# The Relationship between Gender Stereotypes and Academic Performance for Rural Eighth Grade Students: A Mixed Methods Ethnographic Case Study 

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The Relationship between Gender Stereotypes and Academic Performance for Rural Eighth Grade Students: A Mixed Methods Ethnographic Case Study by

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#### Abstract

Through this mixed methods ethnographic case study, the subject of gender stereotypes for middle school students, and its relationship to academic performance was investigated. Specifically, the research focused on Albert Bandura's (1977) Social Learning Theory, gender stereotypes, and how educational institutions, peer relationships, and parental influences may dictate gender norms as they relate to academic success. It also attempted to evaluate the relationship between the issue of gender stereotypes and current experiences in a rural American middle school that led to the recurring issue of the educational gender gap and the underperformance of male students. The purpose of the study sought to examine how gender stereotypes develop for students at Small-town Middle School, to describe what specific factors have the strongest influence on how these students see themselves, and to examine the relationship between these stereotypes and academic success in school. Using a mixed methods survey design, the researcher gathered data from a cohort of eighth grade students in order to examine the formation and propagation of gender stereotypes that led to differing academic outcomes for male and female students.


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## Chapter 1

## Introduction

In the recent decades, the differences in achievement for male and female students has been the topic of much discussion and research. It is common belief that students perceive each gender to have normative traits that equate to certain levels of success in school; the prolonged reproduction of these set of standards form gender stereotypes (Vernier, Martinot, 2015). According to social learning theory (Bandura, 1977), these gender stereotypes are socially constructed beliefs that influence how students perform in the educational setting (Vantieghem, Vermeersch, Van Houtte, 2014). Conflicting outcomes of achievement for male and female students, known as the educational gender gap, are a direct result of the enactment of these stereotypes. Legewie and DiPrete (2012) argued, "Now that a growing gender gap in educational attainment has emerged, it is important to extend this line of research and ask whether schools affect gender inequality, and if so, what are the mechanisms by which this occurs" (p. 463). Understanding where the behavioral constructs associated with male or female come from, who propagates them, and how they influence a student's success in school could provide educators with the data needed to address the most influential factors leading to the widening gap in achievement (Adams, Blumenfeld, Castaneda, Hackman, Peters, \& Zuniga, 2000).

This chapter is arranged into the following sections: overview, problem statement, purpose of the study, significance of the study, theoretical framework, definition of terms, and summary. Together, these sections provide a brief overview of relevant literature
surrounding the topic, give insight into the formulation of the research topic and questions, demonstrate how this study built upon prior research in the field, and articulate how this study introduced meaningful information into the broad spectrum of educational gender gap research and research on influential factors of gender stereotypes for middle school students.

## Overview

Gender identity and social identity link through a causational relationship. The self-identity of gender plays a very important role in the formation of a social identity for "without including the concept of interaction with society at large, the term has no meaning" (Schramm-Pate, 2014). One builds upon the other. According to Albert Bandura's (1977) Social Learning Theory, gender roles are socially learned constructs and how a child perceives ways in which he or she should act come from observation of others, imitation of gender specific attributes, and the reward or punishment that he or she receives during his or her performance of gender specific behaviors. Through this, a child's perception of who he or she should become melds together with their expectation of others.

Middle school students, in particular, are at a pivotal moment in their lives as they learn to become more independent, self-aware, and cognizant of how they fit into the world around them (Dougherty, 1997). Students in this age bracket can easily articulate what they believe a male or female should do, how he or she should act, and even what happens to him or her if they do not fit into what is accepted. According to SchrammPate (2014), Vygotsky explains a child develops the rules of behavior "through social interactions with significant people in a child's life, particularly parents, but also other
adults" which calls to question the influence of the educational system on a child's sense of gender identity and social identity since a child spends the majority of his or her day, once they reach school age, with teachers and in a school-based setting. However, even if these adolescents can explain what they believe, not all adolescents are self-aware enough to be able to describe, or even understand, where their ideas came from (Levykh, 2008).

In conjunction, the difference in how males and females perform in school has been a topic for debate for years. In the seventies, the focus of this debate was on the lack of achievement of females in the math and sciences. Through examination and research into this focus on female achievement, several areas of concern where identified: a lack of role models in science and math textbooks and resources for girls, a teacher's attention focused more often on the more active constituents in the classroom, i.e. the boys, and a culture of pervasive gender stereotyping occurred which furthered female passiveness and compliance in the learning environment (Byrne, 1978; Hodgetts, 2008; Vantieghem, Vermeersch, \& Van Houtte, 2013). In the early nineties, the focus shifted to the disinterest and lack of motivation of males in the academic realm, not just in one or two content areas but in the learning environment as a whole (Vantieghem, Vermeersch, Van Houtte, 2013). Throughout all of the intensive studies on females' and males' lack of achievement in schooling, the goal was to help all students become successful.

As an institution, education's founding premise is everyone can learn regardless of differences and that our differences should not hinder our ability to be successful in the academic setting (Marzano, 2007). In turn, curriculum, as prescriptively defined by Glatthorn (2006), was "all the learning experiences planned and directed by the school to
attain its educational goals" (p. 4) and it was also descriptively defined as "the reconstruction of knowledge and experience that enables the learner to grow in exercising intelligent control of subsequent knowledge and experience" (p. 5).

Therefore, curriculum, as a derivative of policy, practice, and theory, is the avenue to which knowledge and understanding are dictated by the school and ultimately, it is access to critical pathways of knowing gained by the student (Adams, 2000). Sometimes, however, the two do not correlate, thus diminishing the ultimate goal of curriculum and the institution of education. This is important when examining possible causal factors into gender stereotyping in schools and elements that may be leading to the current issue of the educational gender gap.

## Problem Statement

Research has indicated that males generally underperform relative to their female counterparts in most areas of the industrialized world (Legewie, \& DiPrete, 2012). Specifically, for Small-town Middle, the male students have consistently, over the last 4 testing cycles, had less of the population meet the state expectation for proficient in both reading and math. The growth for this subset has also been minimal. In contrast, the female population performs at or above the state's cut score for proficient in both areas and this group has also seen a steady increase in percent meeting or exceeding state expectation over the last four years. As seen in Figure 1.1, the female population at Small-town Middle has a proven record of outperforming the male population in both reading and math.

When examining how this trend averaged out over the four-year period, $65.1 \%$ of male eighth grade students passed the Reading portion SC PASS while $76.35 \%$ of females at Small-town Middle passed; this is a difference of $11.25 \%$.


## Figure 1.1 Percent proficient on SC PASS from 2011-2014

Similarly, in the Mathematics portion of SC READY, when looking at the average over the four-year period, 66.65 percent of males passed while $76.5 \%$ of females passed. This is a difference of $9.85 \%$.

Similarly, enrollment in advanced coursework in the eighth grade, English I Honors, has historically had more female students than male and the End of Course (EOC) test given by the state has, on average, seen the female subset consecutively produce a higher mean. This is a significant factor because it reproduces the staggering difference in male and female performance for this school in a very different population: gifted and talented versus regular education. In both tracks, the results are the same. The females outperform the males.

This study sought to determine how these rural middle school students form their ideas of what males and females can do in school. Explicitly, the study looked at three
possible areas of influence for the formation of gender stereotypes: school experience, peer influences, and parental influences. Using Likert-type items, open response, and checklist items, the survey sought to garner both a qualitative understanding of students' perceptions as well as a quantitative measure of which factor was most influential.

## Purpose of the Study

The context of this research study focused on how the middle school students in one southern, rural, middle school, Small-town Middle, perceived gender roles and stereotypes as an influence on their academic achievement. There were three contributing factors examined: school experiences, social factors (i.e. peer influences), and parental influences. Specifically, the goal of this study was to identify the degree to which these factors played a role in the formation of gender stereotypes and how these roles created gender norms and expectations that caused the students to have variations in attitude and behaviors towards being academically successful.

The research questions that guided the study were as follows:

1. How do a small sample of rural eighth grade students perceive gender to influence academic performance?
2. Which contextual factors including school experiences, peers, and parental influence most directly contribute to the formation of gender roles in the academic setting?
3. How do the contextual factors ofschool experiences, peers, and parental influence effect beliefs about gender roles as they pertain to academic success?
4. Which academic traits are most often associated with which gender roles?

To address the research questions, the researcher developed an electronic survey that included both Likert scale items and checklist items for quantitative review and a series of open-ended items for qualitative review. Survey participants completed items in the following areas in order to evaluate their personal experience with gender roles and stereotypes in school: a) school-based experiences, b) social experiences (i.e. peer relations), c) parental expectations for gender and academics, and d) gender traits in academics. To deepen the understanding of a student's authentic experience with these factors, participants examined personal beliefs about gender roles and academics through a series of open-ended sentence starters which allowed for individualized answers to be produced. In the final portion of the survey, fourteen academic traits were identified and participants had the option to determine if the academic trait was "masculine," "feminine," or neutral in nature which was labelled "both."

## Significance of the Study

Educational gender gap research tries to explain why there are differing levels of achievement between males and females. Often that research targets one population over the other in order to "fix" the problems at hand (Vantieghem, Vermeersch, Van Houtte, 2013). In doing so, a one-sided picture is created. In contrast, this study sought to examine the same core issue, the underperformance of the male eighth grade students at Small-town Middle, from both the male and female perspective. Having an understanding of what both subsets of the population believe to be contributing factors allowed for a broader and more well-defined picture of the substantive factors involved in the disparate academic performance. It also allowed the researcher to examine if gender stereotypes
were internalized in the same way by both genders or is one gender was internalizing a different social message than the other group.

Because the study hinged on academic performance, specifically on proficiency levels on the state test, examining the cultural context of the educational setting was imperative. Adams (2000) argued that curriculum, because it is the traditional path to learning and is implemented by an institution, can often be seen as a "dominant agent," one which often reproduces systems of social privilege and power (p. 6). In this same vein, Joseph (2000), explained that we must "examine curriculum as a culture by taking into account the histories, norms, beliefs, values, roles, patterns of behavior, and environments of educational practices" (p. x). When applying the conceptual ramifications of the culture of curriculum to the idea that such ingrained systems of learning can indoctrinate students, one can begin to see why what is taught (policy), how it is taught (practice) and why it is taught (theory) are paramount to the propagation of our established society. In a perfect world, the curriculum as a development of aligned policy, practice, and theory would provide every learner with the tools necessary to critically assess the world around them and, in places where inequality or inequity was present, be able to eradicate such disparities (Adams, 2000).

Determining the factors that create gender stereotypes for students will help identify how these beliefs are formed. Social learning theory (Bandura, 1977) articulated that we learn through a social context and our learning molds our behaviors and our sense of self. It also bridged tenets of both behaviorism and cognitive learning theories and, in doing so, explained that children imitate and replicate behaviors often associated with gender norms because those norms have external reinforcement from the society in which
the child operates (McLeod, 2016). Furthermore, it explained that children adopt behaviors and expectations that are reinforced extrinsically by our society and most often through interactions they have with peers and adults (Bandura, 1977). It is this confluence of factors that begged the question: are we, as a society, perpetuating gender expectations in our schools which led to the separation of male and female academic success? Therefore, it was this theory that helped to formulate the possible contextual factors that might lead to the formation of gender stereotypes for students at Small-town Middle.

Through this investigation, the researcher sought to examine how gender norms and expectations were formulated for rural eighth grade students at Small-town Middle, especially in regards to their influence on a student's perception of the academic self. By use of a mixed methods survey, in which item analysis, $T$-test data analysis, and In Vivo coding were employed to obtain data, the researcher presented findings that elaborated upon the contextual factors that most directly relate to students' beliefs about gender stereotypes and subsequently how those stereotypes played a role in academic performance as encountered by the middle school students at Small-town Middle. Finally, several findings from the research about stereotypes of gender in schooling were explored, which provided possible direction for future research.

## Theoretical Framework

The lens the researcher used to conduct, analyze, and draw conclusions about this research was based on a sociological approach to education through a disciplinary orientation. This study was a mixed methods ethnographic case study as it was rooted in concern for the cultural context and since it examined a bound set of factors and elements
that were assessed through the research (Merriam, 1998). A disciplinary focus was employed by the researcher due to involvement in the field of study. Furthermore, since a disciplinary orientation situated the preliminary ideas for this study, the focus was more finely tuned by examining how Social Learning Theory (Bandura, 1977) interplayed with constructs of curriculum in schools, the impact of peers on normative behaviors, and parental influences that shape a student's perception of gender stereotypes in relation to academic performance.

According to Bandura (1977), gender roles were a socially learned construct and how a child perceived that he or she should act comes from observation of others, imitation of gender specific attributes, and the reward or punishment that he or she received during his or her performance of gender specific behaviors. This study examined how the specific social institution of education, because of the interchange of social, parental, and school-based influences, may have had a major influence in the continued practice of gender norming in the school setting, especially in regards to the eighth grade students at Small-town Middle.

## Definition of Terms

The following terms and phrases were defined according to their application in this study.

Achievement. Achievement is defined as the level of expectation for students to be considered grade-level proficient on state given assessments (Vantieghem, Vermeersch, Van Houtte, 2013).

Attention. Attention is the initial phase in the social learning theory. During this phase a child notices certain important behaviors in a model, most likely an adult of influence (McLeod, 2016).

Contextual Factors. Contextual factors are the elements determined to have the most possible influence on the given scenario. In this study the contextual factors are: school experiences, peers, and parental influence.

Curriculum. Curriculum is the avenue of learning. It is broken into three pieces: policy, practice, and theory. It is highly important because it can be a reproductive model which causes certain beliefs to become ingrained in the system (Adams, 2000).

Educational Gender Gap. The educational gender gap refers to the differential achievement of males and females in the academic setting (Vantieghem, Vermeersch, Van Houtte, 2013).

Gender. Gender is often used interchangeably with sex but in the context of this study gender refers to male or female, not biological sex (Freedman, 1993).

Gender Expectations. Gender expectations refers to the articulation of norms by society, parents, peers, media, or other influential factors (Serbin, Powlishta, \& Gulko, 1993).

Gender Identify. Gender identify is how an individual chooses to see him or herself in regards to gender. A person may determine that they are male or female or in some cases neither or both (Schramm-Pate, 2014).

Gender Norms. Gender norms refers to the socially prescribe ways of acting that are appropriate for a person's gender. It is the basic separation of individuals into dichotomous and binary categories (Freedman, 1993).

Gender Roles. Gender roles are the enactment of gender norms and expectations as dictated by the society in which one lives (Freedman, 1993).

Gender Socialization. Gender socialization is the way males and females are often socialized differently. It deals with how each sex is conditioned to conform to the norms associated with gender (Serbin, Powlishta, \& Gulko, 1993).

Gender Stereotypes. Gender stereotypes are the expectations that a gender must act and behave in a certain way. Many times, these stereotypes are false and cause oppressive societal structures to be prolonged.

Heteronormative. Heteronormative structures support the idea that there are two distinct complementary genders, male and female, and that people should enact behaviors associated with their biological sex (Afshar, 2004).

Hidden Curriculum. Hidden Curriculum is the reproduction of societal expectations that are supported in the curriculum and the culture of an educational institution. These expectations can be detrimental as they can continue a culture of oppression and repression (Sambell, \& McDowell, 1998).

Meditational Process. This is the process of cognitively processing observed behaviors and then determining what behaviors to repeat (McLeod, 2016).

Motivation. Motivation is the final phase in the social learning theory. During this phase the child receives either positive or negative feedback based on their replication of behaviors and is therefore condition to either accept or reject certain behaviors based on extrinsic motivational factors (McLeod, 2016).

Nature vs. Nurture. "The nature versus nurture debate concerns the relative importance of an individual's biology (i.e. genetically inherited DNA) ("nature") versus
socialization (i.e. personal experiences in the social world) ("nurture") in determining or causing individual differences in physical and behavioral traits" (Schramm-Pate, 2014).

Reproduction. This is the third phase in the social learning theory. During this phase the child repeats or imitates the behaviors that were noticed and retained. It is important to note that only behaviors that have made an impact on the child are reproduced. (McLeod, 2016).

Retention. Retention is the second phase in social learning theory. During this phase the behaviors that the child was exposed to and noticed are then retained in the memory so that they can be cognitively processed (McLeod, 2016).

Sex. Sex is the medical term used to identify the biological construct of the body's genitalia, i.e. a penis or a vagina. Sex and gender are often used interchangeably but for the purpose of this study sex refers solely to the biological construct. (Serbin, Powlishta, \& Gulko, 1993).

Sex Typing. Sex typing means to categorize objects, tasks, and even occupations in order to assign them to a particular gender. Sex typing is done by society as a whole, by individuals, i.e. parents, and is often seen depicted through media (Serbin, Powlishta, \& Gulko, 1993).

Social Learning Theory. Social learning theory is a theory originating from the work of Albert Bandura (1977) which tries to explain the reproduction of behaviors associated with gender identity. There are four steps in the process of social learning: attention, retention, reproduction, and motivation (McLeod, 2016).

Social Identity. Social identity refers to how a person perceives himself or herself in relation to the society in which he or she lives but it also refers to the way that a person understands how others in their society perceive them (Schramm-Pate, 2014).

## Limitations

Small-town Middle had approximately 400 eighth grade students separated onto 4 "teams." Each team consisted of approximately 100 students with four core-content area teachers. Teams were number: 8-1, 8-2, 8-3, and 8-4. Each team had even numbers Honors, as well as Regular Education students.

To eliminate possible repetition of the survey or possible repeat respondents, the researcher asked only one content area of teachers if they would be willing to be part of the study. If they had all said "yes" then the study could have included all four teams and all approximate 400 eighth grade students at Small-town Middle. Of the 4 teachers the researcher queried, only one teacher was willing to have her classes serve as the data set for the study. Therefore, this study only surveyed approximately $25 \%$ of the total possible data pool.

Also, the researcher had to rely on the lead teacher of team 8-3 to remind students about consent forms, to let the researcher know if parents had made any contact with concerns, and to collect the parental consent forms. The date for the study was also determined by the lead teacher and the administrator for Small-town middle based on their testing windows and calendar of school events at the end of the year. Neither the lead teacher nor the principal wanted to miss instructional time that could be used in preparation for the end of the year tests and so the study had to be conducted during the very last week of school.

The researcher was also only allowed one day to conduct the survey; therefore, any students who were permitted to take the survey but may have been absent or missed that class period due to other circumstances, were not able to be part of the sample population. Similarly, the researcher had no control over the school calendar for events such as fire drills, lock downs drills, scheduled drug dog searches, or other common school occurrences that could possibly occur during the research study.

## Delimitations

The realm of gender roles and gender stereotypes is infinitely broad and has many applications. However, for the purpose of this study, only those myths and stereotypes about traditionally acceptable gender roles of male and female as they pertain to education were explored in the literature review. Though there are a vast amount of resources that delve deeply into the promulgation of gender norming in our society and in our culture, only those myths that directly correlated to those roles in the educational setting did the researcher deem pertinent.

Similarly, when examining the contextual factors of peer influence, the researcher focused on how those influences are shaped directly through actions and words through peer to peer interaction. Social factors such a social media, music and film, and news media were not investigated even though those avenues can contribute to the formation of certain believes and values.

Finally, the research into school experiences hinged on the students' experiences interacting with his or her teachers in the academic setting. It did not delve into examining curricular resources, access to to adult advocates, the layout of the physical environment, or even percentage of male and female adults in the building. Though
those are all very valuable pieces of data that could directly lead to possible formation of beliefs for students, the most influential element was deemed to be the direct contact a student had with the adults he or she encountered and therefore, the focus remained on the student's personal experiences with educators.

