A Shortage of Male Elementary School Teachers: Exploring the Perceptions of Male Teachers Using Q Methodology

by

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Submitted in Partial Fulfillment of the Requirements

For the Degree of

Doctor of Education in Educational Leadership

YOUNGSTOWN STATE UNIVERSITY

December 2017

# A Shortage of Male Elementary School Teachers: Exploring the Perceptions of Male Teachers Using Q Methodology Kurt R. Meader

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### ACKNOWLEDGEMENT

There are many people that I would like to thank for helping me to complete this project. First, I must thank Dr. Karen Larwin, my advisor throughout my doctoral studies and dissertation chair, for her optimism, guidance, and caring nature. I must also express gratitude to the members of my committee, Dr. Charles Howell, Dr. Kenneth Miller, and Dr. Sharon Stringer, for their support and recommendations throughout this process. I would also like to thank Leslie Reedy for the assistance of editing this paper.

I thank the professors, administrators, faculty, and staff with whom I have had the privilege to work. You have been influential and gave me many valuable experiences throughout my years in education.

To my doctoral studies cohort, I thank you for the friendship and support through this challenging process. Some led the way, graduating before me, and others will follow.

I would also like to thank the most important component of the study, the volunteer participants, men who chose teaching, a career predominated by women, despite societal discourses.

## DEDICATION

This work is dedicated to my loving wife, Alicia. Your insight and opinion were sought often. Were it not for her love, patience, and support, this work would not have been possible.

I also dedicate this work to my late parents, Richard and Janice. Although you passed away years before this project began, your inspiration and influence endures.

### ABSTRACT

There is a shortage of male elementary school teachers in the United States. Men who choose careers as elementary school teachers must be confident and ignore social barriers that keep other men from considering the profession. The current investigation seeks to understand the viewpoints of men who teach elementary school, a career predominated by women. This study addresses what influenced their career decision, what might deter males from teaching, what might be done about the shortage, and how might male teachers benefit children. This was the first known investigation on the topic using Q methodology. Data analysis extracted three distinct viewpoints:

The *Fixers* acknowledged that men are expected to perform tasks in addition to teaching duties (such as being a handyman), the *Mentees* had an elementary school teacher who influenced their career decision, and the *Aspirants* aspired to teach from a young age. Results indicated that men have a strong desire to share their skills and passions, and they believed that men can make a difference. Serving as a male role model for children was important, but they did not want to be considered a surrogate father for fatherless children. Male participants disagree that gender predetermines a career, and they are not concerned that others might not see them as real men because they teach children. However, men must take precautions when working with children due to public scrutiny. Recruitment efforts are not known to participants. Many men make their career choice to teach elementary school later than most women. This study provides a review of existing literature, details the results of data analysis, responds to research questions, discusses implications and limitations, and makes recommendations for further research.

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#### Chapter 1

### Introduction

In a speech on July 4, 1924, President Calvin Coolidge said, "Teaching is one of the noblest of professions. It requires an adequate preparation and training, patience, devotion, and a deep sense of responsibility. Those who mold the human mind have wrought not for time, but for eternity" (Notable Quotes website, n.d.). It is difficult to argue against the importance of the act of teaching; to enlighten and guide others fulfills our sense of purpose. The U.S. Bureau of Labor Statistics (2013), projected that the employment of teachers, between 2012 and 2022, will increase by 10.8%, or, 15.6 million jobs. Although many people do not view teaching as monetarily lucrative, employment predictions look promising.

During the 1999-2000 school year, public, private, elementary, and secondary school teachers made up 2.7% of the overall U.S. workforce (National Center for  $\pi$ Education Statistics, 2005). Yet, among elementary and middle school teachers, fewer than 20% were males (U.S. Bureau of Labor Statistics, 2015). We do not know the exact figures for elementary alone, because those data are not kept. However, the numbers of male teachers tend to drop proportionately with the younger-aged students. For example, 57% of secondary teachers are women, but an overwhelming 97.2 % of preschool and kindergarten teachers for young children. In order to determine how to attract more males to positions as elementary school teachers, it is important to understand the viewpoints of males working in the profession.

### **Background of the Problem**

The demand for more males to teach elementary school is not evidenced in research, but could simply be based merely on an axiom. The concept that male teachers fill the void for absentee fathers, and that boys will have increased school performance with a male teacher are widely accepted without the support of empirical studies. Few studies have attempted to investigate this assumption by looking into the effect, if any, of gender balance in classrooms, but have found no differential effects of teacher gender on student outcomes (Bricheno & Thornton, 2002; Ehrenberg, Goldhaber & Brewer, 1995; Hopf & Hatzichristou, 1999; Mancus, 1992; Sokal & Katz, 2008). Therefore, it is difficult to explain why we need more male elementary school teachers.

Instead, attempting to explain why we do not have more male teachers might be simpler. The public image of a teacher is that of low status when males express an interest in becoming a teacher because they are at risk of scrutiny (Cushman, 2005a). With such low numbers of male teachers, some students might not experience having a male teacher until high school. Yet, teaching children is an occupation that requires caring and nurturing, qualities society perceives that men lack.

Historically, women have dominated the teaching profession. Therefore, people tend to perceive teaching young children as women's work, believing that men are, by nature, not fit to take on caring and nurturing roles (Browne, 1999). Furthermore, the image of a teaching as feminine work may result in lower professional status, compared to other professions (Drudy, 2008). Perhaps the image of a masculine, real man does not match the image of the feminized image of women's work as a school teacher (Cushman, 2008; Jones, 2007b; Sargent, 2000).

Men who make the choice of becoming a teacher of young children do so with the risk of scrutiny by those outside the profession (Williams, 1992). There is a sense, from many people, that men who want to work with children must be predators, homosexuals, or effeminate. These are erroneous, prejudicial, and unfair assumptions.

Perhaps an increase in male teachers would serve as a model to boys that teaching is a worthwhile and potentially rewarding career choice (Davison & Nelson, 2011; Martino, 2008). Additionally, many people consider role modeling as a reason to place children in a classroom with a male teacher. According to the U.S. Census Bureau (2014), approximately one-third of children, today, grow up in a home without fathers.

While there has been much focus in recent decades on women breaking into nontraditional roles, such as police officers, doctors, construction workers, etc., virtually, no focus is placed on men who try to break that barrier. However, few studies have looked into men who decide to take non-traditional career paths (Cushman, 2005a; Galbraith, 1992; Simpson, 2004; 2005; Williams, 1992). This area is still relatively untouched, and current research is needed.

Still a dilemma exists with keeping men in teaching positions once they are recruited and hired. The glass escalator theory describes the phenomenon of people who stereotype males as having the potential for eventual promotion to administrative positions (Williams, 1992). Moreover, this circumstance might work against the hiring of men as teachers.

Statistics provide evidence that there are few males teaching young children, yet, current research does not fully explain why few males are willing to pursue this career choice. There does not appear to be any evidence why we need male teachers. Although

this may only be a perceived social need, it does not mean that we should not make an effort to hire and retain male teachers (Martino & Kehler, 2006). People perceive male, primary school teachers to be important for boys (a view consistent with some existing literature), and many people see male teachers as being beneficial to girls (McGrath & Sinclair, 2013).

### **Statement of the Problem**

For more than 100 years, women have dominated education, creating a shortage of male, elementary school teachers that exists today, yet nothing has led to a turnaround (Blount, 2005). The specific problem to be addressed, within the proposed study, is the shortage of male elementary school teachers. According to the U.S. Bureau of Labor Statistics (2011, [as cited in the MenTeach website, 2014]), 2.3% of preschool and kindergarten teachers are males, and 18.3% of elementary and middle school teachers are males. We do not have the exact numbers for elementary only, but women are more likely to teach younger children than men (Bricheno & Thornton, 2002).

According to Sanatullova-Allison (2010b), "This question-who or what inspired students to chose [sic] a teaching career-was the subject of a number of studies during the 1950s and 1960s"...to determine the "motivating factors in the decision to teach" (p. 37). This has led to an increased discussion; why would a man be interested in what is traditionally women's work? The notion of women's work is supported in the Evolution Theory that predicts that men seek status, competitiveness, and risk-taking, and women seek nurturing roles (Browne, 1999). Browne further theorized that the gender gap in the workplace is not particularly due to discrimination, because females are, by nature, more caring and nurturing than males, and therefore more likely to teach primary grades, as

opposed to the secondary and university levels.

Additionally, societal gender bias potentially influences the number of males working with young children, instead of discrimination against males in teacher education programs or employment practices (Seifert, 1988). However, colleges and school districts could strive to do more. What is lacking is information that would lead to policy and procedural changes at the university and local school district levels to develop sound recruiting efforts for male teachers or potential candidates for careers in elementary schools. A widespread belief that more male teachers are needed to serve as role models to boys is not grounded in research, but seems to be a societal and media perception (Carrington, Tymms, & Merrill, 2008; Cushman, 2008; McGrath & Sinclair, 2013; Mills, Haase, & Charlton, 2008; Montecinos & Nielson, 2004; Sargent, 2005). However, that mere perception seems convincing. Finding out why males choose to teach young children may assist in recruiting efforts.

#### **Purpose of the Study**

The purpose and primary focus of this study was to examine the perspectives of male elementary school teachers with regard to what influenced their career choice. The secondary purpose of this study was to look at what factors might deter males from teaching young children, and what might be done to reduce the shortage of male teachers. Q methodology, a mixed method, was used to gather the perspectives of 15 males currently working as elementary school teachers.

Women's important contributions to the field of education are not negated. However, the focus of this study was on men as a minority. This study emphasized the importance of promoting male teachers, at the elementary level, to achieve a greater

balance in the workforce that matches the make-up of society, which is roughly 50% men and 50% women. Moreover, this study was not intended to be a work of criticism toward female teachers, or females in general. By correcting erroneous stereotypes that prevail in society, perhaps more males might be recruited for the job.

#### Significance of the Study

In an era when social justice has developed and made a significant impact on people, helping to ensure equality and equity in career choices, the shortage of male elementary school teachers generates little attention. Males may face unfair scrutiny and prejudice when showing an interest in teaching children.

There is a need to address the gender gap in elementary education. We must develop better recruiting practices, especially at the college level, in order to attract more males to teaching. Additionally, school districts would benefit from providing incentives that would attract males to careers in education, thus closing the gender gap in education. A review of research on this topic revealed that studies are relatively new, beginning only in the 1990s. Moreover, few current studies have addressed the issue. This study provides some insight into why some men teach, and what might deter others from teaching.

#### **Primary Research Questions**

In order to ascertain potential reasons behind the shortage of males in elementary teaching positions, this research is focused on answering the following questions:

- 1. What is the perspective of males that influenced their decision to enter a career as an elementary school teacher?
- 2. What factors, if any, are perceived to deter males from teaching elementary school?

- 3. What might be done about the shortage of male, elementary school teachers?
- 4. What do male educators perceive is the benefit to children in having a male teacher?

A mixed-methods approach was used in this study to explore male teachers' perspectives. The intention was to determine shared beliefs and perspectives on the topic and gather new insight (Barbosa, Willoughby, Rosenberg, & Mrtek, 1998).

### **Research Design**

The proposed study uses Q methodology, which is a mixed-methods study used to look at the viewpoint of a group of people. This methodology helps to determine a shared viewpoint from the participants (Watts & Stenner, 2012). Both qualitative and quantitative methods are used. The participants were a group of 15 male, elementary school teachers. Primarily, in Q methodology, the participants are the variables because their points of view are being compared (Watts & Stenner, 2012).

This study used Survey Monkey to compile the concourse (a list of statements) from a larger group of teachers. Further statements were gathered from an extensive review of the literature on the subject. Through steps that will be described in a later chapter of this document, a finalized set of statements were developed.

Following the sorting process, the researcher coded each grid and entered the data into PQ Method software. Codes were used in demographically identifying the participants. For example, information was retrieved about the years of experience, grade level taught, and previous types of experience of each participant. Then, varimax rotation was used in order to interpret relevant factors.

### **Conceptual Framework**

Choosing a career is a major decision in life that most people do not take lightly. To subscribe to the belief that, based on evolution, males are biologically fit for careers that we perceive as masculine, and women naturally fit those roles that are perceived as feminine, as demonstrated by Kingsley Browne (1998), seems too simplistic. If it were so predictable, and based on biology, then why are there female police officers and firefighters, or male nurses and male elementary teachers? Career choice must be more complex than this.

This void can be filled by looking at career development in Linda Gottfredson's (1981; 2002) *Theory of Circumscription, Compromise, and Self-Creation*, which attempts to describe the developmental process of career choice from stages rooted in childhood and adolescence. This theory involves a process by which the individual narrows down career choices over time, through selecting roles that are seen as compatible with their self-concept, as well as analyzing roles that are perceived to be accessible.

Additionally, the Social Cognitive Career Theory (SCCT) developed by Robert Lent (1994), Steven Brown (2000), and Gail Hackett (2002) fits well with this premise. However, SCCT considers how self-efficacy, expected outcome, and goals interrelate with personal and environmental factors such as gender, social supports, and barriers.

The *Theory of Circumscription, Compromise, and Self-Creation* and the SCCT will be elaborated upon more in Chapter 2. Although no theory can precisely explain nontraditional career choices, the notion that career decisions are formulated during the formative years of youth, that individuals go through stages of development, and there are interrelated environmental influences, are the foundations of this concept.

In addition to career choices, the researcher wanted to validate the need to study perceptions, viewpoints, beliefs, etc. Because the purpose of this study was to examine the career choices of male elementary school teachers based on their perceptions and viewpoints, it is important to acknowledge why beliefs are important to analyze.

This study was grounded in the work on teacher beliefs and how this meaning differs from that of knowledge (Pajares, 1992). Teachers' beliefs influence perception and judgment, which affect behavior in their work. An example of this can be found in studies about teacher self-efficacy, and how it affects the outcome of a teacher's job. According to Bandura (1993), "Efficacy beliefs influence how people feel, think, motivate themselves, and behave" (p. 118). This has a profound effect that sometimes counters conventional thought. For example, the frequently talked about conventional belief in the 1950s was that no human would ever be able to run a mile faster than four minutes, yet, Roger Bannister did so, and almost immediately changed the mindset of others. It is fitting that Tschannen-Moran and Hoy (2007) described efficacy as "a little idea with big impact" (p. 24).

Furthermore, this study sought to gather a collective efficacy from the viewpoint of male teachers, an area where research is scant. Collective efficacy is the "shared beliefs in the power to produce effects by collective action," such that it "fosters groups' motivational commitment to their missions" (Bandura, 2000, p. 75). In this study, the researcher was seeking a collective efficacy of the participants, male, elementary school teachers. The focus was the beliefs of this minority group of teachers. According to Pajares (1992), "Attention to the beliefs of teachers and teacher candidates should be a focus of educational research and can inform educational practice in ways that prevailing

research agendas have not and cannot" (p. 307). This blends well with Q methodology, which is "comprised of procedures and a conceptual framework that provide the basis for a science of subjectivity, and its phenomena consist of the ordinary conversation, commentary, and discourse of everyday life" (Brown, 1993, p. 95).

#### Assumptions, Limitations, and Scope

Q methodology relies on the subjectivity of the participants by identifying and categorizing the perceptions, or opinions, of the participants. As a result, the underlying assumption was that the participants were truthful and that their input in the procedures of the study accurately depicted their attitudes and opinions. Additionally, it was assumed that noticeable and significant correlations were identified with the highest factor scores during analysis of data.

Although the purpose of this study was to investigate the perspective of male, elementary school teachers, there are limitations in using Q methodology. Not addressed in this study were generalizations to a larger population, because this is not the intended purpose of this methodology. Therefore, generalizations were not considered. Additionally, the study was limited to a small group of participants from northwestern Pennsylvania, and randomization procedures were not used. Chapter 3 will explain more about the selection of participants in this study.

Future research, using other methods, should address the extent to which these findings can be generalized to a larger population. For example, researchers could look at surveying larger samples and use random sampling. Both those findings and the findings in this study would have potential to be used in policymaking and efforts to attract and retain male elementary school teachers.

### **Definition of Terms**

- *Concourse* All relevant aspects of a topic as it relates to the study. "When ideas run together in thought, and it is from this concourse that a sample of statements is subsequently drawn for administration in a Q sort" (Brown, 1993, p. 95).
- *Q methodology* A method used to compile a shared set of viewpoints from participants that is largely unexplored (van Exel, 2005; Watts & Stenner, 2012).
- *Q* sample Consists of statements that were compiled from the concourse. "The Q sample must represent all major ideas, viewpoints, feelings, and opinions in the concourse" (Barbosa et al., 1998, p. 1035). The Q sample "can potentially be ranked ordered from a first-person perspective" (Watts & Stenner, 2012, p. 57).
- *Q sort* The study participants sort the statements from the Q sample in rank order on a continuum, from least agreeable to most agreeable, based on their perspective (Watts & Stenner, 2012).
- *Self-efficacy* An individual's belief in his or her ability and control over one's motivation and behavior that affects performance outcomes (Bandura, 1993).

#### **Summary**

This study has significance for educational policies regarding teacher recruitment. Regardless of an empirical foundation, the demand to increase male, elementary school teachers is ambiguous. This makes it difficult to explain why we need more male teachers. Researchers have various ideas that include: defeminizing schools and closing the gender gap, providing male role models, debunking sex roles, and division of labor stereotypes (Allan, 1994; Carrington et al., 2008; Cushman, 2005b; Coulter & McNay, 1993; Benton DeCorse & Vogtle, 1997; Martino & Kehler, 2006; Mills, Martino, & Lingard, 2004; Roulston & Mills, 2000; Sargent, 2000; Skelton, 2003; 2012).

A demand for more males to teach elementary school exists, despite scrutiny that males sometimes face, which justifies the need to focus more research attention on the topic. Additionally, some argue that the gendered profession of education, which supposedly values diversity, should reflect the make-up of the rest of society (Brookhart & Loadman, 1996). The complexity of historical and social issues, such as the image of a feminized career, low status, and public scrutiny, might deter males from choosing careers in education (Cushman, 2005a).

The purpose of this study was to compile a common perspective from a group of male elementary school teachers in order to contribute to a body of research on the shortage of male teachers. Current research on the topic included a limited number of studies, and no study was found to use Q methodology to examine perspectives.

Chapter 1 provided the foundation, the purpose of the research, and the design of the study. Chapter 2 will provide a review of current literature relative to the study. Subsequent chapters will include the research design and sample population, a review of the findings based on data collection and analysis, and discussion, conclusions, and suggestions for further research.

#### Chapter 2

### Literature Review

The researcher presumes that the predominance of female elementary school teachers over male elementary school teachers is common knowledge. Sargent (2000) referred to teaching elementary school as a "gendered occupation" (p. 412). According to the U.S. Bureau of Labor Statistics (2011, [as cited in the MenTeach website, 2014]), 2.3% of preschool and kindergarten teachers are males, and 18.3% of elementary and middle school teachers are males. We do not have the exact numbers to differentiate between middle school and elementary school teachers, but generally there are few male teachers of younger students, and, gradually, more are found as students progress through grade levels (Bricheno & Thornton, 2002). In other words, women appear to be attracted to teaching young children and men appear to be more attracted to secondary and higher education careers. Additionally, there is little to no evidence to suggest that these proportions have changed in recent years, nor are there predictions that the trend will end in the near future.

Surprisingly, existing research does not explain why we have few males willing to teach young children. Perhaps it is due to cultural, gender roles. Furthermore, attempts to attract more males to careers in teaching have shown little success. Sanatullova-Allison (2010b) indicated an increased interest by researchers and educators about men who choose a career in teaching.

The purpose of this study was to gather insight from the perspective of male, elementary school teachers. In support of the study, this literature review provided a background necessary to understand the shortage of males willing to and interested in

teaching young children. This chapter included a review of the literature based on the following themes: (a) identity, (b) gender issues, (c) male role modeling, (d) the scrutiny of male teachers, (e) career choices, and (f) the glass escalator theory.

### **General Background**

The call for more male elementary teachers appears to be universal, but it is not a new phenomenon. Moreover, this sentiment spans more than 100 years in American history (Acker, 1995; 1996; Blount, 2005 [as cited in Martino, 2008, p. 190]). Some people would suggest that women chose careers in teaching due to their nature as a nurturer. The Evolution Theory suggested that the gender gap in the workplace is not particularly due to discrimination, but because females are, by nature, more caring and nurturing than males, they are more likely to teach primary grades, as opposed to the secondary and university levels (Browne, 1999). However, the lack of male teachers was not always historically the case.

#### **Historic overview**

A historical overview shows that during colonial America, and into the 1800s, teaching was a profession for the middle-class man, and generally revered with respect. Often those professionals taught as a stepping-stone to other careers, such as medicine or law (Johnson, 2008, p. 4). However, a rapid exodus occurred during ensuing years. The transition of America from an agricultural-based economy to that of an industrialized economy, which began in the mid-1800s, created better paying jobs for men, which led to a mass exodus of men from the teaching profession (Blount, 2000; Johnson, 2008). Because society, at that time, did not accept women into industrial occupations, women filled the teaching void left by the departure of men. This was worsened, because women

were hired for about one third the pay as men (Gumet, 1988, [as cited by Johnson, 2008, p. 4]). This departure lowered the status of teaching and likely detracted men from the occupation, and as more men left, the status lowered even more (Benton DeCorse & Vogtle, 1997; Skelton, 2012). Unfortunately, it appears that the male exodus from teaching continues to this day.

Another theme that emerged was one that appears to be more homophobic or effeminate in nature. According to Blount (2005, [as cited by Martino, 2008]), there is a history in the United States since the mid-1800s "which documents the reemergence of such anxieties about either the absence of 'real men' or the questionable status of 'effeminate men' in the provision of appropriate sex-role socialization for boys" (p. 193). This theme was also noted in the turn of the century Rule 127 in Ireland, where, according to Bhroimeil (2006, [as cited by Martino, 2008]) it was believed that a man "both by temperament and training was unfit to teach infants," and that women were "the natural guardians of young children" (p. 199). That same document also pointed out an existing public concern fearing that young boys might become feminine if taught by women. These conflicting public discourses appear today, although perhaps in more subtle ways.

### Identity

It is possible that there is a kind of reverse-discrimination occurring. It is also possible that, because of feminization and the lowered status of teaching, along with the overall historic oppression of women in the workplace, the shortage of male elementary teachers is invisible and unheeded. It might be too difficult for most people to

sympathize with male teachers because males appear to have dominated other workplaces.

Men are underrepresented in fields predominated by women, such as elementary school teaching, and experience prejudice, mostly by those outside the profession (Williams, 1992). Contrary to the opinions of outsiders, teachers have a slightly altered view of the identity of a primary grade teacher. Most male and female teachers agreed that primary teaching was equally demanding and stressful as secondary teaching, and that primary teaching was equally suitable for both men and women (Skelton, 2003). However, societal perceptions appear to keep the number of males in check. Cushman (2005a) commented on such beliefs:

> The public image of teaching as low status is the source of many reactionary statements on the part of family, friends and others when a male decides to become a teacher. ... 'low status' is inextricably related to society's traditional perception of work involving children as being the role of women, and the work of women being historically undervalued and underpaid. (p. 334)

The modern-day male teacher wrestles to define character and role, and struggles to "articulate what the identity of the male teacher should be" (Jones, 2007b, p. 182). Societal expectations of males have made it difficult to distinguish male teachers from females, because teaching young children is viewed as a feminine occupation. Jones (2007b) further suggested that societal discourses viewed male teachers as not real men, and described other multiple identities, such as disciplinarian, janitor, removal or action man, head teacher, potential pedophile, father-figure, technology, math, or sports' expert.

Positive marginality, the concept of success by ability to ignore the stigma of being a member of a non-dominant group (Unger, 1998; 2000), could be applied to males who ignore societal discourse and choose careers in the predominated, female field of education. Marginality refers to one who is a member of two different groups and the negative social stigma by which others define them. For example, a woman who works as a police officer might be referred to as a lady cop, or a male who works as a nurse might be referred to as a male nurse, rather than just a police officer and a nurse, respectively.

Societal discourses of what it is to be a man and a teacher are powerful, and could be at the core of the shortage of males in elementary schools. Although it is not healthy to cloud our views through stereotyping, and despite societal discourses, male teachers appear to contribute to the stereotypes, by sensing something different to offer, other than curriculum, and view their approach as different from women (Benton DeCorse & Vogtle, 1997). The identity of a male teacher is illusive and has yet to be defined.

