

**Minding the Gap: A Comparison of Personality Traits in Male versus Female High School
Band Directors**

Amber Elizabeth Abbott
5546 April Journey
Columbia, MD 21044

September 30, 2016

Micah Jones, Director of the School of Music
Elizabeth Sokolowski, Division Head of Music Education

The University of the Arts
College of Performing Arts
School of Music

Master of Music in Music Education

**Minding the Gap: A Comparison of Personality Traits in Male versus Female High School
Band Directors**

Amber Abbott

Approved as to style and comment by:

Elizabeth Sokolowski

FULLNAME, Division Head Music Education

Micah Jones

FULL NAME, Director of the School of Music

James Savoie

FULL NAME, Dean of Graduate Studies Graduate Studies

ABSTRACT

Minding the Gap: A Comparison of Personality Traits in Male versus Female High School Band Directors

(September 2016)

Amber Abbott, B.M. University of Maryland
Research Project Supervisor: Elizabeth Sokolowski

The purpose of this empirical study is to investigate and compare personality traits between male and female high school band directors. This investigation will survey an equal number of male and female high school band directors. Participants will complete a short survey to identify their gender, age, and career, as well as a personality traits inventory that assesses the “Big Five” personality traits: mind, energy, nature, tactics, and identity. Results from each category will be compared between genders.

Table of Contents

Chapter 1: Introduction

Statement of Purpose.....	1
Rationale.....	1
Expected Findings.....	2

Chapter 2

The Gender Gap by Numbers.....	3
Why the Gender Gap?.....	4
The Personality Problem.....	6
16personalities.com Personality Test.....	9

Chapter 3: Study and Findings

Overview.....	12
Survey 1.....	12
Survey 2.....	13
Method of Analysis.....	15
Response Results.....	15

Chapter 4: Conclusion

Overview.....	21
Discussion of Data.....	21
Study Conclusion.....	24
Reflections.....	25
Further Considerations.....	26
Professional Understandings.....	27

Appendices

Appendix A: Survey 1 Email.....	28
Appendix B: Survey 2 Email.....	29
Appendix C: Survey 2 Qualifiers.....	30
Appendix D: Chi-Square Test Results.....	31

Works Cited

Chapter 1: Introduction

Statement of Purpose:

The purpose of this empirical study is to investigate and compare personality traits between male and female high school band directors. This investigation will survey an equal number of male and female high school band directors. Respondents will complete a short survey to identify their gender, age, and career, as well as a personality traits inventory that assesses the “Big Five” personality traits: Mind, Energy, Nature, Tactics, and Identity. Results from each category will be compared overall and between genders.

Rationale:

Historically, high school band directors have consistently been majority male. Hartley and Jagow found that in 1992, the National Educators Association reported that only 11% of high school band directors were female, and a 2001 study by MENC (now NAFME) showed the ratio of male to female high school band directors to be 3:1 (qtd. in Harris). Similarly, Sheldon and Hartley found that from 1947-2008, only 5% of high school ensemble conductors at the Midwest Clinic International Band, Orchestra and Music Conference were female (45).

Reasoning for this gender gap has been widely discussed, often citing historical norms and biases and societal expectations (e.g., motherhood) as contributing factors. However, a 2010 Mitchell Robinson article cites a general music educator as saying she “did not want to change her personality to be able to compete in the instrumental music society” and that “there must be some reason why most high school band directors out there are men and maybe this is a part of it” (39-40). This general music educator went on to define this male personality type as being “type A” and “hypercompetitive” (39).

Little investigation has been done about male and female high school band directors and

differences in their personality traits or types. This study does not intend to label personality types or qualities as masculine or feminine; rather, this study hopes to find a relationship between personality types and traits of both male and female respondents to either support or deny the perception that one must have a specific personality type to enter the high school band director career field.

Expected Findings

The researcher does not expect to find one personality type that dominates respondent data. The researcher is making this hypothesis based on the fact that respondents have only one definite thing in common: they are all, or have been, high school band directors for at least five years. Any other demographic information varies wildly. Given a random sampling of people, it is statistically unlikely that the majority of them would register as one specific personality type, and the researcher does not believe that a shared career would change this likelihood.

However, the researcher does expect to find one or more dominant personality traits amongst all respondents. She hypothesizes that because all respondents are teachers, and because of the nature of that job (time commitment and management, care for students, etc.), it is possible that there will be at least one similarity in personality traits amongst respondents as well.

Chapter 2

The Gender Gap by Numbers

Historically, high school band directors have consistently been majority male. While gender distribution of educators in the United States have become increasingly female, moving from 69% in 1986 to 84% in 2011, gender trends in the high school band directing career field have continued to favor males (Feistritzer 11).

In 1991, Charles Leonhard compiled a report entitled “The Status of Arts Education in American Public Schools”, which compiled and discussed demographic, curricular, and instructional data regarding arts programs in all levels of public grade school. Leonhard found that only 23.4% of instrumental specialists (referring to band and orchestra directors) in small secondary schools (enrollment < 999) were female (116). That number dropped to 11.1% for large secondary schools (enrollment 1000+) (151). Interestingly, Leonhard also found that male to female enrollment in music education program was about equal, which begs the question, “Where are all the women going?” (qtd. in Sheldon and Hartley 40).