## Summary

Understanding the relationship between the factors that led to the formation and dissemination of gender stereotypes and norms in the academic setting and how a student saw gender roles affecting his or her academic performance could lead to a raised awareness of the major contributing factors of the educational gender gap. Examining the possible contextual factors separately helped to pinpoint the extent to which these factors could be the cause. Identifying where these norms proliferate may be vital in the efforts to uproot the pervasive and systemic stereotypes about gender performance in relation to how a student believes he or she should perform in school.

This study attempted to delineate where possible gender expectations came from, how they were propagated, and how they affected a student's academic success. Using a mixed methods approach, the researcher hoped to gain quantitative insight into contextual factors that led to gender stereotypes in the educational setting that had the strongest correlation to academic performance. Similarly, by giving students the opportunity to relate their experiences in their own words, the researcher hoped to honor the authentic voice of the students and provide qualitative data that represented their lived experiences.

## Chapter 2

## Literature Review

This chapter is a review of the literature related to Albert Bandura's (1977) social learning theory, and to current trends and research on the educational gender gap. Literature related to these topics is examined in this chapter to align the study with past and current research, validate the research problem, and provide theoretical grounding to the research questions. Relevant literature about the implications of the social learning theory, and gender gaps in academics are the primary topics summarized in this chapter. This section represents an analysis and interpretation of how the process of this research study is consistent with the ideas presented within social learning theory literature and research into how curriculum contributes to the educational gender gap.

The review of literature is divided into two major sections. The first section, Social Learning Theory, is separated into 4 subtopics: (1) history of the theory, (2) social factors, (3) parental influence, (4) school environment. The second section, Curriculum and the Educational Gender Gap, is categorized into four subgroups as well: (1) history of the educational gender gap, (2) the hidden curriculum, (3) dominant myths about females, (4) dominant myths about males.

This chapter concludes with a summary section in which salient points from the encompassing research are reviewed. Strategies for searching relevant literature to this study included electronic databases such as ERIC (Education Resources Information), EBSCOhost, Discus, dissertations, newspapers, books, and professional journals such as

Assessment \& Evaluation in Higher Education, Journal of Personality and Social Psychology, Electronic Magazine of Multicultural Education, WILLA - Women in Literacy and Life Assembly, Social Psychology of Education and other prominent academic journals.

## Social Learning Theory

History of the theory. Albert Bandura (1977) was widely held to be the father of social learning theory. In this theory, children process through observational learning. This was commonly referred to as the "mediational process" as it focuses on how mental factors are the catalyst for learned behaviors (McLeod, 2016). Bandura (1977) also focused on the factors that caused repeated behaviors in children because it was his belief that children had to process what was observed and then determine if they should imitate that behavior based on the consequences that would arise if the behavior is repeated. He broke the social learning theory down into four basic elements as shown in Figure 2.1. The four components are as follows:

1. Attention: Attention is the initial phase in the social learning theory. During this phase a child notices certain important behaviors in a model, most likely an adult of influence.
2. Retention: Retention is the second phase in social learning theory. During this phase the behaviors that the child was exposed to and noticed and then retained in the memory so that they can be cognitively processed.
3. Reproduction: This is the third phase in the social learning theory. During this phase the child repeats or imitates the behaviors that were noticed and retained. It
is important to note that only behaviors that have made an impact on the child are reproduced.
4. Motivation: Motivation is the final phase in the social learning theory. During this phase the child receives either positive or negative feedback based on their replication of behaviors and is therefore condition to either accept or reject certain behaviors based on extrinsic motivational factors (McLeod, 2016).

Through the process of repeated exposures, a child begins to determine how he or she should act.


Figure 2.1 A Framework for the Social Learning Theory Model
As Freedman (1993) explained, the social learning theory "focuses on how gender differences occur, stressing processes through which males and females may come to adopt similar or dissimilar ways of being" (p. 5). It was not as concerned with the why of the behaviors as it was with the avenue to which those behaviors become internalized and
a repeated pattern of behavior for a child. Freedman (1993) went on to explain the importance in this difference because, "They place a greater importance on the individual's subjective experience of gender identity than do either of the social structural theories or the evolutionary theories of gender differences" (p. 8). McLeod (2016) concured by stating, "As such, SLT [social learning theory] provides a more comprehensive explanation of human learning by recognizing the role of the mediational process." Bandura's (1977) work has become one of the founding theories regarding how behaviors are adopted and implemented. As Grusec (1992) explained,

To begin with, he rescued the process of identification from the confusion of hypothesized roots in dependency and acquired reinforcement and motivation, directing the theoretical focus to a more fruitful basis in cognitive processes, including attentional and memorial factors. Bandura's empirical contributions during the 1960s and 1970s provided ample evidence of the central role of observational learning in a diversity of areas, particularly aggression and selfregulation. The research also highlighted the variety of mechanisms mediating the acquisition of behavior through observational learning. It is doubtful that anyone today would argue that modeling does not play a dominant role in socialization (p. 784).

In other words, accounting for a child's ability to recognize behavioral patterns, to distinguish between who performs those patterns, and to determine the validity of patterns suggest that the cognitive process was highly influential in a child's reproduction of behaviors, more so than perhaps other theories that focused on evolution or the "nature" argument suggested.

Social factors. Adolescents' perceptions of how they should act are often reinforced by the gendered messages produced and delivered by the people they watch and learn from. Vygotsky, in the Zone of Proximal Development theory, ascertained that a child learns about what is acceptable in his or her culture through observations of the world in which they live (Levykh, 2008). It stands to reason then that the formation of gender expectations and gender norms are learned from the societal structures that a child develops within and around. Baker (2013), argued, "the intersection of culture, politics, and biology often decides how we behave. Our bodies, male and female, are the very vehicles through which we perform our genders and how we perform our genders is so often decided by social forces outside of us." The world in which one lives has a tremendous impact on beliefs about what is acceptable, what people of each gender are capable of achieving, and in turn it can very often pigeon hole people into categories that are based on false assumptions. Dyer (2000) cited Kimmel as stating:

Boys' reluctance to pursue certain fields because of gender stereotyping, for example, resonates with girls as well. Sexual bullying and teasing in schools affects both boys and girls as victims and perpetrators. Boys may face homophobic taunts while girls grapple with other forms of harassment, but a hostile school culture of sexual harassment or bullying redounds on both sexes deleteriously and academic achievement, notions of masculine and feminine attitudes, choice, tendencies, or pursuits inhibit both sexes from exploring a range of interests (p. 29)

This was a very poignant observation as it proved that when examining how gender stereotypes present themselves, one cannot focus solely on either the male or female
perspective. it is the confluence of both viewpoints that brings to light the broader spectrum of issues. For this research study, this point was paramount as the researcher did not want to focus only on males nor only on females but on the perceptions of both genders in the academic setting.

Gender is one of the broad categories used to created normative behaviors and often it can be seen as the starting point for the promulgation of attitudes and beliefs, but one must also take into consideration that there is a myriad of factors that intersect in shaping these behaviors and beliefs. "Boys and girls share an increasingly complex, multicultural community, both within and outside of school where either identity is crucially mediated and shaped by other social characteristics such as a student's socioeconomic status, race, ethnicity, linguistic status, immigration status, age, sexuality, and region" (Dyer, 2000). Also, it is important to acknowledge that the variances in gender stereotypes and sex typing from within these subgroups directly relates to the home life in which a child is raised.

Parental influences. During the early stages of development, a child is dependent on his or her parents to sustain life. As the child grows, develops, and begins to form cultural knowledge, an impression of how each parent should act begins to take shape. Early on, the child observes his or her parents, retains in his or her memory the patterns observed, observes those patterns being reproduced or reproduces them himself or herself, and is motivated by the parent to continue to reproduce the pattern or not. With these impressions, the first categorical markers form. Serbin, Powlishta, and Gulko (1993) described this process as the onset of sex typing:

One of the first dimensions that children notice is sex. "Male" and "Female" are dichotomous, exhaustive, and perceptually salient "natural kind" categories that are emphasized by adults and peers. Because there are usually observable behavioral differences between the sexes within the child's world, gender category knowledge is often useful in making predictions about the behaviors of males and females.

The researchers go on to explain that the attitudes of the parental figures largely influence the degree to which the child will sex type items, toys, and even occupations. How a child perceived the parent to react to behavioral differences becomes the patterns that the child then repeats.

This is important when considering that the child who is brought up in a highly sex typed environment with strict traditional dichotomous gender roles, may find certain aspects of the educational environment to be inappropriate for their gender. "Children are more likely to describe toys and occupations as appropriate for only one sex if their parents espouse more traditional sex-typed personality characteristics" (Serbin, Powlishta, Gulko, 1993). The child internalized what he or she believed their parents value. Even when these values are not espoused outright, a child picks up on social markers through interactions with the parent and it is the perception from the child that reinforces the normative traits.

In contrast, if the parents are more open to non-normative gender roles, the child has a less strict opinion of what he or she must perform. Serbin, Powlishta, and Gulko (1993) found that this was particularly true in households where the mother worked
outside of the home or where the father took a large part in the child-rearing. This made an interesting argument when examining different parenting structures.

Research has shown that parenting styles can have a tremendous impact on a student's academic success, regardless of gender. According to Khan, Ahmad, Hamdan, and Mustaffa, (2014):

Present study focuses on parent's contribution to their children's success by helping with homework, guiding students in their choice of courses, and implicitly and explicitly encouraging school success by setting and maintaining high standards. Parenting style plays an important role in the area of social and educational development (Leung, 1988), it influences a child's success in many domains such as academic achievement (Darling, 1999).

When synthesizing what Serbin, Powlishta, and Gulko (1993) found in conjunction with the information from Khan, Ahmad, Hamdan, and Mustaffa (2014), it was evident that the attitudes and traits exhibited by the parents towards the child have a lasting effect on not only the child's reproduction of behaviors, but also on the future academic success of the child far past the early childhood years. Similarly, Rivers (2012) explained that parental expectation and the relations formed between parents of either sex have a strong contribution to student success:

The quality of parent-child relations is often conceptualized within the parenting styles framework and has been utilized as a basis for understanding differences in child and adolescent outcomes. For example, previous research has established relationships between parenting styles and the academic performance and achievement of adolescent youth. A consistent finding from this research is that
authoritative parenting, defined as those who are demanding and responsive to their children and have set clear rules and expectations for their children is associated with positive gains in adolescents' academic performance and achievement (p.202).

Different parenting styles culminate in different outcomes for children and not all sex-typed parenting styles will always reproduce child with strict sex typed notions, but there is evidence to the fact that parents who believe their child capable of academic success, regardless of gender, fare better than those children who have very restrictive parental views on gender. It is also important to note that the child's internalization of these behaviors comes from their observation of their parents, motivational factors received based on their reproduction of certain traits, and how the child processes that information to come to a conclusion about how to act moving forward. Their perceptions of their parents' beliefs and expectations become their reality.

School environment. Schools systematically reinforce the ideologies of middle class America with regards to gender identity and the heteronormative ideas of male and female (Sambell \&McDowell, 1998). There are certain roles and cultural assumptions about males and females that are often imposed, which means boys act like boys (masculine, heterosexual, dominate) and girls act like girls (feminine, heterosexual, submissive) and if one does not fit nicely into one or the other category than the perception is that there is something wrong. Farrell (2005) explains, "To describe a social institution as heteronormative means that it has visible or hidden norms, some of which are viewed as normal only for males/men and others which are seen as normal only for females/women" (p. 3). In addition to reading, writing, and arithmetic, the American
educational system, in many cases, is indoctrinating children with the notion that anyone who does not exactly fit into the mold of what is considered normal must therefore be "abnormal" and needs to be corrected, dismissed, or, in extreme cases, punished (Pincus, 2000).

Schools are public places geared specifically toward the acquisition of knowledge and to broaden the minds of American youth. According to Gratz (2000), the primary purpose of standards is economic, meaning students must become globally competitive if the economic structure in this country is to flourish, and it is to address the disparities between affluent schools and high-poverty / minority schools, meaning everyone has the right to a good education (p.681). More importantly, schools are in place to help children grow into productive, rational, contributing members of society, no matter what their gender identity may be. Therefore, when examining the many normative doctrines that are in place in American schools, the point realized is that the approach towards gender is skewed. A binary where the two genders are pitted against one another becomes the norm. Dentith (2002) explains, "Gender is something we do and something we think about. It is a particular set of practices and cultural meanings that organize people into categories that are not based on biological truths."

McCann (2013) uses the term gender to "refer to the process by which sex differences are struggled over, enacted in cultural practices, and inscribed in and deployed by social institutions (schools, courts, hospitals, and media)" (p. 17). This is the take away idea. Gender roles are not necessarily based on biological truths; they are imposed notions about how genders should behave and are not constituted on the
capabilities of the young men and women in the classrooms of today's America. This is of utmost importance for as Giroux (2013) explains,

Under a pedagogy of repression, students are conditioned to unlearn any respect for democracy, justice, and what it might mean to connect earning to social change. They are told that they have no rights and that rights are limited only to those who have power. This is a pedagogy that kills the spirit, promotes conformity, and is more suited to an authoritarian society than a democracy. The idea that people of other gender role orientations are not included in the educational pedagogy, and if they are, they often belittled, does nothing except to solidify the notion that people who do not conform to heteronormative structures are outside the realm of acceptable society. Education perpetuates the idea that not being part of the heteronormative community makes that person abnormal and thus devalued. For females this does not just mean sexual identity (i.e. lesbians) but also females who do not appear overtly feminine or even females who have more aggressive or dominate personal qualities like voice or tone, which are considered unladylike. For example, strong willed boys are called "determined"; strong willed girls are called "bossy" (Gurina, 1996). Males have it just as bad. Legewie and DiPrete (2012) explain, "Boys' notorious underperformance in school and their tendency to disrupt the learning process in classrooms has sparked intense academic and public debates about the causes of what many now call the 'problem with boys'" (p. 463). The mere undertones in labels and adages such as that suggest that there is only one set way to act in the school setting and therefore, it reinforces the stereotypes of how males and females should perform in schools.

It is these types of practices that constrict both subset of students by forcing unfair societal expectations onto them. In turn, the prolonged exposure to these stereotypes replicates the model implied in the social learning theory for what is seen is then retained and then reenacted.

## Curriculum and the Educational Gender Gap

History of the educational gender gap. There are many buzz words in education today. One of the big ones is diversity. Students in many American classrooms can be seen sitting and working in groups with other students who look very different from how they do. The American classrooms are a melting pot of individuals from varying experiences and it is through this diversity that the system is more accepting of people from different backgrounds, socio-economic status, and religions. One key component schools tend to believe they address is diverse learners. Diversity is a hot button topic in today's world of education and even institutions of higher learning are adding in diversity components into their training for future educators (Farrell, Gupta, \& Queen, 2004). Joseph (2000) describe this reflection on how diversity is handled as follows:

When we think about a school or classroom culture, we must simultaneously imagine not a state entity but an assemblage of individuals who have different family cultures, different understandings and values influenced by race, gender, sexual orientation, social class, and religion as well as their own creativity and imagination (p. 27).

As McCarthy and Dimitriadis (2000) explained, "A recognition that our differences of race, gender, and nation are merely a starting point for new solidarities and new alliances, not the terminal stations for depositing our agency and identities" (p. 82).

However, the reality is that schools, though now more focused on diversity and beginning to have the open conversation about acceptance and celebration, have not always found the melding of different groups to be easy or successful. The national organization American Associate of University Women (AAUW) conducted one of the very first research initiatives into how women were treated differently from their male counterparts in 1885 and found that, against popular belief, that pursuing higher education did not injure women's health (Dyer, 2000). From there forward, the discussion of how and why men and women performed differently in academic settings was on for full debate. In the early seventies, the focus was on the lack of female success in the math and sciences. From there the pendulum swung full force in the other direction and by the nineties the focus was on how boys were falling behind and what had the system done to cause it. As Dyer (2000), explains, "Christine Hoff Sommer, charged that the research on girls distorted evidence of girls' success, distracted public attention from the 'real' victims in schools- boys- and promulgated a bias against boys' 'natural' behavior in the feminized classroom" (p. 7). Modern research shows that as a results boys' overall attitudes towards school depict a very dark image indeed. They are less interested in the school and in learning in general and the research chronicles a much lower rate of engagement in classwork, less time spent on homework, and it reports that they find school less meaningful and enjoyable (Kessels, Heyder, Latsch, \& Hannover, 2014).

The educational gender gap is a perplexing issue that calls to question inherent sources. Mead (2015) agreeed that the gap does not lend itself to an easy answer by stating, "This leads to two possible lines of thinking about gender gaps: Either they represent innate differences in boys' and girls' abilities, or they reflect biases in how
schools and families treat boys and girls that translate into differences in outcomes." If the latter is the root cause, then an examination of what we teach in schools and how the culture of the school is formed needs to be scrutinized.

Hidden curriculum. Teachers teach more than the standards and objectives set out by the state. They teach lessons, rules, and ways of interacting with the fellow man; they teach children the norms of the society in which they live. Joseph, Mikel, and Windschitl (2011) go further to explain that teachers can be so much more than the mere transmitters of knowledge; in fact, they need to "envision progressive, humane, and ethical curriculum and image themselves in new identities as powerful and dedicated creators" (p.65) to the art of the educational experience. Curriculum is the connection between the learned and the learner. It is the bridge between what is done (i.e. practice), how it is done (i.e. policy) and why it is done in such a way (i.e. theory) (Adams, 2000).

This is often known as the hidden curriculum. In America, the school system's hidden curriculum can often be described as a white, middle class, heterosexual agenda as Alsubaie (2015) explained, "A hidden curriculum refers to the unspoken or implicit values, behaviors, procedures, and norms that exist in the educational setting." Certain ways of speaking, listening, communicating and dealing with conflict are geared by the norms of a nuclear middle-class family. The goal of the hidden curriculum is not necessarily malicious; instead it is meant to help even the playing field and teach students social norms so that they, too, can interact in the society in which they function (Sambell, \& McDowell, 1998).

However, it extends further and deeper than that. Most current curriculum does a cursory job investigating the diversity of our society and the historical variety of
viewpoints (Alsubaie, 2015). Sometimes what is not taught is just as powerful and memorable as what is taught. In the same vein, Afshar (2004) explained,

One reason there are so many misconceptions about sexuality is that it is not talked about in U.S. educational systems. It is not generally included in primary schools because, it is argued, it is too early for children to learn about sexuality (Fine, 1988). It is often not included in high school curricula because, the argument goes, adolescents are at a crucial age and should not be exposed to the "promotion of sexuality," especially non-heterosexuality. It is not included in college since it is not 'relevant' to the subject matter in most courses. (p. 36) The hidden curriculum has its negative side effects. It can often spur homophobia and put into place gender boundaries. Instead of teaching students to accept diversity and work on conflict resolution, student receive an inferential message about the necessity to "fit in" to social norms. Different becomes synonymous with bad and children, very early on, do not want to be seen as either.

Dominant myths about females. The blatant stereotype of female roles is known as heterosexism. In his book, Sexual Orientation and School Policy, Ian Macgillivray (2004) stated, "heterosexism of the larger society affects schools in that the diverse people and perspectives are most often excluded from the curriculum and practices of the school which results in physically, emotionally, and developmentally hostile environments for many students."