Male teachers often find themselves in a gender role conflict. The conflict is that a male teacher's qualities (masculine themes such as interests in competition, aggressiveness, and outdoor activities, etc.) are inconsistent with environmental expectations (education is viewed as nurturing, passive, and an indoor activity). This is often a deterrent for both men and women who want to work in non-traditional occupations (Wolfram, Mohr, & Borchert, 2009). Despite the illusive nature and lack of identity for male teachers, some have focused on differences between men and women.

# **Differences in Gender**

The societal notions that caring and nurturing for children are exclusively for

women manifest gender issues and stereotyping. As a result, males might seek traditional masculine roles that are competitive and dominant. Preservice and current male teachers have expressed apprehension that they might be accused of improper contact with children, unfoundedly, or that others might question their sexual orientation (Eng, 2004; Hansen & Mulholland, 2005). Yet, our society appears to view fathers who demonstrate caring of children in a family setting with admiration, and even likening it to masculinity. Therefore, is the demonstration of caring even gender-related at all?

A further look at gender issues suggested that the presence of a male teacher has an influence on preschool children's sex role learning. Children taught by a teacher of the same gender had more stereotyping than the opposite gender, but children taught by males with the added variable of a nonsexist curriculum decreased gender stereotypes (Koblinsky & Sugawara, 1984). Male teachers might have a greater effect on boys than on girls, perhaps because boys might develop an androgynous view of teachers (Mancus, 1992). We need to have gender equity for greater balance among male and female teachers. Male teachers can offer something different from that of female teachers because of their unique backgrounds and experiences (Benton DeCorse & Vogtle, 1997; Brookhart & Loadman, 1996; Davison & Nelson, 2011). This does not suggest that males are better teachers than females, or vice versa. According to Bricheno and Thornton (2002), there is no direct relation between gender balance and student achievement, but balance should remain a goal. Although gender balance in education should be a goal, there are surprisingly few studies into staff gender balance in primary schools (Bricheno & Thornton, 2002; Drudy, 2008). Other than balance, there might be other reasons to increase male participation.

Identifying the teaching characteristics of male elementary teachers, or what sets male teachers apart from their female colleagues, is difficult. Research suggests that the skill of the teacher correlates more with student achievement than teacher gender (Antecol, Eren, & Ozbeklik, 2012; 2015). Furthermore, research into gender in education appears to focus more on leadership and gender, student gender, and a focus on college-level dynamics.

The notion that same-gender teachers might serve as positive role models for students and influence student achievement has been widely studied, with varied results, particularly at the elementary school level. For example, according to Dee (2007), when middle school students were paired with same-gender teachers, student achievement, teacher perceptions of student performance and student engagement significantly improved. Others have also found a correlation between teacher gender and student achievement at the secondary level, but at the elementary school level there appears to be no correlation or inconclusive results (Ammermueller & Dolton, 2006; Carrington et al., 2007; Carrington et al., 2008; Francis, Skelton, Carrington, Hutchings, Read, & Hall, 2008; Krieg, 2005; Warwick & Jatoi, 1994; Winters, Haight, Swaim, & Pickering, 2013).

In one study that focused on teacher relationships with students, elementary school teachers self-reported that they felt more conflicts and less closeness with boys (Koepke & Harkins, 2008). One explanation might be that teachers tend to accept dominant and autonomous behavior of boys, but respond more positively to calm and submissive girls (Basow, 2004; Meece & Scantleberry, 2006, as cited by Spilt, Koomen, & Jak, 2012). However, these differences might not be within the control of any teachers. Instead, it might be differences among students. "Girls may seek more

nurturing relationships with teachers, whereas boys are more inclined to present themselves as autonomous, resulting in less close teacher-student relationships for boys in comparison to girls" (Ewing, 2009; Ewing & Taylor, 2009, [as cited by Spilt et al., 2012, p. 7]).

Although there appears to be no correlation between teacher gender and standards for referring students to special education, there might be less noticeable behavioral differences between male and female teachers. According to McIntyre (1990), female teachers were more likely than male teachers to refer students with high levels of aggression. Similar suggestions were made by Opdenakker and Van Damme (2006), indicating that, although the study was limited to math instruction at the secondary level, classroom management made a positive difference in student success, and male teachers tended to keep order better than female teachers. This suggests that male teachers handle aggressive students more successfully than female teachers.

Greater gender equity in education could reduce or eliminate what could be a bias toward women. There appears to be different rules and expectations for males than females in teaching. For example, there is a no touch rule, whereby males are reluctant to have physical contact with students for fear of false predatory accusations, yet those same rules do not apply to women (Cushman, 2005b). Gender role predictions are also vague. This is evident with the assumption that men are good disciplinarians (Francis, 2008). It seems absurd to expect that a person would be good at something, such as discipline, based on their gender, alone. Male teachers need to be supported and encouraged rather than to be given difficult discipline problems and expectations to fill the void of absentee fathers (Cushman, 2005b). Therefore, it is imperative to develop systems of support.

What attracts males to teaching? There are factors that might have influenced men to enter the field of elementary education. Factors might include: influence of former teachers and family members, career advice, and the most influential were personal experiences in working with children (Mulholland & Hansen, 2003; Sanatullova-Allison, 2010b).

For unknown reasons, men shy away from working with young children. Could it just be due to a lack of any experience with children? Once exposed to working with children, more men became intrinsically motivated to major in, or change majors, to elementary education (Sanatulla-Allison, 2010b). A challenge that should be explored further is how to provide men with that experience.

Because of a minority status in education, one might suspect that men would be discouraged by a perceived disadvantage, yet men reported that they felt comfortable working with women (Simpson, 2004). This suggests that male teachers might view their minority status different from other such social groups that carry an implied inferiority. This warrants further research on the topic.

Could it be that many men outside of teaching are uncomfortable in a traditional woman's role? A German study of teachers (Wolfram et al., 2008) found that gender role conflict (men's fear of femininity) had a negative effect on well-being, and that femininity was associated with lower work satisfaction. However, this warrants further exploratory research.

Male teachers must negotiate between imitating females on the job and changing to a masculine approach. According to Nordberg (2002), "To be a man and work in a female-dominated occupation is thereby about relating to: traditions of the occupation,

conditions of modernity, conceptions of gender, and the expectations that the male body actualizes" (p, 35).

#### Maleness

Masculinity remains a focus of concern. However, hiring more males to teach, just because they are males, does not make sense, and needs to be further defined (Burn, 2001; Coulter & McNay, 1993; Cushman, 2005b; Francis, 2008; Martino & Kehler, 2006). There appears to be a demand, from educators and the public, for manly teachers. Yet, how does masculinity fit into a traditionally feminine career?

Men who take on a career in education, particularly with young children, run the risk of being seen as unmanly and not masculine. It is theorized that some men compensate by exuding masculinity, whether intentionally or unintentionally (Nordberg, 2002; Roulston & Mills, 2000). However, several studies indicated that male elementary teachers do not appear to fit the stereotypes and are generally comfortable with themselves and their masculine sexuality when choosing to work in a female-dominated environment (Brookhart & Loadman, 1996; Chusmir, 1990; Nordberg, 2002). A key question is: What are the expectations of a male teacher?

It could be that even educators contribute to stereotyping maleness or manliness. Teachers and principals further the stereotype by preferring that masculine, real men are hired as teachers (Cushman, 2008; Jones, 2007b). These real men traits typically include an interest in sports and competition. However, Mulholland and Hansen (2003) identified a contrary finding. In a college course, males were less competitive than females. This demonstrates the caution people need to take with stereotyping.

There may be a difference between male and female teachers, particularly in the

primary grades, but research is limited, and may only be based on perception. For example, research regarding teachers' perspectives in school settings in Greece suggested that "strong gender-related differences were found in every aspect of children's functioning in schools" (Hopf & Hatzichristou, 1999, p. 15). Yet, it is difficult to simplify what effect male teachers have on young students.

Regarding student academics, there is no evidence that students (male or female) perform differently whether the teacher is a male or female. The exact value of male teachers remains unanswered. Male teachers do not appear to have any direct effect on the student achievement of boys or girls (Bricheno & Thornton, 1996). However, there is reason to believe that boys might benefit from male teachers in other ways.

Students with male teachers had more, non-stereotyping attributes than those without male teachers (Koblinsky & Sugawara, 1984; Mancus, 1992; Sokal & Katz, 2008). However, there is conflicting research about the effect of male teachers on boys. Carrington et al. (2008) found that there was no indication that boys' attitudes improved because of having male teachers, nor did girls' who had female teachers. Yet, Sokal and Katz (2008) demonstrated that boys did not improve in reading achievement, but did defeminize boys' views of reading when they had a male teacher.

Are masculinity and femininity merely perceptions? Boys appear to be less interested in reading than girls are. Do boys view reading as feminine? If so, simply pairing boys who lack motivation to read with a male teacher would appear to solve the problem, so that the male teachers would model an interest in reading. However, because there is no evidence (and seems to be absurd to think) that male teachers are more effective than females in teaching reading to boys, where does the perception come from?

Female teachers tend to have expectations for male teachers to take on nonteaching, masculine tasks, such as lifting heavy things, doing repairs, and to confront the principal to speak on behalf of all teachers, which according to Sargent (2000), "In spite of their misgivings, all of the men said that quite often, they accept the task" (pp. 422-424). Despite trying to remain gender-neutral, these men might unintentionally behave in conventional masculine ways, thus, perpetuating the stereotype.

The perception of the male as disciplinarian is not backed by research. That male teachers must exude masculinity, and handle unruly boys, is a lofty expectation that could cause men to leave teaching (Mills, Haase, & Charlton, 2008). Mills et al. went on to refer to this ideal teacher as the "imaginary male teacher" (p.71). This suggests that with limited and unreasonable expectations, the ideal male teacher is not going to exist.

### Male Role Modeling

A number of studies examined the societal belief that male teachers make surrogate fathers, simply by being a male (Sanatullova-Allison, 2010a; Sargent, 2005; Sevier & Ashcraft, 2009). According to Sargent (2005), male role models are presumed to be needed for students that "lack a constant male presence in their lives"...that will lead to an "increase in discipline" and for "exposing girls to an 'alternative' form of masculinity" as opposed to "abusive or neglectful" (pp. 254-255).

Despite this, many people want more male teachers and mainly perceive the concept of the male role model and disciplinarian to be important for boys, but there is also evidence that male primary teachers also benefit girls (McGrath & Sinclair, 2013). The common argument is that boys with absentee fathers need a male role model. However, McGrath and Sinclair (2013) suggested that girls from some home

environments might need to see that men are not abusers. This is a matter rarely discussed in the research.

Men in education see advantages and disadvantages of the role they are expected to play. Being a role model was perceived to be an important part of the job, but men felt a conflict in meeting the demand and expectation to be a role model, especially with so few numbers (Allan, 1994). A majority of male principals agree that there is a need for more male role models, but did not see academic reasons for this preference (Cushman, 2008). So, what do men have to offer?

Men can offer a great deal to education, not just by being a male, but through the potential of serving as a role model to children, although there exists an ambiguity about the kind of role model male teachers are expected to portray (Davison & Nelson, 2011; Sargent, 2005). According to Sargent (2000), "There is not a single image of the male role model but several, and these often conflict with one another" (p. 418).

Regardless of what the male role model should be, males who are willing to teach children do not question what it means to be a male role model (Skelton, 2003; Montecinos & Nielsen, 2004). In other words, men generally accept the expectation to be a male role model.

According to Sevier and Ashcraft (2009), the "surrogate father rationale is typically offered as self-evident, assuming that male teachers, by virtue of their maleness, will serve as desirable models of masculinity" (p. 535). Martino (2008) attempted to define role model:

Rhetoric surrounding the call for male role models in elementary schools relies on certain common sense assumptions and anxieties about the

influence of feminization of boys' developing masculinities which are driven, often implicitly, by a limited understanding about the need for adequate sex role identification as a panacea for addressing the problems boys are experiencing in schools. In short, being a role model becomes synonymous with being a 'real man' who is able to ensure that boys' masculinity remains intact or is appropriately cultivated (p. 193).

But what is a real man? Montecinos and Nielsen (2004) referred to the sports coach as a metaphor frequently used to define male teachers.

Clearly, many people call for the recruitment and retaining of male teachers for children. Yet, there appears to be little agreement on what this should look like. According to Montecinos and Nielsen (1997), "If young boys see men as teachers, they are less likely to grow up thinking of teaching as an occupation reserved for women" (p. 48). This refutes the claim by Mancus (1992) that there is no evidence suggesting that male teachers can inspire and influence boys to become teachers.

Martino and Kehler (2006) acknowledged the need to attract more males to education, but forewarned that we should avoid arguing for "more male role models in schools as a panacea for addressing boys' diverse educational and social problems" (p. 125). Instead, some researchers suggested further research on the topic of caring in elementary school and the specific types of caring (Davison & Nelson, 2011; Hansen & Mulholland, 2005).

### Scrutiny

An argument against the employment of male teachers, or, a major factor that could discourage males from pursuing employment in early childhood, is the perceived

possibility of child abuse (Benton DeCorse & Vogtle, 1997; Cushman, 2005a; Farquhar, 1997; Jones, 2007b; Parr & Gosse, 2011; Sanatullova-Allison, 2010a; Sargent, 2000; 2005; Skelton, 2003; Sumsion 1999; 2000; Weaver-Hightower, 2011; Williams, 1992). However, Cushman (2008) referred to this as a moral panic due to highly publicized cases in the media, which implies irrationality.

There appears to be a double standard of sorts between male and female teachers of young children. While it is socially acceptable for the female teacher to nurture children, which often involves physical contact (hugging, for example), the same male colleague is under scrutiny, and at risk of being accused of sexual misconduct. Other social fears about male teachers include femininity and homosexuality. According to Blount (2000), there exists a "deep-rooted sexism" and "as long as cross-gender behavior is considered tantamount to homosexuality, then school employment will likely remain deeply gender polarized" (pp. 97-98). An example of the different rules and expectations between males and females in teaching is the "no touch" rule, whereby, males are reluctant to have physical contact with young students for fear of false predatory accusations; yet, those same rules do not apply to women (Cushman, 2005b, p. 236).

There is subtle discrimination in education, whereby people treat others unequally based on their gender, especially with things that they would see as usual behaviors and responses (Benokraitis, 1997, as cited by Sumsion, 2000). For example, there might be a subtle push to place males in upper elementary grades, without considering them for work in early childhood, possibly due to suspicion of men's motives for wanting to work with very young children. There appears to be no sound advice for males in a predominantly female role. Female teachers advised males to: behave as female teachers

would, be careful, never be alone with a child, touch in certain ways, and don't touch (Jones, 2007a). However, there are faults in this advice. First, it is impossible for a male to behave as a female teacher when physical touch is acceptable with children by female teachers (the double standard). Second, to never be alone with a child suggests that male teachers need to be supervised by a female chaperone. Finally, touch in certain ways, but don't touch contradict each other, and is no advice at all. Being careful appears to be the best advice, although it is ambiguous.

Teaching is a career about caring, and both men and women show caring (Vogt, 2002). Caring should involve the professional relationships with children without men being suspected of abuse (Hansen & Mulholland, 2005). This adds undue stress to the male teacher. Parr and Goose (2011) suggested that while the safety and protection of students remain most important, we must also ensure that teachers' rights are respected and that teachers feel safe and secure when doing nothing wrong. Men must learn to navigate this world of the double standard by better understanding boundaries and taking precautions (Benton DeCorse & Vogtle, 1997). Despite the risks, marginal amounts of men still want to teach. Although males have a sense of the possibility of wrongful accusations of child abuse, many preservice men are not dissuaded (Hansen & Mulholland, 2005).

### **Career Choices**

As mentioned previously, since the mid 1800s, teaching in the United States has been viewed traditionally as work for women. However, men and women are not so similar when it comes to choosing to teach. It is not spectacular or unusual for a woman to choose a career in teaching, but men who teach have entered a nontraditional career. It

is important to understand men and their career choices, because the stigma of men working in traditional women's work is more likely to deter men, than with women who enter the traditional man's job (Williams, 1992). Galbraith (1992) also recognized gender differences by asking if men are so similar to females, then what accounts for their choice to break tradition and choose a non-traditional career? This is an effective argument for more research on the subject.

To understand what might attract males to careers in teaching young children, a number of researchers chose to undertake qualitative studies that looked at preservice teachers, expecting to find explanations to this phenomenon (Hansen & Mulholland, 2005; Kolblinsky & Sugawara, 1984; Sanatullova-Allison, 2010; Skelton, 2003; Sokal & Katz, 2008). However, this could be problematic because experienced practitioners were not considered, which disregarded a potentially crucial population. One plausible explanation for this shortcoming is that researchers found it convenient to use preservice students in their studies, most likely because the studies were based at universities. Therefore, there is a need to study teachers with experience.

Regarding experienced teachers, both males and females rated elementary teaching as satisfying, although males did not rate job satisfaction as positive as females did (Klecker, 1997). However, one distinct difference between men and women in the education workforce is that many males appear to show hesitation when choosing to become a teacher. Men tended to choose a major as elementary education while in college, while women tended to make this decision before entering college (Montecinos & Nielsen, 1997). Additionally, many males are likely to have come from previous occupations or careers before entering the field of education (Cushman, 2005; Smedley,

2007; Simpson, 2004; 2005; Williams, 1992). Moreover, Williams (1992) indicated that many men "identified with the stigma of working in a female-identified occupation as the major barrier to more men entering their professions" and that many do not enter "these fields until well into adulthood" (p. 303). The stigma that Williams (1992) referred to includes being afraid to be seen as a failure or sexual deviant, while women who work in traditional male settings have achieved acceptance, as is evident on television shows where women are depicted as doctors, lawyers, and police officers.

## **Glass Escalator Theory**

What few men enter the teaching profession might also leave for administrative jobs, causing a greater shortage of males. Evidence supports the Williams' (1992) glass escalator theory that men enjoy privilege in female-dominated jobs, and are more likely to be promoted into administrative positions than women (Blount, 2000; Chusmir, 1990; Cognard-Black, 2004; Farquhar, 1997; Jones, 2007b; Montecinos & Nielsen, 1997; Thornton & Bricheno, 2000). According to Johnson (2008), "Deep gender divisions in the teaching profession go against the democratic and egalitarian values schools are expected to promote" (p. 3). Moreover, children are witnesses to a gender inequality in schools. According to Gutmann (1987, as cited by Johnson, 2008), the idea that male teachers should become administrators and woman should teach, perpetuates an unhealthy stereotype that males dominate over women (p. 3).

The glass escalator effect might be ingrained before men and women become teachers. Before declaring their college major, more men than women expressed an interest in becoming a principal. Similarly, a higher percentage of women than men planned to stay as elementary teachers throughout their career, but the proportion of men

with the same expectation dropped after a three-year preservice program (Montecinos & Nielsen, 1997). This suggests that the gender gap is deeply embedded in society, and is not necessarily a product of the education system.

Despite this, a more recent trend suggests that more women than men are now entering training programs and administration positions in education (Johnson, 1998, p. 3). In light of this information, the limited number of male elementary teachers remains a problem and the solution is enigmatic.

#### **Theoretical Framework**

This study is grounded in the many theoretical pressures that might attract or detract males from becoming elementary school teachers. Multiple forces appear to influence the thinking of males regarding how they view teaching as a profession. Some of these forces are most likely based on perception of those outside of the profession. However, teachers have specific beliefs, and those beliefs shape their practice. Pajares (1992) suggested that teacher beliefs "should become an important focus of educational inquiry but that this will require clear conceptualizations, careful examination of key assumptions, consistent understandings and adherence to precise meanings, and proper assessment and investigation of specific belief constructs" (p. 307). Because perceptions tend to be driving forces that shape our decisions, further research is warranted to explore why men choose to teach young children.

When conceptualizing this study, the need for a solid theoretical basis was necessary to develop inquiry. The underlining question about how men develop an interest in teaching young children can be found in Linda Gottfredson's (1981; 2002) Theory of Circumscription and Compromise, which attempts to describe the development

of career choices in young people.

The Circumscription is a filtering process that rules out unacceptable career options based on their perceived fit with their self-concept. Gottfredson's (1981; 2002) stages of circumscription are:

Stage 1: Orientation to size and power (age 3-5). In this stage, children begin to associate adults with occupational roles and see themselves as one day becoming an adult.

Stage 2: Orientation to sex roles (ages 6-8). By this age, children begin to understand the concept of sex roles and are concerned with matching jobs with their gender identity.

Stage 3: Orientation to social values (ages 9-13). During this stage, children are now able to see more abstractly and begin to recognize social status (e.g., education, income, clique membership) in addition to sex-type. Children now begin to distinguish jobs that they consider to be tolerable and unacceptable, with a range that includes a lower boundary and a higher boundary. For example, children view some jobs that are low status level as unacceptable, and determine that some high-status jobs are unacceptable.

Stage 4: Orientation to internal, unique self (age 14+). This is a more sophisticated look at themselves and reality. Young people begin to recognize their own sense of uniqueness. Teenagers are able to weigh their abilities, interests, and personalities and further filter out the unacceptable careers; however, desirable jobs might not be available. According to Gottfredson (1981; 2002), this leads to Compromise, where the individual begins to sacrifice roles seen as compatible with their self-concept in favor of those that are perceived to be more easily accessible. However, a conflict with this theory can exist because youth are sometimes limited in their knowledge about how to access roles.

Another theory in which this study is based is the Social Cognitive Career Theory (SCCT) that was developed by Robert Lent (1994), Steven Brown (2000), and Gail Hackett (2002). This theory looks at three aspects of career development: development of career interests, the making of career choices, and obtaining career success. SCCT considers how self-efficacy, expected outcome, and goals interrelate with personal and environmental factors such as gender, social supports, and barriers. SCCT suggests that people will become interested in, and pursue careers, that are aligned to their self-efficacy beliefs, when they have the skills necessary and environmental supports in place.

People are exposed to a variety of activities in school, home, and their community during their upbringing. These activities might form the basis for cultural norms. For example, boys and girls might receive reinforcement from engaging in activities that are gender-different. Through continued exposure, young people form their self-efficacy and expectations for the outcomes of activities. Self-efficacy is revised through increased involvement in an activity, leading to mastery or failure. Therefore, people will develop stronger interests in the activities that they believe are strengths.

Just like Gottfredson's Theory of Circumscription and Compromise (1981; 2002), SCCT emphasizes the involvement of compromise in occupational choice. According to Lent (1994), Brown (2000), and Hackett (2002), career choice is shaped by environmental factors like family pressure, culture, economics, opportunities available, and education that becomes supports and sources of encouragement. However, these

same variables may also serve as barriers for many youth, leading them away from following their career interests. This is to suggest that the more positive supports there are, the more likely that adolescents will pursue their interests, as opposed to compromising for more culturally acceptable or pragmatic options.

Simply put, SCCT suggests that interests will predict career choices when environmental conditions are supportive, rather than not supportive. Without supportive conditions, a young person's interests might need to be bargained or compromised so that career choice is narrowed to pragmatic or culturally acceptable options.

There appears to be value in finding out more about how men develop an interest in teaching young children, and possible deterrents to a career in education for men. This is grounded in Linda Gottfredson's (1981; 2002) theory of Circumscription and Compromise and Lent's, Brown's, & Hackett's Social Cognitive Career Theory, which both attempt to describe the development of career choices in young people.

#### Summary

The demand for male elementary school teachers is perpetual, and dates back more than 100 years in American history. Moreover, the concern appears in many countries worldwide. By studying the viewpoints of male elementary school teachers, information may be gleaned by providing a deeper understanding of what attracts males to the job. Sanatullova-Allison (2010a) describes the need to look into the topic:

The field of teacher education should revise the outdated but still prevalent attitude that women belong in the lower grades and men in the upper grades. This reversed sexism has forced a stigma on men who choose to work with the young as 'suspect or out of their element'. (p. 189)

This study intends to increase the knowledge and understanding of the male elementary teachers' perspective, and whether that outlook might lead to better recruitment and retention policies and practices.