In 2001, the Music Educators National Conference (known as MENC, now NAfME) released a detailed breakdown of its membership. The demographic data stated that of its 48,000 members, 54% of them were female, showing the music educator career field to be generally gender-balanced (MENC 52). However, when the data was explored further and analyzed by specific school level taught, the numbers became far less even. The number of male to female band directors was reported to be nearly 3:1 (Harris). The opposite was true about choral conductors and general music educators, where the number of female educators (68% and 71%, respectively) far outweighed the number of males (MENC 52).

In 2012, Deborah Sheldon and Linda Hartley completed a study investigating gender distribution among primary conductors at the Midwest Band and Orchestra Clinic from 1947-2008. Females served as primary conductors for only fifty two of the 602 total performing groups in that time period, with the first female conductor appearing in 1955 (44). In total, women comprised 7.56% of the entire primary conductor count (44). This gap increased when Sheldon and Hartley separated performance group by age level and investigated the number of conductors of secondary ensembles. Of the 279 total high school level performing groups, only fifteen (5.38%) of them were led by female conductors. The other 264 (94.62%) were led by males (45).

Sheldon and Hartley did note that “proportions of women to men nearly doubled in the 2000s from around 9% to 17%” (45). While there were only ten female conductors out of 115 total conductors in the 1990s, that number increased to twenty two out of 128 in the 2000s (45). How this number is broken down by ensemble level is unclear.

While the gender gap appears to be slowly and slightly closing, it is still a clear and problematic trend within the high school band director career field in the United States.

Why the Gender Gap?

Many theories exist as to why such a gender gap exists. An initial theory is rooted in history with gender-role stereotypes from the colonial times and the development of band culture in the United States. Briefly stated, band culture has been segregated since its inception around 1800 (Delzell 80). Women were expected to play music privately, in the home, and only on “graceful” instruments (Fiske 25). Town bands were male-only, and when band programs were developed for youths, they were often segregated (Delzell 80). Females often had to join female-only groups if they wanted to play, and it was unheard of for a female to be seen conducting a

group until Ethel Leginska and Antonia Brico had brief professional conducting success in the 1920s and 30s (“Paving Their Own Way” 38). While the number of women in instrumental conducting positions has increased since that time, they are still grossly underrepresented overall.

Additionally, because of this male-dominant history, some women feel the gender gap is in part because of an “Old Boys Club”, described as “a group of men who ‘hold the cards’ and recommends people for jobs”, making it more difficult for women to break into the career field (Fiske 107). This Old Boys Club may influence hiring practices, having men beget men, but “because these are usually quite informal procedures, they are difficult to pin down, let alone combat” (107). The Old Boys Club also “implies that male band directors form a tightly-knit group from which it is difficult for women to find support” (Mullan 42). Women have described the Old Boys Club as “intimidating”, stating that its existence has made it “especially difficult to earn respect within the profession” (“Paving Their Own Way” 115, 216). Being a lone female in a sea of men can make it difficult to feel accepted and validated, and also to find mentors, which may turn some women away from the profession.

Gender-biased expectations of females may also play a role in the gender gap. Being a high school band director requires a large time commitment outside of the normal school day. Delzell hypothesizes that familial responsibilities at home may cause principals to assume that female applicants are time-limited and “unwilling or unable to work the extra hours required in most high school band positions,” an unfortunate gender-bias (82). Additionally, some women may consider the high time commitment and make a personal choice to exit this career field. One former female high school band director remarked, “My daughter was the #1 factor to influence this decision. I was tired of spending all of my nights and weekends with other people's children and missing out on my own child” (Robinson 38-39). This is not to say that males are not faced

with this same decision upon having a family, but female high school band directors do often feel pressure to make a choice between career and family (“Paving Their Own Way” 196).

Lastly, there is an opinion that one must have a certain personality type to be a high school band director. This personality type is “historically, socially, and culturally characterized by the socially constructed, masculine traits of power, assertiveness, and toughness” (“Paving Their Own Way 8). According to Colleen Sears, “female conductors are expected to replicate the stylized, traditionally masculine acts of toughness and assertiveness while on the podium”, and some women feel that the degree to which they successfully fit this role determines their ability to do the job. When asked why she did not want to take a band directing job, one woman commented that she did not “[want] to change her personality to be able to compete in the instrumental music society” and that “there must be some reason why most high school band directors out there are men and maybe this is it” (Robinson 39-40). The following section, and this study, explores this idea.

The Personality Problem

“Due to historical and societal precedence, men have had the power to develop the role of the conductor. The discourses that surround and inform it are saturated with masculine values, and therefore, the masculine gendered body and its associated behaviour are understood as being the norm. A female conductor, then, is defined by her difference to the masculine norm. On the gendered podium ‘male’ is the unmarked category and ‘female’ the marked. Woman is perceived as ‘Other.’” (Bartleet 51)

There is a belief that being a high school band director requires a certain aura, a specific personality in order to handle the high demands of the job. This personality is one of assertiveness and confidence (“Paving Their Own Way” 176). The job requires an individual to be powerful, competitive, extraverted, determined, and a “go getter” (185). It also requires one to have a thick skin while at the same time maintaining a sense of humor (185). All of these traits combined create a personality that is best able to take on the long hours, hectic schedules,

competitive nature, organizational challenges, and personnel management aspects of the job.

Unfortunately, due to the overabundance of male high school band directors, these traits and this personality have been viewed as “masculine” only.