It was not so long ago that here, in South Carolina, one would see cars proudly sporting a "Shave the Whale" sticker to refer to Shannon Faulkner, the first female cadet at South Carolina's very own Citadel University. The problem was that she was a
woman, and therefore she had no place in a place meant for men. She was stepping outside the traditional role of a female and it caused intense and immediate backlash, not just for her but for all women, especially in South Carolina. It was widely discussed through media outlets and in households across this state that "girls should know their place", i.e. the Citadel not being one of them (Manegold, 1994).

Shannon Faulkner never graduated from the Citadel because she eventually was so ostracized, so bullied, so harassed that she had to drop out (Manegold, 1994). And in doing so, many of those who said a woman could not handle it in a man's world took it as proof they were right. It is this restrictive viewpoint that can be seen in regular public school classrooms today. In his essay, "The Invisible Presence of Sexuality in the Classroom" Ahoura Afshar (2004) states, "Practices of regulation and restriction are integral to creating and maintaining hierarchies of power, which in turn limit the kinds of learning and teaching that can happen in our classrooms" (p.34). When we tell a woman she doesn't belong in a particular institution of learning, the implication is much farther reaching than just that one particular organization. It sends a cultural message about the roles of females.

It is this hetero-centric idea that pervades the classrooms of modern America. If material with a different take on gender roles is to be taught, it would need to be selected by teachers, but that seldom, if almost never, occurs. Morris (2005) in the article "Queer Life and School Culture: Troubling Genders," found that teachers unconsciously made things harder because they continued to teach curriculum that excluded instead of accepted gender role diversity. She even said that such actions on the teacher's part project prejudgments and rigid expectations onto people who are different. Reluctance or
refusal to address gender identity issues produce the major problem for female students because it only reinforces the masculine dominate role. In the article, "Teachers as Products of Their Schoolings: Disrupting Gendered Positions," Sanford (2002) found the following:

Because teachers serve as role models, the attitudes that they present, both implicit and explicit, affect the attitudes and values of the children they teach. Teachers' selection of materials, responses to texts, and the ways that teachers express ideas have a powerful impact on children. Their beliefs and actions become inseparable from the behaviors, attitudes, and beliefs of the students as they develop in classrooms of individual teachers and in school more generally.

Teachers are the transmitters of knowledge and if all that is transmitted is the heteroviewpoint than the idea that anything slightly different (dress, attitude, posture, voice, etc.) must therefore be wrong and the repercussion for students is that to be right, one must adopt the set of heteronormative rules established in society for their designated gender. Girls are better readers; boys are better in math. Girls are more linguistic; boys are more physical. Girls are demure; boys are gregarious (Serbin, Powlishta, Gulko, 1993). All of these ideas are not only false but they also dictate ideas to students that they should or should not have particular educational interests.

When the material taught within the classroom supports the heteronormative stereotypes imposed by other social institutions, the solidifying notion of what genders mean becomes ingrained in the students. The implications can bleed from the curriculum to the school community and in turn, subsequently teach the students that those who are not part of the "curriculum" are not to be valued. Dentith (2003) stated, "in a society such
as ours that values certain archetypes and specific forms of conformity, discrimination and alienation become the norm for all who are different." This is not a new fact. America has dealt with issues regarding racism, nationalism, ability discrimination, and ageism. Even homophobia is widely discussed in the political realm and on social medias. However, it is how it is handled in schools that has the greatest impact and often causes the greatest detriment to our society as a whole since children spend the greatest amount of their day in the educational setting. Dentith (2003) further found that being viewed as different from the norm or "other socially inscribed ways of being can lead to social alienation through bullying and other forms of abuse or discrimination."

Therefore, the reluctance or direct refusal to address gender identity issues in the school setting can lead to not only a negative undertone towards those that are different but also an outward violence towards those students who do not fit into the heteronormative practices prescribed by the American school culture. Afshar (2004) stated, "LGBT students (and teachers) ARE present in our classrooms-whether we choose to see them or not-and it is their very invisible presence that demonstrates the power of heteronormativity to mask that which does not conform, and to naturalize that which does" (p. 33). Though he focuses on the implications for LGBT students, the idea is the same for non-normative heterosexuals. If one is a heterosexual but does not "act it" then this applies. This could mean females with larger builds or dominate personalities; this could mean boys with a propensity for dress-up or who may not be athletic.

Most recently, Sunnie Kahle, an 8-year-old girl in Virginia was removed from her school because she did not fit into the gender roles they found acceptable, namely her short hair and desire to wear baggy t-shirts and shorts with sneakers. On March $27^{\text {th }}$,

2014, Good Morning America's Sydney Lupkin reported, "a Virginia school has said it will not allow her to return in the fall 'unless Sunnie as well as her family clearly understand that God has made her female and her dress and behavior need to follow suit with her God-ordained identity.'" When questioned about her gender identity, the grandmother said, "Sunnie always says she's a girl, though she happens to like collecting baseball cards and rocks, and practicing using her BB gun with her grandfather" (Lupkin, 2014). Though this particular case comes from an ultraconservative Christian school in rural Virginia, it is a testament to the fact that gender role reinforcement is still alive and well in the school systems of today.

Dominant myths about males. However, the argument is not one sided. Males also face stereotypes about how they should or should not behave, especially in regards to academic performance. Pollack (1998) described the 3 prevalent myths about boys in "Real Boys: The Truths behind the Myths." The 3 major falsehoods he presented are:

1. Boys will be boys;
2. Boys should be boys;
3. Boys are toxic (p. 88-97).

Under these three assumptions, there are damaging value judgments passed onto boys at an early age that dictate what and who they should become as adult men.

The adage "boys will be boys" is the most crucial because it states explicitly that it is part of who the male is biologically that makes him the way he is. The verb "to be" means the subject was created that way and will always be that way; it is a constant that has no hope of being reversed, modified, or corrected. This statement is used to dismiss certain events in a boy's life as mere play or boyish antics and in turn
places blame for any ill will or uncouth behavior on the hormone testosterone. Pollack (1998) contendde that, "the idea that high levels of testosterone equate with high levels of violence stems from the mistaken assumption that testosterone is the only force that inclines boys towards both active, rough and tumble play and violent behavior" (p. 91). However, what he goes on to examine is that, though testosterone is a factor in some outward attributes of this behavior, it is in no way more determining than factors of how a boy is raised and nurtured. "Boys will be boys" is not only a dismissive statement used to placate crude and rough behavior, it also propagates the notion that boys cannot help who they are and that the testosterone in their bodies has more control over who they are than the families and households and environments in which they are raised and that idea is categorically incorrect. We are who we are and we do what we do because of nature and because of nurture in combination.

While nature is considered biological, nurture is considered environmental. Testosterone is nature; home life is nurture. Leaving out such an important part of the puzzle does not allow for a full picture of the underlining reasons for behavior. McCrae, Costa et al (2000) in "Nature over Nurture: Temperament, Personality, and Life Span Development" explained the role of nurture:

Environmental influences play crucial roles in the functioning of the personality system in several different respects: They define the conditions under which human personality evolved; they shape a vast array of skills, values, attitudes, and identities; they provide the concrete forms in which personality traits are expressed; and they supply the trait indicators from which personality traits are inferred and trait levels are assessed (p. 175).

This notion combined with Pollack's (1998) demonstrateed that the dismissive idea of "boys will be boys" gives no credit to the home life or environment the boy is in day after day and in fact, it is this environment that plays a major role in aggressive/ violent behaviors as much as testosterone. Michael Gurian (1996) goes on to add, "it is more accurate to say that much of who we are is determined by body chemicals, brain differences, hormones, and by society's efforts to honor this biology through its socializing influences" (p. 102). So, it is the combination of elements that creates possible aggressive or unwanted behaviors. Furthermore, what needs to be realized is that a ball through a window or running full speed down the hallway in a school may not be necessarily a "male" behavior. It may simply be a child who had aimed and released incorrectly or who got caught up in a moment of excitement. That can happen to anyone, not just boys.

The second myth that "boys should be boys" is where we begin to see ugly gender expectations rear their head. This statement declares that there are certain ways boys should act in relation to girls and if they do not act in these prescribed manners then they are not adhering to the norms of their gender. Pollack (1998) refered to these norms as the "gender straitjackets" (p.94) and that these inhibitors do not allow males to live in ways that are more natural to their inclinations. Then he references a hidden structure of masculinity known as the "Boy Code" (Pollack, 1998, p. 94) which lays out particular ways of behaving: 1) Be tough, 2) Demand respect, 3) Never act like a "girl". The stigmas attached to these hidden rules of behavior for males not only set up the hierarchy of male dominance over female, they imply that to be male one must never show tenderness, earn another's respect, or allow oneself to share the qualities that make us all
human if they could even remotely be perceived as feminine. This "hardening process" is seen almost as a rite of passage for boys entering into adulthood as a "man" but what it also does is makes boys "cut off from their own feelings and their voices no longer fully connect with their emotional selves" (Pollack, 1998, p. 95). In the end, this myth creates boys who become men who no longer know how to behave in any other manner than the one that was forced up on them as children and that is a travesty.

The third and final myth, "boys are toxic," is even more devastating to the creation of identity for young males. As Pollack (1998) described, this idea makes them seem dangerous, and unstable like "unsocialized creatures" (p.98) incapable of being reasoned with. The sentiment also denotes the idea that if they are so dangerous then we must protect the other gender, females, from them. In schools, this plays out through disciplinary measures associated with labeling boys as dangerous, deviant, or delinquent. Skiba, Michael, Nardo, and Peterson (2002) found, "A number of studies have found that boys are four times as likely as girls to be referred to the office, suspended, or subjected to corporal punishment" (p.321). This is the myth in manifestation. If boys are indeed toxic, they must be whipped into shape and so wide sweeping disciplinary measures are a result (Kindlon \& Thompson, 2002, p.167). As Pollack (1998) stated, "It is as if we are in the midst of an irrational society-wide backlash against boys and young men" (p. 98).

Often when an idea is repeated long enough by enough people, it gets incorrectly assumed to be a truth. This holds true for the myths presented by Pollack (1998). As a result, the sentiment that males are wild, uncontrollable, irresponsible, irrational creatures makes the idea of educating them seem daunting and insurmountable. Kindlon and Thompson's (2002) poignant comparison of boys as thorns on roses is both timely and
perennial for a thorn is seen as a nuance, an item to be clipped or removed, or one that by its mere presence is damaging. They explain that males in classrooms are labelled as "different, lesser, and sometimes frowned upon presence and he [the male student] knows it" (Kindlon \& Thompson, 2002, p. 155). No educator intends to stigmatize his or her student population; unfortunately, many educators do not have a full grasp of the multifarious ways one's presumptions can come through to the students. When examining the facts such as "research indicates a boy is four times more likely to be referred to a school psychologist" or that "60 to 80 percent of learning disabilities occur in boys" (Kindlon \& Thompson, 2002, p.163) the glaring indication is that, though a teacher's intent may not be to stereotype or brand male students, it is indeed occurring.

Throughout Kindlon and Thompson's (2002) essay the major cord that resonated was the notion that because of some of the possible biological tendencies of a child who self-identities as male (i.e. running, climbing, physical play, or any perceived aggressive action) that as a student he gets labelled as "wild" or "uncontrollable" and even "bad." These labels lead to disciplinary issues, obstinate behaviors, or a development of the "hate" of school (Kindlon \& Thompson, 2002, p.163).

Very similar to William Pollack's (1998) notion of the 3 defining myths about boyhood, Kindlon and Thompson (2002) examined the archetypes often thrust upon male students: the wild beast or the entitled prince (p. 166). Such derogatory labels presume that boys are both uncontrollable and incapable of responsible decision making or in the case of the entitled prince, the male is allowed to function separate and above others and as such normal rules do not apply to him. Kindlon and Thompson (2002) explained:

When our responses are distorted by these and other archetypal ideas, boys suffer for it. If the school culture or teachers react to a boy in ways that suggest they are fearful of him, baffled by or uncomfortable with him then he assumes he is fearsome and somehow not quite right, even unlovable. If they excuse him for reasonable childhood expectations because he is a man in the making and need not be bothered, the lessons of empathy and accountability are replaced by a creed of entitlement void of responsibility (p. 167).

Neither idea allows for male students to express themselves in other fashions. When these labels are applied in the educational setting, it is no wonder that boys often find school a source of frustration and resentment.

## Summary

The educational gender gap has been an issue historically in our country for decades (Legewie \& DiPrete, 2012). Research surrounding the differences in academic attainment between males and females began in the early seventies with a focus towards increasing opportunities and achievement for females regarding the math and sciences and by the nineties it had shifted to the decline of male academic success. Since then, there has been an ever widening gap between male and female success with little to be done to assuage the problems. One main cause may be that, while there are many factors taken into consideration to address this growing concern, one of the most obvious, the formation of gender identity, is not often researched. Vantieghem, Vermeersch, and Van Houtte (2013) explained, "in the past decades too little research has attempted to transcend the gender dichotomy and too many explanations have stayed firmly linked to sex categorizations and distinctions thus ignoring the unifying mechanisms across sexes and reducing intra-sex differences" (p. 358).

By continuing the previous research using Bandura's (1977) social learning theory as the foundation and examining possible sources of gender normative attitudes, a more contemporary investigation can be made to determine if the perceptions of students about the interplay of gender and academics lead to a perception of increased or decreased academic success. Ascertaining the contextual factors that lead to the internalization of sex typed patterns of behavior can also determine who and what are the primary influences that affect students' success in academic areas. Identifying current perceptions that students hold about how their peers, parents, and school environment formulate their beliefs will be helpful to educators to gauge ways to best address these false stereotypes. It will also assist educators in developing programs that decrease archaic beliefs about what our male and female students are equally capable of achieving. Examining how these beliefs and attitudes occur in present-day curriculum through policy, practice, and theory, will shed light on the ingrained and indoctrinated falsehoods that are perpetuated in our current educational system. Therefore, building positive attitudes for both genders will aid development of educational reform policies that in turn will benefit the entire student population and may lead to the lessening of not only the educational gender gap, but the educational gap that occurs between many demographics of students.

## Chapter 3

## Methodology

The research at Small-town Middle was an ethnographic case study using a mixed methods survey focusing on how rural eighth students perceive gender stereotypes as an influence on academic performance. Concentrating on social learning theory, the interplay between gender roles and academics, and the contextual factors that influence middle school students to associate gender roles with particular academic traits, the study examined how school experiences, peers, and parents influence the roles of gender in regards to academic performance.

Small-town Middle, with 800 students and just under 60 staff, is the only middle school in a historically rural and poor district. The district in which the school is located takes up more than $70 \%$ of the land mass in the county but only constitutes a very small portion of the tax base. The other districts in the county are much more affluent and, as such, have been able to prioritize and support initiatives that Small-town Middle is incapable of: one to one technology, MacBook distribution for students, class sets of iPads, etc. The poverty index at Small-town Middle is at $74 \%$ and even though the school would qualify, it is not a Title I institution. The demographic makeup of the school consists of $70 \%$ percent Caucasian- American, 20\% African American, and 10\% consisting of a mix of Hispanic and other.

Students at Small-town middle are teamed, which means that of the 400 eighth grade students roughly 100 are on each team. Each team consist of 4 teachers: one

English Language Arts (ELA), one math, one science, and one Social Studies. Of those four, one teacher is selected to be the lead teacher. He or she is designated as the leader of the team and traditionally acts as the liaison between the administration and the student body, as well as the point of contact for all nonacademic activities for the students. The "team" is a current common middle school practice that attempts to bridge an adolescent from elementary to secondary schooling with a more individualized focus on student development by way of a close knit community of students and educators.

Over the past four testing cycles, the school has maintained a "Good" rating on its Annual Yearly Progress (AYP), but it has not made gains in closing the achievement gaps in many of its populations' subsets. Most recently, it did not meet targets for 4 of its subgroups: males, African Americans, Free and Reduced lunch, and Special Education students. It did meet annual growth targets for the targeted groups of White, Female, and Hispanic. Though the data from the Palmetto Assessment of State Standards (PASS) used to inform this study was from several years prior, it was the only testing assessment that had been consistent since 2013-2014. South Carolina administered the PASS assessment for an eight-year cycle before the state adopted ACT Aspire in 2014-2015 and then switched to SC READY in 2015-2016. Therefore, when examining trends in data, school systems have adopted looking back several years to PASS as it provided the only longitudinal data available for reading and mathematics. With the most current data available through SC READY, even though it was a benchmark year for testing, the school only has approximately $43 \%$ of student reading on-grade-level and only $36 \%$ of student performing on-grade-level in mathematics. The data breakdown is not available for subgroups at this time.

Statistically, the female student population at Small-town Middle continuously makes growth and achieves on-grade-level status while year after year, the male contingency stagnates with on-grade-level targets and the percent of males meeting targeted growth has not made any substantial gains over the four-year time frame of data that is consistent. In the data from the 2014 school year's administration of the state assessment, PASS, $79.4 \%$ of female students were considered on-grade-level while on $65.1 \%$ of males were considered on-grade-level for reading. In math, $80.8 \%$ of females met the grade level requirement and males only had $68.9 \%$ meeting grade level targets. For every year in the four year testing cycle, females outperformed males in both reading and math.

Another important data source used to inform this study was school records of enrollment into English I Honors coursework in eighth grade and the mean score on the End of Course (EOC) assessment given by the state as seen in Table 3.1 and Figure 3.1. Table 3.1 Mean EOC Score for Males versus Females from 2011 to 2014

| Testing Year | Males EOC sore | Females EOC Scores |
| :--- | :---: | :---: |
| 2014 | 85.6 | 88.1 |
| 2013 | 85.5 | 86.8 |
| 2012 | 84.1 | 86.7 |
| 2011 | 87 | 85.7 |



Figure 3.1 Enrollment numbers for English I Honors in the eighth grade
Enrollment in English I Honors in eighth grade is determined by a student Gifted and Talented status, his or her $7^{\text {th }}$ grade ELA class average, and his or her performance on the state adopted formative assessment, NWEA's Measures of Annual Progress known as MAP. These data coupled with the state assessment data trends for reading and math for the same four-year cycle became the catalysts for the study as it attempted to understand why females were considerably more successful on state given assessments and in the school setting, and what factors caused the male population to fall further and further behind academically.

## Methodological Justification

Surveys have three general purposes: deciding policy, planning and evaluating programs, and conducting research (Fink, 2013). The survey employed in this study, entitled "Middle School Students' Perceptions of Gender Identity and Its Influence on Academic Performance," was designed to gather feedback from Small-town Middle School's eighth students to help identify what could be some possible contextual factors
leading to the trend in data on state assessment measures and in school based coursework that caused concern over the gender educational gap. Achievement, in this instance, is defined as the level of expectation for students to be considered grade-level proficient (Vantieghem, Vermeersch, \& Van Houtte, 2013).

The information gained in this survey had three specific goals for the teachers and administration at Small-town Middle to help them begin to analyze possible ways to counteract any negative influential factors that might be a root cause for poor academic performance for all of its students. Those goals were:

1. It will also allow the staff to determine if any changes need to be made to either curriculum or articulation of expectations and, if so, what these specific changes should entail.
2. If the survey determines that the influential factors creating negative gender norms are from peers or from parents, then the school could consider formulating parent sessions, workshops, or training to help educate stakeholders about the detrimental effects of gender stereotyping.
3. If the stimulus seems to be most tightly tied to peer influence, then the guidance department along with the school's staff could begin to weave nonnormative education into the character education program currently in place in the school.