Further research, recruitment, preservice training, and policy review are needed to increase male elementary school teachers (Cushman, 2005a; 2010; Davison & Neilson, 2011; Martino, 2008; Sanatullova-Allison, 2010b; Sumsion, 2000; Weaver-Hightower, 2011). Unfortunately, despite the long-lasting demand to increase the number of male elementary school teachers, little has changed. Men are still in short supply to work with young children.

Research on the topic is insufficient and dated, with much of it limited to preservice (inexperienced) teachers, and much of it is from outside of the U.S. According to Smedley (2007), the research topic of male teachers only began in the 1990s, and refers to a "chronological shift from the invisibility to the visibility of men as gendered" (p. 370). This warrants current research, particularly looking at perspectives of experienced American male teachers.

#### Chapter 3

### Methodology

This study examined the perspective of males who chose careers as elementary school teachers, despite their minority status in having selected this non-traditional career path. As the previous chapter reflects, there may be cultural, financial, or even biological factors that influence men's decision to teach young children. Because the essential goal of this study was to explore the perspectives of those male teachers, Q methodology, a mixed method, was determined to be appropriate. One main feature about this method is that it was based on the perspective of the subjects. That there is a shortage of male elementary teachers is common knowledge, and there might be cultural expectations that contribute to this phenomenon. However, in this study there was neither a hypothesis, nor bias from the researcher influencing the results, but merely a collection and analysis of the viewpoints from the male elementary teacher. A brief explanation of Q methodology, its history, and steps used in this research are provided.

#### **Q** methodology: A Brief History and Explanation

Q methodology (Q) is a systematic research method used to study the viewpoint, or subjectivity of people. Q was first developed in 1935 by British psychologist and physicist William Stephenson in a letter to the journal, *Nature*, and has gained prominence in fields outside of psychology (Brown, 1993; Watts & Stenner, 2012). The main idea behind Q is to compile a shared set of viewpoints from the participants (Watts & Stenner, 2012). Many consider it a mixed method in that there are elements of both qualitative (collecting individual opinion) and quantitative (during a systematic factor analysis) methods of research. Q differs from typical factor analysis, the R method. Where R looks for correlations among variables, Q looks for correlations among subjects across the sample of variables. Essentially, it is an inter-rater comparison that reduces many viewpoints down to a few that represent a shared viewpoint.

Rather than facts, the subjectivity in Q methodology is due to each individual's feelings, opinions, and perspectives, and reveals unexplored preferences, sentiments, motives, and aspects of a personality that influence behavior (Brown, 1993; van Exel, 2005; Watts & Stenner, 2012). Because of the open-endedness and exploratory nature in Q, this researcher was inclined to focus on an interpretive approach, as supported by van Exel (2005) who referred to the helpfulness of using Q to explore, "the part of personality that is of great influence on behavior but that often remains largely unexplored" (p. 2).

## Instrumentation.

Q methodology begins by assembling a concourse, a collection of statements that reflect all possible opinions related to the research topic. To build the concourse in this study, the researcher gathered information from an extensive review of the literature on the subject, as highlighted in Chapter 2. In addition to previous research, the researcher gathered information from Survey Monkey. Survey Monkey was selected as a tool because of its ease of use and the potential for large-scale data collection. The researcher borrowed survey questions from two existing surveys by Richardson (2005), and Hyman (2015), and then modified them to match the goals of the current research.

The survey consisted of 15 items assessing attitudinal data towards agreement or disagreement with a number of propositions (covering issues such as career satisfaction, salary, social standing, the demands of teaching, and whether it is beneficial for males to teach young children). Strength of agreement was measured on a Likert-type scale

ranging from 1 (strongly disagree), 2 (disagree), 3 (unsure), 4 (agree), and 5 (strongly agree). Subsequently, there were five items with demographic data (age, gender, number of children, experience, and educational background), followed by five qualitative, openended items, exploring the decision to teach, and opinions about males teaching at the elementary level. The survey was given to multiple public school educators, male and female, elementary and secondary. The researcher sent invitations to take the survey to more than a dozen school districts.

## Survey items assessing reasons for respondents' choice of teaching were:

- 1. Teaching provides me with a good career path.
- Teaching enables me to contribute more effectively to the economic wellbeing of my family.
- 3. I believe I am able to make a greater contribution to society as a teacher.
- 4. Teaching is a satisfying occupation.
- 5. Before teaching, I had prior experience working with children/youth.
- 6. My family was supportive of my decision to become a teacher.
- 7. I have always wanted to be a teacher.
- 8. I believe that teaching enhances my social status.
- 9. I believe that teaching enhances my level of respect in the community.
- 10. Teaching is a psychologically & emotionally demanding occupation.
- 11. I believe teaching requires a greater range of social skills than required for most other occupations.
- 12. Teaching is an occupation that offers a good salary.
- 13. Teaching is an occupation that allows me to have a more fulfilling life.

- 14. Younger students benefit from having more male teachers at the elementary level.
- 15. I have been encouraged to teach, or considered teaching at the elementary level.

\*Note: Response options for all items were from 1 (strongly disagree), 2 (disagree), 3 (unsure), 4 (agree), and 5 (strongly agree).

Subsequent demographic survey questions were:

- 16. Gender (male, female);
- 17. Number of children (0, 1, 2, 3 or more);
- 18. Age group (21–29, 30–39, 40–49, 50+ years);
- 19. Number of years teaching (1-5, 6-10, 11-15, 16-20, 21 or more); and
- 20. Highest level of qualification held (bachelor degree, master's degree, doctorate or other)

## Open-ended survey items:

- 21. What other occupations/careers have you pursued or considered?
- 22. What most influenced your decision to pursue a teaching career?
- 23. What might cause you to abandon teaching as a career?
- 24. Why are more women represented in elementary classrooms than men?
- 25. What positive and negative connotations are attached to males teaching elementary level students?

After gathering the responses from participants (n = 234), the data were used to develop the concourse for the Q sort. Some statements in the concourse were derived from the survey respondents, and others came from a thorough review of the literature. According to Watts and Stenner (2012), statements must be "Broadly representative of the opinion domain, population, or concourse at issue" (p. 58). Therefore, the researcher first categorized the statements, and then formed a panel to verify the direction, so that a wide range of viewpoints would be represented. The following items represent the negative, positive, and neutral statements that were obtained from the survey responses and the extensive review of the literature.

The statements are:

# Negative Statements

- 1. Most men pursue careers with more earning potential, because they view teaching as undesirable for the head of a household.
- 2. The stigma of a man working a traditional woman's job likely discourages more men from teaching.
- There is a lack of recruitment or discussion with men about the importance of male elementary teachers.
- 4. Women are naturally better caretakers than men are.
- Society doesn't encourage men to do jobs that involve caring, such as teaching young children or working in a hospital, unless it is a higher position (principal/doctor).
- 6. There is reverse sexism at the university level that men are encouraged to teach high school and women teach elementary.
- 7. Many male teacher candidates also wish to coach and that attracts them to the secondary school level.
- Poor, ineffective teachers who I had growing up have influenced my decision to teach, because I could do it better.

- 9. I was late in making my career choice to teach because of negative stereotypes.
- Society puts more emphasis on women than men, when neutralizing gender stereotypes, as seen in many television shows and movies with women cops, doctors, and the like.
- 11. School culture views male elementary teachers as: disciplinarian, school handyman, removal man, head teacher, and technology expert.
- 12. Being considered a role model is important, but it is difficult to meet the demand and expectations.
- 13. Social barriers (often subtle) exist where men are discouraged from teaching by peers and family.
- 14. Young children do not feel that they can talk openly with a male teacher.
- 15. Teaching children is as negative for men as a non-traditional career.
- 16. A unique form of sexism exists in education, putting male teachers under scrutiny because of a perceived public fear of inappropriate conduct, intertwined with femininity and homosexuality.
- 17. Men are often victims of prejudice when working in education, such as the stereotype of sexual deviation or predation.
- 18. I have experienced prejudice that I might have inappropriate intentions with students.
- 19. Because of public scrutiny, men must take extra precautions when working with children, that women do not.
- 20. I am concerned that others might see me as not a real man, because I teach.
- 21. I have to be careful about proximity to students: the touch or not touch issue.

22. I have experienced school-cultural biases that favor women in my teaching career.

# Positive Statements

- 1. I view teaching as being similar to coaching.
- 2. A teaching career is consistent with my family life.
- My decision to become a teacher was influenced by a male teacher that I had in elementary school.
- 4. I wanted to be a teacher from a very young age.
- 5. Teaching allows me to share my skills and passions with others and I feel that I make a difference.
- 6. My choice to become a teacher was a calling.
- 7. Children need positive male role models.
- 8. I take pride in being a male role model.
- 9. Male elementary teachers do not fit the stereotypes.
- 10. Men possess the same basic traits as women, with regard to teaching.
- 11. A man is more likely to be promoted to an administrative position than a woman is.
- 12. If children see more male teachers, they are less likely to believe that teaching is an occupation reserved for women.
- 13. I am unique in that I have the background and perspective that are different from female and secondary teachers.
- 14. I have ignored social barriers and negative stereotypes that have discouraged men from entering teaching.
- 15. I embrace the expectation to be a surrogate father to students lacking a father.

- 16. Men take precautions and understand the social boundaries of males interacting with children.
- 17. I have something different to offer that is not in the curriculum, that the male approach is different from that of the female.

# Neutral Statements

- Career stereotyping is self-imposed when men and women make the decision to become a teacher.
- 2. The intrinsic reward of working with children outweighs financial wealth and security.
- 3. Men and women are biologically fit for specific types of careers.
- 4. School culture expects male teachers to behave as women would.
- Expectations for male teachers are lofty, but shouldn't be considered the cure for societal problems.
- 6. Male teachers are generally better disciplinarians that female teachers.
- 7. The gender of a teacher has little to no effect on student academic achievement.
- Recruiting more males to teaching would debunk the preconceptions that have led to a shortage of males in the workplace
- 9. Some men leave teaching for other professions due to gender-related issues.
- Some men leave teaching for other professions due to regulations, policies, and for better pay.
- 11. Men must establish their own rules when beginning a career as a teacher, despite societal viewpoints.
- 12. Men are expected to fill a void in an otherwise female profession.

- 13. The media and universities need to do more to recruit male teachers.
- 14. Social justice and transformation will occur when society and educational stakeholders tackle the issue of teaching as a female-gendered career.
- 15. More studies need to be done about men and teaching, and what male teachers can offer to children.
- 16. I couldn't care less about gender issues in my career. I just want to teach.
- 17. If more high school and college males were exposed to working with young children, more would want to become teachers.
- 18. I received career advice at a young age that influenced my decision to teach.
- 19. Teaching primary grades is a career equally suitable for both men and women.
- 20. To demonstrate caring to students is gender neutral.
- 21. Men and women have different teaching styles.
- 22. I have had to adopt my own strategies because given strategies lacked masculinity.

What follows is a revised and more narrowly focused list of negative, positive, and neutral statements:

# Negative Statements

- 1. Most men pursue careers with more earning potential, because they view teaching as undesirable for the head of a household.
- 2. The stigma of a man working a traditional woman's job likely discourages more men from teaching.
- There is a lack of recruitment or discussion with men about the importance of male elementary teachers.

- 4. Women are naturally better caretakers than men are.
- Society doesn't encourage men to do jobs that involve caring, such as teaching young children or working in a hospital, unless it is a higher position (principal/doctor).
- 6. There is reverse sexism at the university level that men are encouraged to teach high school and women teach elementary.
- 7. Many male teacher candidates also wish to coach and that attracts them to the secondary school level.
- Society puts more emphasis on women than men, when neutralizing gender stereotypes, as seen in many television shows and movies with women cops, doctors, and the like.
- 9. School culture views male elementary teachers as: disciplinarian, school handyman, removal man, head teacher, and technology expert.
- 10. Being considered a role model is important, but it is difficult to meet the demand and expectations.
- 11. I have experienced discouragement from teaching as a career by peers and/or family.
- 12. School culture expects male teachers to behave as women would.
- 13. Because of public scrutiny, men must take extra precautions when working with children that women do not.
- 14. I am concerned that others might see me as not a real man, because I teach.
- 15. I have experienced school-cultural biases that favor women in my teaching career.

## Positive Statements

- 1. I view teaching as being similar to coaching.
- 2. A teaching career is consistent with my family life.
- My decision to become a teacher was influenced by a male teacher that I had in elementary school.
- 4. I wanted to be a teacher from a very young age.
- Teaching allows me to share my skills and passions with others and I feel that I make a difference.
- 6. My choice to become a teacher was a calling.
- 7. I take pride in being a male role model for children.
- 8. Male elementary teachers do not fit the stereotypes.
- 9. Men possess the same basic traits as women, with regard to teaching.
- 10. If children see more male teachers, they are less likely to believe that teaching is an occupation reserved for women.
- 11. I am unique in that I have the background and perspective that are different from female and secondary teachers.
- 12. I have ignored social barriers and negative stereotypes that have discouraged men from entering teaching.
- 13. I embrace the expectation to be a surrogate father to students lacking a father.
- 14. I have something different to offer that is not in the curriculum, that the male approach is different from that of the female.
- 15. I have had to adopt my own strategies because prearranged strategies lacked masculinity.

# Neutral Statements

- The intrinsic reward of working with children outweighs the concern for financial wealth and security.
- 2. Men and women are biologically fit for specific types of careers.
- Expectations for male teachers are lofty, but are not the cure for societal problems.
- 4. The gender of a teacher has little to no effect on student academic achievement.
- Recruiting more males to teaching would debunk the preconceptions that have led to a shortage of males in the workplace.
- 6. Men must establish their own rules when beginning a career as a teacher, despite societal viewpoints.
- Male elementary teachers are expected to fill a void in an otherwise female profession.
- 8. The media and universities need to do more to recruit male teachers.
- 9. Social justice and transformation will occur when society and educational stakeholders tackle the issue of teaching as a female-gendered career.
- 10. More studies need to be done about men and teaching, and what male teachers can offer to children.
- 11. I couldn't care less about gender issues in my career. I just want to teach.
- 12. I received career advice at a young age that influenced my decision to teach.
- 13. Teaching primary grades is a career equally suitable for both men and women.
- 14. Men and women have different teaching styles.

# **Participants**

The participants in Q, sort a large number of statements on a continuum, from least agreeable to most agreeable, based on reflection of their own perspective. This is known as the Q sort. In this study, 12 male elementary school teachers were selected to be participants. The participant size is not important in Q. According to Brown (1993), "the focus is on quality rather than quantity" (p. 94). The point is not to gather enough participants to generalize to a greater population. According to Watts and Stenner (2012), the "participants are the variables in the context of Q methodology" (p. 72). This contrasts with most other research methodology.

The participants are not random, but are "a structured sample of respondents who are theoretically relevant to the problem under consideration; for instance, persons who are expected to have a clear and distinct viewpoint regarding the problem and, in that quality, may define a factor" (Brown, 1980, as cited by van Exel, 2005, p. 6). In this study, the respondents were experienced male teachers of young children. The researcher used the aforementioned survey, leading to the development of the concourse, to ask if participants (specifically, male elementary school teachers) were interested in becoming involved in a further study. Educators from more than a dozen school districts were invited to participate in that survey. Additionally, the researcher communicated through email to ask for voluntary participants. At the conclusion of the Q sort, the researcher interviewed each participant to gather demographic data and information about their ratings.

## **Procedures**

After creating the concourse, the next step is to draw a subset of statements that

will later be presented to the participants (van Exel, 2005). The purpose of the subset is to condense the list into a more focused collection, helping to eliminate repetition and reduce ambiguity. The finalized concourse is known as the Q sample. All items in a Q study must be backed by research (personal communication, J. Gordon, June 30, 2015), to which the current study adheres. The goal was to attain a Q sample that was "representative of the wide range of existing opinions about the topic" (van Exel, 2005). Moreover, the Q sample was designed with diverse statements on a continuum, and consisted of 44 items. The limitation of 44 items avoided the potential of the study to be too demanding and overwhelming to the participants.

In short, Q methodology asks the participants to rank-order a set of statements of opinion. These statements are derived from the concourse and are called the Q sample.

# **Procedure and Ethical Considerations**

This study was concerned with the perspective of male teachers of young children. Essentially, there were two parts to the study: the selection of teachers for the survey in developing the Q sample, and the selection of participants for the Q sort. Letters of permission were sent to school district superintendents to include male elementary school teachers in the survey. Once accepted, the researcher emailed teachers to complete an online survey on Survey Monkey.

Similarly, to secure participants for the Q sort, letters of permission were sent to school district superintendents to include male elementary school teachers. Once accepted, letters of invitation were sent to the male teachers at elementary schools. A total of 12 eligible participants were selected. No more participants were needed, due to the standards of Q methodology explained elsewhere in this chapter.

Participants varied in age, experience, and background. It was important that a diverse group of men were selected to participate in order to provide a comprehensive overview. A series of email correspondence helped to determine time and location for the Q sort with each of the 12 participants. The Q sort was accomplished individually, or in small groups, throughout several sessions.

Upon the approval of all Youngstown State University Human Subjects/Institutional Review Board (IRB) requirements, participants were issued statements about minimal risk, as defined by current federal regulations. Specifically, this study involved no probability of harm or discomfort, and data would not be used to embarrass the participant. Furthermore, each participant was informed of the purpose of the study and the strict confidentiality upheld by coding participants' data and identity throughout the study. By acknowledging awareness of the abovementioned criteria, each participant signed an informed consent document. This document included a statement about the purpose of the study, the general procedure, and the voluntary nature of the participant. Furthermore, the decision of the participant to stop and withdraw from the study at any time would be respected. At the conclusion of the study, upon request, the participants' data would be shared with them.

## Data analysis.

In Q, the goal is to look for correlations among the factors. As stated above, the factors are the viewpoints of each participant. According to Barbosa et al. (1998), "persons as individuals become 'variables.' They are correlated to each other and factored into groups according to similarities in the way they rank a set of stimuli" (p. 1033). This is known as by-person factor analysis.

Barbosa et al. suggested the following steps:

1. To elaborate the breadth of possible opinions regarding the subjective topic in question.

2. To select a representative, but not necessarily exhaustive, number of phrases describing these opinions or feelings.

3. To develop and use a metric for measuring the subjective feelings of study respondents about the phrases.

4. To perform data reduction through by-person factor analysis, using each of the steps for factor analysis described above. In a Q study, rotation of the axes can be performed using any statistical method (such as varimax) and or by a manual (abductory or judgmental) method. The manual rotation allows for a researcher to pursue an individual suspicion regarding the structure of subjectivity as it might be represented in the data.

5. To obtain a summarizing array of the relevant rankings among statements for each factor or viewpoint. This is done by calculating factor scores for each statement along each axis. This step is automatically done by software specifically designed to perform Q studies.

6. Finally, an inductive interpretation of factor structure is made by examining the ranked order of statements arranged according to factor scores within each factor. This step leads to an understanding of the various points of view, or attitude clusters, regarding the subjective topic being evaluated. (pp. 1033-1034)

In general, the idea is to look for correlations among the factors.

Following the sorting process, the researcher coded each grid and entered the data

in to PQ Method software. Data were used in identifying the participants demographically. For example, information was retrieved about age, years of experience, how many children they had, and the highest level of educational attainment of each participant. Then varimax rotation was used in order to interpret relevant factors.

The researcher expected to find emerging factors that represented general or common perceptions of the participants regarding their view of what influenced their decision to enter a career as an elementary school teacher, what factors, if any, were perceived to deter males from teaching elementary school, and what might be done about the shortage of male elementary school teachers.

## Validity.

In typical studies, generalization means to be able to generalize to a population of people elsewhere. However, generalization in Q is different, because in Q it is unlikely to generalize, in part based on the small number of participants. More importantly, it is not the intention in Q to generalize to a different population. According to Brown (1980, as cited by van Exel, 2005), "Because there is no external criterion for a person's point of view, the issue of validity of Q sorts does not apply" (p. 18). Validity in Q refers to how accurate the participants' feelings are on the subject. According to Barbosa et al. (1998), "validity as a term used in Q methodology relates to the degree of satisfaction a respondent feels about how accurately his or her ranking of the items represents his or her personal feelings" (p. 1035). Therefore, in this situation, validity refers to whether the participant was sharing his true feeling.

In all research methods, there is a concern for biases. However, Q is generally immune to influences by the researcher, because the sorting process allows each

individual the freedom to arrange and rearrange items that attribute to their personal viewpoint until the end result demonstrates that person's own feelings (Barbosa et al., 1998). This makes Q much different from a survey that limits response choices. Barbosa et al. went on to specify steps to be taken that help limit bias in a Q study:

(a) avoiding artificial constraints in conditions of instruction that would force respondents to provide data under a theoretical framework, (b) providing a Q sample sufficiently broad so as to allow a fair and adequate representation of all the major ideas observed to exist in the concourse, (c) creating a specific condition of instruction that will guide respondents as they model their subjective feelings into the Q sort, and (d) selecting respondents for their suspected diversity in feelings, opinions, and attitudes in an effort to uncover as much of the underlying structure of subjectivity as possible. (p. 1039)

In this study, the researcher addressed Barbosa et al.'s (1998) steps to limit bias as follows:

(a) The researcher refrained from any communication with regard to existing frameworks, and any communication was limited to scheduling and procedures of the study itself. Before sorting the items, participants received identical conditions of instruction, or guidelines for sorting based on their own viewpoint.

(b) Unlike surveys that were developed from preconceived thoughts and opinions of researchers, this Q study was devoid of preconceived ideas from the researcher, but instead was based on data from the preliminary survey, and common themes found in a review of the literature.

(c) Each participant in this study was given the same instructions and guidelines, thus providing structure. This was a solid study in the sense that each participant had the freedom to arrange and rearrange items during the Q sort process so that the resulting arrangement represented each participant's own feelings.

(d) The respondents in this study were similar in that they were all male elementary school teachers, but varied in age, years of experience, places of employment, and other demographics.

The key in the Q process was to gather information that brought meaning to the researcher, and there was no suggestion of a reoccurrence to the general population.

#### Summary

Q methodology (Q) is a unique research tool that has not been widely used in education. It appears to be a useful tool in understanding the mindset of the male elementary school teacher. Q has been used to study how people think about a topic by looking at differences in perspectives, having the participants rank and sort statements. The subjectivity that Q looks at is due to each individual's feelings, opinions, and perspective, rather than hard facts. "Q can be very helpful in exploring tastes, preferences, sentiments, motives and goals, the part of personality that is of great influence on behaviour but that often remains largely unexplored" (van Exel, 2005, p. 2). Because the intent of this study was to seek perspectives of male teachers, Q was an appropriate process.

This study was proposed to add to knowledge about the shortage of male elementary school teachers, from the points of view from males working in those positions. The research questions in this study were developed while reviewing the

literature extensively. The Q sample in this study was also derived after an extensive review of literature and a survey of male teachers.

The researcher administered the process of Q to a population of male elementary school teachers, and included a collection of varying demographics. PQMethod software was used to look for and analyze correlations.

The focus of Chapter 3 in this study included the research design and methodology. This study was not designed to find correlations between variables, but, instead, looked for common perspectives of male elementary teachers. The next chapter will present the findings based on data collection and analysis.

#### Chapter 4

## **Analysis of Data**

Chapter 4 discusses the results of a data analysis that followed the completion of the Q sort of 44 statements by 12 participants. The researcher audio-recorded each participant during the Q sort. PQMethod 2.35 for Windows, a statistical software package specifically designed for analyzing Q sort data, and compatible with the Q methodological principles, was used to perform statistical analysis. Q methodology is distinguished from other methodology because it looks at the correlation and analysis of participants based on their responses, rather than the correlation of items. "The correlation matrix duly reflects the relationship of each (Q sort) configuration with every other (Q sort) configuration (not the relationship of each item with every other item)" (Watts & Stenner, 2005, p. 80).

Data analysis in Q methodology, "involves the sequential application of three sets of statistical procedures: (1) correlation, (2) factor analysis (or Principal Components Analysis [PCA]), and (3) the computation of factor scores" (McKeown & Thomas, 2013, p. 47). Using the PQMethod software, the data from each Q sort were entered in the way they were collected: by statement numbers. The program computes correlations among Q sorts, which are then factor-analyzed with either the Centroid or Principal Component method. Resulting factors are then rotated analytically (Varimax rotation). The analysis step produces an extensive report with a variety of tables on factor loadings, statement factor scores, discriminating statements for each of the factors as well as consensus statements across factors, etc. (Schmolck, 2014).