When asked during a study to describe masculine and feminine traits, respondents described them as almost total opposites. Where females are expected to express emotion, males are expected to be tough (“The Persona Problem” 5). Females are sensitive and gentle while males are aggressive and forceful (Mullan 158). These gender-biased definitions and expectations of what constructs male and female personas, combined with the aforementioned perceived required high school band director personality, can create prejudice against female participation in the career.

Colleen Sears states, “The culture of masculinity in band directing restricts access for women seeking secondary instrumental music positions and influences the way female conductors construct their professional identities” (“The Persona Problem” 5). When asked about personality in the profession, women made the following statements:

- “I feel that at least some of the women who went on to be directors of some type are more type A, focused on work and less social. In that conversation with my friend, she mentioned not wanting to change her personality to be able to compete in the instrumental music society. I didn't want to do that either.” (Robinson 39)
- “They want...a certain kind of guy to walk in and have the high school band director personality. I still don't think they expect that from women...” (“Paving Their Own Way” 89-90)
- “I have a certain amount of masculinity in my personality that I have learned to develop to be an effective teacher, all the while nurturing, hanging on to dear life with my femininity because I'm so connected to that.” (176)
- “I definitely think that people like administration or supervisors or whoever's interviewing for those jobs definitely take women less seriously. I think there's this preconceived notion, that, being a band director is a highly public job. You are on display all the time. And I think that there's this preconceived notion that men are much more capable of that. It's a big gig to manage. I think that having a man's face on that role is more accepted than putting a young female face on that role.” (“The Persona Problem” 6)

- “You need to have an extraordinary amount of confidence. You have to have a - a much bigger personality...I had to really develop a person who's really not me.” (7)
- “I feel that being a woman has held me back. Well, I shouldn't say that it's held me back. I feel that it's taken me longer to get to the point where I am today...I would bet a gazillion dollars that men never worry about any of those issues- because I know a lot of men. Including my husband who's a high school band director. I will say that I don't think he's given a second's thought to how much confidence he needs to grow and how much work he needs to do to be able to articulate.” (8)

Not only are these women acknowledging that there is an expected, masculine persona for the job, they also feel like they have to alter or finesse their own personalities in order to better fit this persona. There is a female perception that failure to do this makes it harder to be successful, both in the classroom and in the community, as feminine traits can be a “hindrance” to career success (“The Persona Problem” 9).

Adopting this accepted masculine persona can sometimes cause a woman to be perceived negatively, a phenomenon entitled “role congruity theory”. Eagly and Karau define role congruity theory as:

“A...theory of prejudice toward female leaders [that] proposes...perceived incongruity between the female gender role and leadership roles leads to 2 forms of prejudice: (a) perceiving women less favorably than men as potential occupants of leadership roles and (b) evaluating behavior that fulfills the prescriptions of a leader role less favorably when it is enacted by a woman.” (573)

Simply put, this theory states that women are perceived negatively whether they exhibit feminine or masculine traits. As one female director stated, "It's so delicate, the line between being a total bitch and having authority and control,” referring to how she is perceived when exhibits classroom management (“Paving Their Own Way” 216). The powerful persona of a male director can be misconstrued as mean or bitchy when exhibited by a female (Mullan 149).

Alternatively, such “feminine” traits as sensitivity and nurturing can enhance the personality of a high school band director. Relationship building is a large part of being a

teacher, especially when students spend multiple years in a band program. Being compassionate can make building these relationships easier. One female director even uses this as a classroom management tool, explaining that her students “don’t want to disappoint [her]” (“Paving Their Own Way” 189). Other female directors have commented that their sensitivity has made it easier to communicate with and relate to their students, which has helped build rapport, classroom management, and relationships in a way that males may have a harder time achieving (189).

This dichotomy between what is acceptable and what is actually accepted as a high school band director personality leaves many female high school band directors to “[negotiate] the competing roles of authoritative conductor and caring teacher through a careful balancing act of gender performance that allows them to operate within the socially constructed norms of the profession” (“The Persona Problem” 5). However, to what extent is this balancing act required? Is there a specific personality type or trait that is common to all high school band directors, regardless of gender, or is this merely a socially constructed perception? This study aims to investigate this question by compiling results of a personality test for equal amounts of male and female high school band directors.

16Personalities.com Personality Test

Participants in this study were asked to take a personality test on 16Personalities.com. The 16Personalities personality test is described as a redefined Myers-Briggs Type Indicator (“Our Theory”).

The Myers-Briggs Type Indicator relies on a four-letter acronym that indicates personality traits originally termed by Carl Jung and means to identify how individuals choose to use their perception and judgement (MBTI). Its cited purpose is to make the “theory of

psychological types described by C. G. Jung understandable and useful in people's lives”

(MBTI). The traits measured by the Myers-Briggs test are:

- Introversion vs Extraversion (I/E);
- Sensing vs Intuition (S/N);
- Thinking vs Feeling (T/F); and,
- Judging vs Perceiving (J/P).

16Personalities has taken the construct of the Myers-Briggs Type Indicator and redefined several of these traits, as well as created an additional measured trait. The 16Personalities test places equal weight on each trait when determining and analyzing a person’s personality type, which allows the test “to achieve high test accuracy while also retaining the ability to define and describe distinct personality types” (“Our Theory”). The test is aligned with the “Big Five Personality Traits” concept (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience), but actually measures the following categories and traits (Srivastava):

1. Mind - Introversion/Extraversion (I/E)
2. Energy - Observant/Intuitive (S/N)
3. Nature - Thinking/Feeling (T/F)
4. Tactics - Judging/Prospecting (J/P)
5. Identity - Assertive/Turbulent (A/T)

After receiving test results, individuals are given a personality type that falls into one of four roles: Analysts, Diplomats, Sentinels, and Explorers (“Our Theory”). Four separate personality types fall under each role, allowing the option of sixteen total personality types as listed below.