Using research into motivational factors for students (Stipek \& Seal, 2001) and the social learning theory as a component (Bandura, 1977), there were three areas of concentration that needed to be examined in the study: school influence, peer influence, and parental influence. These were the areas that have been deemed to be most consistent
and most important in the child's development of attitude towards school. Using these in conjunction with the influences of gender norms and gender expectation, several objectives were determined for the survey.

The objectives of the survey include:

- Determine what possible school experiences might influence a student's belief about how genders should perform in school
- Examine how peer interactions in the academic setting might influence a student's belief about gender roles and school success
- Evaluate parental influences on academic performance as such influences pertain to a student's gender expectations
- Determine which academic traits are most often associated with which gender roles from a student's perspective

The framework depicted in Figure 3.1 is intended to show a reciprocal relationship between the factors of influence, gender identify, and then also academic performance. Though gender identify is the result of influential factors, it can also be a catalyst for how expectations are perceived from outside sources. In the same vein, academic performance can be both a causal result as well as an instigating factor in gender identity. The result is that one is developed from the other and vice versa.

In developing this conceptual framework, the researcher centralized the category of gender identity since it is the fulcrum in the study. The influential factors that are believed to lead to the formation of gender role expectations in academics are: a) school based experiences, b) peer relations, and c) parental influence. These factors, though they are separate categories, also influence one another as well thus the interim circles
between the categories in the conceptual framework. There is also an arrow between gender identity and these factors that is shown to go both ways as each area is influenced by the other and it is a continuously evolving process that is not necessarily one directional in nature.

On the other side of gender identity, academic performance is shown to result with a positive or negative influence. It, too, has a two directional arrow as how a student performs academically in particular subject areas can also influence not only further academic performance but also the development of gender roles and expectations. Subsequently, these influences may lead to either positive or negative gender role expectations associated with academic performance.

## Conceptual Framework



## RELATIONSHIP BETWEEN GENDER IDENTITY AND ACADEMIC PERFORMANCE

Figure 3.2 Conceptual Framework for Gender and Academic Performance

Research questions. The framework represents the structure for what research questions will be answered in the study as all research question focus on the three influential factors, their relationship to the student's gender identity, and how academic
performance is effected as a result. The research questions that guided the study were as follows:

1. How do a small sample of rural eighth grade students perceive gender to influence academic performance?
2. Which contextual factors including school experiences, peers, and parental influence most directly contribute to the formation of gender roles in the academic setting?
3. How do the contextual factors of school experiences, peers, and parental influence effect our beliefs about gender roles as they pertain to academic success?
4. Which academic traits are most often associated with which gender roles?

To address the research questions, survey participants will complete items in the following areas in order to evaluate personal experience with gender roles in school: a) school-based experiences, b) social experiences, c) parental expectations for gender and academics, and d) gender traits in academics. Participants will also examine personal beliefs about gender roles and academics through a series of open-ended sentence starters which allowed for individualized answers to be produced.

## Data Source and Collection

Format of survey. The survey consisted of 17 items divided into 4 categories: School-based experiences, Social Experiences (i.e. peers), Parental Expectations for Gender in Academics, and Gender Traits in Academics. These items include questions using a Likert-type scale, open response items, an extended personal response item, and checklist questions. The items were also broken into subsets which examine specific
areas in more depth than a general question could ascertain. Classifying question stems under item headings in order to minimize the visual appearance of the survey into manageable chunks seemed prudent since the target audience were middle school students and not adults. Had each item been set apart, the survey would have had 43 tasks to be completed, instead of the 17 item survey formatted into subsets. Fowler (2014) indicated that people are more apt to answer a survey that appears to have a smaller number of tasks rather than a long list of items one after another. Each category had its own page of items that once completed sent the participant on to the next page. In total, the survey had 6 pages.

The researcher created the survey using Google Forms, a web-based survey instrument. Using this service allowed the researcher to designate pages geared to specific areas of focus and allowed for the survey to be drafted in such a way that all changes were instantaneous and live on the web. It also allowed for the survey to use an html link to be connected from an external website so that survey participants had access to the survey from any computer with internet access. This was an important factor in the design of this survey since it was given to students using one of the computer labs at Small-town Middle and multiple sections of students were able to take the survey using the same computers during one school day. It also allowed them to take the survey without having to have a username and login, which the students do not have at Smalltown Middle, unlike many of the neighboring school districts.

The survey began with an introduction to the purpose of the survey which was intended to reiterate why the students were answering the survey questions and to also remind students that the survey, in no way, affected academic standing, both of which
were included on the letter that went home to the parents. The introduction to the survey was as follows:

I am a researcher from the University of South Carolina. I am working on a study about gender as an influence on academic performance and I would like your help. I am interested in learning more about your experiences and how they have shaped your thoughts and feelings about gender roles and their effects in school. Your parent/guardian has already said it is okay for you to be in the study, but it is up to you if you want to be in the study.

If you want to be in the study, you will be asked to do the following:

- Answer some written questions about your experiences with gender roles in school, how your friends and peers respond to academic success for males and females, and what you think your parents expect from you in regards to your academics.
- Any information you share with me will be private. No one except me will know what the answers to the questions were and because you will not be listing any information other than your gender, I will not be able to tell who wrote what. You do not have to help with this study. Being in the study is not related to your regular class work and will not help or hurt your grades. You can also drop out of the study at any time, for any reason, and you will not be in any trouble and no one will be mad at you. Please ask any questions you would like to about the study.

Since the targeted audience was determined by location and attendance, directly thereafter occurred the only demographic question. It asked the student which gender he
or she identified with in his or her day-to-day life and the answer choices are male, female, and I do not feel comfortable choosing at this time. The third option came out of research provided by Letts (1999) suggesting that by only offering a dichotomous set of gender roles, the norm that someone must only be male or female is propagated further and, since the purpose of the survey was to allow for authentic voices about gender in academics to be heard, it seemed necessary to offer a more open selection of choices for gender. It was also intended to frame the participants' lens of understanding going into the survey.

Pages 2 through 4 of the survey consisted of a single set of Likert-type items (4-6 items in the set), and 3-4 open response items that began with sentence starter prompts. The Likert-type items used a 4 option scale that includes strongly disagree, disagree, agree, and strongly agree. Each of these pages followed the same pattern because these were the pages that dealt with the conceptual framework's influential factors: schoolbased experiences, peer influences, and parental influences. Each page began with an explanation. For example, on the Social Experiences page it said:

The following questions deal with ways your friends influence how you may see gender playing a role in school. Some questions will have a scale you can use to answer. Other questions will ask you to type in your thoughts. If it asks you to type, do not worry about spelling; just try to give as much detail as you can for each question.

It was necessary to try to maintain a consistent amount of items and format so that the visual impact of the srvey did not inadvertently give more weight to one of the factors over the others. The open response items also followed the same structure and were
altered only toward their given category. For example, one sentence starter in school experiences said, "When it comes to school, males are good at..."" and the parental influence equivalent was, "When it comes to school, my parents think males are good at...". It was also important since the researcher was surveying a less mature audience to keep a consistent format to ensure ease of use and to help participants understand the tasks they were given (Fink, 2013).

Table 3.2 Distribution of Item Types by Contextual Factors

| Category of <br> Contextual <br> Factors | Likert Items | Open Response <br> Items | Checklist Items |
| :--- | :---: | :---: | :---: |
| School-based <br> Experiences | 6 | 4 | 0 |
| Social Experiences | 6 | 4 | 0 |
| Parental Influence | 4 | 3 | 0 |
| Gender Traits in <br> Academics | 0 | 1 | 14 |

The fifth page of the survey used a checklist format. This page began by saying, "Below you will see a list of academic traits. Please decide if you think these are associated more with being masculine (male), feminine (female), or both." Then the survey participants were given a list of 14 academic traits. They were only to choose one option per trait. The goal of this checklist was to see trends in what students deem masculine, feminine, or gender-neutral academic qualities.

The final page provided the students with an opportunity to give an extended open response. The instructions said, "Please give any personal thoughts or experiences you believe might provide a better picture of how being male or female relates to academic
performance as you have experienced in your life." Participants then had a text box that allowed up to 1000 characters in which to formulate their response. The goal of this question was to allow for authentic reflection on the part of the student so he or she was able to elaborate on personal experiences that were not necessarily ascertained in the questions prior. After the final open response was a brief statement of thanks from the researcher to the participants expressing gratitude for their input.

Piloting of Survey Questions. To ensure that the survey would be clear to the participants of the research study, the researcher enlisted the assistance of two former students, one male and one female, to read the survey after it was designed. These students were recent eighth grade graduates from Small-town Middle and therefore were similar to the targeted population of the study. Both students were honors level students. The male was Caucasian and the female was Hispanic.

Piloting the survey instrument was important in order to counteract any flaws in the design of the instrument before the survey was operational. Fowler (2014) recommended having a survey to be pretested by possible respondents to help address three possible problems:

1. Are the directions clear?
2. Do the questions make sense to the respondents?
3. Were there any problems understanding what was expected? (p. 104)

To pilot the most authentic application as possible, the students took the survey online using their laptops while in the presence of the researcher. After completing the survey, the pilot participants and the researcher went through the survey question by question and discussed any confusing wording or possible multiple interpretations.

Through the discussion, the pilot participants confirmed that authentic and individualized answers could be given and that the survey seemed to measure what was intended.

The piloting of the survey and subsequent discussion took approximately an hour. During that time, the researcher and pilot participants identified errors in usage, examined the format and structure of questions, and discussed possible points of confusion. Each pilot participant received a ten-dollar gift card to a local retailer as compensation for their time and feedback.

Sampling frame. The sampling frame for this research survey consisted of $938^{\text {th }}$ grade middle school students who were all enrolled at Small-town Middle on team 8-3. Because all available students in this demographic were included in the population of the survey, this survey qualified as a census of a convenience population (Fink, 2013, p. 87). A tally of students was compiled by the lead teacher on team 8-3 and she provided the number of students in attendance to the researcher on the day the survey was administered.

Due to the age of the participants, students and parents were given the opportunity to opt out of the survey prior to the survey administration date. The survey administration was given clearance in writing by the principal of Small-town Middle, but an informed consent letter was also sent home with the students and an electronic copy of the letter was made available to parents through the lead teacher's website and was sent to those parents who had an email on file with the lead teacher.

The actual population for the survey participants was less than the number of available participants due to absenteeism, parent request, and school based disciplinary measures (i.e. In-school suspension, out-of-school suspension). The team, 8-3, consisted
of a total of 104 students, but on the day of the survey only 93 students from team 8-3 took the survey as 1 student had opted out and 10 were absent or had been suspended until the end of the year.

Procedure. Administration of the survey was assigned for May $23^{\text {rd }}, 2017$ as it was a date deemed suitable by both the principal and lead teacher for team 8-3 at Smalltown Middle. Once the date had been determined, the lead teacher for team 8-3 sent home the informed consent letters with students on May $8^{\text {th }}, 2017$ and also made a copy of the letter available electronically to the parents through her website and through email to those parents who had one on file with her on the same day.

Through conversations the researcher had with the lead teacher and due to the sensitive nature of the topic of the survey, the researcher travelled to Small-town Middle on May $12^{\text {th }}, 2017$ to attend the morning team meeting for team 8-3. At the meeting, which last approximately 20 minutes, the researcher was introduced to the full population of the students on the team, was able to go back over the informed consent letter with the students to clarify any confusing points, and to answer any questions students may have about the process for the researcher. The researcher also reiterated the purpose of the survey, that students were not obligated in any way to take the survey, and that the information that was gathered from the survey would be used solely for the researcher's own personal educational pursuits and would not affect them in any harmful way.

The researcher and lead teacher discussed with the students the logistics for the day of the survey and what those who opted out would be doing instead: staying with the lead teacher in her room, and we discussed what students would do if they did not finish
the survey in the time frame of the class period: go to their next block with a pre-made team pass.

Students had until May $22^{\text {nd }}, 2017$ to return any opt out forms to the lead teacher. Once all forms were collected, the survey was uploaded onto the website for team 8-3's lead teacher the morning the survey was administered using a shorten URL link generated from Google forms.

The day of the survey administration, the lead teacher for team 8-3 escorted her classes of students to the designated computer lab during each class period. There was only 1 student who returned the opt out form who was in attendance that returned with the lead teacher to her room during her fourth period class. Students used the shortened html link from the teacher's website to complete the survey.

After initially discussing the survey with the lead teacher and principal, it was suggested that the researcher read the survey aloud for students who were struggling readers, English Language Learners, or students who have testing accommodations that allow for materials to be read to them. Those who participated in the survey remained in the lab with the researcher and the researcher read the aloud the survey in its entirety. Reading aloud to the entire group allowed for all participants to remain in the same location to complete the survey. Students were allowed, however, to take the survey at their own pace and they had the majority of the class period ( 58 minutes) in which to complete the survey. Since the students were teamed, the whole team of teachers had been made aware of the survey administration and had given consent for students to finish if need be and come to their academic class a little late. This was unnecessary as all students completed the survey within the time frame.

At the end of the given administration day, once all classes had the opportunity to report to the lab, the survey link was removed from the lead teacher's website and the researcher closed the survey for responses so that data was able to begin to be analyzed.

## Data Analysis

Analysis of the survey consisted of both quantitative and qualitative measures. Quantitative analysis of the survey was conducted using IBM SPSS statistics 24. Items from the Google from were exported into an excel document. Once in the Excel document the quantifiable data was recoded into numbers for easy transfer into SPSS. The first question asked students to identify their chosen gender. If a student selection "male," that was coded with a 2 . If a student selected "female," that was coded with a 1. Students who selected not to identify were coded with a 0 . The Likert-type items were recoded into numeric form: $0=$ Strongly Disagree, $1=$ Disagree, $2=$ Agree, and $3=$ Strongly Agree. For the fourteen item checklist for academic traits, respondents had three options: masculine, feminine, and both. Similar to the original demographic question, "masculine" received a code of 2 , "feminine" received a code of 1 , and "both" received a code of 0 .

Once items were imported into SPSS and numeric codes were labelled with qualifiers, items from the Likert-type scale sets and from the checklist were analyzed for central tendencies, and frequency. The researcher employed descriptive statistics to determine the number, mean, and standard deviation for each item in each set of scales for School Experiences, Social Influences (peers) and for Parental Influences. Items in each set were them added into additional variables labelled School, Peers, and Parents for
easy reference in SPSS. The researcher then compared those means and standard deviations of three domains using the Correlate function in SPSS.

For the items in the checklist of academic traits, descriptive statistics were employed to determine the number, mean, and standard deviation for each item.

Qualitative items were also extrapolated from the Google form into the Excel sheet and then were copied into a separate worksheet in order to be sorted and filtered within the Excel program. The researcher examined the open response items using the qualitative analysis process of structural coding. Structural-based coding is a question based code that both codes and initially categorizes the responses to examine comparable segments' commonalities, differences, and relationships that appear across respondents (Saldana, 2009).

The researcher used a combination of In-vivo and descriptive coding to develop sub-codes under each structural code to look for trends, themes, and patterns. Descriptive coding summarizes in short words or phrases the basic topic of a passage of qualitative data while In-vivo coding draws from the respondent's own language for codes to prioritize and honor the respondent's own voice (Glesne, 2011, Saldana, 2009). Initially the researcher examined each sentence starter by the gender of the respondent and then coded responses as positive or negative in nature. Then each response was examined looking specifically for patterns of language or repetitive verbiage used by the students. Afterwards, the researcher examined the comparison of positive and negative responses given by both males and females and looked for trends in the patterns of answers from the group as a whole.

## Reliability and Validity

Making sure the survey was both reliable and valid was a key component of creating a measure that would produce accurate results. Using internal consistency to assess the quality of survey would ensure that the results were reliable. This was done by using a Cronbach's Alpha statistical analysis which calculated "how well different items complement each other in their measurement of the same quality or dimension" (Fink, 2013, p. 66). Because the purpose of this survey was to measure personal attitudes and beliefs about the educational experience, the internal consistency needed to be high for it to prove reliable. The goal was to have the highest reliability coefficient possible, but a standard coefficient of .70 was the minimum criterion for adequate reliability (Fink, 2013, p.67).

Validity measures how "trustworthy" the data gathered in the survey is and through validity one can claim that the information is indeed accurate, credible, and plausible (Glesne, 2011, p. 49). There are several methods to confirm a survey is valid and the one that was employed in this particular research was content validity. Content validity means that the items in the survey can be validated by making sure that the questions accurately represent what is being measured (Fink, 2013, p. 67). This was done by using theory as a basis for item formation and by having experts examine the survey prior to its deployment. Using theory to create content validity meant that the survey used words, phrases, or ideas associated with the theories used to create the survey (Fink, 2013, p. 67). The survey used in this research focused on the social learning theory by Albert Bandura (1977) and in that theory children use observable data to determine how they wish to behave. The survey was consistent with the ideas presented in his theory in
that it broke down students' experiences and what they have observed into the categories of school environment experiences, peer influences, and parental influences which correlate to areas indicated by Bandura. Experts in the field of education and survey design also examined the survey as well as experts in the specific population of the survey participants as both the lead teacher and principal at Small-town middle were given the survey and allowed to give feedback to the researcher prior to the researcher submitting the survey for IRB approval.

## Ethical Procedures

Due to the age of the participants, the researcher obtained administrative permission to conduct research. All measures were also taken to make parents and guardians fully aware of the purpose and reasons for the study. Parents were given the information both electronically through access to the lead teacher's website and through email if they had an email on file, and through a hard copy. Also on the parent letter, the contact information of the researcher was made available as well as the contact of the principal and lead teacher from team 8-3 for any parents who wished to seek further information about the survey instrument or procedure process.

Once data was gathered, it was stored at the researcher's home in a secure location. After three years, all data will be destroyed. Participants were protected from harm by being informed of purpose for this research, by using an anonymous survey method, and through the use of informed consent forms for parents and guardians.

## Researcher Perspective

All data was collected solely by the researcher through the use of electronic means. The researcher, a former ELA teacher, recently transferred to a district level
position from a teaching position at Small-town Middle. The students in this study were never directly taught by the researcher; however, due to the nature of the locale and since this is the only school serving this population for this district, it might very well be possible that the researcher taught the participants' siblings and may know the participants beyond of the realm of the study. The researcher was directly involved in introducing the study to the participants and was the one who read the survey aloud as the participants took the survey. Since the lead teacher remained in her classroom with the student who could participate, the researcher was the sole moderator during the duration of the time it took for the students to complete the study.

## Summary

This study sought to determine the contextual factors that influence the formation of gender stereotypes in schools by using the Social Learning Theory's model that behaviors are internalized from what is observed, and are then reproduced when it is deemed acceptable to perform in such a way (Bandura, 1977). In conjunction, the study also sought to evaluate how gender stereotypes affect academic success. Research has shown that the educational gender gap is an area of concern for most western industrialized countries (Legewie, \& DiPrete, 2012).

In order to best answer the research questions, a mixed methods survey design was employed because this allowed for both quantitative and qualitative data to be extrapolated. By breaking the survey into contextual factors that most likely contributed to the formation of normed gender behaviors: school experiences, peers, and parental
influences, the researcher hoped to glean salient insight into how these gender stereotypes were formed and propagated for the eighth grade students at Small-town Middle.

## Chapter 4

## Results

This study investigated the possible effect that the contextual factors of school experiences, peers, and parental influence may have had on gender stereotypes for rural eighth grade middle school students that led to differing academic outcomes for male and female students. This chapter represents the results from data collected from a survey that used both Likert-type items and checklist items for a quantitative review, and open response items for a qualitative review to address the issue of the educational gender gap at Small-town Middle.

