes in Instrumental Music." ProQuest Dissertations Publishing, 2005. Publishing, 2020.
- Hamlin, Kimberly A. "Helen Hamilton Gardener's Fight Against Sexist Science: Darwinism, Misogyny, and Education in the 19th Century." *Literary Hub*. April 2020.
<https://lithub.com/helen-hamilton-gardeners-fight-against-sexist-science/>.
- Hersey, Joanna Ross. 2008. "The Entertainment Value of Novelty: Women Brass Musicians on the Vaudeville Stage." *Historic Brass Society Journal* 20 (December): 155–73.
doi:10.2153/0120080011007.
- Hersey, Joanna Ross. "'Such Unfeminine Instruments': Women Brass Musicians in America before 1940". ProQuest Dissertations Publishing, 2006.
- History San José. "Delmas House: Brohaska Family in San Jose." Accessed April 20, 2022.
<https://historysanjose.org/research-collection/local-sites/delmas-house/>.
- Holman, Gavin. "Soft lips on cold metal: female brass soloists of the 19th and early 20th centuries." 2018.
https://www.researchgate.net/publication/328031640_Soft_lips_on_cold_metal_female_brass_soloists_of_the_19th_and_early_20th_centuries

International Women's Brass Conference. "Historical Brass Archive." Accessed April 19, 2022.

<https://myiwbc.org/historical-brass-archive/>.

International Women's Brass Conference. "About IWBC." Accessed April 19, 2022.

<https://myiwbc.org/about/>.

Jones, Sara K. "'Marching Barbies': Influences of Gender Bias in Three Female High School Band Teachers". ProQuest Dissertations Publishing, 2010.

Microaggression. *Wikipedia*. <https://en.wikipedia.org/wiki/Microaggression>.

Mullan, Pat. "Melba Liston: Jazz Master." *Newsletter of the International Women's Brass Conference* 2:2 (1995) 1-2.

Myers, Douglas W, and Claire Etaugh. "Reports: Women Brass Musicians in Major Symphony Orchestras; How Level Is the 'Playing' Field?" *Women & music* (Washington, D.C.) 7, no. 3 (2001): 28–.

Neville, Helen A, Germaine H Awad, James E Brooks, Michelle P Flores, and Jamie Bluemel. "Color-Blind Racial Ideology: Theory, Training, and Measurement Implications in Psychology." *The American psychologist* 68, no. 6 (2013): 455–466.

Rogelstad, Mary. "The Women in the Brass Section: How They Found Success." *The J.W. Pepper Blog*. *J.W. Pepper*. 13 March 2019. <https://blogs.jwpepper.com/the-women-in-the-brass-section-how-they-found-success/>.

Schlicht, Ursel. "Liston, Melba." *Grove Music Online*. 25 Jul. 2013; Accessed 20 April 2022. <https://doi-org.iris.etsu.edu/10.1093/gmo/9781561592630.article.A2242135>.

Schmalenberger, Sarah, and Patricia Maddox. "Female Brass Musicians Address Gender Parity, Gender Equity, and Sexual Harassment: A Preliminary Report on Data from the Brass Bodies Study." *Societies* (Basel, Switzerland) 9, no. 1 (2019): 20–.

Seraph Brass. "About." Accessed April 19, 2022. <http://www.seraphbrass.com/>.

Siler, Nathan. "A History of the CCM Brass Choir." Doctoral dissertation, University of Cincinnati, 2012. http://rave.ohiolink.edu/etdc/view?acc_num=ucin1354550757.

Tick, Judith, Margaret Ericson, and Ellen Koskoff. "Women in music." *Grove Music Online*. 2001; Accessed 27 Aug. 2021.
<https://www.oxfordmusiconline.com/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000052554>.

Willener, Alfred, Gerald Webster, and Susan F. Fleet. --*When Will the Walls Come Tumbling Down--?: An Essay on Women Playing Trumpet and Other Brass Instruments*. Pullman, Wash: Best Press, 1994.