Figure 2.1

Analysts <ul style="list-style-type: none">• Architect• Logician• Commander• Debater
Diplomats <ul style="list-style-type: none">• Advocate• Mediator• Protagonist• Campaigner
Sentinels <ul style="list-style-type: none">• Logistician• Defender• Executive• Consul
Explorers <ul style="list-style-type: none">• Virtuoso• Adventurer• Entrepreneur• Entertainer

For this study, this personality test will provide analyzable data by labeling each respondent with definable personality traits in five separate categories. The researcher is focused more on comparing traits within each category than comparing overall personality type. With this information, she hopes to identify data trends that can in some way answer the question on which this study is based: does one have to have a certain personality type to be a high school band director?

Chapter 3: Study and Findings

Overview:

The purpose of this study was to compare personality traits between male and female high school band directors. The data for this study was gathered over the course of two months. In order to collect data, the researcher surveyed equal numbers of male and female high school band directors from across the country by networking on social media and with colleagues.

This study's data collection process had two phases. First, an initial respondent request was sent using a Google Form through the researcher's personal Facebook page and a private Band Directors group. The researcher anticipated receiving a higher male than female response due to the overall population of the career field, so she also emailed applicable female colleagues to request their participation. The number of respondents was not capped for this initial survey, because the researcher expected only a fraction of those who responded to continue with the remainder of the study. A total of 182 responses were received.

Next, the initial respondents were emailed with instructions to take a personality quiz online and to submit their results through a separate Google Form. The researcher sent several rounds of emails to encourage response. Having found more male than female respondents, the researcher also continued targeting female colleagues to balance the male to female respondent ratio. A total of 106 respondents, fifty-three each male and female, completed the study.

Survey 1:

The initial survey was purely to create a pool of candidates for the study. It consisted of a short description of the study with an attached Google Form (Appendix A). These were then posted to the researcher's personal Facebook page and a private Band Directors Group, as well as emailed to female colleagues.

The Google Form survey asked for the following information:

1. Are you currently, or have you been in the past, a high school band director for 5 or more years, or are you a recently retired band director who spent the greater majority of your career teaching high school band?
2. Prefix, first, and last name
3. Do I have your permission to publish your name along with your responses as a part of the final paper?
4. How many years have you been a high school band director?
5. With which gender do you identify?
6. Email address

The researcher asked that participants be or have been a high school band director for five or more years in an attempt to survey people with substantial experience and, assumedly, interest in being a high school band director. Of the 182 people who responded to this survey, nine respondents answered “no” to the first question, eliminating them from the study. The researcher asked question four to verify the respondents’ answers to question 1 and for potential use later in the study.

Names and email addresses were collected for contact information to continue the study. Options for the gender response included “male”, “female”, and “other” with a space to submit an alternate response. Question three was asked for respondent confidentiality.

Survey 2:

A follow-up email to complete the study was sent to all respondents who qualified (Appendix B). It contained instructions to complete an online personality test at 16personalities.com and submit those results through a separate Google Form. It also gave respondents the opportunity to discontinue their participation.

Of the 182 respondents who received this email, one opted to discontinue participation. Seventy-five responded with the completed survey in the first week. An additional twenty responded in the following month. After the first month, the researcher tallied the numbers of

male versus female respondents and found that several more females were needed to create even numbers for each gender. She emailed both surveys to qualifying colleagues as well as the female respondents from the first survey who never completed the second. An additional colleague and eleven respondents from the first survey completed the study after this round of email. The second survey was closed as soon as equal numbers of male and female respondents were reached.

The second survey asked respondents to record the results of their personality test, including the personality type they received and results and percentages for each trait of the personality type (mind, energy, nature, tactics, identity). It also asked demographic information (name, age, and gender), as well as the following open-ended questions:

- On a scale of 1-5, how satisfied do/did you feel about being a high school band director (HSBD)?
- If you would like to explain anything about your answer above, please do so here.

The researcher defined each number rating for the first of these two questions (listed in Appendix C) and added the following disclaimer for confidentiality and to encourage honesty:

The definitions for each number are only meant to be approximations. If you would like to explain your response, you may do so in the text box below the scale. Your name will not be referenced in my project in any way during discussion of these responses.

Finally, respondents were asked if they had any questions, comments, or concerns and if they were interested in receiving the results of this study. Some respondents made remarks about the study itself or noted their reactions about their personality types. Only three respondents indicated that they did not want to receive the study results.

It should be noted that much of the information collected from respondents was not used in this study. At the time of data collection, the researcher was considering comparing personality traits amongst additional demographic information (age, years teaching, or career satisfaction) along with the predetermined demographic of gender but ultimately realized that

would result in much too broad of a study. The only data used in this study is gender, personality type, and individual personality traits.

Method of Analysis

Data was collected through Google Forms and automatically organized in a corresponding Google Sheet. The original data was labeled as a “Master Doc” and specified not to be edited at all. The entire set of data was copied and pasted into a separate “Master Doc Copy” spreadsheet from which specific data was transferred to separate spreadsheets to be organized.