Factor rotation identified three distinctive factors using eigenvalues greater than 1.0. Factor One, the *Fixers*, maintained that male teachers are often sought by female teachers and school culture for non-teaching tasks such as disciplinarian, school handyman, removal man (removing an unruly student from a classroom), head teacher, and technology expert. Factor Two, the *Mentees*, were influenced to become a teacher by a male teacher whom they had in elementary school. Men in Factor Three, the *Aspirants*, unlike men in the other factors, aspired to teach from a young age.

Model viewpoints were constructed for each factor using ranked statements that were considered significant with positive *z* scores greater than 1.00, and negative *z* scores greater than -1.00. Statements that distinguish one factor from another, with *z* scores found to be significant at p < 0.01, defined and provided clarity to the main opinions of each viewpoint. During the sorting process, discussions between each participant and the researcher were audio-recorded, and notes were taken that enhanced the understanding of viewpoints. A post-sort interview was conducted, both, during and after each sort. Moreover, basic demographic data were also collected at the onset of each sort to develop a profile for each participant, and to look for patterns to enrich understanding.

Quantitative and qualitative data were synthesized to provide meaning and understanding into the different viewpoints about teaching from the perspective of male elementary teachers. Results of the analysis were used to respond to the following initial research questions that framed the study:

- 1. What is the perspective of males that influenced their decision to enter a career as an elementary school teacher?
- 2. What factors, if any, are perceived to deter males from teaching

elementary school?

- 3. What might be done about the shortage of male elementary school teachers?
- 4. What do male educators perceive is the benefit to children in having a male teacher?

**Correlation matrix.** After the extraction, a correlation matrix was used to examine relationships between the scores of individual sorts with every other sort. According to Watts and Stenner (2012), "in Q methodology correlation provides a measure of the nature and extent of the relationship between any two Q sorts and hence a measure of their similarity or otherwise" (p. 97). Correlations are scored on a scale ranging from +1.00 to -1.00. Correlations show similarities (positive numbers) and differences (negative numbers). Therefore, a correlation of 0 would indicate no shared information between two variables. An assigned letter codes participants. For example, in sort 1, the first participant is designated A.

According to McKeown and Thomas (2013), "the standard error for a zero-order factor loading is  $SE = 1/\sqrt{N}$ , where N is the number of items in the Q sample" and they further explain that 2.58 x  $\sqrt{N}$  as statistically significant at the .01 level (p. 53). This study contained 44 items in the Q sample, and the standard error of factor loadings displayed in Table 1 is  $SE = 1/\sqrt{44} = 0.15$ . Therefore, to be statistically significant in this study (calculated as 2.58 x 0.15 = 0.39) a correlation must be  $\pm .39$ .

Table 1 provides the correlation matrix analysis between the 12 Q sorts. Correlations found to be statistically significant are shown in bold print.

Sorts	1	2	3	4	5	6	7	8	9	10	11	12
	1 00		-			•	,	-	-			
1 A	1.00	0.48	0.53	0.33	0.28	0.49	0.28	0.09	0.37	0.63	0.36	0.34
2 B		1.00	0.44	0.49	0.02	0.42	0.19	0.08	0.52	0.39	0.12	0.07
3 C			1.00	0.36	0.25	0.44	0.20	0.36	0.42	0.66	0.35	0.29
4 D				1.00	0.32	0.46	0.55	0.50	0.40	0.56	0.46	0.38
5 E					1.00	0.28	0.32	0.25	0.25	0.54	0.47	0.47
6 F						1.00	0.30	0.20	0.71	0.55	0.47	0.25
7 G							1.00	0.54	0.07	0.47	0.35	0.37
8 H								1.00	0.01	0.46	0.45	0.45
9 I									1.00	0.41	0.24	0.04
10 J										1.00	0.54	0.46
11 K											1.00	0.68
12 L												1.00

Table 1.Correlation Matrix Between Sorts

The results of Table 1 revealed many moderate-to-high correlations between participants, as indicated by values of 39 or higher ( $r \ge .39$ ). These are shown in bold print. The results also revealed low correlations, or disparities and disagreements, between responses (r < .39). A result of 1.0 indicates the perfect correlation between that participant with his own response. In an effort to account for variability and look for shared meaning in the data, continued analysis involved identification and removal of common variance from the results. The analysis method used to extract factors was the PCA. According to Watts and Stenner (2012), the PCA "will resolve itself into a single, mathematically best solution" (p. 99).

Table 2 reveals eigenvalues ranging from the highest level of 5.185 to the lowest level of 0.3083. The analysis indicated that 68% of the variance responses could be identified in three factors.

Table 2.

Ligenvalues								
Factors	1	2	3	4	5	6	7	8
Eigenvalues	5.185	1.8664	1.0742	0.8378	0.6648	0.6456	0.5276	0.3083
% expl.Var.	43	16	9	7	6	5	4	3

The 12 Q sorts were intercorrelated and factor-analyzed. Three factors were extracted and rotated, because together this represented 68% of the total study variance. In other words, factor analysis determined sets of people that can be grouped together, indicative of similar viewpoints. According to Watts and Stenner (2012), eigenvalue factors of less than 1.00 "are often taken as a cut-off point for the extraction and retention of factors" (p.105). Three factors exceeded the acceptable 1.0 cutoff with eigenvalues of 5.2, 1.9, and 1.1. Therefore, a three-factor model was considered to be the most efficient and parsimonious model in explaining the participants' viewpoints.

# Varimax rotation.

The Varimax Rotation is a preferred method when analyzing viewpoints of study participants. According to Watts and Stenner (2012) Varimax is objective and reliable, and is, "an excellent means of revealing a subject matter from viewpoints that almost everybody might recognize and consider to be of importance" (p. 126). The rotation provides a weighted average, known as a factor, which indicates how closely each participant aligned to others with similar viewpoints.

Unlike traditional factor analysis, where items (or variables) are correlated and categorized, Q methodology correlates and categorizes the participants by their responses. Essentially, each participant's data from the Q sort are treated as a single variable (Brown, 1993).

Table 3 illustrates the extent to which each Q sort was associated with each participant following rotation. In this three-factor model, X indicates the factor each participant connects with the most.

Factor Matrix with an X Indicating a Defining Sort					
Factors	1 (Fixers)	2 (Mentees)	3 (Aspirants)		
Sorts					
1 A	0.6721X	0.3467	0.0594		
2 B	0.7759X	-0.2288	0.2579		
3 C	0.6365X	0.272	0.2142		
4 D	0.4668	0.1437	0.6960X		
5 E	0.1677	0.7649X	0.0779		
6 F	0.7527X	0.2778	0.1209		
7 G	0.1136	0.2095	0.7886X		
8 H	-0.0135	0.2841	0.8157X		
9 I	0.8390X	0.0634	-0.0697		
10 J	0.5801	0.5162	0.3891		
11 K	0.2243	<b>0.7484X</b>	0.3018		
12 L	0.0393	0.7687X	0.3433		
% expl.Var.	28	21	19		

Table 3.Factor Matrix with an X Indicating a Defining Sort

Note. X indicates significant factor loading

Eleven of the 12 Q sorts loaded significantly on one of the three factors. Together, factors 1, 2 and 3 explain 68% of the study variance. One participant (J) did not load significantly on any factor with other participants in this study. This does not suggest that this individual was eccentric, but did not fit with the three main factors that were extracted.

Table 3 reveals factor-defining sorts, which indicate that the sorts, or individuals, have been categorized into a factor because they show similar sorting patterns. These patterns suggest similar viewpoints. According to Stenner et al. (2003, as cited by Watts & Stenner, 2012), "Q sorts loading significantly on the same factor are those that share a similar sorting pattern" (p. 181). For example, the five sorts, or individuals, classified as factor 1 are categorized together because they share a distinctive viewpoint.

# Q sort statements with corresponding ranks.

To determine how much each factor agreed with each statement, z scores were examined. Schmolck (2014) described z scores as weighted average scores. The

weighted scores reveal the level of agreement and disagreement within each identified

factor, or viewpoint.

Table 4 provides information relating to statements that held the highest levels of agreement (positive z scores) and disagreement (negative z scores) for Factor 1, the Fixers. Only statements with z scores near or greater than 1.00 were included in the table.

Table 4.

No.		Z-
NO.	Statement	SCORES
4	Men and women have different teaching styles.	1.86
20	Teaching allows me to share my skills and passions with others and I feel that I make a difference.	1.714
22	I take pride in being a male role model for children.	1.465
31	The intrinsic reward of working with children outweighs the concern for financial wealth and security.	1.386
5	Society doesn't encourage men to do jobs that involve caring, such as teaching young children or working in a hospital, unless it is a higher position (principal/doctor).	1.355
)	School culture views male elementary teachers as: disciplinarian, school handyman, removal man, head teacher, and technology expert.	1.297
25	If children see more male teachers, they are less likely to believe that teaching is an occupation reserved for women.	1.247
29	I have something different to offer that is not in the curriculum, that the male approach is different from that of the female.	0.984
13	Teaching primary grades is a career equally suitable for both men and women.	0.963
24	Men possess the same basic traits as women, with regard to teaching.	-0.992
30	I have had to adopt my own strategies because prearranged strategies lacked masculinity.	-1.019
12	I received career advice at a young age that influenced my decision to teach.	-1.347
9	I wanted to be a teacher from a very young age.	-1.48
32	Men and women are biologically fit for specific types of careers.	-1.481
1	I have experienced discouragement from teaching as a career by peers and/or family.	-1.781

Ranked scores for Factor 1, z scores Greater Than 1.00

18	My decision to become a teacher was influenced by a male teacher that I had in elementary school.	-1.971
14	I am concerned that others might see me as not a real man, because I teach.	-2.003

Complete results for the information listed in Table 4 are provided in Appendix

A. Tables 5 and 6 display similar results for Factors 2 and 3, respectively, and are also

included in Appendix A.

Table 5 provides ranked *z* scores for Factor 2, the Mentees.

Table 5.

Ranked scores for Factor 2, Z scores Greater Than 1.00

No.	Statement	Z-SCORES
20	Teaching allows me to share my skills and passions with others and I feel that I make a difference.	1.651
18	My decision to become a teacher was influenced by a male teacher that I had in elementary school.	1.633
42	I received career advice at a young age that influenced my decision to teach.	1.622
21	My choice to become a teacher was a calling.	1.475
27	I have ignored social barriers and negative stereotypes that have discouraged men from entering teaching.	1.368
41	I couldn't care less about gender issues in my career. I just want to teach.	1.365
16	I view teaching as being similar to coaching.	1.332
22	I take pride in being a male role model for children.	1.329
17	A teaching career is consistent with my family life.	1.186
43	Teaching primary grades is a career equally suitable for both men and women.	1.07
23	Male elementary teachers do not fit the stereotypes.	-1.02
5	Society doesn't encourage men to do jobs that involve caring, such as teaching young children or working in a hospital, unless it is a higher position (principal/doctor).	-1.052
37	Male elementary teachers are expected to fill a void in an otherwise female profession.	-1.189
30	I have had to adopt my own strategies because prearranged strategies lacked masculinity.	-1.192
10	Being considered a role model is important, but it is difficult to meet the demand and expectations.	-1.204
4	Women are naturally better caretakers than men are.	-1.631
32	Men and women are biologically fit for specific types	-2.083

of careers.

Table 6 provides ranked *z* scores for Factor 3, the Aspirants.

Table 6.	
Ranked scores for Factor 3. Z scores Greater T	ł

Ranke	ed scores for Factor 3, Z scores Greater Than 1.00	
No.	Statement	Z- SCORES
19	I wanted to be a teacher from a very young age.	2.233
22	I take pride in being a male role model for children.	1.863
20	Teaching allows me to share my skills and passions with others and I feel that I make a difference.	1.787
17	A teaching career is consistent with my family life.	1.684
21	My choice to become a teacher was a calling.	1.684
41	I couldn't care less about gender issues in my career. I just want to teach.	1.095
24	Men possess the same basic traits as women, with regard to teaching.	1.032
43	Teaching primary grades is a career equally suitable for both men and women.	0.969
39	Social justice and transformation will occur when society and educational stakeholders tackle the issue of teaching as a female- gendered career.	-0.923
36	Men must establish their own rules when beginning a career as a teacher, despite societal viewpoints.	-0.996
18	My decision to become a teacher was influenced by a male teacher that I had in elementary school.	-1.101
6	There is reverse sexism at the university level that men are encouraged to teach high school and women teach elementary.	-1.237
32	Men and women are biologically fit for specific types of careers.	-1.333
30	I have had to adopt my own strategies because prearranged strategies lacked masculinity.	-1.423
12	School culture expects male teachers to behave as women would.	-1.813
15	I have experienced school-cultural biases that favor women in my teaching career.	-1.972

# **Factor Arrays.**

Because Q Methodology is intended to look for viewpoints on a subject, a factor array shows a visual depiction of that factor's collective viewpoint. In other words, it is the typical sort for each factor, and does not necessarily reflect an individual participant's placing of statements. Watts and Stenner (2012) described the main goal of a factor array as providing "the best possible estimate of the relevant factor and in so doing to get a sense of what its 100% or perfectly loading Q sort might actually look like" (p. 141). Therefore, each factor array is the probable model sort that represents what is common in individuals associated with that factor.

Figures 1-3 below provide arrays for each of the three model factors.

 Figure 1. Model Sort for Those Teachers Who Loaded Significantly on Factor 1

 Strongly

 Disagree

 Strongly Agree

									-	
-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
14	11	24	1	12	4	2	3	9	5	20
18	19	30	6	33	10	7	13	25	22	44
	32	34	15	35	21	8	16	29	31	
		42	39	36	23	17	40	43		-
				37	27	26				
					28		-			
					38	1				
					41	1				

Variance = 6.05 St Dev. = 2.65

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
14	4	5	6	2	3	1	25	16	21	18
32	21	11	8	12	9	7	31	17	27	20
	27	23	38	13	15	26	40	22	42	
		37	39	28	19	34	43	25		-
				29	24	44			-	
					33		-			
					35					
					36					

 Figure 2. Model Sort for Those Teachers Who Loaded Significantly on Factor 2

 Strongly

 Disagree

 Strongly Agree

Variance = 6.05 St Dev. = 2.65

*Figure 3.* Model Sort for Those Teachers Who Loaded Significantly on Factor 3 Strongly

Disa	aree
DISa	giuu

Strongly Agree

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
12	6	11	5	2	1	7	16	13	17	19
15	30	18	14	3	4	10	31	24	20	22
	32	36	28	8	9	23	34	41	21	
		39	37	38	26	25	42	43		-
				44	27	40			-	
					29		-			
					33					
					35					

Variance = 6.05 St Dev. = 2.65

# Factor Interpretation: Identifying Similarities and Differences of View.

The factor arrays, demographics, and other information gathered during the postsort interviews, lead to the interpretation of viewpoints. According to Watts and Stenner (2012), the goal of factor interpretation is to "uncover, understand and fully explain the viewpoint captured by the factor and shared by the significantly loading participants" (p. 181).

A correlation analysis probing the relationships between the factors, Table 7, shows a moderately low correlation between Factors 1 and 2, and between Factors 1 and 3. However, the data also show a moderately high correlation between Factors 2 and 3, which suggests that the two factors share many viewpoints. Previously written, Table 3 indicated that six out of the 12 participants (50%) were identified in Factors 2 and 3. This also suggests that Factor 1 holds a distinctive viewpoint. Also indicated in Table 3, five out of 12 participants (42%) were identified in Factor 1.

Table 7.Correlation Between Factor Scores

Factors	1	2	3
1		0.34	0.32
2	0.34		0.53
3	0.32	0.53	

The factor characteristics table, Table 8, contains the reliability (under the heading Composite Reliability) and error messages (under the heading S.E. of Factor Z-Scores) for each of the factor arrays. As mentioned previously in the Varimax Rotation section, factors are essentially weighted averages that indicate close alignment among participants. This study had 11 people who produced results with good reliability and standard error measurements.

Table 8.Factor Characteristics

		Factors	
	1	2	3
No. of Defining Variables	5	3	3
Average Rel. Coef.	0.8	0.8	0.8
Composite Reliability	0.952	0.923	0.923
S.E. of Factor Z-Scores	0.218	0.277	0.277

### Analysis of factors: Understanding the meaning of viewpoints.

This section presents a description of each factor with a synopsis and demographic details of participants who loaded significantly on the factor, including a list of distinguishing statements for each factor. The distinguished statements help to define the key viewpoint for each factor, and to ascertain common and differing viewpoints between factors. Tables 9, 10, and 11 identify statements that each factor ranked higher or lower when compared to the other two factors. A difference at the p < 0.01 level is represented with an asterisk. For example, Table 9 demonstrates that Factor 1 ranked statements 44, 5, 9, 29, and 3 significantly higher, and statements 41, 21, 34, 24, 42, 19, 11, and 18 significantly lower than the other factors.

# Factor 1: The Fixers

Table 9.

Distinguishing Statements for Factor 1

			1		2		3
No.	Statement	Q-SV	Z- SCR	Q-SV	Z- SCR	Q-SV	Z- SCR
44	Men and women have different teaching styles.	5	1.86*	1	0.01	-1	-0.51
5	Society doesn't encourage men to do jobs that involve caring, such as teaching young children or working in a hospital, unless it is a higher position (principal/doctor).	4	1.36*	-3	-1.05	-2	-0.74
9	School culture views male elementary teachers as: disciplinarian, school handyman, removal man, head teacher, and technology expert.	3	1.30*	0	-0.03	0	-0.06
29	I have something different to offer that is not in the curriculum, that the male approach is different from that of the female.	3	0.98	-1	-0.18	0	0.16
3	There is a lack of recruitment or discussion with men about the importance of male elementary teachers.	2	0.65	0	-0.16	-1	-0.42
2	The stigma of a man working a traditional woman's job likely discourages more men from teaching.	1	0.39	-1	-0.43	-1	-0.44
8	Society puts more emphasis on women than men, when neutralizing gender stereotypes, as seen in many television shows and movies with women cops, doctors, and the like.	1	0.32	-2	-0.46	-1	-0.5
17	A teaching career is consistent with my family life.	1	0.31	3	1.19	4	1.68
41	I couldn't care less about gender issues in my career. I just want to teach.	0	-0.07*	3	1.36	3	1.09
21	My choice to become a teacher was a calling.	0	-0.11*	4	1.48	4	1.68
34	The gender of a teacher has little to no effect on student academic achievement.	-3	-0.85	1	0.03	2	0.85
24	Men possess the same basic traits as women, with regard to teaching.	-3	-0.99*	0	0	3	1.03
42	I received career advice at a young age that influenced my decision to teach.	-3	-1.35*	4	1.62	2	0.56
19	I wanted to be a teacher from a very young age.	-4	-1.48*	0	-0.15	5	2.23
11	I have experienced discouragement from teaching as a career by peers and/or family.	-4	-1.78	-3	-0.87	-3	-0.78
18	My decision to become a teacher was influenced by a male teacher that I had in elementary school.	-5	-1.97	5	1.63	-3	-1.1

Factor 1 had five significantly loading participants and it explained 28% of the study variance. It had an eigenvalue of 5.19. The participants ranged in age from 20s to

50s. Four out of five have children of their own, with the average of 1.6 children per participant in this group. This factor had the highest percentage of teachers with limited experience. Three teachers had

1-5 years of experience in the profession, one had 11-15 years, and another had 16-20 years of experience. Four had master's degrees and one had a bachelor degree, giving this factor the highest average education level.

A synopsis of their viewpoint follows. Rankings of relevant statements are provided. For example, (44:+5) indicated that statement 44 was ranked +5 by Factor that factor in the Q sort. Some comments that clarified and supported the interpretations made by participants are cited, indicated in italics.

### The Fixers' General Viewpoint

Men and women clearly have different teaching styles (44:+5), and do not possess the same basic traits regarding teaching (24:-3). As participant B confirmed, "Women and men handle their classes differently." It is unclear whether women are better caretakers than men are (4:0), but the gender of the teacher does make a difference with student achievement (34:-3). School culture views males differently from females (9:+3), and men have something different to offer students that is not in the curriculum (29:+3). Participant A commented, "You have a greater influence on male and female students than you realize."

Society does not do enough to encourage men to teach (5:+4), and recruitment is lacking (3:+2). Participant A confirmed, "Recruiting is something that I am not aware of." There is a greater emphasis on women than men when neutralizing gender stereotypes (8:+1), and men are probably discouraged from working in a traditional

woman's job, such as teaching (2:+1). Participant F indicated that there is no easy fix; "It will take generations to change minds."

The Fixers felt that teaching was not so much a calling (21:0). They did not want to teach from a young age (19:-4), nor was their career choice influenced by male elementary teachers that they had as children (18:-5). (It is noteworthy that four of the five participants in the Fixers decided to teach sometime during college or later, and one decided during high school). Moreover, there was no influential career advice in their youth (42:-3). However, when they wanted to become a teacher, peers and family supported the decision (11:-4). Gender issues in education are not a concern, and they would rather focus on teaching (41:0). Participant I affirmed, "The gender doesn't matter. It is more about the person."

In summary, the *Fixers* are male teachers who have experienced a school culture that expects more from them than just teaching duties such as acting as disciplinarian, school handyman, removal man (removing an unruly student from a classroom), head teacher, and technology expert. However, they do not appear to be put off by this. These men believe that there are clear differences between male and female teachers and what each has to offer.

Table 10 demonstrates that Factor 2 ranked statements 18, 42, and 27 significantly higher, and statements 13, 23, 10, and 4 significantly lower than the other factors. A difference at the p < 0.01 level is represented with an asterisk.

# Factor 2: The Mentees

Table 10.

Distinguishing Statements for Factor 2

			1		2		3
No.	Statement	Q-SV	Z-SCR	Q-SV	Z-SCR	Q-SV	Z-SCR
18	My decision to become a teacher was influenced by a male teacher that I had in	-5	-1.97	5	1.63*	-3	-1.1
42	elementary school. I received career advice at a young age that influenced my decision to teach.	-3	-1.35	4	1.62*	2	0.56
27	I have ignored social barriers and negative stereotypes that have discouraged men from entering teaching.	0	0.03	4	1.37*	0	-0.35
34	The gender of a teacher has little to no effect on student academic achievement.	-3	-0.85	1	0.03	2	0.85
24	Men possess the same basic traits as women, with regard to teaching.	-3	-0.99	0	0.00*	3	1.03
19	I wanted to be a teacher from a very young age.	-4	-1.48	0	-0.15*	5	2.23
13	Because of public scrutiny, men must take extra precautions when working with children that women do not.	2	0.66	-1	-0.17	3	0.89
23	Male elementary teachers do not fit the stereotypes.	0	-0.09	-3	-1.02*	1	0.31
10	Being considered a role model is important, but it is difficult to meet the demand and expectations.	0	0	-4	-1.20*	1	0.25
4	Women are naturally better caretakers than men are.	0	-0.14	-4	-1.63*	0	0.14

Factor 2 had three significantly loading participants and it explained 21% of the study variance. It had an eigenvalue of 1.87. They ranged in age from 30s to 50s. This factor was the only group where all participants were fathers, with an average of 1.7 children per participant. One teacher had 6-10 years of experience in the profession, one had 11-15 years, and another had 21+ years of experience. The average for the group was in the 11-20-year range. Two had master's degrees and one had a bachelor degree. A synopsis of their viewpoint follows.

### The Mentees' General Viewpoint

Teaching is consistent with family life for the Mentees (17:+3). True to their namesake, the decision to become a teacher was influenced by a male elementary teacher that they had in school (18:+5). Participant E confirmed that some of his favorite teachers were males in elementary school and, "I had four male teachers through sixth grade." Mentees feel that teaching was a calling (21:+4). Participant K stated, "I found peace in my life from teaching." These men did not necessarily want to teach from a young age (19:0), although career advice was given at a young age that influenced their decision to teach (42:+4).