## Restatement of the Problem

Research has indicated that males generally underperform relative to their female counterparts in most areas of the industrialized world (Legewie, \& DiPrete, 2012). Specifically, for Small-town Middle, the male students have consistently, over the last 4 testing cycles, had less of the population meet the state expectation for proficient in both reading and math. The growth for this subset has also been minimal. In contrast, the female population performs at or above the state's cut score for proficient in both areas and this group has also seen a steady increase in percent meeting or exceeding state expectation over the last four years. As seen in Figure 1.1, the female population at Small-town Middle has a proven record of outperforming the male population in both reading and math.

Similarly, enrollment in advanced coursework in the eighth grade, English I Honors, has historically had more female students than male and the End of Course (EOC) test given by the state has, on average, seen the female subset consecutively produce a higher mean. This is a significant factor because it reproduces the staggering difference in male and female performance for this school in a very different population: gifted and talented versus regular education. In both tracks, the results are the same. The females outperform the males.

This study sought to determine how these rural middle school students form their ideas of what males and females can do in school. Explicitly, the study looked at three possible areas of influence for the formation of gender stereotypes for this subset of students: school experience, social influences through peer interaction, and parental influence. Using both open response and close-ended survey items, the survey sought to garner both a qualitative understanding of students' perceptions as well as a quantitative measure of which factor was most influential.

## Restatement of the Research Questions

The context of this research study focused on how the middle school students in one southern rural middle school, Small-town Middle, perceive gender roles and stereotypes as an influence on their academic achievement. There were three contributing factors examined: school experiences, social factors (i.e. peer relations), and parental influence. Specifically, the goal of this study was to identify the degree to which these factors play a role in the formation of gender stereotypes and how these roles create gender norms and expectations that cause the students to have variations in attitude and behaviors towards being academically successful.

The research questions that guide the study are as follows:

1. How do a small sample of rural eighth grade students perceive gender to influence academic performance?
2. Which contextual factors including school experiences, peers, and parental influence most directly contribute to the formation of gender roles in the academic setting?
3. How do the contextual factors of school experiences, peers, and parents influence beliefs about gender roles as they pertain to academic success?
4. Which academic traits are most often associated with which gender roles?

## Description of Research Sample

Students at Small-town middle are teamed which means that of the 400 eighth grade students roughly 100 are on each team. The sampling frame for this research survey consisted of $938^{\text {th }}$ grade middle school students who were all enrolled at Smalltown Middle on team 8-3. The team, 8-3, consisted of a total of 104 students, but on the day of the survey only 93 students from team 8-3 took the survey as 1 student had opted out and 10 were absent or had been suspended until the end of the year.

## Quantitative Results: Descriptive Statistics

The quantitative data from the survey was used to answer research question 2:
"Which contextual factors out of school experiences, peers, and parental influence most directly contribute to the formation of gender roles in the academic setting?" and research question 4: "Which academic traits are most often associated with which gender roles?"

Using SPSS, the researcher analyzed items from the Likert-type scale sets for central tendencies, and frequency by employing descriptive statistics to determine the number, mean, and standard deviation for each item in each set of scales for School Experiences, Social Influences (Peers) and for Parental Influences. Items in each set were the n added into additional variables labelled School, Peers, and Parents for easy reference in SPSS. The researcher then compared those means and standard deviations of the three scales using the Correlate function in SPSS. Reliability for each scale was also derived using Cronbach's Alpha to determine the reliability of overall scale and the items within the scale. The researcher also examined the scale variances for each scale set to determine the overall spread of student responses and compared that variance with the frequencies of item statistics per scale. It was this overlay of the data that allowed for the most accurate interpretations of the data to be extrapolated.

Research Question 2 Which contextual factors including school experiences, peers, and parental influence most directly contribute to the formation of gender roles in the academic setting?

Because the value of the reliability coefficient, Cronbach's Alpha, is greater than .70, the items within this survey are said to have a relatively high internal consistency and is considered "acceptable" in terms of consistency. Of the three scales, Peers had the highest reliability rating (.791) followed by School Experiences (.716), while Parental Influences was the least reliable of the scales in the survey (.677), as shown in Table 4.1.

Table 4.1 Cronbach's Alpha Reliability per Scale

| Scales | Cronbach's Alpha | N of Items |
| :--- | :---: | :---: |
| School Experiences | .72 | 6 |
| Peers | .80 | 6 |
| Parental Influence | .68 | 4 |

As seen in Table 4.2, items from the School Experiences Scale were tested for item reliability. The only improvement in the consistency of the survey would come from deleting the "Males/ Females are equally successful academically" item from the School Experience scale which, if deleted, would raise the Cronbach's Alpha score to a .743 versus the original .716 it received originally. The removal of any other items would make the survey less consistent. The removal of the item "Males/ females get called on equally" would have the most dramatic impact on reliability, dropping the overall Cronbach's Alpha score to .627 versus the original .716.

Table 4.2 School Experiences Reliability Item-Total Statistics

| Scale Item | Scale Mean <br> if Item <br> Deleted | Cronbach's <br> Alpha if <br> Item <br> Deleted |
| :--- | :--- | :---: |
| Teachers treat males/ females the same | 8.68 | .67 |
| Teachers have the same expectations | 8.31 | .69 |
| Teachers believe males/ females are equally smart | 8.48 | .68 |
| Males/ females get called on equally | 8.76 | .63 |
| Males/ females are equally comfortable sharing | 9.05 | .65 |
| Males/ Females are equally successful academically | 8.65 | .74 |

Likewise, as seen in Table 4.3, items from the Peers Scale were tested for item reliability. However, unlike the School Experiences Scale, removing any single item in the Peers scale would result in a lower consistency. As indicated by the results, the removal of all items in this scale dropped the overall Cronbach's Alpha score of below the original .791. The items that would have the most negative impact if removed were "Academic success is socially acceptable for males" and "Academic success is socially acceptable for females" which would cause the overall Cronbach's Alpha score to drop to a .732 versus the original score of a .791 .

Table 4.3 Peer Reliability Item-Total Statistics

| Scale Item | Scale Mean <br> if Item <br> Deleted | Cronbach's <br> Alpha if <br> Item <br> Deleted |
| :--- | :--- | :--- |
| Males friends do well academically | 11.13 | .77 |
| Female friends do well academically | 10.75 | .77 |
| Academic success is socially acceptable for males | 10.78 | .73 |
| Academic success is socially acceptable for females | 10.51 | .73 |
| Males are proud of academic success | 10.77 | .77 |
| Females are proud of academic success | 10.41 | .78 |

The final scale, Parental Influences, received a Cronbach's Alpha score of . 671 which is slightly lower than the target of the .70 mark to be considered "acceptable" in terms of consistency. However, removal of any item within this scale would only further decrease the consistency rating of the scale as seen in Table 4.4. This scale included less items than the previous two scales and was also the only scale to contain reverse coded items. Both "Parental expectation are linked to gender" and "Parental expectations
would change if gender were different" were the reverse coded items, meaning if a student selected "Strongly Disagree" this was actually a more positive response unlike every other item in the Likert-type scales. Though the Cronbach's Alpha test was run with the original data and not the recoded data, the lower reliability rating begs to question the effects of the reverse coded items on the reliability rating of the scale.

Table 4.4 Parental Influence Reliability Item-Total Statistics

| Scale Item | Scale <br> Mean if <br> Item <br> Deleted | Cronbach's <br> Alpha if <br> Item <br> Deleted |
| :--- | :---: | :---: |
| Parents believe males/ females have equally ability | 6.58 | .67 |
| Parents have equal expectations for males/ females | 6.75 | .62 |
| Parental expectations are linked to gender | 7.12 | .59 |
| Parental expectations would change if gender were different | 6.74 | .54 |

When examining the central tendencies for each scale, mean, standard deviation, median, and mode were calculated as seen in Table 4.5. Median and mode helped deepen the understanding of the data for the researcher by showing other representations of how students responded. It is important to note that the first two scales, School Experiences and Peers had the same possible scale variance, $0-18$. There were 6 items in the scale and each item could receive a score as follows: Strongly Disagree $=0$, Disagree $=1$, Agree $=$ 2, and Strongly Agree $=3$. Therefore, the lowest a student might score would be 0 and the highest score would be an 18. For the Parental Influence scale there were only 4 items. The scale variance was therefore 0-12 using the same Likert-type descriptors: Strongly Disagree $=0$, Disagree $=1$, Agree $=2$, and Strongly Agree $=3$.

The variance of possible responses is important to note when comparing the mean to the median and mode. For example, in the School Experience scale, the mean was 10.3871 , the median was 10 and the mode was 8 . Therefore, the data suggest that even though the mode (the most recurring scale score) is lower than the mean, the median supports the mean as the more accurate measure of student response.

For the Peers scale, mean was a 12.8710 , the median score was a 13 , and the mode was a 14. In this scale, the mode was a more positive response scale score; however, the median and mode are almost identical and therefore justify the mean as the more accurate measure of student response.

Table 4.5 Central Tendencies per Scale

| Scales | N | Mean | Std. <br> Deviations | Median | Mode |
| :--- | ---: | ---: | ---: | ---: | ---: |
| School Experiences | 93 | 10.39 | 3.18 | 10 | 8 |
| Peers | 93 | 12.87 | 3.24 | 13 | 14 |
| Parental Influence | 93 | 6.53 | 1.98 | 6 | 6 |

For the Parental Influences scale, the mean was a 6.5269 , the median was a 6 , and the mode was a 6. It is important to note that for the Parental Influence scale there were two reverse coded items, as mentioned earlier. Therefore, whereas in the School Experiences and Peers scales the data would suggest the higher the mean the more positive the responses of the students, for this scale the researcher concluded the more average the response the more positive the response if the item statistics supported that the majority of students selected the following: Strongly Agree for items 1 and 2 in this
scale equaling a 6 and a Strongly Disagree for items 3 and 4 equaling a 0 , thus resulting in the most positive score: a 6 for the scale.

The researcher also deemed it necessary to examine the mean scores for each scale by gender to see if possible disparities lie between groups of student respondents. Of the total survey population, 45 student respondents identified as male, 45 identified as female and 3 of the participants chose not to identify their gender. Due to the low number in the latter group, the researcher chose to leave those three respondents out of the Group Statistics by Gender per Scale analysis due to the statistically insignificant impact they would have on the data. As shown in Table 4.6, female participants had a slightly higher mean than the male respondents for each scale which would indicate their responses were marginally more positive in nature. However, standard deviations for each group were very close.

Table 4.6 Group Statistic by Gender per Scale

| Scales | Gender | N | Mean | Std. <br> Deviations |
| :--- | :--- | :--- | :---: | :--- |
| School Experiences | Female | 45 | 10.98 | 3.21 |
|  | Male | 45 | 9.93 | 3.06 |
| Peers | Female | 45 | 13.27 | 3.08 |
|  | Male | 45 | 12.38 | 3.39 |
| Parental Influence | Female | 45 | 6.76 | 1.80 |
|  | Male | 45 | 6.22 | 2.04 |

Examining the frequency of scale variance for each scale also helped the researcher to determine where the majority of respondents fell in the spectrum of the questioning. For example, when comparing the variance of responses for the School Experiences scale to the Peers scale, since they both had a possible range of 0-18 as the
possible spectrum of scores, the data clearly showed that the majority of respondents had a more positive response to the Likert-type items in the Peers scale than to those in the School Experiences Scale, as shown in Figures 4.1 and 4.2.


Figure 4.1 Frequency of scale score variance for School Experiences


Figure 4.2 Frequency of scale score variance for Peers

For the School Experiences scale, the majority of responses (64 of the total 93) fell between the ranges of 8-12 on the 18- point scale with the highest number of responses, 16 responses, falling on the scale score of 8 . Conversely, in the Peers scale, the majority of responses (64 of the total 93 ) feel between the 11 and 16 scale score mark with the majority of students falling on the scale score of 14 out of the possible 18 .

In Figure 4.3, the frequency of scale variance for the Parental Influence scale depicted a stark contrast to the previous two scales. Though it was on a smaller scale, 012 versus the $0-18$ as was utilized in the School Experiences and Peers, and because of the two reverse coded items, the majority of students fell in the 6-8 range (66 of the total 93).


Figure 4.3 Frequency of scale score variance for Parental Influences

While this would indicate that this was the most positive scale that the students responded to, the researcher also had to examine frequency statistics for each item in the scale because, while the 6 is the most positive scale score by virtue of the previously
stated scenario: a Strongly Agree for items 1 and 2 in this scale would equal a 6 and a Strongly Disagree for items 3 and 4 would equal a 0 , thus resulting in the most positive score: a 6 for the scale, the reverse is also possible in that a student may have selected Strongly Disagree for items 1 and 2 which would have equaled 0 and then have selected Strongly Agree for items 3 and 4 which would have equaled 6, totaling in a scale score of 6. Therefore, the researcher could not assume that because 39 of the 93 respondents had a scale score of 6 that this was necessarily a positive rating. Further data analysis was needed.

Table 4.7 Frequency Statistics by Item for Parental Influence

| Items from Parental Expectations | Likert-type Scale | Frequency | Percent |
| :--- | :--- | :--- | :--- |
| Scale |  |  |  |


| Parents believe males/ females have | Strongly Disagree | 1 | 1.1 |
| :--- | :--- | ---: | ---: |
| equal ability | Disagree | 3 | 3.2 |
|  | Agree | 39 | 41.9 |
|  | Strongly Agree | 50 | 53.8 |
| Parents have equal expectations for | Strongly Disagree | 4 | 4.3 |
| males/ females | Disagree | 9 | 9.7 |
|  | Agree | 34 | 36.6 |
|  | Strongly Agree | 46 | 49.5 |
| Parental expectations are linked to | Strongly Disagree | 38 | 40.9 |
| gender | Disagree | 24 | 25.8 |
|  | Agree | 19 | 20.4 |
|  | Strongly Agree | 12 | 12.9 |
| Parental expectations would change if | Strongly Disagree | 53 | 57.0 |
| gender were different | Disagree | 24 | 25.8 |
|  | Agree | 9 | 9.7 |
|  | Strongly Agree | 7 | 7.5 |

Examining the frequency statistics per item in each scale allowed the researcher to further determine if the modes in the scale score variances were accurate and if they
were, indeed, positive in nature. According to the item statistic for the Parental Influence scale, as seen in Table 4.7, the scale score of 6 would indicate a positive response and the majority of respondents ( 89 of the total 93 ) selected either Agree or Strongly Agree for "Parents believe males/ females have equal ability." Similarly, 80 of the total 93 respondents selected Agree or Strongly Agree for "Parents have equal expectations for males/ females." For the reverse item "Parental expectations are linked to gender," 62 of the respondents selected Disagree or Strongly Disagree. Similarly, for the final item in the scale, which was also a reverse item, 77 of the participants selected Disagree or Strongly Disagree for "Parents expectations would change is gender were different."

While the item statistics helped to clarify questions about variance for the Parental Influence scale, they are also important for the other scale to help identify possible areas of influence by examining any high or low trends among the response.

As seen in Table 4.8 Frequency Statistics by Item for School Experiences, the data shows that students participants had the most positive reaction to the item "Teachers have the same expectations" with 72 of the respondents selecting Agree or Strongly Agree. Comparably, 69 of the 93 respondents selected Agree or Strongly Agree to the item "Teachers believe males/ females are equally smart." However, in a shift toward the negative, 41 respondents selected Disagree or Strongly Disagree for the item "Males/ females get called on equally" and a glaring 52 students selected Disagree or Strongly Disagree when responding to the scale item "Males/ Females are equally comfortable sharing."

Table 4.8 Frequency Statistics by Item for School Experiences

| Items from School Experiences | Likert-type Scale | Frequency | Percent |
| :--- | :--- | :--- | :--- |
| Scale |  |  |  |


| Teachers treat males/ females the | Strongly Disagree | 9 | 9.7 |
| :--- | :--- | ---: | ---: |
| same | Disagree | 24 | 25.8 |
|  | Agree | 45 | 48.4 |
|  | Strongly Agree | 15 | 16.1 |
| Teachers have the same expectations | Strongly Disagree | 2 | 2.2 |
|  | Disagree | 17 | 18.3 |
|  | Agree | 46 | 49.5 |
|  | Strongly Agree | 28 | 30.1 |
|  |  |  |  |
|  | Strongly Disagree | 3 | 3.2 |
| Teachers believe males/ females are | Disagree | 21 | 22.6 |
| equally smart | Agree | 51 | 54.8 |
|  | Strongly Agree | 18 | 19.4 |
|  | Strongly Disagree | 7 | 7.5 |
| Males/ females get called on equally | 34 | 36.6 |  |
|  | Disagree | 39 | 41.9 |
|  | Agree | 14.0 |  |
|  | Strongly Agree | 13 |  |
|  |  |  | 19.4 |
|  | Strongly Disagree | 18 | 37.6 |
|  | Disagree | 35 | 33.3 |
|  | Agree | 31 | 9.7 |
|  | Strongly Agree | 9 | 8.6 |
| Males/ females are equally | Strongly Disagree | 8 | 26.9 |
|  | Disagree | 25 | 46.2 |
| Males/ Females are equally successful |  | 43 | 18.3 |

The items in the Peers scale, had to be examined a bit differently as each item was set up in a pair. Statements were either about males or females in the school setting, how they were perceived by others, and about how they may react to particular academic situations. Therefore, it is important to note if the respondents replied in similar fashion to the statements in the pair or if there was a discrepancy in how the respondents answered as shown in Table 4.9.

Table 4.9 Frequency Statistics by Item for Peers

| Items from Social Experiences Scale | Likert-type Scale | Frequency | Percent |
| :--- | :--- | ---: | ---: |
|  |  |  |  |
| Males friends do well academically | Strongly Disagree | 4 | 4.3 |
|  | Disagree | 30 | 32.3 |
|  | Agree | 45 | 48.4 |
|  | Strongly Agree | 14 | 15.1 |
|  |  |  |  |
| Female friends do well academically | Strongly Disagree | 3 | 3.2 |
|  | Disagree | 6 | 6.5 |
|  | Agree | 61 | 65.6 |
|  | Strongly Agree | 23 | 24.7 |
|  |  |  |  |
|  | Strongly Disagree | 4 | 4.3 |
|  | Disagree | 15 | 16.1 |
| Academic success is socially | Agree | 43 | 46.2 |
| acceptable for males | Strongly Agree | 31 | 33.3 |
|  |  |  |  |
|  | Strongly Disagree | 4 | 4.3 |
|  | Disagree | 5 | 5.4 |
| Academic success is socially | Agree | 39.8 |  |
| acceptable for females | Strongly Agree | 47 | 50.5 |
|  |  |  |  |
|  | Strongly Disagree | 6 | 6.5 |
| Males are proud of academic success | Disagree | 15 | 16.1 |
|  | Agree | 38.7 |  |
|  | Strongly Agree | 36 | 38.7 |
| Females are proud of academic success | Strongly Disagree | 2 | 2.2 |
|  | Disagree | 5 | 5.4 |
|  | Agree | 36.6 |  |
|  | Strongly Agree | 52 | 55.9 |

Of the three sets, the one with the largest discrepancy of answers was between the items, "Male friends do well academically" and "Female friends do well academically." For the first item, the one referencing males, 34 of the 93 respondents selected Disagree or Strongly Disagree, which is glaringly contrary to the 9 respondents who selected Disagree or Strongly Disagree to the variation of that same statement about Females. Put in different terms, 84 of the 93 respondents selected Agree or Strongly Agree to the item
"Females friends do well academically," while only 59 said the same about their male friends.