Following that, six separate spreadsheets were created to isolate the personality types and individual personality traits that respondents received. Data for each topic was analyzed in its totality, as well as separately for each gender.

Response Results

Mind: Introverted vs Extraverted

The Mind category “determines how we see and approach the outside world, including people, objects and activities within it” and intends to indicate “how much stimulation we require and can absorb from our environment” (“Our Theory”). Figure 3.1 shows the breakdown of responses.

Figure 3.1

<i>Trait</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
Introverted (I)	50	28	22
Extraverted (E)	56	25	31

Energy: Observant vs Intuitive

The Energy category “determines how you see the world and what kind of information you focus on” and “shows whether we prefer to focus most of our energy on looking for novel, intuitive connections or on observing and utilizing what we already see around us” (“Our Theory”). Figure 3.2 shows the breakdown of responses.

Figure 3.2

<i>Trait</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
Observant (S)	60	26	34
Intuitive (N)	46	27	19

Nature: Feeling vs Thinking

The Nature category “determines how we make decisions and cope with emotions” (“Our Theory”). Figure 3.3 shows the breakdown of responses.

Figure 3.3

<i>Trait</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
Feeling (F)	79	36	43
Thinking (T)	27	17	10

Tactics: Judging vs Prospecting

The Tactics category determines “how we approach planning and available options” and “our attitude toward certainty and structure in our lives, both at mental and physical levels” (“Our Theory”). Figure 3.4 shows the breakdown of responses.

Figure 3.4

<i>Trait</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
Judging (J)	70	32	38
Prospecting (P)	36	21	15

Personality Type

The four personality traits were combined to identify each respondent as one of sixteen different personality types. Figure 3.5 shows the breakdown of personality traits respondents received.

Figure 3.5

<i>Acronym</i>	<i>Title</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
INTJ	Architect	0	0	0
INTP	Logician	3	2	1
ENTJ	Commander	4	3	1
ENTP	Debater	2	2	0
INFJ	Advocate	9	7	2
INFP	Mediator	7	4	3
ENFJ	Protagonist	11	4	7
ENFP	Campaigner	9	4	5
ISTJ	Logistician	4	1	3
ISFJ	Defender	16	7	9
ESTJ	Executive	8	7	1
ESFJ	Consul	16	3	13
ISTP	Virtuoso	3	2	1
ISFP	Adventurer	7	5	2
ESTP	Entrepreneur	1	0	1
ESFP	Entertainer	5	2	3

Additionally, these personality types are grouped into four broad categories: analysts, diplomats, sentinels, and explorers. Figure 3.6 shows the breakdown of categories into which respondents fell based on their personality types.

Figure 3.6

<i>Category</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
Analysts <ul style="list-style-type: none"> • Architect • Logician • Commander • Debater 	9	7	2
Diplomats <ul style="list-style-type: none"> • Advocate • Mediator • Protagonist • Campaigner 	36	19	17
Sentinels <ul style="list-style-type: none"> • Logistician • Defender • Executive • Consul 	44	18	26
Explorers <ul style="list-style-type: none"> • Virtuoso • Adventurer • Entrepreneur • Entertainer 	16	9	7

Identity: Assertive vs Turbulent

The Identity category “affects all others, showing how confident we are in our abilities and decisions” (“Our Theory”). This is the additional trait developed by 16Personalities.com and is not included in the four-letter acronym for each personality type; rather, every personality type can be labeled as either assertive or turbulent. Figure 3.7 lists the breakdown of responses.

Figure 3.7

<i>Trait</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
Assertive (A)	67	38	29
Turbulent (T)	39	15	24

Through further analysis described in Chapter 4, the researcher will investigate the statistical relevance of these personality indicators, as compared to personality test results of the general population, in an effort to identify dominant personality traits or types among respondents.

Chapter 4: Conclusions

Overview

This results of this study indicated that there was certainly not one specific personality type with which respondents identified. All but one of the sixteen overall personality types were represented, and each individual personality trait received at least 25% of the overall response within its pairing. However, after further analyzing the data, the researcher did have several statistically relevant findings and was able to create a list of dominant personality traits amongst respondents.

Discussion of Data

Chi Square Analysis

The researcher used a chi-square test, which compares observed data to expected data, to help interpret the study's results (McLaughlin and Noel). The chi-square is calculated using the following formula, where o is the observed data value, and e is the expected data value.

Figure 4.1

McLean, Phillip. *Chi-square Formula*. Digital image. *The Chi-Square Test*. N.p., 2000.
<https://www.ndsu.edu/pubweb/~mcclean/plsc431/mendel/mendel4.htm>.

$$\chi^2 = \sum \frac{(\text{Observed Value} - \text{Expected Value})^2}{(\text{Expected Value})}$$

The resulting chi-square value from this formula is then interpreted by referencing a probability chart and finding the nearest probability, or p value. This p value determines the probability of the observed results being due to chance. For this study, a p value of 0.05 was used, meaning the following:

- If $p > 0.05$, the observed values were not statistically significant - in the acceptable range of deviation, and any deviations were probably due to chance.
- If $p < 0.05$, the observed values were statistically significant - not in the acceptable range of deviation and were not due to chance, but some outside factor. (website)

Values for expected data were obtained from a compilation of Myers-Briggs tests results from the years 1972-2002 (“How Frequent Is My Type”). For this analysis, “Identity” was not included in this particular analysis as it is not measured by the Myers-Briggs test and therefore could not have expected results.