Gender issues are not a concern for the Mentees (41:+3), and they do not believe that male elementary teachers are expected to fill a void in a profession predominated by females (37:-3). However, there are stereotypes with male elementary teachers (23:-3). Meeting the demand and expectations to be a role model is not difficult (10:-4). Regarding teaching, the gender of a teacher does impact student academic achievement (34:+1), although it is unclear whether men and women share the same teaching traits (24:0). However, the Mentees believe that men are just as good as women at caretaking (4:-4).

Social barriers and negative stereotypes that discourage men from teaching are easy to ignore (27:+4), and there is not much of a concern about public scrutiny that might cause men to take extra precautions when working with children (13:-1). Participant E commented, "I haven't experienced social barriers." The Mentees are not concerned that others in society do not see them as real men because they teach (14:-5). There is no lack of encouragement in society for men to work in jobs that involve caring (5:-3). Participant K commented, "Men get instant respect from staff, teachers, and the community." There is no concern about the stereotypes of male elementary teachers (23:-3), and men don't really offer anything different from women (29:-1).

In summary, the *Mentees* were so called because they were mentored or influenced to become a teacher by a male teacher whom they had in elementary school. Gender issues were not a concern, and these men found it easy to ignore social barriers and negative stereotypes that discourage other men from teaching.

Table 11 demonstrates that Factor 3 ranked statements 19 and 24, significantly higher, and statements 12 and 15 significantly lower than the other factors. A difference at the p < 0.01 level is represented with an asterisk.

## **Factor 3: The Aspirants**

Table 11.

Distinguishing Statements for Factor 3

			1		2		3
No	Statement	Q- SV	Z- SCR	Q- SV	Z- SCR	Q- SV	Z- SCR
19	I wanted to be a teacher from a very young age.	-4	-1.48	0	-0.15	5	2.23*
24	Men possess the same basic traits as women, with regard to teaching.	-3	-0.99	0	0	3	1.03*
34	The gender of a teacher has little to no effect on student academic achievement.	-3	-0.85	1	0.03	2	0.85
42	I received career advice at a young age that influenced my decision to teach.	-3	-1.35	4	1.62	2	0.56*
14	I am concerned that others might see me as not a real man, because I teach.	-5	-2	-5	-2.24	-2	-0.67*
36	Men must establish their own rules when beginning a career as a teacher, despite societal viewpoints.	-1	-0.17	0	-0.03	-3	-1
18	My decision to become a teacher was influenced by a male teacher that I had in elementary school.	-5	-1.97	5	1.63	-3	-1.1
12	School culture expects male teachers to behave as women would.	-1	-0.49	-1	-0.42	-5	-1.81*
15	I have experienced school-cultural biases that favor women in my teaching career.	-2	-0.83	0	-0.14	-5	-1.97*

Factor 3 had three significantly loading participants and it explained 19% of the study variance. It had an eigenvalue of 1.07. They ranged in age from 20s to over 50, with the average age between 30 and 49. Two of the three had children of their own with the average of 1.3 children in this group. This factor had the least experience teaching. Two teachers had 1-5 years of experience in the profession, and one had 11-15 years of experience. Two had master's degrees and one had a bachelor's degree. A synopsis of their viewpoint follows.

# The Aspirants' General Viewpoint

The Aspirants wanted to teach from a young age (19:+5), and it was a calling (21:+4). It is a career that is consistent with family life (17:+4), but the decision to teach

was not due to any influence by a male teacher (18:-3). Participant D always wanted to teach, but "I got derailed in college," went on to other careers, and "got my teaching degree at age 50." However, the Aspirants did receive career advice at a young age that influenced the decision to become a teacher (42:+2). Participant H recalled the realization, "By age 9-12 I was not going to be a professional athlete." These men had support from peers and family members regarding their career choice (11:-3). Participant G indicated that his mother now says that she always saw him becoming a teacher, "But, when I was younger, those words never came out of her mouth."

The Aspirants are proud to be a role model for children (22:+5). However, these men are apprehensive about the expectation to be a surrogate father to students lacking a father (28:-2). Men and women equally possess the same basic traits to be a teacher (24:+3), and gender does not have an effect on student academic achievement (34:+2). Men and women do not necessarily have different teaching styles (44:-1). The Aspirants are not concerned that others in society do not see them as real men because they teach (14:-2). Participant G explained, "My father is a farmer. My family is conservative. I used to hunt and fish, but I am not into it now. My brother, who is the most manly [sic] in the family, is a male nurse."

There is no such thing as a school-cultural bias that favors women (15:-5), male teachers are not expected to behave as females would (12:-5). Men do not have to establish their own rules when beginning a career as a teacher (36:-1). However, public scrutiny causes men to take extra precautions when working with children (13:+3). Participant D recalled when he was student teaching and being observed by a female

professor from the university. "The professor saw me pat a child on the shoulder and said she would have to write me up."

In summary, the *Aspirants* were different from men in the other two factors because they aspired to teach from a young age. They also received good career advice at a young age, and had supportive family and friends in their career decision. These men believed that men and women are equals in their impact on students in the classroom.

## **The Unfactored Outlier**

One participant did not load significantly with any of the three factors, meaning that his Q sort did not follow the patterns of the other factors. However, there were similarities and differences in his viewpoint. Demographically, he appeared to be average when compared with all other participants in this study. Participant J was in his 30s, with 6-10 years of teaching experience. He had a master's degree and was a father to three children. Regarding his career development, participant J believed that younger males are "more influenced by society." But as he got older, he saw opportunities, such as "a good living and retirement with teaching."

### **Participant J's Viewpoint**

There is no concern whether others do not see me as a real man because I teach (14:-5), and I embrace the expectation to be a surrogate father to students lacking a father (28:+5). It is not true that women are naturally better caretakers than men (4:-3). Participant J stated, "As a father, men show caring in a different way."

Gender issues in teaching are not a concern (41:+4), and teaching is suitable for both genders (43:+5). However, Participant J believed that more male teachers are needed "to have a different view."

A career in teaching is consistent with family life (17:+3). I have not experienced discouragement from teaching by family and peers (11:-2). The decision to teach was not influenced by any male elementary teacher that I had when he was young (18:-4).

School culture does not expect male teachers to behave as women would (12:-4), and there no biases that favor women over men in teaching (15:-5). Men do not have to take extra precautions with children, because of public scrutiny (13:-2).

Yet, there are differences between male and female teaching styles. Participant J believed, "Men are not as structured. They have teachable moments. Guys are more flexible and half the time kids end up paying attention."

In summary, the outlier was not concerned with the real man image, had not experienced school gender bias, or public scrutiny because he is a male teacher. He believed that teaching primary grades is equally suitable for men and women. However, one viewpoint distinguished him from the others, in that he embraced the expectation to act as a surrogate father for students who lack a father.

### **Similarities Between Factors**

The data analysis process took participant viewpoints and categorized them into factors of like-minded groups. However, the researcher also sought viewpoints that were shared among all participants, or the consensus of the entire group. During the Q sort, several items did not distinguish between any pair of factors. In other words, all factors in the study ranked them similarly. Table 12 provides consensus statements. All statements are non-significant at p>.01, and those flagged with an \* are also non-significant at p>.05.

# Table 12.Consensus Statements

				2			
			1		2		3
No. 1	Statement Most men pursue careers with more earning potential, because they view teaching as undesirable for the head of a household.	Q-SV -2	Z-SCR -0.74	Q-SV 1	Z-SCR 0.01	Q-SV 0	Z-SCR -0.16
2	The stigma of a man working a traditional woman's job likely discourages more men from teaching.	1	0.39	-1	-0.43	-1	-0.44
*	There is reverse sexism at the university level that men are encouraged to teach high school and women teach elementary.	-2	-0.68	-2	-0.58	-4	-1.24
/*	Many male teacher candidates also wish to coach and that attracts them to the secondary school level.	1	0.61	1	0.14	1	0.19
3	Society puts more emphasis on women than men, when neutralizing gender stereotypes, as seen in many television shows and movies with women cops, doctors, and the like.	1	0.32	-2	-0.46	-1	-0.5
6	I view teaching as being similar to coaching.	2	0.82	3	1.33	2	0.4
20*	Teaching allows me to share my skills and passions with others and I feel that I make a difference.	5	1.71	5	1.65	4	1.79
22*	I take pride in being a male role model for children.	4	1.47	3	1.33	5	1.80
25	If children see more male teachers, they are less likely to believe that teaching is an occupation reserved for women.	3	1.25	2	0.77	1	0.3
26*	I am unique in that I have the background and perspective that are different from female and secondary teachers.	1	0.56	1	0.28	0	-0.12
28	I embrace the expectation to be a surrogate father to students lacking a father.	0	0.13	-1	-0.32	-2	-0.69
30*	I have had to adopt my own strategies because prearranged strategies lacked masculinity.	-3	-1.02	-4	-1.19	-4	-1.42
31*	The intrinsic reward of working with children outweighs the concern for financial wealth and security.	4	1.39	2	0.73	2	0.70

32*	Men and women are biologically fit for specific types of careers.	-4	-1.48	-5	-2.08	-4	-1.33
33*	Expectations for male teachers are lofty, but are not the cure for societal problems.	-1	-0.31	0	-0.14	0	0.08
35*	Recruiting more males to teaching would debunk the preconceptions that have led to a shortage of males in the workplace.	-1	-0.15	0	-0.15	0	-0.34
36	Men must establish their own rules when beginning a career as a teacher, despite societal viewpoints.	-1	-0.17	0	-0.03	-3	-1
38*	The media and universities need to do more to recruit male teachers.	0	0.22	-2	-0.46	-1	-0.47
39*	Social justice and transformation will occur when society and educational stakeholders tackle the issue of teaching as a female-gendered career.	-2	-0.6	-2	-0.6	-3	-0.92
40*	More studies need to be done about men and teaching, and what male teachers can offer to children.	2	0.61	2	0.9	1	0.29
43*	Teaching primary grades is a career equally suitable for both men and women.	3	0.96	2	1.07	3	0.97

Statements were identified similarly to the three factors as reported previously. For example, (22:+4,+3,+5) indicated that statement 22 was ranked +4 by Factor 1, +3 by Factor 2, and +5 by Factor 3. Some comments that clarified and supported the interpretations made by participants were cited and are indicated in italics.

### **Combined Viewpoint**

As a teacher, the men are proud to be a male role model for children

(22:+4,+3,+5), and feel that they make a difference by sharing skills and passions with others (20:+5,+5,+4). The choice to teach outweighed the concern for financial wealth and security (31:+4,+2,+2).

There is no such thing as a predetermined biological fit for career types based on gender (32:-4,-5,-4), and teaching primary grades is equally suitable for both men and

women (43:+3,+2,+2). Participant L indicated that his brother was in business, and added, "His best worker is a woman." Teaching strategies are gender neutral and do not lack masculinity (30:-3,-4,-4). However, there might be subtle differences between genders. The men believe that their background and perspective is different from female and secondary teachers (26:+1,+1,0). More studies need to be done about men and teaching, and what male teachers can offer to children (40:+2,+2,+1). The men do not believe that teaching as a female-gendered career is a social justice issue (39:-2,-2,-3). Additionally, they are not so sure that expectations for male teachers are lofty, nor is the topic relevant to curing societal problems (33:-1,0,0).

The men are not so sure that recruiting more males would debunk the preconceptions that have led to a shortage of males in the workplace (35:-1,0,0). Furthermore, it is not the responsibility of the media and universities to do more to recruit male teachers (38:0,-2,-1). While in college, the men did not experience any reverse sexism that encouraged males to teach high school and women to teach elementary (6:-2,-2,-4). Instead, it is likely that some male teacher candidates also wish to coach and that attracts them to the secondary school level (7:+1,+1,+1).

Recruiting male teachers was widely commented on by participants. Five of the 12 participants made comments that they were not aware that recruiting males for teaching existed, or they hadn't even thought about it. Participant A stated, "I am not aware of recruiting." Participant B commented about recruitment at the university level; "I am not sure that they do." Participant D indicated that it was probably true that there is lack of recruitment for male teachers, but added, "I don't really care about it, because I don't know that there is recruitment on either side (gender)." Participant E said,

"Recruiting. I have not thought about that." Participant L forewarned, "You shouldn't recruit. If you don't want to do it (teach), don't enter the profession. You are touching people's lives."

# Using Participant Responses to Answer the Research Questions

The purpose of the study was to examine the perspectives of male elementary school teachers with regard to what influenced their career choice, and their perceived effect on children. The secondary purpose of this study was to look at what factors might deter males from teaching young children, and what might be done to reduce the shortage of male teachers.

This section focuses on points gleaned from the Q sorts and interviews. The abovementioned qualitative and quantitative data provide information to answer the original research questions by looking for a consensus among the study participants. **Research Question 1:** What is the perspective of males that influenced their decision to enter a career as an elementary school teacher?

Of the 44 statements in this study, the researcher determined that 18 contributed to answering the first research question. Particularly, four statements (20, 22, 31, and 32) had the strongest support from all three factors.

All three factors rated statement 20, *Teaching allows me to share my skills and passions with others and I feel that I make a difference*, with a high level of agreement. This statement was rated +5 by the Fixers and the Mentees, and +4 by the Aspirants. Men in this study clearly have a strong desire to share with others and want to make a difference in the lives of young people.

Equally important, statement 22, *I take pride in being a male role model for children*, was also rated highly by all three factors, at +4, +3, and +5. Men, in this study, clearly want to be a role model for children. However, these men were reluctant and, perhaps resentful about becoming a surrogate father to students lacking a father. This is indicated by responses in statement 28, *I embrace the expectation to be a surrogate father to students lacking a father*, which the three factors rated at 0, -1, and -2.

Similarly, statement 31, *The intrinsic reward of working with children outweighs the concern for financial wealth and security,* had high ratings of +4, +2, and + 2 by the three factors. Men, in this study, want to work with children, and were not overly concerned about wealth.

Conversely, statement 32, *Men and women are biologically fit for specific types of careers*, was rated with strong disagreement, with ratings of -4, -5, and -4 by the three factors. This indicates that men in this study strongly opposed the idea that men and women are innately designed for certain careers. In other words, gender does not determine career choice.

There were additional statements that supported research question 1. First, all three factors agreed that teaching was consistent with family life (statement 17), particularly with the Aspirants, rating it +4. Additionally, only men in the Mentees, described by their namesake, were influenced to become a teacher by a male teacher whom they had in elementary school (statement 18) indicating a rating of +5. The Mentees and the Aspirants indicated that becoming a teacher was a calling (statement 21), both rating it +4. Men in the Fixers believed that they have something different to offer from what women can (statement 29), demonstrated by a rating of +3. Finally, men

in the Mentees and the Aspirants indicated that they received career advice, at a young age, that influenced their decision to teach (statement 42), with ratings of +4 and +2.

**Research Question 2:** What factors, if any, are perceived to deter males from teaching elementary school?

The researcher determined that 22 statements contributed to answering the second research question. Particularly, six statements (6, 7, 30, 31, 32, and 43) had the strongest support from all three factors.

All three factors rated statement 6, *There is reverse sexism at the university level that men are encouraged to teach high school and women teach elementary*, with a high level of disagreement, indicating that they do not believe that universities deter males from teaching elementary school. The Fixers and the Mentees rated this statement -2, and the Aspirants rated it -4.

Additionally, statement 7, *Many male teacher candidates also wish to coach and that attracts them to the secondary school level*, was only slightly agreed upon by the men in this study. All three factors rated it +1. Therefore, it is possible that some men are deterred from teaching elementary grades, in favor of high school, because of the desire to coach athletics.

As with question 1, statement 31, *The intrinsic reward of working with children outweighs the concern for financial wealth and security,* was rated by the Fixers at +4 and the Mentees and the Aspirants at +2. However, lower financial status might no longer be a dilemma. Participant D described the modern teacher's salary as, "a pay scale that is livable, even admirable in some locales."

The men agreed with statement 43, *Teaching primary grades is a career equally suitable for both men and women,* with the Fixers and the Aspirants rating +3, and the Mentees rating +2. Although this reflects the belief of participants, who are all males teaching elementary students, secondary teachers, and those outside the profession, might see things differently.

There was universal disagreement with statement 30, *I had to adopt my own strategies because prearranged strategies lacked masculinity,* with the Mentees and the Aspirants rating -4, and the Fixers rating -3. This suggests that teaching strategies are gender neutral, and may be equally suitable for the majority of male secondary-level teachers. Therefore, teaching strategies should not be a deterrent to men teaching young children.

As with question 1, statement 32, *Men and women are biologically fit for specific types of careers,* was disagreed with as the Fixers and the Aspirants rated it -4 and the Mentees rated it -5. This suggests that men in this study support feminism and equality, and believe that gender does not play a role in career choice.

There were additional statements that supported research question 2. First, only the Fixers believed that society puts more emphasis on women than men, when neutralizing gender stereotypes (statement 8), rating +1. However, the Mentees and the Aspirants disagreed with ratings of -2 and -1, respectively. Additionally, the Fixers and the Aspirants believed that male teachers must take precautions with children, due to public scrutiny (statement 13) with ratings of +2 and +3, respectively. This suggested a possible deterrent that would turn men away from teaching children.

The Mentees believed they have ignored social barriers and negative stereotypes that discourage men from teaching (statement 27), rating +4. This suggested that social barriers and negative stereotypes that deter men from teaching children might not exist.

The Mentees also believed that most men might pursue careers with more earning potential than teaching (statement 1), rating +1. Therefore, a teacher's income could be a deterrent for many men.

Finally, all three factors indicated they did not experience discouragement from peers and family when they decided on a teaching career (statement 11), with ratings of - 4, -3, and -3. Therefore, male teachers found support from those within their circles. However, this does not reflect whether those outside of the field of education met discouragement. The support of family and friends could still be a factor in determining whether a man wants to teach elementary school.

**Research Question 3:** What might be done about the shortage of male elementary school teachers?

The researcher determined that six statements contributed to answering the third research question. Particularly, three statements (38, 39, and 40) had the strongest support from all three factors.

An easy response to what might be done about the shortage of male elementary school teachers is recruitment. Statement 38, *The media and universities need to do more to recruit male teachers,* was rated by the Fixers, the Mentees, and the Aspirants at 0, -2, and -1 respectively. On the surface, it appears that the men did not believe that there needs to be more recruitment. However, five of the 12 participants commented about not knowing that recruitment even existed. Therefore, the researcher interpreted the

responses to statement 38 to mean that it should not be the responsibility of the media and universities to recruit male teachers. This can be supported by statement 3, *There is a lack of recruitment or discussion with men about the importance of male elementary teachers*, of which the Fixers rated +2.

Clearly, many participants are unsure about recruiting. Participant A indicated he was not aware of recruitment and added. "There is a social stigma. Like nurses in hospitals, society has to get past that, or not care about it." Participant B also indicated, "No one recruited me," in college and, "There is nothing about how to be a role model for males," adding, "or females." One interesting finding, Participant L disagreed with recruiting males to teach, because it might attract the wrong people and warned that the individual should really want to be there because, "You touch people's lives."

The participants disagreed with statement 39, *Social justice and transformation will occur when society and educational stakeholders tackle the issue of teaching as a female-gendered career,* with the Fixers and the Mentees rating -2, and the Aspirants rating -3. Several men indicated that they did not agree that there is a social justice issue. Participant G stated, "I don't feel that there is any injustice... men who want to teach, are able to. It's not like we're being held down. Maybe there is some injustice for the students, that there aren't more males teaching." This sentiment can be supported by Statement 25, *If children see more male teachers, they are less likely to believe that teaching is an occupation reserved for women,* the Fixers, the Mentees, and the Aspirants rated +3, +2, and +1, respectively.

Statement 40, *More studies need to be done about men and teaching, and what male teachers can offer to children,* was agreed upon by all three factors, with ratings of +2, +2, and +1.

**Research Question 4:** What do male educators perceive is the benefit to children in having a male teacher?

The researcher determined that 10 statements contributed to answering the fourth research question. Particularly, statement 22, *I take pride in being a male role model for children*, had the strongest support from all three factors, with ratings of +4, +3, and +5. This suggested that role modeling by a male teacher is perceived as a major benefit to children. Those in the Mentees and the Aspirants believed that it is not difficult to meet the demand and expectations (statement 10). However, it appears that all three factors did not embrace the expectation to be a surrogate father to students lacking a father (statement 28).

There were additional statements that supported research question 4. First, the three factors agreed that exposing more male teachers to children would change the view that teaching is a career for women (statement 25). Men in the Fixers and the Mentees agreed that men can offer a perspective that is different from women (statement 26), and the Fixers strongly believed that they offer something that is not in the curriculum (statement 29). Although ambiguous, this suggested that men believe they can make a difference, just because of their gender.

Additionally, men in the Fixers believed that a male teacher can influence student academic achievement (statement 34), and strongly believed that men and women have different teaching styles (statements 24 and 44). Contrarily, men in the Mentees and the

Aspirants indicated that they did not care about gender issues in education, and would rather focus on teaching (statement 41).

### Summary

This chapter presented the results of a factor analysis that was completed following the sorting of 44 statements by 12 male teachers using Q Methodology. This method was used to explore viewpoints of male elementary school teachers in a predominantly female career. Eleven of the 12 study participants loaded significantly into one of three distinct factors, indicating similarities of viewpoints. The three factors were the *Fixers*, the *Mentees*, and the *Aspirants*.

Feedback from participants was analyzed and synthesized to construct the viewpoints. Factor 1, Fixers, were male teachers who have experienced a school culture that expects more from them than their usual teaching duties such as acting as disciplinarian, school handyman, removal man (removing an unruly student from a classroom), head teacher, and technology expert. Factor 2, Mentees, were mentored or influenced to become a teacher by a male teacher whom they had in elementary school. Factor 3, Aspirants, unlike the others, aspired to teach from a young age. Each factor varied in viewpoints, but also shared common viewpoints among the participants, producing noteworthy research findings that help to address initial research questions.

Chapter 5 will provide a discussion of the findings and how the findings align with existing research, limitations of the study, recommendations for future research, and a conclusion.

#### Chapter 5

# Discussion

# **Summary of Findings**

This study was inspired by a void in the literature. A limited number of studies addressed the lack of male elementary school teachers, and some known studies merely focused on preservice teachers. Furthermore, no study was found to use Q Methodology to examine perspectives on the topic. The current investigation set out to fill these gaps in the literature.

The emphasis on exploring self-efficacy and collective efficacy (Bandura, 1993; 2000) and the significance of teacher beliefs (Pajares, 1992) formed the basis of this study, which used Q Methodology, a mixed methods approach, to examine subjectivity and viewpoints of male elementary school teachers. Initially, the researcher conducted a survey and ideas were combined with themes from existing literature to develop a concourse for this study. Twelve male elementary school teachers volunteered to participate in this Q study. The participants were asked to rank 44 statements, indicating to what extent the person agreed or disagreed with each statement. The researcher asked each participant additional questions to clarify and enhance understanding of viewpoints. Factor analysis extracted three distinct factors (or groups with similar viewpoints) in 11 of the 12 participants. Additionally, consensus viewpoints (those shared by all) were identified.

Factor 1, labeled the *Fixers*, believe that men who teach elementary school are expected to perform tasks (such as being a handyman) in addition to teaching duties.

However, they appear to accept that role and believe that there are clear differences between male and female teachers.

Factor 2, labeled the *Mentees*, were influenced to become teachers by a male elementary teacher that they had in elementary school. They are not concerned with gender issues, and find it easy to ignore social barriers and negative stereotypes that discourage other men from teaching.

Factor 3, labeled the *Aspirants*, aspired to teach from a young age, differentiating them from the other two groups. They received career advice at a young age, and felt supported in their decision to teach from family and peers. They believe that male and female teachers are equals in their impact on students.

The purpose of this study was to compile a common perspective from a group of male elementary school teachers. The viewpoints of the study participants were used to address the following research questions:

- 1. What is the perspective of males that influenced their decision to enter a career as an elementary school teacher?
- 2. What factors, if any, are perceived to deter males from teaching elementary school?
- 3. What might be done about the shortage of male elementary school teachers?
- 4. What do male educators perceive is the benefit to children in having a male teacher?

This chapter presents a discussion of how the findings align with the research questions and the literature, based on the themes. Also presented are implications, limitations of the study, and recommendations for future research.