However, on the other end of the spectrum, the respondents had very similar reactions to the set of items "Males are proud of academic success" and "Females are proud of academic success." The first in this set received 72 responses that were either Agree or Strongly Agree while the second item in the set received 76 Agrees or Strongly Agrees. This was the closest set of answers for any of the three sets in this scale.

Research Question 4 Which academic traits are most often associated with which gender roles?

To answer this question, the survey had the students decide if 14 academic areas were considered masculine, feminine, or both. Those areas included:

- Being a good reader
- Being good at mathematics
- Doing well in science
- Doing well in social studies
- Being artistically skilled
- Being musically talented
- Being mechanically inclined
- Working well in groups
- Working well with a single partner
- Working well individually
- Excelling with technology
- Being active in physical education
- Being a good writer
- Having neat hand writing

For the items in the checklist of academic traits, the researcher derived frequencies and percentages using SPSS for each area and then the areas were categorized into three major themes: Academic Subjects (Reading, Writing, Math, Science, and Social Studies), Prime Work Scenarios (Individual, Partner, or Group) and Academic Traits, (Physical Education, Technology, Art, Mechanically Inclined, Music, and Neat Handwriting).


Figure 4.4 Frequency of gender selection by academic subjects
As shown in Figure 4.4 for academic subjects, the student respondents overall felt that math, science, and social studies were areas where both males and females excelled as each category had 66,64 , and 66 of the total number of respondents indicating that it
was a "Both" area. The subject area that had the largest gender identified selection was Writing with 47 of the respondents indicating it was an area which was considered more "feminine;" likewise, reading had a large number of participants specifying it was an area deemed more "feminine" in nature with 33 selecting it as a "feminine" area. Social Studies received the most "masculine" responses with 20 respondents identifying it as a masculine area. However, Reading and Social Studies each had a significant portion of participants selecting them as areas where "Both" males and females excelled.


Figure 4.5 Frequency of gender selection for work scenarios

Similar to the subject areas results, student respondents indicated that most work scenarios one might encounter in the academic setting are not typically perceived to be gender specific in nature. As seen in Figure 4.5, both Partner and Group work had 63 of the total 93 participants indicating that this was an area "Both" excelled in, while individual work lagged behind with 55 responses. Individual work had the largest
selection of respondents designating one gender over the other with 25 indicating that it may be considered a more "feminine" trait.

As shown in Figure 4.6 for academic traits, the student responses varied more drastically than they had in regards to the subject areas. Most pointedly, 60 of the 93 respondents indicated that being mechanically inclined was a masculine trait while neat handwriting had the most gendered identified responses with 71 students indicating that that was a feminine trait. Being active in Physical Education was identified by 49 students as a masculine trait while on the other hand, being artistically skilled was identified by 47 of the respondents as a feminine trait.


Figure 4.6 Frequency of gender selection by academic traits

Excelling in technology and being musically talented were the only academic traits that had the majority of students indicate "Both." However, even in these areas
there were still large pockets that classified these areas as masculine or feminine: 29 identified technology as a masculine trait and 35 identified music as a feminine trait.

## Quantitative Results: Inferential Statistics

The researcher tested the assumption of normality by running the Shapiro-Wilk test using SPSS. According to Laerd Statistics (n.d.), "if the Sig. value of the ShapiroWilk Test is greater than 0.05 , the data is normal. If it is below 0.05 , the data significantly deviate from a normal distribution." The Sig. value for School Experiences was .010 for females and .092 for males. For Sig value for Peers was .043 for females and .002 for males. In the final scale, Parental Influences, the Sig. value was .000 for females and .001 for males.

Therefore, because the data in this survey was determined not to be normally distributed, it was necessary for the researcher to employ a Mann-Whitney U test to determine if there were any differences between the independent variable of gender upon the dependent variables of School Experiences, Peers, and Parental Influence. Using the null hypothesis that one's own gender does not affect how he or she internalizes gender stereotypes as they pertain to academic success, the results were then used to help the researcher determine if this null hypothesis should be rejected in favor of an alternate hypothesis that gender does affect how one internalizes gender stereotypes about academic success.

Table 4.10 Test Statistics for Mann-Whitney U Test

| Scales | Gender | $\mathbf{N}$ | Mean <br> Rank | Sum of <br> Ranks | Mann- <br> Whitney <br> U | Asymph. <br> Sig(2-tailed) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| School Experiences | Female <br> Male | 45 | 48.93 | 2202.00 | 858.00 | .21 |
| Peers | 42.07 | 1893.00 |  |  |  |  |
|  | Female | 45 | 48.52 | 2183.50 | 876.50 | .27 |
| Parental Influence | Female | 45 | 48.94 | 2202.50 | 857.50 | .19 |
|  | Male | 45 | 42.48 | 1911.50 |  |  |

As shown in Table 4.10, the mean rank for females is higher than that of the male respondents, however, for each of the three scales, the p-value (Asymp. Sig. (2-tailed)) is greater than the alpha level of 0.05 ( $95 \%$ confidence interval). This means that the researcher could not reject the null hypothesis in favor of the alternative hypothesis for any of the three scales. In other words, the mean rankings of the two genders in this study are not significantly statistically different from one another.

## Qualitative Analysis

Overall, of the 93 respondents, there was an almost perfect split with 45 identifying as male and 45 identifying as female. However, three of the respondents chose not to self-identify as either gender. Due to the low frequency of non-identifying participants, the researcher chose to examine solely the male and female responses during the qualitative analyses as it allowed for possible divergences to be examined in the data. For this study, gender, acting as the independent variable, provided the lens in which the contextual factors were examined. Once all qualitative data from the contextual factors in the survey were divided, the researcher then devised a code that captured what she saw in
each segment. Data gathered from the survey was coded in each portion into positive and negative responses. Afterwards, responses were then categorized into academic or nonacademic areas and traits.

The open response items were examined using the qualitative analysis process of structural coding. Structural-based coding is a question based code that both codes and initially categorizes the responses to examine comparable segments' commonalities, differences, and relationships that appear across respondents (Saldana, 2009). The researcher then used a combination of In-vivo and descriptive coding to develop subcodes under each structural code to look for trends, themes, and patterns. Descriptive coding summarizes in short words or phrases the basic topic of a passage of qualitative data while In-vivo coding draws from the respondent's own language for codes to prioritize and honor the respondent's own voice (Glesne, 2011, Saldana, 2009).

Research Question 1 How do a small sample of rural eighth grade students perceive gender to influence academic performance?

The very last question on the survey allowed for students to provide an extended response about their overall experience of gender stereotyping in school as it related to academic success. The directions stated, "Please give any personal thoughts or experiences you believe might provide a better picture of how being male or female relates to academic performance as you have experienced in your life." Directly following was the sentence starter, "In my experience..." and a text box that allowed for 1000 characters. Many student participants wrote lengthy paragraphs. Some only wrote a
sentence or two. All students provided some sort of answer, even if it was to indicate that they had not had any negative or life altering experience in this capacity.

Of the female respondents, 7 of the 45 indicated that they had never had any experience dealing with gender stereotypes in the academic setting. Two females wrote about how school was difficult for them, but did not mention if gender had a role in this or not. Seventeen of the female respondents provided answers that were more generic in nature in regards to how gender should not affect students or how all students have equal abilities but success is a choice. Some of the points they made were:

Females 20: In my experience, I think males and females can do the same things [sic] if they work hard and try. A girl should be able to play football if she wants and is good at it. A boy should be able to cheer if he wants and is good at it. Gender shouldn't have anything to do with what you do in school or outside of school. If you don't study or anything in school and you're a girl then you aren't going to make good grades, same goes for a meal [sic]. But if you study and put your mind to it and you are a girl then you will make good grades, same for a male. It depends on the person and how much they want to do that or how much they want good grades. Gender does not matter. The person doing it has to decide to study and play sports. Not the Gender!!!

Female 33: In my experience, I honestly don't see any differences between male and/ or female academically. Guys are capable of passing/ failing, girls are just as capable of passing/ failing. A guy can shoot a basket, a girl can just as well shoot a basket. Like, I don't get why people are so sexist. Everyone can do what
they want, boy, girl, black, white, pink, or purple, anyone's capable of whatever no matter what their gender is.

In contrast to the previous responses, 10 female respondents gave details of specific experiences related to gender stereotypes in school that left a strong impression on them. Three of those female participants mentioned gym class or Physical Education (PE) classes specifically as places where these experiences tended to take place. One mentioned the participation in single gender classrooms. Some of those experiences were:

Female 12: In my experience, males are treated differently by PE teachers and are usually made to be the team leader. Males are chosen to do heavy lifting for any teacher and teachers never ask a female to do heavy lifting for them. They usually ask females to be their personal helpers and run errands for the teacher and nothing more.

Female 39: In my experience, my first quarter activity teacher would always talk about how well the ladies did on things and how bad the males did. She would make us write sentences and all the males had bad handwriting so she would throw their papers out and give them zeros. As a female, I see the males go easy on us in PE. When we play games, if a guy makes a shot it is only one point but if a female makes it, it counts as two points. It makes me upset that they think females can't do as good as males in sports. Some females are actually better at some sports than males, but we never get a chance to show it because they always make it easy on the females.

Female 44:In my experience, take this example, in third grade, my dad thought it would be a great idea to put me in an all-girls class (worst idea he could ever come up with now that I think about it!) We went on a field trip with the all-boys class to a mountain park, I remember both of the classes racing to the top, the girls won and the fellow male members were pouting-given the nine-year-old [sic] we were, we started shouting "Girls rule! Girls Rule!" over and over again. I didn't think much about it at the time [sic] but now I see we were driven by our older peers to think one gender is better than the other when we really all [sic] equal.

Unlike the female portion of participants, not a single male indicated that he had never had experiences with gender stereotypes in school. Ten indicated that males and females were equal in ability and should be treated as such, 7 expressed dissatisfactions with school and with teachers in general, and 19 indicated that females are more successful when it comes to school than males due to a variety of reasons. Some of the points made they made were:

Male 4: In my experience males are treated like they aren't as smart as girls bc [sic] girls like school more bc [sic] they like to be teachers and stuff like that. Boys like to be outside doing things and getting their hands dirty like they should be bc [sic] I know there is a lot more ladies teaching school than there are boys just like there are a lot more boys in the army than girls.

Male 10-: In my experience, females have always been more academically inclined at homework and school in general. Males on the other hand are better at
sports and things outside of school such as baseball, basketball, and tennis. I personally say men and females are totally different. I think all girls love school/ reading as men hate school and everything.

Male 39: In my experience, being a boy you get treated different. They treat you more tough. They treat girls like they can't take any hard feelings. Plus, they treat girls more smart and treat us more dumb.

While many of the responses by the participants that indicated there was, in fact, a difference in how males and females were treated in school were broad in nature, 3 of the male contributors mentioned specific experiences they had with a teacher or in the academic setting that dealt with gender stereotypes. All described experiences in the elementary setting while one was specifically focused on an experience in the single-sex classroom.

Male 15: In my experience, I have been in a only male class and it was a nightmare. Now I am socially awkward and have a hard time with trust and with people. I believe there should not be separate gender classes.

Male 16: In my experience, when I was in $3^{\text {rd }}$ grade my teacher had us take a vocab test. There was this really smart girl in my class who always made 100s on these but this time she didn't but I did. So when she was passing them out she looked at Abby and said "What happened this time?" Abby couldn't answer her. So when she got to me she looked at me and said "Did you cheat?" She asked it in the form of a joke but I could tell she didn't think I was smart enough to make a 100 on the test. I think it was because of the color of my skin and the gender I am.

Male 45: In my experience, as I start getting older, I start realizing that some things I thought were just odd behavior from a teacher in the past are actually a breach of equality. For example, in $5^{\text {th }}$ grade I had a teacher who was obviously more appreciative towards female students. If a male student turned in a piece of work, she would just take it. But if it were a female, even if they did just as good a job, they would be congratulated and praised. I believe this may be because of the fact that most teachers are female. And I'm positive there are male teachers that appreciate male students more. The actual performance of male and females are typically quite equal but sometimes views are skewed.

Like the final thought in the example above, many of the male respondents gave a mixed response indicating that while females may be given an advantage, they believed students should all be treated the same. In contrast, 10 respondents did not indicate any difference in how males or females are treated and solely focused on the even playing field both genders deserve and have access to in the school setting. Out of the 10 respondents who claimed that males and females were equal in nature, some of their claims were:

Male 21: In my experience, I think that both males and females have the ability to do well academically. The only reason people may not see that is that some males/ females have the actual want to do well whereas others don't really care one way or another. Some students feel as if they should do well in school to do well in life and that is basically the general idea of have [sic] school in the first place- so that one day all the knowledge will help you do what you what you've always wanted to, and that, my friends, requires more than just knowledge; that
requires the need to want to pursue that knowledge and goal. Whether you are a male or female, it doesn't matter because you still have the potential to do well and that's what really counts.

Male 35: In my experience, males and females have no difference academically. The only difference is body parts, there is no real difference between genders. Some women are academically failing, some men are academically failing. The only difference is women are small and men are large.

While this question provided a much larger view of the issue, the survey also contained several other sentence starters that were geared more specifically towards the contextual factors of school experiences, peers, and parental influence.

Research Question 3 How do the contextual factors of school experiences, peers, and parental influence effect beliefs about gender roles as they pertain to academic success?

To best answer this question, each contextual factor was examined separately. In the survey, School Experiences appeared first and offered student respondents four open ended sentences starters that allowed for personalized and individualized answers to be produced. Those sentences starters were:

Teachers think females are...
Teachers think males are...
When it comes to school, males are good at ...

When it comes to school, females are good at...

From the first two open ended items, positive and negative responses were coded. The second pair of open ended items were coded by academic and nonacademic traits. Tables 4.10 and 4.11 show the culminating tallies for each.

It is important to note that cumulatively, both males and females responded more positively to the prompt, "Teachers think females are..." and they also cumulatively responded more negatively to the prompt "Teachers think males are...". Regardless of the gender, the responses were strikingly similar in terms of verbiage to describe each gender as a teacher might view them.

Table 4.11 Frequency of Positive Responses for School Experiences

|  | Teachers think females are... | Teachers <br> think <br> males <br> are... | When it comes to school, males are good at... | When it comes to school, females are good at... |
| :---: | :---: | :---: | :---: | :---: |
| Female | 33 | 14 | Math-6 <br> Science- 3 <br> SS- 2 <br> Reading Aloud- 1 <br> Answering Questions- <br> 2 | Academics- 19 <br> Listening- 3 <br> Being Helpful- 3 <br> Being Organized- 3 <br> ELA- 5 <br> Math- 2 <br> Science- 4 |
| Male | 38 | 17 | Academics- 2 <br> PE- 4 <br> Math- 7 <br> SS- 4 <br> ELA- 3 <br> Science- 4 <br> Hands-on Learning- 3 <br> Talking Aloud- 3 | Academics- 19 <br> Paying Attention- 4 <br> Being Helpful- 2 <br> Math- 6 <br> SS- 5 <br> ELA- 7 <br> Science- 6 <br> Arts Courses- 4 |
| Total | 71 | 31 |  |  |

In the positive responses for females, words such as "smart" appeared a total of 13 times from the females and a total of 15 times from the males. Females also used
responses like, "hard-working/ good grades" 14 times, and "know how to act right" 12 times, while males similarly used phrases and words such as "better" 7 times and "good" 13 times to describe how teachers perceive female students.

When examining the negative responses about how teachers might view a female student, there were only 11 total negative responses from females and 7 from males. These included 8 references to females causing "drama," 2 responses to girls being physically "weak," and singular responses that described females as "dumb," "boring," "never responsible," and "easily distracted by boys." Some salient answers from the responses were:

Male 27: Teachers think females are always honest. They treat them like golden kids.

Female 16: Teachers think females are smart, nice, honest, and quiet because we don't cause trouble or disrupt class. Females generally try to achieve their goals in class and become academically successful.

On the other hand, when investigating the responses for how the respondents perceived their teachers to view male students, the perception was overwhelmingly negative. When answering the phrase, "Teachers think males are...", the phrase "dumb," "stupid," or "not smart" showed up a total of 13 times. The word "bad" was included 6 times and the phrase "behavior problem" showed up 14 times. Labels such as "class clown" or "goof off" showed up 12 times while "loud" appeared 6 times, "irresponsible" 8, and the word "trouble" appeared 4 times.

Table 4.12 Frequency of Negative Responses for School Experiences

|  | Teachers <br> think <br> females <br> are... | Teachers <br> think <br> males <br> are... | When it comes to <br> school, males are <br> good at... | When it comes to <br> school, females are good <br> at... |
| :--- | :--- | :--- | :--- | :--- |
| Female | 11 | 29 | Sports Not School- 25 <br> Doing Nothing- 1 | Running the Classroom- 1 <br> Talking to Their Friends- <br> 1 |
| Male | 7 | 24 | Sports Not School- 24 <br> Getting in Fights- 1 <br> Getting Girls- 3 | Causing Drama- 1 <br> Watching the Boys- 1 <br> Getting with the Boys- 1 |
| Total | $\mathbf{1 8}$ | $\mathbf{5 3}$ |  |  |

The minimal positive responses included 13 responses to males being perceived as "smart" by their teachers, 5 responses for being "strong," and 2 for being "brave." There were also 2 responses indicating teachers perceived males to be "athletic" in nature and 2 for males being "outgoing." There were 7 references to males and females being "equal" or "just the same" which the researcher assumed was a positive response. Some salient answers from the responses were:

Male 7: Teachers think males are childish, unfocused, and clowns. The reason I say this is because when a girl gets off topic it is ok but when a male does, oh god, we get wrote up and have silent lunch.

Female 31: Teachers think males are talkative and they keep their eye on them so they don't do anything and they think they are going to say something stupid because they are around their friends."

When inspecting the responses to the sentence starters about what males and females are "good" at when it comes to school, the answers were also quite surprising. There were 49 respondents who said males were good at sports, not academics. In direct contrast, there were 38 respondents who claimed that females were "good" at academics.

Also, when examining the extents in which the respondents listed areas in which males did excel in school, mostly subject areas were listed. There were only 4 areas that were not subject specific: hands-on learning (mentioned 3 times), talking aloud (mentioned 3 times), reading aloud (mentioned 1 time), and answering questions (mentioned 2 times). In contrast, while females also had the specific subject areas listed as strengths, there was a great quantity of areas outside of the academic disciplines mentioned: paying attention (mentioned 4 times), listening (mentioned 3 times), being organized (mentioned 3 times), being helpful (mentioned 5 times).

The section of the survey that analyzed the influence of peers appeared next and offered student respondents four open ended sentences starters that allowed for personalized and individualized answers to be produced. Those sentences starters were:

My friends think females who do well in school are...
My friends think males who do well in school are...
When I see a male who does well in school, I think he is...
When I see a female who does well in school, I think she is ...
Due to the fact that all four open ended items dealt with the perception of male and female students who are academically successful, positive and negative responses were coded in order to glean if there were any major disparities between groups or
between how a student perceived his or her peers' beliefs to differ from his or her own.
Tables 4.12 and 4.13 show the culminating tallies for each.
Table 4.13 Frequency of Positive Responses for Peer Influences

|  | My friends <br> think females <br> who do well in <br> school are... | My friends <br> think males <br> who do well in <br> school are... | When I see a <br> male who does <br> well in school, I <br> think he is... | When I see a <br> female who does <br> well in school, I <br> think she is... |
| :--- | :--- | :--- | :--- | :--- |
| Female | 31 | 26 | 43 | 43 |
| Male | 37 | 29 | 39 | 41 |
| Total | $\mathbf{6 8}$ | $\mathbf{5 5}$ | $\mathbf{8 2}$ | $\mathbf{8 4}$ |

Females fared better in this portion of the survey, as well, with the largest proportion of participants responding positively about both peer perceptions and personal perception of female academic success. Of the 90 participants who were coded from this section, 68 believed their peers had positive reactions to female academic success and 84 had personal positive reactions to female academic success.