Mind

The “Mind” category was not found to be statistically significant, as the p value was significantly higher than 0.05. This category was the most balanced of the four, as the number of introverts to extroverts was almost equal. While slightly more respondents measured Extraverted, neither trait was particularly dominant in this category.

Figure D.1

<i>Row #</i>	<i>Category</i>	<i>Observed # (HSBD)</i>	<i>Expected # (Gen. Pop.)</i>	<i>Expected %</i>
1	Introverted	50	52.258	49.300%
2	Extraverted	56	53.742	50.700%

p value: .6609

Considering the slightly higher response of Extraverted respondents, the researcher has noted that more females (58.49%) measured Extraverted than males (52.83%).

Energy

“Energy” was found to be extremely statistically significant with a p value of .0001.

While not as balanced between the two traits as the “Mind” category, the observed results were significantly more balanced than what was expected, with Observant registering as the stronger trait.

Figure D.2

<i>Row #</i>	<i>Category</i>	<i>Observed # (HSBD)</i>	<i>Expected # (Gen. Pop.)</i>	<i>Expected %</i>
1	Observant	60	77.698	73.300%
2	Intuitive	46	28.302	26.700%

p value: .0001

More females (64.15%) identified as the stronger trait than males (49.06%).

Nature

“Nature” was found to be very statistically significant with a p value of .0020 and was also the category with the most unbalanced responses overall. Observed results were much more divided than the expected results, with Feeling outweighing Thinking by a wide margin.

Figure D.3

<i>Row #</i>	<i>Category</i>	<i>Observed # (HSBD)</i>	<i>Expected # (Gen. Pop.)</i>	<i>Expected %</i>
1	Feeling	79	63.388	59.800%
2	Thinking	27	42.612	40.200%

p value: .0020

More females (81.13%) identified as the dominant trait than males (67.92%).

Tactics

“Tactics” was found to be statistically significant with a p value of .0136. The observed responses were again more divided than expected. Far more respondents measured Judging than Prospecting.

Figure D.4

<i>Row #</i>	<i>Category</i>	<i>Observed # (HSBD)</i>	<i>Expected # (Gen. Pop.)</i>	<i>Expected %</i>
1	Judging	70	57.346	54.100%
2	Prospecting	36	48.654	45.900%

p value: .0136

More females (71.70%) identified as the dominant trait than males (60.38%).

Study Conclusion

By considering the observed data and corresponding p values, the researcher compiled a list of traits and related personality types that could be considered dominant in the high school band directors surveyed in this study.

Figure 4.2

<i>Category</i>	<i>Dominant Trait</i>
Mind (I/E)	n/a
Energy (N/S)	Observant (S)
Nature	Feeling (F)
Tactics	Judging (J)

Considering these traits, it makes sense that the two highest scoring personality types overall were Defender (ISFJ) and Consul (ESFJ), with sixteen respondents each.

Interestingly, females responded at a higher number than males for each of these four dominant traits (including, for this purpose, Extraverted). This is direct opposition to the opinion that one must have a masculine, aggressive personality in order to be a high school band director. The only category in which females did not score higher than males for the dominant trait was “Identity”, which was not analyzed using the chi-square formula. Assertive was the dominant trait, with more male respondents (71.70%) than females (54.72%).

The results of this study can be summarized by stating that while there were definite personality trait/type trends amongst respondents, by no means did all respondents consistently share the exact same personality traits and/or type. This study disproves the idea that one must have a specific personality type or trait to be a high school band director amongst these particular respondents. It does, however, show that there are potential personality trends within this sample of high school band directors. Whether or not this is true for all high school band directors would require further investigation.

Reflections

The researcher’s expected findings, which were to identify at least one dominant personality trait among all respondents, were confirmed by this study. The researcher was hesitant to make any further specific hypotheses about how respondents would score, as to not insert any personal bias into this study, so she had no original guess about what/which trait(s) would be strongest. That said, she was particularly surprised by the trait category “Nature”, which had the largest divide of any category between its individual traits (Feeling and Thinking). Based on her reading, the band director personality was described as Type-A and assertive. She expected far more respondents, particularly the males, to identify as Thinking than Feeling.

The researcher also realized that while she was not surprised by the variety of responses or the emergence of dominant traits, she did not expect such female-heavy values for each dominant trait. She was expecting to find some sort of male dominance within the data since the career is majority male but was excited to discover that the opposite was true.

Finally, the researcher was interested to find that there were two personality types that, while not comprising the majority of results, stood out as having significantly more respondents than the others: Defender and Consul, which were identical besides their first trait letter (Introverted/Extraverted). She wonders if this trend would hold true with a larger respondent group.

Further Considerations

After completing this study, the researcher thought it notable how many unanswered questions and unexplored venues are related to this study. Throughout the research process, the researcher was overwhelmed with the number of ways her collected data could be investigated, causing her to significantly narrow her study. As stated in Chapter 3, she chose to very specifically focus on two overall variables: gender and personality type/traits. However, through this study, she created a list of other related considerations that could not be answered now but could be of interest in the future. Some of those considerations are as follows:

1. How do the personality results from this test compare to personality results of elementary and middle school band directors? Of high school teachers in general? Of teachers in general?
2. How do the personality results from this test compare to personality results of different genders in general?
3. What personality traits are typically associated with each gender and why? How did the results of this study compare to those associations?
4. Is there any correlation between other demographics (age, years taught, job satisfaction, etc.) and personality type?