## **Research Question #1**

The first research question considered what influenced men to teach elementary school. For the Mentees and Aspirants, teaching was a calling. All three factors in this study have a strong desire to share their skills and passion with others and believe that, by being a male teacher, they make a difference. Furthermore, male teachers are proud to be a male role model for children. This supports existing research indicating that male teachers are accepting of being a role model (Skelton, 2003; Montecinos & Nielson, 2004). Research has also examined the societal belief that male teachers can serve as surrogate fathers for fatherless children (Sanatullova-Allison, 2010a; Sargent, 2005; Sevier & Ashcraft, 2009). It is noteworthy that the current study revealed that male teachers, although proud to be a role model, do not want to be expected to act as surrogate fathers.

Men, in this study, strongly opposed the idea that gender and biology predetermine a certain career. This is a contradiction to the Evolutionary Theory that suggests that women are biologically more likely to teach young children than men due to innate qualities (Browne, 1999).

Men, in this study, preferred a career that is consistent with family life, and they preferred the reward of teaching children to a career with wealth and financial security. Previous research highlighted an historic trend where men were deterred from teaching to pursue better paying jobs (Benton DeCorse & Vogtle, 1997; Blount, 2000; Johnson, 2008; Skelton, 2012).

The Social Cognitive Career Theory of Lent (1994), Brown (2000), and Hackett (2002), in which career choices are shaped by sources of encouragement, including

family and other sources is confirmed in this study. Other researchers have identified factors that might influence men to teach elementary school: influence of former teachers and family members, career advice, and the most influential were personal experiences in working with children (Mulholland & Hansen, 2003; Sanatullova-Allison, 2010b). Men in this study did not feel discouraged by family and peers when they decided to enter a career in teaching. The Mentees and Aspirants indicated that they received career advice at a young age that influenced their decision to become teachers, but only the Mentees were influenced in their career choice by a male teacher that they had as a child. Both conditions support the Social Cognitive Career Theory.

The Fixers believe that male teachers have something different to offer from that of females. This premise supports an existing study that males sensed that they offer something different, in addition to the curriculum (Benton DeCorse & Vogtle, 1997). Yet, exactly what that is remains vague.

### **Research Question #2**

The second research question considered factors perceived to deter men from teaching elementary school. First, all three factors believed that biology (gender) does not predetermine career types, which as stated previously, contradicts the Evolution Theory (Browne, 1999). Furthermore, the lack of support from family and peers was not an issue with the men in this study. However, as stated previously, men outside of education might be discouraged, because they believe that teaching is not masculine and that it does not match the image of a real man (Cushman, 2008; Jones, 2007b; Sargent, 2000). Furthermore, some men might become discouraged from teaching because of gender role conflict, which means that masculine qualities (such as competition,

aggressiveness, and outdoor activities) are inconsistent with environmental expectations (such as nurturing, passivity, and indoor activities) of a school setting (Wolfram, Mohr, & Borchert, 2009). However, men in the current study did not have to adopt their own strategies because teaching strategies lacked masculinity. Therefore, male teachers must believe teaching strategies to be gender-neutral. Despite societal barriers, existing research indicated that male elementary teachers are comfortable with themselves and their masculine sexuality when working in a female-dominated environment (Brookhart & Loadman, 1996; Chusmir, 1990; Nordberg, 2002). The current study supports this finding, where the men indicated that they were not concerned that others might not see them as a real man because they were a teacher. Furthermore, the Mentees and the Aspirants indicated that they do not care about gender issues in teaching, and would rather just teach.

All three groups in this study disagreed that reverse sexism exists at the university level, where females are encouraged to teach elementary students, and males are encouraged to teach at the secondary level. This supports Seifert (1988), who implied that societal gender bias potentially influences the number of males teaching children, instead of discrimination in teacher education programs.

The desire to coach might steer men who want to teach at the high school level. All three groups in the current study acknowledged this notion. It is noteworthy that participants believed that teaching was similar to coaching. It is also noteworthy that several participants indicated that they are currently, or have been, coaches. A follow-up study about secondary male teachers would provide more information.

The lack of financial reward in an education career might deter men from teaching. Although men in this study prioritized the intrinsic reward of working with children above financial reward, the lack of financial reward might still be a deterrent for men outside of education. Specifically, the Mentees believed that most men might pursue careers with more earning potential than teaching. As stated above, existing research indicated an historic trend where men were deterred from teaching to pursue better paying jobs (Benton DeCorse & Vogtle, 1997; Blount, 2000; Johnson, 2008; Skelton, 2012).

People tend to perceive teaching primary grades as women's work, believing that men are not fit for caring and nurturing roles (Browne, 1999), and the scant number of men working in primary grades reflects this. Women are more likely to teach younger children than men (Bricheno & Thornton, 2002), and a whopping 97.2% of preschool and kindergarten classrooms are dominated by women (U.S. Bureau of Labor Statistics, 2015); yet, men in the current study believed that teaching primary grades is equally suitable for both men and women, which supports existing research (Skelton, 2003).

Society might place more emphasis on women than men regarding neutralizing gender stereotypes, as evident on television where women are depicted as doctors, lawyers, and police officers (Williams, 1992). However, only the Fixers agreed with this notion.

Public scrutiny regarding men working with children is a deterrent to those considering a career in education (Benton DeCorse & Vogtle, 1997; Cushman, 2005a; Farquhar, 1997; Jones, 2007b; Parr & Gosse, 2011; Sanatullova-Allison, 2010a; Sargent, 2000; 2005; Skelton, 2003; Sumsion 1999; 2000; Weaver-Hightower, 2011; Williams,

1992). Preservice and current male teachers have expressed apprehension that they might be unfoundedly accused of improper conduct with children (Eng, 2004; Hansen & Mulholland, 2005. The Fixers and the Aspirants confirmed this phenomenon, and conclude that male teachers must take precautions with children that female teachers do not necessarily worry about.

Despite social barriers and negative stereotypes that discourage men from teaching, the Mentees have ignored this premise. However, the other groups rated this neutrally, which suggested that they neither strongly agreed, nor strongly disagreed with the statement. The researcher determined that all male elementary school teachers have ignored social barriers and negative stereotypes by the very nature of their career choice.

### **Research Question #3**

The third research question considered what might be done about the shortage of male elementary school teachers. Many researchers have called for further research, recruitment, preservice training, and policy review to increase male elementary school teachers (Cushman, 2005a; 2010; Davison & Neilson, 2011; Martino, 2008; Sanatullova-Allison, 2010b; Sumsion, 2000; Weaver-Hightower, 2011). Men in this study agreed that there is a need for further research on the topic of men and teaching, and what they can offer to children. However, the Fixers indicated that there is a lack of recruitment of male elementary school teachers. Yet, the recruitment of male teachers appears to be elusive, with 5 out of 12 men in this study volunteering that they were not aware that any recruiting existed, or had not experienced recruitment. Furthermore, all three groups disagreed that the media and universities need to do more to recruit. The researcher interpreted that because of the unfamiliarity with recruitment, the participants might be

expressing that it should not be the responsibility of the media and universities to recruit. This notion is related to the study participants' disagreement that a reverse sexism exists at the university level encouraging men to teach at the secondary level and women at the elementary level.

That there is a shortage of male elementary school teachers could be considered a social justice issue, but the men in this study disagreed. Existing research on positive marginality (Unger, 1998; 2000) examines the persistence of those who are members of two different groups, and despite the minority status of one group, can pass as members of the dominant group. Men who teach young children might be viewed in society as not fitting into the mainstream by choosing a female dominant career. However, the known research focuses on a sense of inferiority and injustice, such as that experienced by feminists. In the current study, participants did not see themselves as part of two groups, nor do they believe that they were alienated. Most participants indicated that they do not care about gender issues and just want to teach, and many indicated that they did not believe there is injustice involved. However, the researcher notes that during the study, Participant G hypothesized that there might be "injustice for students, that there aren't more males teaching."

Although the issue of recruiting men to teach is vague, the men in this study agreed that when children see more men teaching, they are less likely to view teaching as women's work. This supports existing research (Davison & Nelson, 2011; Martino, 2008; Montecinos & Nielsen, 1997).

# **Question #4**

The fourth research question considered the perceived benefit to children having a male teacher. First, all three groups acknowledged and showed pride in their contributions as male role models. During the post-sort interview, which permitted openended responses, when asked what positive connotations are attached to males teaching elementary school, 5 of 12 participants specifically named role modeling. Previous research suggested that, although only a societal and media perception, there is widespread belief that more male teachers are needed as role models to boys (Carrington, Tymms, & Merrill, 2008; Cushman, 2008; McGrath & Sinclair, 2013; Mills, Haase, & Charlton, 2008; Montecinos & Nielson, 2004; Sargent, 2005). The present study did not specify whether male teachers would benefit boys or girls, but rather children in general. McGrath and Sinclair (2013) suggested that girls also benefit from male teachers because some girls come from harsh environments, and the exposure to a male teacher might show that not all men are abusers. Although men in the current study perceived male role modeling to be beneficial to children, as denoted previously, these men do not want the expectation to be a surrogate father for children lacking a father. The researcher notes that no additional information explains this reaction.

As mentioned previously, exposing students to more male teachers could change the view that teaching is a career exclusively for women. All three groups in this study agreed with this premise. Existing research suggested that male teachers might have a greater effect on boys than girls, regarding developing an androgynous view of teachers (Mancus, 1992). The Fixers and the Mentees believed that men offer a perspective that is different from women. Although this is vague, it is a viewpoint that supports existing

research (Benton DeCorse & Vogtle, 1997; Brookhart & Loadman, 1996; Davison & Nelson, 2011). Furthermore, the Fixers specified that they offer something that is not in the curriculum, which is also ambiguous, but supports existing research (Benton DeCorse & Vogtle, 1997).

It is possible that men have different teaching styles, or delivery styles. While the Mentees and the Aspirants did not appear to be interested in gender issues in education, and would prefer to focus on teaching, the Fixers distinguished themselves with the belief that male teachers have teaching styles that differ from female teachers, and male teachers can influence student academic achievement. However, existing research is inconclusive. There appears to be no correlation between teacher gender and student achievement at the elementary level (Ammermueller & Dolton, 2006; Bricheno & Thornton, 1996, 2002; Carrington et al., 2007; Carrington et al., 2008; Francis et al., 2008; Krieg, 2005; Warwick & Jatoi, 1994; Winters et al., 2013). Other research found that it is the skill of the teacher, and not teacher gender, that impacts student achievement (Antecol, Eren, & Ozbeklik, 2012; 2015).

The effect of males on students might not be academic. Cushman (2008) indicated that the majority of male principals agree that there is a need for more male role models, but the reasons are not academics, which is ambiguous. Furthermore, researchers suggest that the reason why research is inconclusive might be due to surprisingly few studies about staff gender balance in primary schools (Bricheno & Thornton, 2002; Drudy, 2008).

The concept of recruiting more men to teach elementary school is enigmatic. The Fixers specified that there is a lack of recruitment or discussion with men about the

importance of male elementary school teachers, and five out of 12 study participants indicated that they were not aware that recruiting existed. Additionally, the participants did not believe that recruiting more men would debunk the preconceptions that have led to a shortage of males in the workplace. Finally, the men did not believe that it is the responsibility of the media and the universities to do more to recruit males. The data from this investigation is inconclusive regarding who should do the recruiting.

Is discipline handled differently between men and women? This concept was not included in this study. However, many participants discussed this during the post-sort interview. When asked what where positive connotations attached to males teaching elementary school, six out of 12 men indicated that discipline as a connotation. In other words, they believed that discipline is an important characteristic in male teachers. Discussions about discipline are illustrated below.

Participant B indicated that the genders handle their classes differently, and that part of students' misbehavior is to seek out male attention. Participant C indicated that men connect with children by talking to them on a "real level," and by doing things like playing football with students during recess helps students to look at things differently. Participant F indicated his belief that students respect male teachers better than female teachers. Participant I indicated that male teachers have different interests than female teachers, such as hunting, and he believes that it helps to develop a rapport with students, thus making a difference behaviorally. Participant G indicated that male teachers connect with some students differently from female teachers. Participant H indicated that males are "strict," for which he reportedly receives positive praise. Finally, Participant J indicated that male teachers are less bothered by things than female teachers, and men

"go with the flow" at times when some women get "bent out of shape," a sexist comment. Contrarily, Participant E indicated that people assume that males are better at discipline than females, but he did not personally believe that.

The researcher notes that discipline was also a negative connotation for some male teachers. Participant G indicated that female teachers expect men to be able to fix problems with male students, and often "push" the problems off on men, yet he believes that women have the same ability to handle problems as male teachers. Similarly, Participant J believes that students often see the male teacher as "mean," and so might parents, thus confusing being firm with being mean. Likewise, Participant I indicated that he has had to defend himself against complaints from parents (mothers specifically) that he was "mean" when dealing with student discipline.

## Implications

An unintended outcome of this study, that many men make their elementary teaching career choice late, is noteworthy. Nine out of 12 participants either held other careers before teaching or decided to teach during college. This confirms existing research that women tend to have their mind set on becoming a teacher before entering college, while men tend to choose the elementary education major while in college (Montecinos & Nielsen, 1997). Moreover, other existing research indicates that many males are likely to have come from previous occupations or careers before entering the field of education (Cushman, 2005; Smedley, 2007; Simpson, 2004; 2005; Williams, 1992). Additionally, this study was based, in part, on the conceptual framework of Gottfredson's (1981; 2002) Theory of Circumscription and Compromise, which encompasses a process by which the individual narrows down career choices over time,

through selecting roles that are compatible with their self-concept, as well as analyzing roles that are perceived to be accessible. As described in Chapter 2, Gottfredson's theory involves stages through which children and adolescents progress when exploring desirable careers. In other words, young people sacrifice roles suddenly seen as incompatible for those perceived as more easily accessible. One limitation of this theory, some youth might have limited access and exposure to certain roles. It is unknown why many men hesitate on the decision to become a teacher. A challenge that should be explored further is how to provide young men with a rewarding experience. One potential solution would be for school districts to create opportunities for adolescent boys to work with, and help, younger children. For example, middle and high school students could volunteer for tutoring elementary school students or assistance with after school activities. This supports existing research where, once exposed to working with children, more men became intrinsically motivated to major in, or change majors, to elementary education (Sanatulla-Allison, 2010b).

Although men in this study were unclear whether recruiting more males to teach elementary school would debunk public preconceptions, and that the media and universities need to do more to recruit male teachers, many did acknowledge a lack of recruitment, or their own lack of knowledge that recruiting exists. If more males are to be encouraged to teach elementary school, it is befitting for universities to promote elementary education as a promising career for men. For example, universities could promote teaching through career fairs and college fairs at regional high schools. They might also promote teaching through the many men who return to college, looking for a second career, or the many military veterans trying to do the same. Additionally, more

can be done by school districts looking for males to teach young children. School districts should form partnerships with colleges and universities to promote teaching locally.

Due to public scrutiny, and because male teachers must sometimes defend themselves against parents who accuse them of being uncaring and too harsh with student discipline, there is more that male teachers can do. They must take a proactive approach. For example, waiting until a parent becomes upset, and then having to become defensive, is not a wise approach to handling concerns. According to Knopf and Swick, 2007, p. 293), "Parental perceptions are influenced by the way we treat them." Men need to step up efforts to be proactive with their public relations campaign. Swick (2004, as cited by Knopf & Swick, 2007, p. 293) identified that parents want "someone who cares about them and their children," values parental input, and to be a part in "shaping the agenda." Therefore, male teachers would benefit by communicating regularly and through multiple media to parents. For example, social media could be used to communicate what is going on in the classroom with parents. More importantly, face-to-face communication might break down barriers and build trust. Male teachers could hold their own open house early in the school year, separate from any such school-wide event. A teacher and a parent might find that what each envisions for the child is aligned. If it is determined that such alignments do not exist, the open house format would provide opportunities for parents and teachers to explore aligned expectations and develop collaborative solutions.

## Limitations of the Study

While researchers respect Q methodology, it is often misunderstood. Because opinions are sought, some might regard Q methodology as qualitative research, but it is

mixed methods research. This study used Q methodology to capture and describe comparable and differing participant viewpoints on the topic: understanding and addressing the shortage of male elementary school teachers. As with any research study, limitations of this study have been recognized.

Where much of the existing research focused on preservice male teachers, the researcher identified and filled a void by including males currently employed as elementary school teachers. Although this study was limited to male elementary school teachers working in small towns in northwestern Pennsylvania, this study did not exclusively rely on random sampling procedures. Q methodology typically uses strategic sampling so that the selection might express "a particularly interesting or pivotal point of view" (Watts & Stenner, 2012, p. 71). In other words, it makes sense to use participants who have a personal stake, knowledge, and experience regarding the topic.

A relatively small number of participants also limited the study. A preliminary survey and email communication asked for willingness to volunteer. Of the 20 initial volunteers, some did not respond to follow up communication, and others proved difficult to schedule with the researcher. However, generalizing findings to the larger population was neither considered, nor intended, because Q methodology is not designed to generalize to the rest of the population. Instead, it is designed to generalize to the concepts and relationships between factors. Having 12 participants allowed for more depth of analysis and interpretation through discussions during each Q sort. According to Brown (1993), "The focus is on quality rather than quantity" (p. 94). Therefore, a larger sample might have diluted the quality of data collected, which would have been counterproductive. Watts and Stenner (2005) described a large group of participants in a

Q study as "problematic," because "such an approach can easily negate many of the subtle nuances, complexities, and hence many of the essential qualities contained in the data" (p. 79). Moreover, the process in Q methodology is time-consuming. Collecting data during the Q sort activity takes about an hour for each participant. Therefore, having 100 or 200 participants would have been excessive and unwarranted to gather the necessary data.

Another limitation is a possibility of researcher bias. First, many of the participants knew the researcher professionally before the study, but none worked together with the researcher at the time of the study. It is possible that they volunteered because of professional respect for the researcher. However, it is unlikely that there was any influence during the Q sort procedure, which relies exclusively on individual decision and action. The researcher adhered to clinical, scripted procedures that were replicated with every individual participant, and post-sort interview questions were also scripted.

An additional researcher bias might occur during the interpretation stage of data analysis. Q methodology uses both quantitative and qualitative data. To further explain the participants' viewpoints beyond the confining nature of the Q sort process, the researcher used qualitative data, in the form of demographic information, post-sort questions and spontaneous discussions during each Q sort. The qualitative data was subjective and left for the researcher to interpret.

Finally, there is a possibility of participant bias. It might be disadvantageous to rely on the cooperation and truthfulness of each participant. There is a risk that the participant gave an account of what they thought was acceptable to others, rather than

their genuine opinion about the topic. However, during the Q sort activity the researcher repeatedly reminded each participant that there were no right or wrong responses and they were permitted to change their mind at any time.

## **Recommendations for Future Research**

There is a noteworthy lack of clarity in existing research and literature about what impact male elementary school teachers have on the attitudes, perceptions, achievement, and educational experiences of male and female students. Furthermore, literature is limited on the topic of males who choose careers in elementary education, a field predominated by women. Further research, recruitment, preservice training, and policy review are needed to increase male elementary school teachers (Cushman, 2005a; 2010; Davison & Neilson, 2011; Martino, 2008; Sanatullova-Allison, 2010b; Sumsion, 2000; Weaver-Hightower, 2011). That there are few men in the field warrants further research.

This study revealed that male elementary school teachers would like to see more studies on the topic. The replication of this study, in another region, may provide additional evidence that would confirm consensus of viewpoints, or introduce entirely different perspectives that would enhance its relevance.

Although existing literature shows that the gender of the teacher has little effect on student achievement, some people believe that men are valuable to children in other ways. Yet, teaching involves more than achievement test scores, particularly within the atmosphere of daily interactions with young, impressionable children. Further research into what male teachers can provide for children, other than academic achievement, is needed. For example, with so much focus on male role models to boys, there is a void in existing research about the effect of male teachers on girls. Because few studies exist,

gender balance in elementary schools should remain a goal and should be considered an equality issue.

Much of the existing research was done with preservice teachers as participants, possibly because the researchers were located at universities and found it convenient to use college students. This is a potential limitation and more studies that involve experienced teachers are needed. The replication of these previous studies using male teachers that are currently working in schools would shed new light on the subject.

This study revealed that male teachers were confident in their masculinity, were not concerned that others might not view them as real men, and had the support of family and friends in their career choice. However, there appears to be information missing about the men who might have considered a career in education but did not, because they were apprehensive about what others might feel, and did not have the support of family and friends.

As participants revealed in this study, there is a lack of recruitment of men to teach elementary school. Furthermore, the participants were uncertain that recruiting is the responsibility of universities or the media, which reveals another gap. Are there recruitment efforts, and if not, who should be responsible? The recruitment of males into careers in elementary education is of great importance, particularly because men in this study indicated that they were not aware that recruitment even existed. Emphasis and assumptions in existing research are often focused on teacher salaries, but there are other forces that might drive men away from the field. More information is needed about social barriers, social status, and gender dynamics that might impact the shortage of male

teachers. Only then, can we better understand and be able to attract quality male teachers.

More research is needed to clarify differences, if any, between male and female elementary school teachers' perceptions. A parallel study, with female elementary school teachers as participants, might be interesting to compare the male and female viewpoints. Of course, this would not be a perfect side-by-side comparison, because so many statements in the current study were unique to men.

What this study does not cover is society's stigma of males working with children. Many researchers mention societal discourses about males teaching children, but have focused on presuppositions of what society expects from the viewpoint of preservice or working teachers. However, more research is needed from the perspective from people outside of education. By studying various members of society, we gain insight into the social barriers that keep men away from classrooms.

Many men in this study disclosed a belief that there are differences between teaching styles of men and women in elementary school settings. The concept of men and caring needs to be explored more too. Is it possible that men care in different ways than women? More research is needed to look at differences (if any) in teaching styles and characteristics between men and women, and what impact that has on children.

Finally, this study revealed that male teachers are proud to be role models for children, but do not embrace the expectation to be a surrogate father for fatherless students. It might just be semantics, that surrogate fatherhood suggests a greater level of responsibility than that of male role model. This finding might have identified a void

between societal expectations and the role that male teachers believe they are taking on, and should be explored more through additional research.

## Conclusion

Attitudes and perceptions are significant and fundamental for understanding men who decide to teach elementary school, a career predominated by women. This study explored the issue of using Q methodology by examining and interpreting the perceptions of males who teach elementary school. Q methodology allowed the researcher to explore subjective opinions (similar and varied) of the participants. This study provided a review of existing literature, detailed the results of data analysis, responded to research questions, discussed implications and limitations, and made recommendations for further research.

This was the first known investigation on the topic, the shortage of male elementary school teachers, by using Q methodology. Given the predominance of female teachers in elementary schools, a man who decides to teach, within that setting, must be confident, and ignore social barriers that keep other men from considering the profession.

While this study focused on 12 male teachers in small towns in northwestern Pennsylvania, the findings may be relevant to male teachers with similar profiles and experiences at school districts elsewhere in the United States. By providing credence to the perceptions of the study participants, and understanding the extent to which men feel the importance of their position, influencing young minds while serving as a role model to children, universities and school districts might seek new ways to attract quality men to the teaching profession.