In the positive responses for females, words such as "smart" appeared a total of 21 times from the females and a total of 17 times from the males. Both female and male respondents also used responses like, "successful" a total of 5 times, and "good" 8 times to describe how their peers perceive female students who are successful in school. Other positive phrasing included expressions such as "better," "caring," "works hard," and "going to college."

When examining positive responses for males, females used "smart" a total of 14 times while males used the same word 8 times. The word "cool" appeared only once from a female respondent, but appeared 8 times from male respondents in regards to how their
peers view males who are academically successful. Other positive phrasing included sayings such as "hard workers," "intelligent," reliable," and "trying to get a good job." Some salient statements from this section of the survey about peer influence that exuded positive perceptions were:

Female 13: My friends think females who do well in school are expected to do so. This is true because we hold high standards for ourselves.

Male 11: My friends think females who do well in school are someone who tries hard and cares about school. They think they care about their future.

Female 39: My friends think males who do well in school are normally nice and think about things some don't and are more gown [sic] up rather than those who play around.

Male 41: My friends think males who do well in school are cooler than the kids who always get in trouble.

As a whole, female respondents had an overall more negative view in this category of the survey than their male counterparts. When tallying the amount of positive responses females gave about their peers' views of male or female success in school, there were 57 total positive responses. Males, on the other hand, had a total of 66 positive responses about how peers' view male and female academic success.

When examining the totals for negative responses, it is evident that the females gave a sum of 38 negative responses for peers' view of male or female academic success
while the males only had 24 total negative responses about how their peers view male or female academic success.

Table 4.14 Frequency of Negative Responses for Peer Influences

|  | My friends <br> think females <br> who do well in <br> school are... | My friends <br> think males who <br> do well in school <br> are... | When I see a <br> male who does <br> well in school, I <br> think he is... | When I see a <br> female who <br> does well in <br> school, I think <br> she is... |
| :--- | :--- | :--- | :--- | :--- |
| Female | 16 | 22 | 2 | 2 |
| Male | 8 | 16 | 6 | 4 |
| Total | $\mathbf{2 4}$ | $\mathbf{3 8}$ | $\mathbf{8}$ | $\mathbf{6}$ |

As shown in Table 4.14, the negative responses were more varied and often had a tendency to use qualifiers that would be considered to be part of a person's outward appearance, sexuality, or social status. Though there were several that repeated, the majority of negative response were unique in nature and offered a more salient perspective into emotional response the respondents believe their peers to have towards those students who are academically successful.

It is also important to note that while each gender sect of respondents may have differed in their total view of how peers perceived male and females who do well in school, overwhelmingly, respondents gave a positive personal response to the sentences starters a) When I see a male who does well in school, I think he is... and b) When I see a female who does well in school I think she is. $\qquad$ Of the total 90 participants who were coded, 82 had a positive personal reaction for male success in school and 84 had a positive personal reaction to female success in school.

Table 4.15 List of Negative Responses for Peer Influences

|  | My friends <br> think females <br> who do well in <br> school are... | My friends think <br> males who do <br> well in school <br> are... | When I see a <br> male who does <br> well in school, | When I see a <br> female who <br> does well in <br> school, I think <br> she is... |
| :--- | :--- | :--- | :--- | :--- |
|  |  | I think he is... |  |  |

The last scale set dealt with Parental Influences in Academic Performance and students were asked to respond to three open ended sentence starters:

When it comes to school, my parents think males are good at ...
When it comes to school, my parents think females are good at...
When it comes to school, because of my gender, my parents think I should...

The responses from these sentence starters were broken down originally by female and male respondents and then coded for positive or negative answers similar to the previous scale sets.

Surprisingly, most of the responses seemed to indicate that students interpreted the sentence to read "When it comes to school, my parents think males/ females are..." and the students seemed to have missed or overlooked the final portion of the sentence that said "good at...". For example, when examining the responses females made to the first open ended response, the word "smart" appeared 7 times as the only answer to the statement. Grammatically, that answer would not accurately complete that sentence as it stands in the survey. However, if the "good at..." portion were removed, the word "smart" would be a grammatically correct answer to complete the sentence.

There were also 12 responses that indicated that females perceived their parents to believe that males were good at "the same things as females." Though males did not have the same amount of positive responses, 24 positive responses versus 28 positive female responses, phrasing containing the word "equal" appeared 14 times.

Table 4.16 Frequency of Positive Responses for Parental Influences

|  | When it comes to school, my <br> parents think males are good <br> at... | When it comes to school, my <br> parents think females are good <br> at... |
| :--- | :--- | :--- |
| Female | 28 | 39 |
| Male | 24 | 40 |
| Total | $\mathbf{5 2}$ | $\mathbf{7 9}$ |

As depicted in Table 4.15, both males and females largely believed their parents to hold positive views of females in school with a total of 79 out of the 90 respondents having positive reactions to the statement, "When it comes to school, my parents think females are good at...". Eighteen females used the word "smart" to complete the sentence while 11 males used the term "smart" to complete the phrasing. Other common words and phrases included "good," "try hard," and "capable" and there was a combined total of 24 occurrences of the term "equal" or "just as good as" appearing across both male and female respondents.

Table 4.17 Frequency of Negative Responses for Parental Influences

|  | When it comes to school, my <br> parents think males are good <br> at... | When it comes to school, my <br> parents think females are good <br> at... |
| :--- | :--- | :--- |
| Female | 17 | 6 |
| Male | 19 | 3 |
| Total | $\mathbf{3 6}$ | $\mathbf{9}$ |

When examining the negative responses (Table 4.16), 17 females believed their parents held negative perceptions of males in school versus 6 for females. Similarly, 19 males also believed their parents held negative perceptions of males in schools versus 3 for females.

Like with the Peer Influence category, the responses varied both by gender and in terms of phrasing. However, unlike the peer responses, the responses trended more towards phrases about behavior as shown in Table 4.17. Whereas with the Peers scale responses, the trend lent itself more toward outward appearance, sexual orientation or physical attributes, the responses in the Parental Influence section mimicked some of the
same language present in the School Experiences scale. Labels that included the word "trouble" appeared in both sets as did reference to females instigating "drama." This is important to note as both scales dealt with students and their interactions with adults.

Table 4.18 List of Negative Responses for Parental Influences

|  | When it comes to school, my parents think males are good at... | When it comes to school, my parents think females are good at... |
| :---: | :---: | :---: |
| Female | Trouble makers <br> Lazy <br> Stubborn <br> Girl Crazy <br> Play around too much <br> Not good <br> Good at being disruptive <br> Don't try <br> Good at getting in trouble <br> Play sports so school doesn't matter <br> They don't like them <br> Are childish <br> Are a bunch of punks <br> The majority of people who aren't successful | Social butterflies <br> Only there for friends <br> Afraid to talk out Get distracted by boys and drama BOY CRAZY! <br> Gonna cause drama |
| Male | Trouble starters <br> Trouble makers <br> Rare if they care about school <br> Not good listeners <br> Boring and stupid <br> Bad in school <br> Dumb <br> Don't want to be anything <br> Misbehave <br> Sometimes bad <br> Like to play too much <br> Bad hand writing <br> Childish <br> Can only work with other guys | The understudy of guys Are humans in jail for a \# of hours a day Snotty |

## Summary

As evident by the Mann-Whitney $U$ test, there does not seem to be a statistically significant difference in how female and male participants answered items in the survey, therefore, resulting in the researcher not rejecting the null hypothesis that one's own gender does not affect internalization of overall gender stereotypes as they pertain to academic success. As demonstrated by the survey results, the contextual factor of Parental Influence received the most positive responses within both the qualitative data and the qualitative analyses. The contextual factors of School Experience and Peers appear to have the most influence on the promulgation of negative gender stereotypes in the academic setting, especially for male students. This was shown through the Likerttype item analysis as well as through the qualitative data analysis. These conclusions are explained in depth in Chapter 5.

## Chapter 5

## Discussion

Through this mixed methods ethnographic case study, the subject of gender stereotypes for rural middle school students, and its relationship to academic performance was investigated. The purpose of the study sought to examine how gender stereotypes develop for students at Small-town Middle School, to describe what specific factors have the strongest influence on how these students see themselves, and to examine the relationship between these stereotypes and academic success in school. Specifically, the research focused on Albert Bandura's (1977) Social Learning Theory, gender stereotypes, and how educational institutions, parental influences, and peer relationships may dictate gender norms as they relate to academic success. It also attempted to evaluate the relationship between the issue of gender stereotypes and current experiences in a rural American middle school that lead to the recurring issue of the educational gender gap and the underperformance of male students.

Using a mixed methods survey design, the researcher gathered data from a cohort of eighth grade students in order to examine the formation and propagation of gender stereotypes that lead to differing academic outcomes for male and female students. Using research into motivational factors for students (Stipek \& Seal, 2001) and Albert Bandura's (1977) social learning theory as a component, there are three areas of concentration that were examined in the study: school influence, peer influence, and parental influence. These are the areas that have been deemed to be most consistent and
most important in the child's development of attitude towards school. Using these in conjunction with the influences of gender norms and gender expectation, the goal of this study was to identify the degree to which these factors play a role in the formation of gender stereotypes and how these roles create gender norms and expectations that cause the students to have variations in attitude and behaviors towards being academically successful.

The research questions that guided the study were as follows:

1. How do a small sample of rural eighth grade students perceive gender to influence academic performance?
2. Which contextual factors including school experiences, peers, and parental influence most directly contribute to the formation of gender roles in the academic setting?
3. How do the contextual factors of school experiences, peers, and parents influence beliefs about gender roles as they pertain to academic success?
4. Which academic traits are most often associated with which gender roles?

To answer the research questions, the researcher employed both quantitative and qualitative measures to analyze the survey data. Research questions 2 and 4 were inspected using SPSS statistical software by examining the descriptive statistical studies of central tendencies, frequencies, variance of scale score, and item statistics. For research questions 1 and 3, the researcher used structural coding systems found in qualitative analyses to examine positive and negative trends in responses and then categorized replies into academic traits and areas.

This chapter provides an interpretation of quantitative results pertaining to the
influence of the contextual factors examined: School Experiences, Peers, and Parental Influence, an interpretation of qualitative results concerning how rural eighth grade students internalize gender roles and stereotypes as they pertain to academic achievement, as well as discusses limitations of the study's findings, and provides suggestions for future research.

## Summary of Findings

Research Finding 1: Students have internalized the same ideas about how gender roles should be enacted in school, regardless of their own gender identity. For males it is overwhelmingly negative; for females, it is overwhelmingly positive.

As Dentith (2002) explained, "Gender is something we do and something we think about. It is a particular set of practices and cultural meanings that organize people into categories that are not based on biological truths" (p.2) The participants in this study responded in such a way that provided the researcher with evidence to support Denith's (2002) assertion, as well as the idea that, though there may be different norms for each gender, each seems to internalize the overall culture of stereotypes as they relate to both genders.

Specifically, for the Likert type items this can be seen when examining the Group Statistics by Gender per Scales. The mean between each gender was marginally different. The standard deviations were also very close. What this shows is that students who identified as male and students who identified as female responded very similarly in response to the statements offered in the scales. For the School Experiences scale the difference between their mean scores was the largest of the three scales at a 1.0445 . The Peers scale had a mean difference of 0.8889 and the difference in means for the Parental

Influences group was the lowest of all at 0.5334 . All of this supports what was seen in the qualitative portion of the research study, as well.

Qualitative responses were coded for each scale as either a positive response or a negative response. The data showed a mirroring trend between the genders. Generally, if one gender had a positive response to a sentence starter, the opposite gender had a similar response. For each scale, females received overwhelmingly more positive responses from both genders than their male counterparts. Looking at the overall picture provides an alarming depiction of the vast difference in positive stereotypes for female and male students. Positive responses about females in school totaled 218 while positive response for males in school came in at only 138. That is a difference of 80 more positive responses for females than for males.

The closest scale happened to be in the Peers scale where females received 68 positive responses and males received 55, a difference of 13. In the Parental Influences scale, females received 79 positive responses while males received 52 , a difference of 27 . However, in the School Experiences scale, females received 71 positive responses while males only received 31 , a difference of 40 .

Similarly, the negative responses were overwhelmingly skewed towards males in school. When tallying the negative responses for males the total came in at 127 while females received only 41 negative responses. That is a difference of 86 more negative responses for males than for females. The closest scale, again, happened to be in the Peers scale where females received 24 negative responses and males received 38 negative responses, a difference of 14 . In the Parental Influences scale, females received only 9 negative responses while males received 36, a difference of 25 . Finally, in the School

Experiences scale, females received 18 negative responses while males received 53, a difference of 35 .

What these data support is the idea that the students who participated in this survey have internalized a rigid set of positive and negative stereotypes about how males and females are perceived in relation to their behaviors and their schooling. It is in direct alignment with Kindlon and Thompson's (2002) assertion that males in classrooms are labelled as a "different, lesser, and sometimes frowned upon presence and he [the male student] knows it" (p. 155). These data go a bit further to say the female students know it, too. Regardless of which gender the students in this survey identified with personally, both genders hold beliefs that seem to be systemic: that when it comes to all things school, females are good and males are bad.

Research Finding 2: Students have conflicting views about what their peers believe about gender roles in regards to academic success.

This entire study is founded on Albert Bandura's (1977) Social Learning Theory, in which children, or in this study, students, learn and reproduce behaviors through a mediational process that begins with observation, then reproduction of what is observed and finally an internalization or discarding of behaviors based on motivational factors. (Grusec, 1992). In Bandura's (1977) theory along with Vygotsky's theory of the Zone of Proximal Development, learning comes through observation from the society and societal structures in which the child, or in this case, student, functions. Peers are a major motivational factor for adolescents and peer interactions in the school setting are part of those societal constructs a student would engage in repeatedly (Dougherty, 1997).

The data from this study showed mixed results about how males and females felt their peers perceived gender as an influence on academic performance. When examining the Frequency of Scale Variance for Peers (Figure 4.2) 69 of the 93 participants scored a 12 or higher out of the 0 to 18 scale. What this means is that 69 of the 93 respondents or $74 \%$, responded in such a way that they fell on the positive side of the spectrum.

The biggest difference was, again, found in the pair of items about whether females or males do well academically. For males, $36.6 \%$ of the respondents disagreed on some level with that notion while only $9.7 \%$ of respondents held the same opinion for females. Overall, the Likert-type items, seemed to produce positive results which, had that been all the data available the researcher would have assumed that peers had a positive influence on academic performance. However, the qualitative data provided a more complex view of students' perceptions of how their peers view gender roles in academics.

The open-ended section of the Peers scale set two pairs of questions up against each other. The first set of questions dealt with what the respondent perceived his or her peers to believe and the second set of sentence starters asked about his or her own beliefs. This is where the major disconnection was observed. When asked about females, 68 of the participants said their peers held positive views, while 84 stated they, personally, held positive views. This is significant because what it indicates is that $73 \%$ of the respondents believe their peers hold positive views of females in education though $90 \%$ of those same respondent claim to hold positive views. Likewise, only 55 respondents indicated their peers held positive views of males in school while 82 indicated that they, personally, held
positive views of males in school. This means that $59 \%$ of the participants think their peers have positive views of males but $88 \%$ personally claim to hold positive views.

Conversely, when examining the negative responses for these same sets, only 6 respondents claimed to have negative views of females in school while 24 thought their peers held negative views of females in schools; that is a difference of $6 \%$ to $26 \%$. For males the increase was even more dramatic. Only 8 of the 93 respondents responded that they held a negative view of a male who was academically successful, while 38 claimed their peers did. This was an increase from $8 \%$ who personally held a negative view to $40 \%$ who believed their peers did.

These data are significant for several reasons which calls forth several points and questions:

1. If students are internalizing and reproducing behaviors based on what they perceive their peers to think, they are probably not reproducing the correct behaviors.
2. There is obviously a disconnection or gap between how peers articulate what is deemed acceptable. If 88-90 percent of respondents personally think it is a positive thing to do well in school, then why do they also believe only $59-73 \%$ of their peers hold the same beliefs?
3. Similarly, why is there such inflation in the perception that their peers view academically successful males negatively?

What the data suggest is that these respondents hold overall positive views of males and females who are academically successful but have trouble understanding if their peers do as well. This may be an area for future research.

Research Finding 3: The contextual factor that had the most negative impact on how students were internalizing gender roles and norms in the academic setting was School Experience.

The purpose of this study was to examine possible causational factors that could be contributing to the educational gender gap that is all too real at Small-town Middle. Three possible contextual factors were extrapolated from the research for this study: school experience, peer influence, and parental influence. One of the leading points in this research supports the assertion of Mead (2015) regarding the formation of the educational gender gap:

This leads to two possible lines of thinking about gender gaps: Either they represent innate differences in boys' and girls' abilities, or they reflect biases in how schools and families treat boys and girls that translate into differences in outcomes (para. 6).

What the data from this study show are, for these respondents, the school has the heavier hand in creating the negative stereotypes for males in the academic setting. When examining the Frequency of Scale Variance for School Experiences (Figure 4.1) only 30 of the 93 participants scored a 12 or higher out of the 0 to 18 scale. What this means is that only 30 of the 93 respondents, or $32 \%$, responded in such a way that they fell on the positive side of the spectrum; in contrast, 63 of the 93 respondents, or $67 \%$, fell below the 12 on the variance scale meaning their mean placed their average response on the negative side of the Likert-type item scale.

The data further supported this assertion as frequency statistics per item in the School Experience scale were examined. When asked if males and females are called on
equally, $44 \%$ of the students indicated that they had a level of disagreement with that statement and when asked if males and females felt equally comfortable sharing and participating in class, $57 \%$ disagreed with $19.4 \%$ indicating that they "Strongly Disagreed." These two items are significant specifically because the classroom culture and environment is a direct results of procedures put into place by the school and by the teacher.

As stated earlier in this chapter, when the researcher examined the qualitative data, the disparity between the School Experiences scale showed females received 71 positive responses while males only received 31 , a difference of 40 ; meanwhile in the School Experiences scale, females received 18 negative responses while males received 53, a difference of 35 .

The most important distinction made by the researcher was the language employed by the respondents when filling in the sentence starters. Only once out of all 93 responses did someone indicate teachers might think a female student to be "dumb" or "stupid," yet this same exact verbiage showed up 13 times for males. Not a single response indicated that teachers think females are "bad" but the researcher identified "bad," "behavior problem," or "trouble" a total of 24 times in the responses when questioned about how teachers view males.

These data support the body of knowledge that suggests no educator intends to stigmatize his or her student population; unfortunately, many educators do not have a full grasp of the multifarious ways one's presumptions can come through to the students. As Kindlon and Thompson (2002) explained, "research indicates a boy is four times more likely to be referred to a school psychologist" or that " 60 to 80 percent of learning
disabilities occur in boys" (p.163). And so, the glaring indication from the research presented in the Literature Review and from the data extrapolated from this survey, is that, though a teacher's intent may not be to stereotype or brand male students, it is indeed occurring.