Professional Understandings

One basic life truth applies to the topic of this study: never make assumptions. Neither one's gender nor one's personality determines whether or not an individual could be successful as a high school band director, or in any career for that matter. It is always best to consider objective, concrete information about an individual's qualifications when determining best fit for a job. This study showed that on paper, the only thing all respondents had in common was career choice. There was no overarching personality amongst them, and nothing about respondents' personality traits communicated the success of their programs, their content knowledge, or their passion for and commitment to the job.

Personally, this study has made the researcher realize her own gender biases. She automatically expects her male colleagues to have some sort of gender bias towards *her*, which has made her grow to expect her male colleagues to act a certain way - tough and aggressive. This vicious cycle of perceived bias is extremely detrimental to building professional and personal relationships, and it does nothing to help remove the gender bias from this career overall. Moving forward, the researcher would like to work to remove this bias from her own judgments in an effort to perceive and interact with her colleagues as they are - simply other high school band directors.

At the end of the day, band directors are in this profession for the same reason - to shape the lives of their students and make music every day. The high school band director gender gap cannot be solved overnight, but this profession can only be improved by individuals overcoming their biases, gender or otherwise, to collaborate with and take advantage of the vast knowledge and experiences of their colleagues.

Appendix A

Survey 1 Email

Good evening!

Only 2 classes and a thesis stand in my way from completing my master's degree at UArts. As part of my final thesis, I'm investigating personality traits of high school band directors and comparing those traits between genders.

If you have been a high school band director for 5 or more years (either in the past, or currently, including this school year) and are interested in helping me out, please take a minute and fill out my survey. This survey is very short and only to collect some preliminary info. I will be contacting you later to complete the study, upon which I will ask you to complete a short personality test (maybe 10 minutes long) and submit the results.

Thank you in advance for your help, and feel free to let me know if you have any questions!

Appendix B

Survey 2 Email

Good evening!

First and foremost, thank you for agreeing to participate in my thesis project! I sincerely appreciate your time and help. If you have decided to no longer participate, please simply reply to this email and let me know.

Otherwise, the second step of this process is to complete the personality quiz HERE:

<http://www.16personalities.com/>

The test is very similar to the Myers-Briggs test, but the developers have redefined a few components and turned them into what they call the "Big Five" personality traits. If you are interested, you can read about the test HERE.

Once you complete the test, leave your results up on your screen! From there, please transfer your results to this Google Form:

<http://goo.gl/forms/SQ3aVoCfr8>

The form will ask for your name and age as well as your general satisfaction about being a high school band director. From there, you will be able to record your test results. You will need to input both the traits you received and the percentages you are given for each trait with which you identify.

If you happen to close the quiz window before completing the form, you should be able to pull up your results again without retaking the quiz by going to the 16 Personalities website and clicking "Members Area" on the right hand side of the menu.

If you have any questions or run into any problems, feel free to contact me! Again, thank you for your help with this project!

Respectfully,

Amber Abbott

Master of Music in Music Education Candidate - University of the Arts

Instrumental Music Director - Laurel High School, Laurel, MD

aabbott@uarts.edu

Appendix C

Survey 2 Qualifiers

On a scale of 1-5, how satisfied do/did you feel about being a high school band director (HSBD)?

- 1 - I do/did not enjoy being a HSBD; I am much happier teaching a different age group
- 2 - I don't/didn't hate being a HSBD, but I feel like a different age group may be a better fit for me
- 3 - I am undecided about how I feel being a HSBD. It is fine, but I'm not convinced this is the age group I would most enjoy teaching
- 4 - I generally enjoy being a HSBD but would possibly try and enjoy teaching another age group
- 5 - I am extremely happy being a high school band director; I genuinely feel like this job is for me and am uninterested in teaching another age group.

Appendix D

Chi-Squared Test Results

Figure D.1 - “Mind” Chi-Square Test Results

“Mind” (I/E):

Row #	Category	Observed	Expected #	Expected
1	Introverted	50	52.258	49.300%
2	Extraverted	56	53.742	50.700%

P value and statistical significance:

Chi squared equals 0.192 with 1 degrees of freedom.

The two-tailed P value equals 0.6609

By conventional criteria, this difference is considered to be not statistically significant.

The P value answers this question: If the theory that generated the expected values were correct, what is the probability of observing such a large discrepancy (or larger) between observed and expected values? A small P value is evidence that the data are not sampled from the distribution you expected.

Figure D.2 - “Energy” Chi-Square Test Results

“Energy” (N/S):

Row #	Category	Observed	Expected #	Expected
1	Observant	60	77.698	73.300%
2	Intuitive	46	28.302	26.700%

P value and statistical significance:

Chi squared equals 15.098 with 1 degrees of freedom.

The two-tailed P value equals 0.0001

By conventional criteria, this difference is considered to be extremely statistically significant.

The P value answers this question: If the theory that generated the expected values were correct, what is the probability of observing such a large discrepancy (or larger) between observed and expected values? A small P value is evidence that the data are not sampled from the distribution you expected.

Figure D.3 - “Nature” Chi-Square Test Results

“Nature” (F/T):

Row #	Category	Observed	Expected #	Expected
1	Feeling	79	63.388	59.800%
2	Thinking	27	42.612	40.200%

P value and statistical significance:

Chi squared equals 9.565 with 1 degrees of freedom.