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APPENDIX A

## Full Analysis Results for Three Factor Structure

PQMethod2.35 Kurt1 Path and Project Name: C:\Users\khlar\Desktop\PQMethod\projects/kurt Correlation Matrix Between Sorts SORTS 1 2 3 4 5 6 7 8 9 10 11 12 100 48 53 33 28 49 9 37 1 A 28 63 36 34 44 8 2 В 48 100 49 2 42 19 52 39 12 3 C 53 44 100 36 25 44 20 36 42 66 35 29 32 55 49 36 100 50 40 4 D 33 46 56 46 38 40 25 71 7 5 E 28 2 25 32 100 28 32 25 54 47 47 6 F 49 42 44 46 55 28 100 30 20 55 47 47 28 19 20 32 54 35 37 G 30 100 8 Н 9 37 8 52 36 42 50 25 25 20 71 54 100 46 4.5 45 40 100 9 I 24 41 1 4 10 J 63 39 12 66 56 54 55 47 46 41 100 24 54 54 46 36 35 46 47 47 35 45 54 100 11 K 68 29 12 L 34 38 47 25 37 45 4 46 68 100 Unrotated Factor Matrix Factors 2 3 4 5 6 7 1 SORTS 0.1831 -0.1952 1 A 2 B 0.6706 0.2947 -0.1971 0.4122 0.3210 0.5295 0.5723 0.3362 0.3428 -0.1630 0.1184 0.1122 0.2241 3 C 4 D 0.4573-0.2405 0.6841 0.2366 -0.0321 -0.3117 -0.2826 0.0164 -0.0633 0.7426 -0.0401 0.4122 0.0401 0.0842 0.2492 5 E 0.5657 -0.2966 -0.4598 -0.2156 0.2983 -0.3790 0.2672 -0.0587 6 F 0.7187 0.3613 -0.1062-0.3346-0.12660.0675 -0.3595-0.04837 G 0.5864 -0.3756 0.4402 -0.0998 0.3904 -0.0467 -0.2880 -0.1666 8 Н 0.5546 -0.5191 0 4112 0.0663 -0.3366 -0.1749-0 0367 -0.0743 -0.1034 0.0211 9 I 0.5652 0.6185 -0.3961 -0.1378 -0.1058 -0.1268 10 J 0.8660 -0.0065 -0.0668 0.1856 0.0730 -0.2346 -0.0334 0.7075 -0.2839 -0.1181 -0.2286 0.3123 -0.0343 11 K 0.6145 -0.5124 -0.2648 0.0937 -0.0567 0.3608 0.1479 -0.2499 12 L Eigenvalues 5.1850 1.8664 1.0742 0.8378 0.6648 0.6456 0.5276 0.3083 % expl.Var. 43 16 9 6 5 4 Cumulative Communalities Matrix Factors 1 Thru .... 3 7 4 5 6 1 SORTS 0.4497 0.5365 0.5754 0.7453 0.8483 0.8819 0.9200 1 A 2 B 0.7475 0.2804 0.6078 0.7209 0.7349 0.7977 0.9152 3 C 0.4681 0.5240 0.5250 0.7342 0.8313 0.9112 0.9115 4 D 0.5514 0.5530 0.7230 0.7808 0.7824 0.7895 0.8516 5 E 0.3200 0.4080 0.6194 0 6659 0.7548 0.8984 0 9698 6 F 0.5165 0.6470 0.6583 0.7702 0.7863 0.7908 0.9201 7 G 0.3439 0 4849 0.6787 0 6887 0 8410 0 8432 0 9262 0.7462 8 H 0.3076 0.5771 0.8945 0.8958 0.7506 0.8639 9 I 0.3195 0.7020 0.7127 0.8696 0.8886 0.8998 0.9002 10 J 0.7499 0.7544 0.8503 0.7499 0.7888 0.7942 0.8492 0.7014 0.7154 0.5005 0.6209 0.7677 0.8652 0.8664 11 K 12 L 0.3776 0.6401 0.7102 0.7190 0.7222 0.8524 0.8743 75 cum% expl.Var. 4.3 59 68 80 86 90 POMethod2.35 Kurt1 Path and Project Name: C:\Users\khlar\Desktop\PQMethod\projects/kurt Factor Matrix with an X Indicating a Defining Sort Sort Loadings 1 2 3 QSORT 1 A 0.6721X 0.3467 0.0594 2 В 0.7759X -0.2288 0.2579 3 C 0.6365X 0 2720 0 2142 4 D 0.4668 0.1437 0.6960X 0.1677 0.7527X 5 E 0.7649X 0.0779 0.2778 6 F 0.1209 7 G 0.1136 0.2095 0.7886X 8 H -0.0135 0.2841 0.8157X 0.8390X 0.0634 -0.0697 Ι 10 J 0.5801 0.5162 0.3891 0.2243 0.7484X 0.3018 11 K 12 L 0.0393 0.7687X 0.3433

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8

0.1000

0.3022

0.1742

0.1689

8

0.9300

0.9418

0.9155

0.9429

0.9733

0.9224

0 9539

0.9013

0.9163

0.8807

0.8949

0.9367

93

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% expl.Var.	28	21	19

Free	Distribution	Data	Results

QSORT	MEAN	ST.DEV.
1 A 2 B	0.000	2.685 2.685
3 C	0.000	2.685
4 D	0.000	2.685
5 E	0.000	2.685
6 F	0.000	2.685
7 G	0.000	2.685
8 H	0.000	2.685
9 I	0.000	2.685
10 J	0.000	2.685
11 K	0.000	2.685
12 L	0.000	2.685

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### Factor Scores with Corresponding Ranks

### No. Statement

1	Most men pursue careers with more earning potentia
2	The stigma of a man working a traditional woman's
3	There is a lack of recruitment or discussion with
4	Women are naturally better caretakers than men
5	Society doesn't encourage men to do jobs that
6	There is reverse sexism at the university level
7	Many male teacher candidates also wish to coach
8	Society puts more emphasis on women than men, when
9	School culture views male elementary teachers as:
10	Being considered a role model is important, but it
11	I have experienced discouragement from teaching as
12	School culture expects male teachers to behave as
13	Because of public scrutiny, men must take extra pr
14	I am concerned that others might see me as not a
15	I have experienced school-cultural biases that fav
16	I view teaching as being similar to coaching.
17	A teaching career is consistent with my family lif
18	My decision to become a teacher was influenced by
19	I wanted to be a teacher from a very young age.
20	Teaching allows me to share my skills and passions
21	My choice to become a teacher was a calling.
22	I take pride in being a male role model for childr
23	Male elementary teachers do not fit the stereotype
24	Men possess the same basic traits as women, with
25	If children see more male teachers, they are less
26	I am unique in that I have the background and
27	I have ignored social barriers and negative stereo
28	I embrace the expectation to be a surrogate father
29	I have something different to offer that is not in
30	I have had to adopt my own strategies because pre
31	The intrinsic reward of working with children outw
32	Men and women are biologically fit for specific ty
33	Expectations for male teachers are lofty, but are
34	The gender of a teacher has little to no effect on
35	Recruiting more males to teaching would debunk
36	Men must establish their own rules when beginning
37	Male elementary teachers are expected to fill a vo
38	The media and universities need to do more to recr
39	Social justice and transformation will occur when
40	More studies need to be done about men and teachin
41	I couldn't care less about gender issues in my car
42	I received career advice at a young age that influ
43	Teaching primary grades is a career equally suitab
44	Men and women have different teaching styles
	non and somen have affectene coaching styles

1	-0.74	34	0.01	18	-0.16	24
2	0.39	16	-0.43	31	-0.44	28
3 4	0.65 -0.14	12 26	-0.16 -1.63	26 42	-0.42 0.14	27 20
5	1.36	20 5	-1.03	42 38	-0.74	35
6	-0.68	33	-0.58	34	-1.24	40
7	0.61	14	0.14	15	0.19	18
8	0.32	17	-0.46	32	-0.50	30
9	1.30	6	-0.03	20	-0.06	22
10	-0.00	22	-1.20	41	0.25	17
11	-1.78	42	-0.87	36	-0.78	36
12	-0.49	31	-0.42	30	-1.81	43
13	0.66	11	-0.17	27	0.89	9
14	-2.00	44	-2.24	44	-0.67	33
15	-0.83	35	-0.14	22	-1.97	44
16	0.82	10	1.33	7	0.47	13
17	0.31	18	1.19	9	1.68	5
18	-1.97	43	1.63	2	-1.10	39
19	-1.48	40	-0.15	25	2.23	1
20	1.71	2	1.65	1	1.79	3
21	-0.11	25	1.48	4	1.68	5
22	1.47	3	1.33	8	1.86	2
23	-0.09	24	-1.02	37	0.31	15
24	-0.99	37	0.00	19	1.03	7
25	1.25	7	0.77	12	0.36	14
26	0.56	15	0.28	14	-0.12	23
27	0.03	21	1.37	5	-0.35	26
28	0.13	20	-0.32	29	-0.69	34
29	0.98	8	-0.18	28	0.16	19
30	-1.02	38	-1.19	40	-1.42	42
31	1.39	4	0.73 -2.08	13	0.76 -1.33	11
32 33	-1.48 -0.31	41 30	-2.08	43 23		41 21
34	-0.31	36	0.03	23 16	0.08 0.85	10
35	-0.85	27	-0.15	24	-0.34	25
36	-0.17	28	-0.03	21	-1.00	38
37	-0.26	29	-1.19	39	-0.61	32
38	0.20	19	-0.46	33	-0.47	29
39	-0.60	32	-0.60	35	-0.92	37
40	0.61	13	0.90	11	0.29	16
41	-0.07	23	1.36	6	1.09	6
42	-1.35	39	1.62	3	0.56	12
43	0.96	9	1.07	10	0.97	8
44	1.86	1	0.01	17	-0.51	31

Factors 2 3

No. 1

Correlations Between Factor Scores

	1	2	3	
1	1.0000	0.3353	0.3237	
2	0.3353	1.0000	0.5324	
3	0.3237	0.5324	1.0000	

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Factor Scores -- For Factor 1

No.	Statement	No.	Z-SCORES
44	Men and women have different teaching styles	44	1.860
20	Teaching allows me to share my skills and passions	20	1.714
22	I take pride in being a male role model for childr	22	1.465
31	The intrinsic reward of working with children outw	31	1.386
5	Society doesn't encourage men to do jobs that	5	1.355
9	School culture views male elementary teachers as:	9	1.297
25	If children see more male teachers, they are less	25	1.247
29	I have something different to offer that is not in	29	0.984
43	Teaching primary grades is a career equally suitab	43	0.963
16	I view teaching as being similar to coaching.	16	0.816
13	Because of public scrutiny, men must take extra pr	13	0.661
3	There is a lack of recruitment or discussion with	3	0.646
40	More studies need to be done about men and teachin	40	0.610
7	Many male teacher candidates also wish to coach	7	0.606
26	I am unique in that I have the background and	26	0.561
2	The stigma of a man working a traditional woman's	2	0.390
8	Society puts more emphasis on women than men, when	8	0.323
17	A teaching career is consistent with my family lif	17	0.315
38	The media and universities need to do more to recr	38	0.217
28	I embrace the expectation to be a surrogate father	28	0.125
27	I have ignored social barriers and negative stereo	27	0.027
10	Being considered a role model is important, but it	10	-0.004
41	I couldn't care less about gender issues in my car	41	-0.068
23	Male elementary teachers do not fit the stereotype	23	-0.088
21	My choice to become a teacher was a calling.	21	-0.112
4	Women are naturally better caretakers than men	4	-0.145
35 36	Recruiting more males to teaching would debunk Men must establish their own rules when beginning	35	-0.153 -0.168
30	Male elementary teachers are expected to fill a vo	30	-0.261
33	Expectations for male teachers are lofty, but are	33	-0.307
12	School culture expects male teachers to behave as	12	-0.493
39	Social justice and transformation will occur when	39	-0.600
59	There is reverse sexism at the university level	6	-0.682
1	Most men pursue careers with more earning potentia	1	-0.737
15	I have experienced school-cultural biases that fav	15	-0.829
34	The gender of a teacher has little to no effect on	34	-0.849
24	Men possess the same basic traits as women, with	24	-0.992
30	I have had to adopt my own strategies because pre	30	-1.019
42	I received career advice at a young age that influ	42	-1.347
19	I wanted to be a teacher from a very young age.	19	-1.480
32	Men and women are biologically fit for specific ty	32	-1.481
11	I have experienced discouragement from teaching as	11	-1.781
18	My decision to become a teacher was influenced by	18	-1.971
14	I am concerned that others might see me as not a	14	-2.003
	2		

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Factor Scores -- For Factor 2

No.	Statement	No.	Z-SCORES
20	Teaching allows me to share my skills and passions	20	1.651
18	My decision to become a teacher was influenced by	18	1.633
42	I received career advice at a young age that influ	42	1.622
21	My choice to become a teacher was a calling.	21	1.475
27	I have ignored social barriers and negative stereo	27	1.368
41	I couldn't care less about gender issues in my car	41	1.365
16	I view teaching as being similar to coaching.	16	1.332
22	I take pride in being a male role model for childr	22	1.329
17	A teaching career is consistent with my family lif	17	1.186
43	Teaching primary grades is a career equally suitab	43	1.070
40	More studies need to be done about men and teachin	40	0.903
25	If children see more male teachers, they are less	25	0.766
31	The intrinsic reward of working with children outw	31	0.730
26	I am unique in that I have the background and	26	0.278
7	Many male teacher candidates also wish to coach	7	0.143
34	The gender of a teacher has little to no effect on	34	0.035
44	Men and women have different teaching styles	44	0.012
1	Most men pursue careers with more earning potentia	1	0.009
24	Men possess the same basic traits as women, with	24	0.000
9	School culture views male elementary teachers as:	9	-0.032
36	Men must establish their own rules when beginning	36	-0.032
15	I have experienced school-cultural biases that fav	15	-0.140
33	Expectations for male teachers are lofty, but are	33	-0.143
35	Recruiting more males to teaching would debunk	35	-0.152
19	I wanted to be a teacher from a very young age.	19	-0.155
3	There is a lack of recruitment or discussion with	3	-0.161
13	Because of public scrutiny, men must take extra pr	13	-0.173

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29	I have something different to offer that is not in	29	-0.184
28	I embrace the expectation to be a surrogate father	28	-0.316
12	School culture expects male teachers to behave as	12	-0.421
2	The stigma of a man working a traditional woman's	2	-0.426
8	Society puts more emphasis on women than men, when	8	-0.456
38	The media and universities need to do more to recr	38	-0.462
6	There is reverse sexism at the university level	6	-0.582
39	Social justice and transformation will occur when	39	-0.596
11	I have experienced discouragement from teaching as	11	-0.871
23	Male elementary teachers do not fit the stereotype	23	-1.020
5	Society doesn't encourage men to do jobs that	5	-1.052
37	Male elementary teachers are expected to fill a vo	37	-1.189
30	I have had to adopt my own strategies because pre	30	-1.192
10	Being considered a role model is important, but it	10	-1.204
4	Women are naturally better caretakers than men	4	-1.631
32	Men and women are biologically fit for specific ty	32	-2.083
14	I am concerned that others might see me as not a	14	-2.235

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Factor Scores -- For Factor 3

No.	Statement	No.	Z-SCORES
19	I wanted to be a teacher from a very young age.	19	2.233
22	I take pride in being a male role model for childr	22	1.863
20	Teaching allows me to share my skills and passions	20	1.787
17	A teaching career is consistent with my family lif	17	1.684
21	My choice to become a teacher was a calling.	21	1.684
41	I couldn't care less about gender issues in my car	41	1.095
24	Men possess the same basic traits as women, with	24	1.032
43	Teaching primary grades is a career equally suitab	43	0.969
13	Because of public scrutiny, men must take extra pr	13	0.893
34	The gender of a teacher has little to no effect on	34	0.847
31	The intrinsic reward of working with children outw	31	0.761
42	I received career advice at a young age that influ	42	0.556
16	I view teaching as being similar to coaching.	16	0.473
25	If children see more male teachers, they are less	25	0.364
23	Male elementary teachers do not fit the stereotype	23	0.305
40	More studies need to be done about men and teachin	40	0.288
10	Being considered a role model is important, but it	10	0.252
7	Many male teacher candidates also wish to coach	7	0.185
29	I have something different to offer that is not in	29	0.159
4	Women are naturally better caretakers than men	4	0.139
33 9	Expectations for male teachers are lofty, but are School culture views male elementary teachers as:	33 9	0.076
26	I am unique in that I have the background and	26	-0.116
20	Most men pursue careers with more earning potentia	26	-0.116
35	Recruiting more males to teaching would debunk	35	-0.344
27	I have ignored social barriers and negative stereo	27	-0.351
3	There is a lack of recruitment or discussion with	3	-0.420
2	The stigma of a man working a traditional woman's	2	-0.444
38	The media and universities need to do more to recr	38	-0.467
8	Society puts more emphasis on women than men, when	8	-0.500
44	Men and women have different teaching styles	44	-0.505
37	Male elementary teachers are expected to fill a vo	37	-0.605
14	I am concerned that others might see me as not a	14	-0.672
28	I embrace the expectation to be a surrogate father	28	-0.688
5	Society doesn't encourage men to do jobs that	5	-0.741
11	I have experienced discouragement from teaching as	11	-0.781
39	Social justice and transformation will occur when	39	-0.923
36	Men must establish their own rules when beginning	36	-0.996
18	My decision to become a teacher was influenced by	18	-1.101
6	There is reverse sexism at the university level	6	-1.237
32		32	-1.333
30	I have had to adopt my own strategies because pre	30	-1.423
12	School culture expects male teachers to behave as	12	-1.813
15	I have experienced school-cultural biases that fav	15	-1.972

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Descending Array of Differences Between Factors 1 and 2

No.	Statement	No.	Type 1	Type 2	Difference
5	Society doesn't encourage men to do jobs that	5	1.355	-1.052	2.407
44	Men and women have different teaching styles	44	1.860	0.012	1.848
4	Women are naturally better caretakers than men	4	-0.145	-1.631	1.486
9	School culture views male elementary teachers as:	9	1.297	-0.032	1.330
10	Being considered a role model is important, but it	10	-0.004	-1.204	1.200
29	I have something different to offer that is not in	29	0.984	-0.184	1.168
23	Male elementary teachers do not fit the stereotype	23	-0.088	-1.020	0.932
37	Male elementary teachers are expected to fill a vo	37	-0.261	-1.189	0.928

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13	Because of public scrutiny, men must take extra pr	13	0.661	-0.173	0.834
2	The stigma of a man working a traditional woman's	2	0.390	-0.426	0.816
3	There is a lack of recruitment or discussion with	3	0.646	-0.161	0.806
8	Society puts more emphasis on women than men, when	8	0.323	-0.456	0.779
38	The media and universities need to do more to recr	38	0.217	-0.462	0.679
31	The intrinsic reward of working with children outw	31	1.386	0.730	0.656
32	Men and women are biologically fit for specific ty	32	-1.481	-2.083	0.603
25	If children see more male teachers, they are less	25	1.247	0.766	0.481
7	Many male teacher candidates also wish to coach	7	0.606	0.143	0.462
28	I embrace the expectation to be a surrogate father	28	0.125	-0.316	0.441
26	I am unique in that I have the background and	26	0.561	0.278	0.283
14	I am concerned that others might see me as not a	14	-2.003	-2.235	0.232
30	I have had to adopt my own strategies because pre	30	-1.019	-1.192	0.173
22	I take pride in being a male role model for childr	22	1.465	1.329	0.136
20	Teaching allows me to share my skills and passions	20	1.714	1.651	0.063
35	Recruiting more males to teaching would debunk	35	-0.153	-0.152	-0.001
39	Social justice and transformation will occur when	39	-0.600	-0.596	-0.003
12	School culture expects male teachers to behave as	12	-0.493	-0.421	-0.072
6	There is reverse sexism at the university level	6	-0.682	-0.582	-0.101
43	Teaching primary grades is a career equally suitab	43	0.963	1.070	-0.106
36	Men must establish their own rules when beginning	36	-0.168	-0.032	-0.135
33	Expectations for male teachers are lofty, but are	33	-0.307	-0.143	-0.163
40	More studies need to be done about men and teachin	40	0.610	0.903	-0.293
16	I view teaching as being similar to coaching.	16	0.816	1.332	-0.517
15	I have experienced school-cultural biases that fav	15	-0.829	-0.140	-0.689
1	Most men pursue careers with more earning potentia	1	-0.737	0.009	-0.746
17	A teaching career is consistent with my family lif	17	0.315	1.186	-0.872
34	The gender of a teacher has little to no effect on	34	-0.849	0.035	-0.884
11	I have experienced discouragement from teaching as	11	-1.781	-0.871	-0.910
24	Men possess the same basic traits as women, with	24	-0.992	0.000	-0.992
19	I wanted to be a teacher from a very young age.	19	-1.480	-0.155	-1.325
27	I have ignored social barriers and negative stereo	27	0.027	1.368	-1.340
41	I couldn't care less about gender issues in my car	41	-0.068	1.365	-1.433
21	My choice to become a teacher was a calling.	21	-0.112	1.475	-1.588
42	I received career advice at a young age that influ	42	-1.347	1.622	-2.969
18	My decision to become a teacher was influenced by	18	-1.971	1.633	-3.605

#### PQMethod2.35 Kurt1

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No. Type 1 Type 3 Difference

Descending Array of Differences Between Factors 1 and 3

#### No. Statement

	Men and women have different teaching styles	44	1.860	-0.505	2.365
5	Society doesn't encourage men to do jobs that	5	1.355	-0.741	2.097
9	School culture views male elementary teachers as:	9	1.297	-0.056	1.353
12	School culture expects male teachers to behave as	12	-0.493	-1.813	1.321
15	I have experienced school-cultural biases that fav	15	-0.829	-1.972	1.143
3	There is a lack of recruitment or discussion with	3	0.646	-0.420	1.066
25	If children see more male teachers, they are less	25	1.247	0.364	0.883
2	The stigma of a man working a traditional woman's	2	0.390	-0.444	0.834
36	Men must establish their own rules when beginning	36	-0.168	-0.996	0.828
29	I have something different to offer that is not in	29	0.984	0.159	0.826
8	Society puts more emphasis on women than men, when	8	0.323	-0.500	0.823
28	I embrace the expectation to be a surrogate father	28	0.125	-0.688	0.813
38	The media and universities need to do more to recr	38	0.217	-0.467	0.684
26	I am unique in that I have the background and	26	0.561	-0.116	0.677
31	The intrinsic reward of working with children outw	31	1.386	0.761	0.625
6	There is reverse sexism at the university level	6	-0.682	-1.237	0.555
7	Many male teacher candidates also wish to coach	7	0.606	0.185	0.420
30	I have had to adopt my own strategies because pre	30	-1.019	-1.423	0.403
27	I have ignored social barriers and negative stereo	27	0.027	-0.351	0.378
37	Male elementary teachers are expected to fill a vo	37	-0.261	-0.605	0.344
16	I view teaching as being similar to coaching.	16	0.816	0.473	0.342
39	Social justice and transformation will occur when	39	-0.600	-0.923	0.323
40	More studies need to be done about men and teachin	40	0.610	0.288	0.322
35	Recruiting more males to teaching would debunk	35	-0.153	-0.344	0.191
43	Teaching primary grades is a career equally suitab	43	0.963	0.969	-0.006
20	Teaching allows me to share my skills and passions	20	1.714	1.787	-0.072
32	Men and women are biologically fit for specific ty	32	-1.481	-1.333	-0.148
13	Because of public scrutiny, men must take extra pr	13	0.661	0.893	-0.232
10	Being considered a role model is important, but it	10	-0.004	0.252	-0.256
4	Women are naturally better caretakers than men	4	-0.145	0.139	-0.283
33	Expectations for male teachers are lofty, but are	33	-0.307	0.076	-0.383
23	Male elementary teachers do not fit the stereotype	2.3	-0.088	0.305	-0.393
22	I take pride in being a male role model for childr	22	1.465	1.863	-0.397
1	Most men pursue careers with more earning potentia	1	-0.737	-0.156	-0.581
18	My decision to become a teacher was influenced by	18	-1.971	-1.101	-0.870
11	I have experienced discouragement from teaching as	11	-1.781	-0.781	-0.999
41	I couldn't care less about gender issues in my car	41	-0.068	1.095	-1.163
14	I am concerned that others might see me as not a	14	-2.003	-0.672	-1.331
17	A teaching career is consistent with my family lif	17	0.315	1.684	-1.369
34	The gender of a teacher has little to no effect on	34	-0.849	0.847	-1.695
21	My choice to become a teacher was a calling.	21	-0.112	1.684	-1.796
42	I received career advice at a young age that influ	42	-1.347	0.556	-1.903
24	Men possess the same basic traits as women, with	24	-0.992	1.032	-2.024
	I wanted to be a teacher from a very young age.	19	-1.480	2.233	-3.713
19	I wanted to be a teacher ifound very young age.	19	1.400	2.200	5.715

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Descending Array of Differences Between Factors 2 and 3