Research Finding 4: Most academic subjects are generally seen as gender neutral, but being "good at school" is most often associated with females while being "good at sports" is most often associated with males.

As seen in the Literature Review, Farrell (2005) explained, "To describe a social institution as heteronormative means that it has visible or hidden norms, some of which are viewed as normal only for males/men and others which are seen as normal only for females/women" (p. 3). The fourth research question in this study aimed directly at answering the point Farrell (2005) made: which academic traits are most engendered for the students of Small-town Middle?

Surprisingly, when the researcher examined the frequency of gender selection by academic subject, the majority of respondents determined that the four core subject areas: reading, math, science, and social studies were gender neutral. All four had over $60 \%$ of participants indicating "Both" while math and social studies had over 70\% of respondents indicating gender neutrality for those areas.

Likewise, all of the options for how students work best received majority neutral ratings with Individual work coming in with $59 \%$ of students indicating neutrality and both Partner and Group work having $67 \%$ of the students rating those areas as gender neutral.

Differences did arise when specific academic traits were narrowed down more specifically. When it came to the academic trait of "neat handwriting" and "being a good writer," the majority of participants indicated that they felt this was a feminine trait with $76 \%$ indicating it as solely feminine for neat handwriting and $51 \%$ indicating being good at writing was a feminine trait. Conversely the academic trait of being mechanically inclined had $65 \%$ of respondents indicating that as a masculine trait and $53 \%$ of participants indicating P.E. was a masculine trait. This final point was significant as it related directly to the qualitative responses given in the School Experiences scale.

Students were asked in that section to examine the areas males and females "were good at in school." Like the previous sections indicated, the researcher coded those responses as positive or negative in nature, but some interesting data surfaced. Over $50 \%$ of the respondents entered in "sports" or some athletic related statement when asked what they believed males were good at when it came to school.

This is significant for several reasons:

1. Sports are not an academic subject area.
2. Just as many females as males indicated this the area of male success.
3. It indicates there is a disconnection between academics and school.

When coding, Physical Education responses for that sentence starter were indicated as a positive response by the researcher since that is an academic area. It was not clear from the respondents when they indicated "sports" if it was outside the realm of Physical Education but since there were students who qualified their responses by listing specific sports such as football or basketball it was assumed on the part of the researcher that this response did not fall under the purview of an academic area.

In direct contrast, 38 responses indicated that females were good at "academics" when it came to school. There were also responses such as "paying attention" and "being organized" that the researcher deemed as positive since these are a few of the skills one might need in order to be success in school. Neither "paying attention" nor "being organized" were mentioned even once for the male contingency.

This calls into question student respondents' understanding of the difference between academic and non-academic related activities. If students do understand this difference, why was sports mentioned so often for males? This may be an excellent area for future research.

## Examination of Data from Students Who Did Not Identify Gender

The respondents in the survey were given the option not to self-identify their gender based on research by Letts (1999) that indicated only presenting the binary options of male and female reproduces stereotypes and misconceptions about those who do not feel comfortable with either label. There were three students who chose not to identify and therefore did not get analyzed with the male and female data. However, those responses were examined as a separate group, one which could provide a deeper insight into the roles of gender in schooling as these students were willing to say they do not fit into the "norm" of what typical society and institutions expect.

Some of the most salient points revoled around the notion that, to these respondednts, gender does not have a role. All three respondents who chose not to selfidentify indicated that teachers think both males and females are smart and that their parents think males and females are smart. The trend in their answers was that gender does not matter. For example, when asked "When I see a female who does well in school,

I think she is..." Non-identifier 3 said, "...smart. Gender doesn't carry to your brain. Its just what you say you are. And if it did matter what would gender fluid people be, just fluncuate (sic) depending on time, no because gender doesn't matter." Likewise, when asked about their own experiences with gender in the academic setting, Non-identifier 1 and 2 both mentioned that it did matter because they are all "taught the same" and that academic success is important for everyone. Non-identifier 3 had a more in-depth response:

I have seen a lot of gender inequality. For one they don't think all genders can equal to the same amount. Also they don't accept gender fluid, nonbinary, or people who don't identify with a certain gender academically acceptable (sic) because they cant put them under a stereotype. And people are always like" girls are smarter, you boys cant do anything" when in actuality it doesn't matter. Females are also expected to get better grades and to grow up to equal something but not that much is expected of males.

What this data shows are that those who do not necessarily identify with a gender do not believe gender should matter. They are still aware of the stereotypes that are presented for males and females, but chose to disregard those ideas because, in their viewpoint, those gender roles would most likely exclude them. This is an interesting finding as it seems to indicate that those who do not fit within the stereotypes set forth by normative culture are released from the obligation many students seem to feel about filling those roles.

## Implications for Practioners

The administrative team at Small-town middle and the stakeholders in this community should use this information to guide discussions around how to combat the prolonged negative stereotypes that appear to be held by its students regarding male academic performance. It is imperative for the educational practitioners to focus on the culture of the school and ways that it is leading to the recurrence of these beliefs. It may begin with an examination of the transition to middle school from the elementary environment.

The American Physiological Association (n.d.) indicates a "Middle School Malaise" which is often associated with this age group in respond to their academic environment. They indicated, "psychologists have discovered a 'developmental mismatch' between the environment and philosophy of middle schools and the children they attempt to teach" ("Middle School Malaise", n.d.). Pinpointing areas of weakness in the transition process may help the administrative, guidance, and teaching teams to reframe the culture of negativity that envloves males in middle school.

## Discussions of Limitations

Limitations of this study included a small sample size from only one middle school in a rural area of South Carolina. Of the 400 possible eighth grade students, only 93 were able to be surveyed; therefore, the researcher was only able to glean a very limited view of the overall picture of how rural eighth grade students perceive gender roles to affect academic success. Results may have been different with a larger sample size. Likewise, there are many rural middle schools in South Carolina. One cannot
assume just because the locations are similar that the students would internalize the same beliefs about how gender roles influence academic achievement.

A second limitation of the study was that there were several areas not examined by the researcher: how class make-up affects perceptions, how students perceive the gender of the teacher to affect the message the students internalizes, or even how access to adults of both genders affects the way gender roles are formed in schools. In discussion with the lead teacher and the principal of Small-town Middle after results were in, one of the most important comments made was,"Do you think their answers would have been different if you had asked about the difference between what their male and female teachers thought?" However, when the researcher was planning and preparing for the survey, it could not be guaranteed that the students would have had access to a male teacher which could have resulted in empty data sets. The researcher therefore, chose to keep the questions about school experiences gender neutral.

Another limitation was that there was not a follow up portion to the qualitative open-ended items. Because the students did not have to identify anything more than their gender, it was impossible for the researcher to determine differences in regular students versus Honors students. A focus group of students who could have come in for a round table discussion after the survey could have clarified some misgivings the researcher had about the data sets presented. For example, the Likert-type data for the Peers scale trends towards a positive response; however, when examining the qualitative data from the open-ended items in the sections, the researcher determined there were many negative perceptions about how students believe their peers feel about males in school. This would
have been an excellent area to dig deeper with a focus group to clarify why there might be a disparity between the numbers and the words.

## Recommendations for Future Research

Research has shown that males in western, industrialized nations are falling behind their female counterparts when it comes to academic achievement (Legewie, \& DiPrete, 2012). As Mead (2015) argued, the educational gap does not lend itself to an easy or quick fix as the root cause is still unclear: "This leads to two possible lines of thinking about gender gaps: Either they represent innate differences in boys' and girls' abilities, or they reflect biases in how schools and families treat boys and girls that translate into differences in outcomes" (para. 6). In this study, the participants indicated that of the contextual factors presented, their experiences in the school environment and with their teachers had the most negative effects on their perceptions of how gender and academic success relate. As discussed in the literature review, schools systematically reinforce the ideologies of middle class America with regards to gender identity and the heteronormative ideas of male and female (Sambell \&McDowell, 1998). Farrell (2005) explained, "To describe a social institution as heteronormative means that it has visible or hidden norms, some of which are viewed as normal only for males/men and others which are seen as normal only for females/women" (p. 3).

Future research could focus on more specific attributes of the educational setting that may contribute to these norms such as the make-up of classes, the gender of the educators, the position of males or females as authority figures in the school setting, and even the curriculum employed by the teachers. Understanding the underlying factors, not
just a general picture, is important in helping educators determine what policies and practices to keep in place and what policies and practices to eradicate.

This study focused specifically on the internalization of gender roles in relation to academic success for eighth grade students. However, Albert Bandura's (1977) Social Learning Theory is applicable at all levels of a child's educational development. As explained in the Literature Review, this process of internalizing observed expectations is commonly referred to as the "mediational process" as it focuses on how mental factors are the catalyst for learned behaviors (McLeod, 2016). Bandura (1977) also focused on the factors that caused repeated behaviors in children because it was his belief that children had to process what was observed and then determine if they should imitate that behavior based on the consequences that would arise if the behavior is repeated. Future research could focus on the same contextual factors examined in this study but at different intervals in a student's educational lifespan. Has a first grader internalized any stereotypes about gender roles in education? If so, what are those roles and where did they come from? How does that change for a third grader or a fifth grader? Do the gender role stereotypes presented in this study diminish for eleventh graders?

The process of observational learning and internalization of normed behaviors does not start at adolescence nor does it end at 18 , so future research could examine the differences in what students internalize throughout their years in the institution of public education. Understanding the possible ebb and flow of how gender roles and norms are internalized will help educators and parents have impactful conversations with students that could possibly counteract some of the negative beliefs that are being adopted by the students.

There also was a large discrepancy in the data between what these respondents indicated they believed about males and females who were successful academically and what they perceived their peers believed. The gap in these two was wide enough to make the researcher question where the inconsistency came from and how students could have such an inaccurate perception of what their peers believed. A focus group could dig deeper into how students form their ideas about what peers believe and if they are internalizing societal expectation from areas from outside their physical environment and then making inaccurate associations. It would be important to also understand if students are not being forthcoming with their peers about their own belief resulting in an accurate perception of what peers outwardly project but simultaneously resulting in an inaccurate perception of true beliefs.

Another outcome noted in this study was the implication that, when it comes to school, males are good at sports related activities and females are good at academic related tasks. As noted in the Literature Review, there were several prevalent and dominant myths that are perpetuated about males and females in school that support these assertions (Macgillivray, 2004, Afshar, 2004, Serbin, Powlishta, Gulko, 1993). However, this study did not determine the effects or role that competitive sports at the middle school level contributed to these gender roles and stereotypes. Future research could focus on whether schools that do not have competitive sports teams have the same issues with the educational gender gap or with the negative stereotypes associated with being a male student, as seen in this study. If, according to the participants in this study, males are only "good at sports" what would happen if the sports were removed? Understanding the effect that the insertion of competitive sports has on how students view school, is a
very interesting possibility for further research as it might indicate a variable that was not examined in this study nor in the Literature Review.

## Conclusion

This study has shown that gender roles are still alive and well for the eighth grade students of Small-town Middle School. In fact, it has proven that of the possible contextual factors investigated, School Experiences has the most contributory impact on the formation and continuation of negative gender roles in the academic setting which has led to the internalization for both male and female students that the male students cannot be as successful. There is a great deal of potential for this study to produce further research into what specific school factors most significantly create these stereotypes, when they begin to form, when or if they possibly end, and how educators can help to combat them. For the students and staff at Small-town Middle, the first step may be to take a hard look at the policy and practices that are currently in place to see if the educational gender gap they have observed is of their own doing.

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## Appendix A

## Survey Questions

The following list of questions will be used in the online survey using Google Forms that will be administered to the student respondents.

## Middle School Students' Perceptions of Gender Identity and Its Influence on Academic Performance

I am a researcher from the University of South Carolina. I am working on a study about gender as an influence on academic performance and I would like your help. I am interested in learning more about your experiences and how they have shaped your thoughts and feelings about gender roles and their effects in school. Your parent/guardian has already said it is okay for you to be in the study, but it is up to you if you want to be in the study.

If you want to be in the study, you will be asked to do the following:

- Answer some written questions about your experiences with gender roles in school, how your friends and peers respond to academic success for males and females, and what you think your parents expect from you in regards to your academics.
-Any information you share with me will be private. No one except me will know what the answers to the questions were and because you will not be listing any information other than your gender, I will not be able to tell who wrote what.

You do not have to help with this study. Being in the study is not related to your regular class work and will not help or hurt your grades. You can also drop out of the study at any time, for any reason, and you will not be in any trouble and no one will be mad at you. Please ask any questions you would like to about the study.

* Required

1. Which gender do you identity with in your day-to-day life? * Mark only one oval.Female
Male
I do not feel comfortable choosing at this time.

## School-Based Experiences

The following questions deal with ways you think your gender plays a role in school. Some questions will have a scale you can use to answer. Other questions will ask you to type in your thoughts. If it asks you to type, do not worry about spelling just try to give as much detail as you can for each question.
2. Think about the following statements and decide how much you agree or disagree based on your personal experiences. *
Mark only one oval per row.
My teachers treat males and
females the same.
My teachers have the same set of Disagree Disagree Agree Strongly Agree
expectations for males and
females.
My teachers believe males and
females are of equal intelligence.
Males and females are called on
equally by teachers.
Both males and females feel
comfortable sharing and
participating in class.
Males and females are equally
successful academically.

# The following are sentence starters. Fill in the blank space with the first thoughts that come to mind. Remember, spelling does not matter so please, just give the best description you can. 

## Ex: <br> People in America are....

honest, loyal and brave because we try to help other countries around the world. We also have the most Nobel prize winners and the largest army.
3. Teachers think females are... *
4. Teachers think males are... *
5. When it comes to school, males are good at...
*
6. When it comes to school, females are good at... *

## Social Experiences

The following questions deal with ways your friends influence how you may see gender playing a role in school. Some questions will have a scale you can use to answer. Other questions will ask you to
type in your thoughts. If it asks you to type, do not worry about spelling; just try to give as much detail as you can for each question.
7. Think about each statement and decide how much you agree or disagree based on your personal experiences. *
Mark only one oval per row.
My male friends do well
academically.
My female friends do well
academically.
It is socially acceptable for males
to do well in school.
It is socially acceptable for
females to do well in school.
Generally, males are proud when
they do well academically.
Generally, females are proud
when they do well academically.

## The following are sentence starters. Fill in the blank space with the first thoughts that come to mind. Remember, spelling does not matter so please, just give the best description you can.

## Ex:

People in America are....
honest, loyal and brave because we try to help other countries around the world. We also have the most Nobel prize winners and the largest army.
8. My friends think females who do well in school are... *
9. My friends think males who do well in school are.... *
10. When I see a male who does well in school, I think he is... *
11. When I see a female who does well in school, I think she is... *

## Parental Expectations for Gender and Academics

The following questions deal with ways your parents or guardians influence how you may see gender playing a role in school. Some questions will have a scale you can use to answer. Other questions will ask you to type in your thoughts. If it asks you to type, do not worry about spelling just try to give as much detail as you can for each question.
12. Think about each statement and decide how much you agree or disagree based on your personal experiences. *
Mark only one oval per row.
My parents think males and
females have the ability to be
equally successful in school.
My parents have the same
expectations for males and
females in regards to school work
and grades.
My parents' expectations for me
are linked to the fact that I am a
male or female.
My parents' expectations for me
academically would be different if I
was the other gender.

# The following are sentence starters. Fill in the blank space with the first thoughts that come to mind. Remember, spelling does not matter so please, just give the best description you 

## can.

## Ex:

People in America are....
honest, loyal and brave because we try to help other countries around the world. We also have the most Nobel prize winners and the largest army.
13. When it comes to school, my parents think males are.... *
14. When it comes to school, my parents think females are... *
15. When it comes to school, because of my gender, my parents think I should... *

## Gender Traits in Academics

Below you will see a list of academic traits. Please decide if you think these are associated more with being masculine (male), feminine (female), or neutra both.
16. *

Mark only one oval per row.

| being a good reader |
| :--- |
| being good at mathematics |
| doing well in science |
| doing well in social studies |
| being artistically skilled |
| being musically talented |
| being mechanically inclined |
| working well well with a single partner |
| excelling with technology |
| being active in physical education |
| being a good writer |
| having neat handwriting |

## Overall Perceptions of Gender Identity and Its Influence on Academic Performance

Please give any personal thoughts or experiences you believe might provide a better picture of how being male or female relates to academic performance as you have experienced in your life.
17. In my experience, ... *
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

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且 Google Forms

## Appendix B:

## Informed Consent Letter for Parents

This letter will be provided to the parents of every child two weeks prior to the survey being administered. This is just one of the ways parents will be notified by both the school and by me as to the contents of the survey, their rights as parents, and to assure them that participation in the survey will in no way affect their child's academic standing.

Dear *** Team 8-3 Parents/ Guardians,

This year, your child will have the opportunity to participate in a doctoral research study for the University of South Carolina! The study, which has been given permission by Mr. ${ }^{* * * * * * * * * * ~ t o ~ b e ~ c o n d u c t e d ~ a t ~}{ }^{* * *}$, seeks to determine if / how middle school students perceive gender as an influence on academic performance. The survey will be conducted using an online survey tool during Mrs. ${ }^{* * * * * * * * ~ c l a s s ~ o n ~ a ~ d a t e ~ d e t e r m i n e d ~}$ by administration.

Those who do not participate will remain with Mrs. ${ }^{* * * * * * * ~ i n ~ h e r ~ c l a s s ~ w h i l e ~ s t u d e n t s ~}$ complete the survey in the computer lab.

Students will not be asked for their name or any other identifiable information other than their gender and all answers will be strictly confidential. Results from this survey are for the research purpose only and answers will not be linked to the survey participant. Your child's name will not be recorded nor will it be connected to their response.

There are not any risks to your child by participating in this study. It will in no way impact grades or participation in activities, and your child may discontinue the survey at any time. You may, however, choose for your child not to participate in the study. If so, please sign the bottom part of this form and have your child return it to Mrs. ${ }^{* * * * * * * * * . ~}$

If you should have any questions or concerns, Mr. ${ }^{* * * *}$, Mrs. ${ }^{* * * * * * * *, ~ a n d ~ M r s . ~ W i t t e ~}$ are available to to you to answer any questions you may have. Thank you in advance for allowing your child the opportunity to participate in this research study.

Sincerely,
Anne R. Witte
USC Doctoral Student in Curriculum and Instruction royale@mailbox.sc.edu

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***********_******@*****.K12.SC.US
**************_ **********@ *****.K12.SC.US
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As the parent/ guardian of $\qquad$ , I choose for my child NOT to participate in the doctoral research study being conducted at *** by Mrs. Anne Witte.

Parent Signature

Date

## Appendix C:

## Principal's Approval of Research Letter

This letter was written by the principal at the research site stating that the study was deemed appropriate and that the researcher was permitted to conduct the study on the school grounds.


To Whom It May Concern,
Elizabeth Anne Royal Witte has my permission, as principal of to conduct research for the sole purpose of her dissertation studies in conjunction with the University of South Carolina Columbia. Mrs. Witte has informed parents as to the subject of the survey, offered parents an opportunity to preview the survey, and has provided parents with the option to opt out for their child. She has also made it clear to all involved that participation in the survey process in no way affects the students' performance $\square$ class. All information garnered in her survey is for her doctoral educational pursuit only and will not be linked back to the child participating in the survey.

Sincerely,