The two-tailed P value equals 0.0020

By conventional criteria, this difference is considered to be very statistically significant.

The P value answers this question: If the theory that generated the expected values were correct, what is the probability of observing such a large discrepancy (or larger) between observed and expected values? A small P value is evidence that the data are not sampled from the distribution you expected.

Figure D.4 - “Tactics” Chi-Square Test Results

“Tactics” (J/P)

Row #	Category	Observed	Expected #	Expected
1	Judging	70	57.346	54.100%
2	Prospecting	36	48.654	45.900%

P value and statistical significance:

Chi squared equals 6.083 with 1 degrees of freedom.

The two-tailed P value equals 0.0136

By conventional criteria, this difference is considered to be statistically significant.

The P value answers this question: If the theory that generated the expected values were correct, what is the probability of observing such a large discrepancy (or larger) between observed and expected values? A small P value is evidence that the data are not sampled from the distribution you expected.

Works Cited

- Bartleet, Brydie-Leigh. "Re-embodiment of the 'Gendered Podium'" *Context: A Journal of Music Research* 23 (2002): 49-57.
- Delzell, Judith K. "Variables Affecting the Gender--role Stereotyping of High School Band Teaching Positions." *The Quarterly* 4.4 (1993): 77-84. Web. Accessed 12 Sept. 2016.
- Dodson, Thomas A., and L. Anne Borders. "Men in Traditional and Nontraditional Careers: Gender Role Attitudes, Gender Role Conflict, and Job Satisfaction." *The Career Development Quarterly* 54.4 (2006): 283-96. Web. Accessed 23 Sept. 2016.
- Eagly, Alice H., and Steven J. Karau. "Role Congruity Theory of Prejudice toward Female Leaders." *Psychological Review* 109.3 (2002): 573-98. Web. Accessed 24 Sept. 2016.
- Feistritzer, C. Emily, S. Griffin, and A. Linnajarvi. *Profile of teachers in the US, 2011*. Washington, DC: National Center for Education Information, 2011.
- Fiske, Jane A. *A Profile of Women Music Educators in Higher Education*, Boston University, Ann Arbor, 1997. <http://search.proquest.com/docview/304332724?accountid=14696>.
- Harris, Josh. "REPORT: WHERE ARE ALL THE WOMEN DIRECTORS?" *SBO*. N.p., 01 Sept. 2002, sbomagazine.com/1269-archives/2910-49report-where-are-all-the-women-directors.html. Accessed 10 Sept. 2016.
- "How Frequent Is My Type." The Myers & Briggs Foundation. The Myers & Briggs Foundation, n.d. <http://www.myersbriggs.org/my-mbti-personality-type/my-mbti-results/how-frequent-is-my-type.htm>. Accessed 15 Sept. 2016.
- Leonhard, Charles. *The Status of Arts Education in American Public Schools: Report on a Survey Conducted by the National Arts Education Research Center at the University of Illinois*. Urbana, IL: Council for Research in Music Education, School of Music, U of

- Illinois at Urbana-Champaign, 1991.
- McLaughlin, Jacqueline, and Jane Noel. "Chi-Square Test." *Chi-Square Test*. Pennsylvania State University, n.d. <http://www2.lv.psu.edu/jxm57/irp/chisquar.html>. Accessed 15 Sept. 2016.
- McLean, Phillip. *Chi-square Formula*. Digital image. *The Chi-Square Test*. N.p., 2000. <https://www.ndsu.edu/pubweb/~mcclean/plsc431/mendel/mendel4.htm>.
- MENC: The National Organization for Music Education, "Gender Trends among MENC Music Educators." *Teaching Music* 8 no. 6 (2001): 52.
- "The Myers & Briggs Foundation - MBTI® Basics." *The Myers & Briggs Foundation - MBTI® Basics*. The Myers & Briggs Foundation, n.d, www.myersbriggs.org/my-mbti-personality-type/mbti-basics. Accessed 20 Sept. 2016.
- Mullan, Andria M. *A Qualitative Study of Female High School Band Directors*, Saint Mary's College of California, Ann Arbor, 2014. *ProQuest*, Access number: 1566193655. Accessed 5 Aug. 2016
- "Our Theory." *16Personalities*. NERIS Analytics Limited, n.d, www.16personalities.com/articles/our-theory. Accessed 10 Sept. 2016.
- Robinson, Mitchell. "From the Band Room to the General Music Classroom: Why Instrumentalists Choose to Teach General Music." *Bulletin of the Council for Research in Music Education* 185 (2010): 33-48.
- Sears, Colleen Anne Quinn. *Paving Their Own Way: Experiences of Female High School Band Directors*. Diss. Columbia U, 2010. *ProQuest*, Access number: 756454920. Accessed 5 Aug. 2016.
- . "The Persona Problem: How Expectations Of Masculinity Shape Female Band Director

Identity." *Gender, Education, Music, & Society* 7.4 (2014): 5-11.

Sheldon, Deborah A., and Linda A. Hartley. "What color is your baton, girl? Gender and ethnicity in band conducting." *Bulletin of the Council for Research in Music Education* 192 (2012): 39-52.

Srivastava, Sanjay. "Measuring the Big Five Personality Domains." *Personality and Social Dynamics Lab*. pages.uoregon.edu/sanjay/bigfive.html. Accessed 20 Sept. 2016.