No.	Statement	No.	Type 2	Туре 3	Difference
18	My decision to become a teacher was influenced by	18	1.633	-1.101	2.735
	I have experienced school-cultural biases that fav	15	-0.140	-1.972	1.832
	I have ignored social barriers and negative stereo	27	1.368	-0.351	1.718
12	School culture expects male teachers to behave as	12	-0.421	-1.813	1.393
42	I received career advice at a young age that influ	42	1.622	0.556	1.066
36	Men must establish their own rules when beginning	36	-0.032	-0.996	0.963
16	I view teaching as being similar to coaching.	16	1.332	0.473	0.859
6	There is reverse sexism at the university level	6	-0.582	-1.237	0.656
40	More studies need to be done about men and teachin	40	0.903	0.288	0.615
44	Men and women have different teaching styles	44	0.012	-0.505	0.517
25	If children see more male teachers, they are less	25	0.766	0.364	0.402
26	I am unique in that I have the background and	26	0.278	-0.116	0.394
28	I embrace the expectation to be a surrogate father	28	-0.316	-0.688	0.372
39	Social justice and transformation will occur when	39	-0.596	-0.923	0.326
41	I couldn't care less about gender issues in my car	41	1.365	1.095	0.270
3	There is a lack of recruitment or discussion with	3	-0.161	-0.420	0.259
30	I have had to adopt my own strategies because pre	30	-1.192	-1.423	0.230
35	Recruiting more males to teaching would debunk	35	-0.152	-0.344	0.192
1	Most men pursue careers with more earning potentia	1	0.009	-0.156	0.165
43	Teaching primary grades is a career equally suitab	43	1.070	0.969	0.100
8		8	-0.456	-0.500	0.044
9	School culture views male elementary teachers as:	9	-0.032	-0.056	0.024
2	The stigma of a man working a traditional woman's	2	-0.426	-0.444	0.018
38	The media and universities need to do more to recr	38	-0.462	-0.467	0.005
31	The intrinsic reward of working with children outw	31	0.730	0.761	-0.031
7	Many male teacher candidates also wish to coach	7	0.143	0.185	-0.042
11	I have experienced discouragement from teaching as	11	-0.871	-0.781	-0.089
20	Teaching allows me to share my skills and passions	20	1.651	1.787	-0.136
21	My choice to become a teacher was a calling.	21	1.475	1.684	-0.208
33	Expectations for male teachers are lofty, but are	33	-0.143	0.076	-0.219
5	Society doesn't encourage men to do jobs that	5	-1.052	-0.741	-0.311
29		29	-0.184	0.159	-0.343
	A teaching career is consistent with my family lif	17	1.186	1.684	-0.498
	I take pride in being a male role model for childr	22	1.329	1.863	-0.533
37		37	-1.189	-0.605	-0.584
32		32	-2.083	-1.333	-0.750
34	The gender of a teacher has little to no effect on	34	0.035	0.847	-0.812
24		24	0.000	1.032	-1.032
13		13	-0.173	0.893	-1.066
23		23	-1.020	0.305	-1.325
10	Being considered a role model is important, but it	10	-1.204	0.252	-1.456
	I am concerned that others might see me as not a	14	-2.235	-0.672	-1.563
4		4	-1.631	0.139	-1.769
19	I wanted to be a teacher from a very young age.	19	-0.155	2.233	-2.388

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Exact Factor Scores (á la SPSS) in Z-Score and T-Score units No. Statement No. 1 2 3

1	Most men pursue careers with more earning potentia	1
2	The stigma of a man working a traditional woman's	2
3	There is a lack of recruitment or discussion with	3
4	Women are naturally better caretakers than men	4
5	Society doesn't encourage men to do jobs that	5
6	There is reverse sexism at the university level	6
7	Many male teacher candidates also wish to coach	7
8	Society puts more emphasis on women than men, when	8
9	School culture views male elementary teachers as:	9
10	Being considered a role model is important, but it	10
11	I have experienced discouragement from teaching as	11
12	School culture expects male teachers to behave as	12
13	Because of public scrutiny, men must take extra pr	13
14	I am concerned that others might see me as not a	14
15	I have experienced school-cultural biases that fav	15
16	I view teaching as being similar to coaching.	16
17	A teaching career is consistent with my family lif	17
18	My decision to become a teacher was influenced by	18
19	I wanted to be a teacher from a very young age.	19
20	Teaching allows me to share my skills and passions	20
21	My choice to become a teacher was a calling.	21
22	I take pride in being a male role model for childr	22
23	Male elementary teachers do not fit the stereotype	23
24	Men possess the same basic traits as women, with	24
25	If children see more male teachers, they are less	25
26	I am unique in that I have the background and	26
27	I have ignored social barriers and negative stereo	27
28	I embrace the expectation to be a surrogate father	28

-0.60	44	0.31	53	-0.14	49
0.40	54	-0.43	46	-0.65	43
0.75	57	0.13	51	-0.83	42
-0.06	49	-2.15	29	0.90	59
1.48	65	-1.44	36	-0.83	42
-0.48	45	-0.24	48	-0.93	41
0.45	55	0.09	51	0.01	50
0.44	54	-0.49	45	-0.32	47
1.30	63	-0.39	46	-0.31	47
0.41	54	-2.03	30	1.06	61
-1.59	34	-0.41	46	-0.36	46
-0.43	46	-0.51	45	-1.58	34
0.42	54	-0.46	45	0.87	59
-1.89	31	-1.62	34	-0.20	48
-0.80	42	0.41	54	-2.17	28
0.49	55	1.03	60	0.29	53
0.08	51	0.99	60	1.38	64
-2.20	28	2.08	71	-1.22	38
-1.72	33	-0.58	44	2.64	76
1.31	63	0.93	59	1.44	64
-0.65	43	0.52	55	2.02	70
1.31	63	0.81	58	1.57	66
0.13	51	-1.54	35	0.88	59
-1.23	38	0.04	50	1.09	61
1.15	62	0.70	57	-0.13	49
0.78	58	-0.13	49	-0.14	49
0.05	51	1.78	68	-0.85	42
0.62	56	0.19	52	-0.49	45
	0.40 0.75 -0.08 0.48 0.48 0.44 1.30 0.44 1.30 0.42 -0.43 0.42 -1.89 -0.80 0.49 0.08 2.20 -1.72 1.31 -0.65 1.31 -0.45 1.31 -0.45 0.13 0.13 0.15 0.15	$\begin{array}{ccccc} 0.40 & 54 \\ 0.75 & 57 \\ -0.06 & 49 \\ 1.48 & 65 \\ -0.48 & 45 \\ 5.044 & 54 \\ 1.30 & 63 \\ 0.41 & 54 \\ -1.59 & 34 \\ -0.43 & 46 \\ 0.42 & 54 \\ -1.89 & 31 \\ -0.80 & 42 \\ 5.49 & 51 \\ -2.20 & 28 \\ -1.72 & 33 \\ 1.31 & 63 \\ -0.65 & 43 \\ 1.31 & 63 \\ 0.13 & 51 \\ -1.23 & 38 \\ 1.15 & 62 \\ 0.78 & 56 \\ 0.05 & 51 \\ \end{array}$	$\begin{array}{ccccccc} 0.40 & 54 & -0.43 \\ 0.75 & 57 & 0.13 \\ -0.06 & 49 & -2.15 \\ 1.48 & 65 & -1.44 \\ -0.48 & 45 & -0.24 \\ 0.45 & 55 & 0.09 \\ 0.44 & 54 & -0.49 \\ 1.30 & 63 & -0.39 \\ 0.41 & 54 & -2.03 \\ -1.59 & 34 & -0.41 \\ -0.43 & 46 & -0.51 \\ 0.42 & 54 & -0.46 \\ -1.89 & 31 & -1.62 \\ -0.80 & 42 & 0.41 \\ 0.49 & 55 & 1.03 \\ 0.08 & 51 & 0.99 \\ -2.20 & 28 & 2.08 \\ -1.72 & 33 & -0.58 \\ -1.72 & 33 & -0.58 \\ -1.31 & 63 & 0.81 \\ 0.13 & 51 & -1.54 \\ -1.23 & 38 & 0.04 \\ 1.15 & 62 & 0.70 \\ 0.78 & 58 & -0.13 \\ 0.05 & 51 & 1.78 \\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

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29	I have something different to offer that is not in	2.9	1.29	63	-0.26	47	0.11	51
30	I have had to adopt my own strategies because pre	30	-0.61	44	-0.77	42	-1.12	39
								~ ~
31	The intrinsic reward of working with children outw	31	1.06	61	0.55	55	0.24	52
32	Men and women are biologically fit for specific ty	32	-1.27	37	-1.36	36	-1.00	40
33	Expectations for male teachers are lofty, but are	33	-0.23	48	-0.08	49	0.02	50
34	The gender of a teacher has little to no effect on	34	-0.98	40	-0.36	46	1.46	65
35	Recruiting more males to teaching would debunk	35	-0.02	50	-0.08	49	-0.21	48
36	Men must establish their own rules when beginning	36	-0.11	49	0.52	55	-1.01	40
37	Male elementary teachers are expected to fill a vo	37	-0.18	48	-1.12	39	-0.44	46
38	The media and universities need to do more to recr	38	0.25	53	0.09	51	-0.72	43
39	Social justice and transformation will occur when	39	-0.45	45	-0.39	46	-0.66	43
40	More studies need to be done about men and teachin	40	0.53	55	0.99	60	-0.15	49
41	I couldn't care less about gender issues in my car	41	-0.37	46	1.86	69	0.54	55
42	I received career advice at a young age that influ	42	-1.72	33	1.80	68	0.40	54
43	Teaching primary grades is a career equally suitab	43	0.86	59	1.07	61	0.36	54
44	Men and women have different teaching styles	44	2.04	70	-0.09	49	-0.84	42

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Factor Q-Sort Values for Each Statement

					1 -	
No.	Statement	No.	1	2	3	
1	Most men pursue careers with more earning potentia	1	-2	1	0	
2	The stigma of a man working a traditional woman's	2	1	-1	-1	
3	There is a lack of recruitment or discussion with	3	2	0	-1	
4	Women are naturally better caretakers than men	4	0	-4	0	
5	Society doesn't encourage men to do jobs that	5	4	-3	-2	
6	There is reverse sexism at the university level	6	-2	-2	-4	
7	Many male teacher candidates also wish to coach	7	1	1	1	
8	Society puts more emphasis on women than men, when	8	1	-2	-1	
9	School culture views male elementary teachers as:	9	3	0	0	
10		10	0	-4	1	
11	I have experienced discouragement from teaching as	11	-4	-3	-3	
12	School culture expects male teachers to behave as	12	-1	-1	-5	
13		13	2	-1	3	
14		14	-5	-5	-2	
15	I have experienced school-cultural biases that fav	15	-2	0	-5	
16	I view teaching as being similar to coaching.	16	2	3	2	
17	A teaching career is consistent with my family lif	17	1	3	4	
18	My decision to become a teacher was influenced by	18	-5	5	-3	
19		19	-4	0	5	
20	Teaching allows me to share my skills and passions	20	5	5	4	
21		21	0	4	4	
22	I take pride in being a male role model for childr	22	4	3	5	
23		23	0	- 3	1	
24	Men possess the same basic traits as women, with	24	-3	0	3	
25	If children see more male teachers, they are less	25	3	2	1	
26	I am unique in that I have the background and	26	1	1	0	
27	I have ignored social barriers and negative stereo	27	0	4	0	
28	I embrace the expectation to be a surrogate father	28	0	-1	-2	
29	I have something different to offer that is not in	29	3	-1	0	
30	I have had to adopt my own strategies because pre	30	-3	-4	-4	
31	The intrinsic reward of working with children outw	31	4	2	2	
32	Men and women are biologically fit for specific ty	32	-4	-5	-4	
33		33	-1	0	0	
34		34	-3	1	2	
35	Recruiting more males to teaching would debunk	35	-1	0	0	
36	Men must establish their own rules when beginning	36	-1	0	-3	
37	Male elementary teachers are expected to fill a vo	37	-1	-3	-2	
38	The media and universities need to do more to recr	38	0	-2	-1	
39	Social justice and transformation will occur when	39	-2	-2	-3	
40	More studies need to be done about men and teachin	40	2	2	1	
41	I couldn't care less about gender issues in my car	41	0	3	3	
42	I received career advice at a young age that influ	42	-3	4	2	
43		43	3	2	3	
44		44	5	1	-1	
	5 1 1					

Variance = 7.045 St. Dev. = 2.654

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Factor Q-Sort Values for Statements sorted by Consensus vs. Disagreement (Variance across Factor Z-Scores)

			Fact	or Arra	ays
No.	Statement	No.	1	2	3
43	Teaching primary grades is a career equally suitab	43	3	2	3
20	Teaching allows me to share my skills and passions	20	5	5	4
35	Recruiting more males to teaching would debunk	35	-1	0	0
39	Social justice and transformation will occur when	39	-2	-2	-3
33	Expectations for male teachers are lofty, but are	33	-1	0	0
30	I have had to adopt my own strategies because pre	30	-3	-4	-4

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Factor Arrays

7	Many male teacher candidates also wish to coach	7	1	1	1
22	I take pride in being a male role model for childr	22	4	3	5
40	More studies need to be done about men and teachin	40	2	2	1
26	I am unique in that I have the background and	26	1	1	0
6	There is reverse sexism at the university level	6	-2	-2	-4
31	The intrinsic reward of working with children outw	31	4	2	2
1	Most men pursue careers with more earning potentia	1	-2	1	0
38	The media and universities need to do more to recr	38	0	-2	-1
32	Men and women are biologically fit for specific ty	32	-4	-5	-4
28	I embrace the expectation to be a surrogate father	28	0	-1	-2
16	I view teaching as being similar to coaching.	16	2	3	2
25	If children see more male teachers, they are less	25	3	2	1
8	Society puts more emphasis on women than men, when	8	1	-2	-1
37	Male elementary teachers are expected to fill a vo	37	-1	-3	-2
2	The stigma of a man working a traditional woman's	2	1	-1	-1
36	Men must establish their own rules when beginning	36	-1	0	-3
11	I have experienced discouragement from teaching as	11	-4	-3	-3
3	There is a lack of recruitment or discussion with	3	2	0	-1
13	Because of public scrutiny, men must take extra pr	13	2	-1	3
29	I have something different to offer that is not in	29	3	-1	0
23	Male elementary teachers do not fit the stereotype	23	0	-3	1
17	A teaching career is consistent with my family lif	17	1	3	4
41	I couldn't care less about gender issues in my car	41	0	3	3
9	School culture views male elementary teachers as:	9	3	0	0
10	Being considered a role model is important, but it	10	0	-4	1
12	School culture expects male teachers to behave as	12	-1	-1	-5
14	I am concerned that others might see me as not a	14	-5	-5	-2
34	The gender of a teacher has little to no effect on	34	-3	1	2
27	I have ignored social barriers and negative stereo	27	0	4	0
15	I have experienced school-cultural biases that fav	15	-2	0	-5
4	Women are naturally better caretakers than men	4	0	-4	0
21	My choice to become a teacher was a calling.	21	0	4	4
24	Men possess the same basic traits as women, with	24	-3	0	3
44	Men and women have different teaching styles	44	5	1	-1
5	Society doesn't encourage men to do jobs that	5	4	-3	-2
42	I received career advice at a young age that influ	42	-3	4	2
18	My decision to become a teacher was influenced by	18	-5	5	-3
19	I wanted to be a teacher from a very young age.	19	-4	0	5

Factor Characteristics

	Factors			
	1	2	3	
No. of Defining Variables	5	3	3	
Average Rel. Coef.	0.800	0.800	0.800	
Composite Reliability	0.952	0.923	0.923	
S.E. of Factor Z-Scores	0.218	0.277	0.277	

POMethod2.35	Kurt1

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Standard Errors for Differences in Factor Z-Scores

(Diagonal Entries Are S.E. Within Factors)

Factors	1	2	3
1	0.309	0.353	0.353
2	0.353	0.392	0.392
3	0.353	0.392	0.392

Distinguishing Statements for Factor 1

(P < .05 ; Asterisk (\*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are Shown.

			Fact	ors			
No.	Statement	No.	Q-SV	1 Z-SCR	Q-SV	2 z-scr	3 Q-SV Z-SCR
44	Men and women have different teaching styles	44	5	1.86*	1	0.01	-1 -0.51
5	Society doesn't encourage men to do jobs that	5	4	1.36*	-3	-1.05	-2 -0.74
9	School culture views male elementary teachers as:	9	3	1.30*	0	-0.03	0 -0.06
29	I have something different to offer that is not in	29	3	0.98	-1	-0.18	0 0.16
3	There is a lack of recruitment or discussion with	3	2	0.65	0	-0.16	-1 -0.42
2	The stigma of a man working a traditional woman's	2	1	0.39	-1	-0.43	-1 -0.44
8	Society puts more emphasis on women than men, when	8	1	0.32	-2	-0.46	-1 -0.50
17	A teaching career is consistent with my family lif	17	1	0.31	3	1.19	4 1.68
41	I couldn't care less about gender issues in my car	41	0	-0.07*	3	1.36	3 1.09

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21 My choice to become a teacher was a calling.	21	0 -0.11*	4 1.48	4 1.68
34 The gender of a teacher has little to no effect on	34	-3 -0.85	1 0.03	2 0.85
24 Men possess the same basic traits as women, with	24	-3 -0.99*	0 0.00	3 1.03
42 I received career advice at a young age that influ	42	-3 -1.35*	4 1.62	2 0.56
19 I wanted to be a teacher from a very young age.	19	-4 -1.48*	0 -0.15	5 2.23
11 I have experienced discouragement from teaching as	11	-4 -1.78	-3 -0.87	-3 -0.78
18 My decision to become a teacher was influenced by	18	-5 -1.97	5 1.63	-3 -1.10

#### PQMethod2.35 Kurt1

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Distinguishing Statements for Factor 2

(P < .05 ; Asterisk (\*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are Shown.

No. Statement	No.	1 Q-SV Z-SCR	2 Q-SV Z-SCR	3 Q-SV Z-SCR
18 My decision to become a teacher was influenced by	18	-5 -1.97	5 1.63*	-3 -1.10
42 I received career advice at a young age that influ	42	-3 -1.35	4 1.62*	2 0.56
27 I have ignored social barriers and negative stereo	27	0 0.03	4 1.37*	0 -0.35
34 The gender of a teacher has little to no effect on	34	-3 -0.85	1 0.03	2 0.85
24 Men possess the same basic traits as women, with	24	-3 -0.99	0 0.00*	3 1.03
19 I wanted to be a teacher from a very young age.	19	-4 -1.48	0 -0.15*	5 2.23
13 Because of public scrutiny, men must take extra pr	13	2 0.66	-1 -0.17	3 0.89
23 Male elementary teachers do not fit the stereotype	23	0 -0.09	-3 -1.02*	1 0.31
10 Being considered a role model is important, but it	10	0 -0.00	-4 -1.20*	1 0.25
4 Women are naturally better caretakers than men	4	0 -0.14	-4 -1.63*	0 0.14

Factors

Distinguishing Statements for Factor 3

(P < .05 ; Asterisk (\*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are Shown.

	Factors			
No. Statement	No.	1 Q-SV Z-SCR	2 Q-SV Z-SCR	3 Q-SV Z-SCR
19 I wanted to be a teacher from a very young age. 24 Men possess the same basic traits as women, with 34 The gender of a teacher has little to no effect on 42 I received career advice at a young age that influ 14 I am concerned that others micht see me as not a	19 24 34 42 14	-4 -1.48 -3 -0.99 -3 -0.85 -3 -1.35 -5 -2.00	$\begin{array}{c} 0 & -0.15 \\ 0 & 0.00 \\ 1 & 0.03 \\ 4 & 1.62 \\ -5 & -2.24 \end{array}$	5 2.23* 3 1.03* 2 0.85 2 0.56* -2 -0.67*
36 Men must establish their own rules when beginning 18 My decision to become a teacher was influenced by 12 School culture expects male teachers to behave as 15 I have experienced school-cultural biases that fav	14 36 18 12 15	-5 -2.00 -1 -0.17 -5 -1.97 -1 -0.49 -2 -0.83	-5 -2.24 0 -0.03 5 1.63 -1 -0.42 0 -0.14	-2 -0.87* -3 -1.00 -3 -1.10 -5 -1.81* -5 -1.97*

PQMethod2.35 Kurt1 15 Path and Project Name: C:\Users\khlar\Desktop\PQMethod\projects/kurt 17

Consensus Statements

-- Those That Do Not Distinguish Between ANY Pair of Factors.

All Listed Statements are Non-Significant at P>.01, and Those Flagged With an \* are also Non-Significant at P>.05.

			Factors		
No.	Statement	No.	1 Q-SV Z-SCR	2 Q-SV Z-SCR	3 Q-SV Z-SCR
1	Most men pursue careers with more earning potentia	1	-2 -0.74	1 0.01	0 -0.16
2	The stigma of a man working a traditional woman's	2	1 0.39	-1 -0.43	-1 -0.44
6*	There is reverse sexism at the university level	6	-2 -0.68	-2 -0.58	-4 -1.24
7*	Many male teacher candidates also wish to coach	7	1 0.61	1 0.14	1 0.19
8	Society puts more emphasis on women than men, when	8	1 0.32	-2 -0.46	-1 -0.50
16	I view teaching as being similar to coaching.	16	2 0.82	3 1.33	2 0.47
20*	Teaching allows me to share my skills and passions	20	5 1.71	5 1.65	4 1.79
22*	I take pride in being a male role model for childr	22	4 1.47	3 1.33	5 1.86
25	If children see more male teachers, they are less	25	3 1.25	2 0.77	1 0.36
26*	I am unique in that I have the background and	26	1 0.56	1 0.28	0 -0.12
28	I embrace the expectation to be a surrogate father	28	0 0.13	-1 -0.32	-2 -0.69
30*	I have had to adopt my own strategies because pre	30	-3 -1.02	-4 -1.19	-4 -1.42
31*	The intrinsic reward of working with children outw	31	4 1.39	2 0.73	2 0.76
32*	Men and women are biologically fit for specific ty	32	-4 -1.48	-5 -2.08	-4 -1.33

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33* Expectations for male teachers are lofty, but are	33	-1 -0.31	0 -0.14	0 0.08
35* Recruiting more males to teaching would debunk	35	-1 -0.15	0 -0.15	0 -0.34
36 Men must establish their own rules when beginning	36	-1 -0.17	0 -0.03	-3 -1.00
38* The media and universities need to do more to recr	38	0 0.22	-2 -0.46	-1 -0.47
39* Social justice and transformation will occur when	39	-2 -0.60	-2 -0.60	-3 -0.92
40* More studies need to be done about men and teachin	40	2 0.61	2 0.90	1 0.29
43* Teaching primary grades is a career equally suitab	43	3 0.96	2 1.07	3 0.97

QANALYZE was completet [sic] at 14:25:19

APPENDIX B

IRB APPROVAL

#### Youngstown UNIVERSITY STATE

One University Plaza, Youngstown, Ohio 44555 Office of Grants and Sponsored Programs 330.941.2377 www.ysu.edu

May 9, 2016

Dr. Karen Larwin, Principal Investigator Mr. Kurt Meader, Co-investigator Department of Educational Foundations, Research, Technology & Leadership UNIVERSITY

177-2016 HSRC Protocol Number: RE: Title: No Title

Dear Dr. Larwin and Mr. Meader:

The Institutional Review Board has reviewed the abovementioned protocol and determined that it is exempt from full committee review based on a DHHS Category 3 exemption.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.



Mr. Michael A. Hripko Associate Vice President for Research Authorized Institutional Official

MAH:cc

Dr. Charles Vergon, Chair c: Department of Educational Foundations, Research, Technology & Leadership

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# Youngstown STATE UNIVERSITY

One University Plaza, Youngstown, Ohio 44555 Office of Research 330.941.2377 www.ysu.edu

February 21, 2017

Dr. Karen Larwin, Principal Investigator Mr. Kurt Meader, Co-investigator Department of Educational Foundations, Research, Technology & Leadership UNIVERSITY

RE: HSRC PROTOCOL NUMBER: 097-2017 TITLE: A Mixed-methods Study of the Shortage of Males Teaching Elementary School

Dear Dr. Larwin and Mr. Meader:

The Institutional Review Board has reviewed the abovementioned protocol and determined that it is exempt from full committee review based on a DHHS Category 3 exemption.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.



Mr. Michael A. Hripko Associate Vice President for Research Authorized Institutional Official

MAH:cc

c: Dr. Charles Vergon, Chair Department of Educational Foundations, Research, Technology & Leadership

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