IDENTIFYING EFFECTIVE CHARACTERISTICS FOR TEACHING IN URBAN AND SUBURBAN SETTINGS

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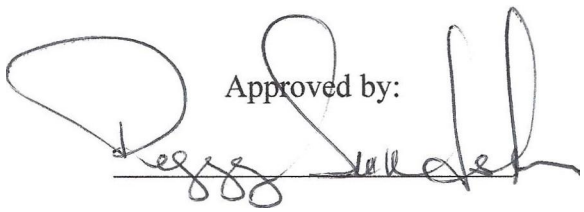

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Identifying Effective Characteristics for Teaching in Urban and Suburban Settings

by

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Abstract

Classroom size, curriculum, and student attendance are all important factors that affect student outcomes, but these factors cannot compare to the classroom teacher's influence on student academic performance. Unfortunately, highly qualified teachers are not equally effective in different school settings. Findings associated with highly effective teachers have suggested that testing personality characteristics could be a way to identify teacher effectiveness at the time of hire. This quantitative non-experimental (descriptive and correlational) study examined the relationship of specific personality characteristics among 22 highly effective teachers (14 urban and eight suburban), measured by the 44-item Big Five Inventory (BFI). The results described both groups' personality characteristics as very high Extroversion, very high Agreeableness, very high Conscientiousness, very high Openness, and low to average Neuroticism. The results answer the following research question: What is the relationship between the personality characteristics (measured by the BFI) and the school location of highly effective teachers? The results showed that Agreeableness, Conscientiousness, and Openness have an influence on teaching effectiveness in the urban and suburban settings. In practice, the 44-item BFI can be used to evaluate specific personality characteristics in urban and suburban settings during the teacher applicants' process.

Key Words*: Effective personality characteristics for teaching, teaching in urban and suburban settings.*

Table of Content

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER I: INTRODUCTION

The ongoing problems with academic achievement of students in the K-12 public schools are well-noted (Long, 2012). Achievement gaps between minority and nonminority students, socioeconomically advantaged and disadvantaged students, as well as urban and suburban students, continue (Darling-Hammond, 2012). Classroom size, curriculum, and student attendance are all important factors that affect student outcomes, but these factors cannot compare to the classroom teacher's influence on student academic performance (Jacob, Rockoff, Taylor, Lindy, & Rosen, 2016; Larson, 2006; Ritter & Hancock, 2007; Rushton, Morgan, & Richards, 2007). Unfortunately, not all teacher influence leads to positive outcomes. Ineffective teachers in urban and suburban settings have been identified as one of the primary causes for achievement gaps (Darling-Hammond & Berry, 2006; Jacob, 2007; Long, 2012).

The No Child Left Behind Act of 2001 (NCLB) supported the idea that all children can learn and schools are held accountable for students' academic progress on state-sponsored testing (Kirby & Dipaola, 2011). According to Kirby and Dipaola, the principle behind NCLB was to improve teacher accountability by requiring teachers to become fully credentialed or at least working toward obtaining a full credential before entering the classroom. The NCLB Act required all teachers to hold credentials, but it did not improve teacher effectiveness, nor prepared student teachers who attended colleges of education to be effectiveness in all settings (Darling-Hammond & Berry, 2006; Greenberg, Putman, & Walsh, 2014; Jacob, 2007).

The NCLB requirements for teacher employment were weak in predicting teacher effectiveness and showed no relationship to student outcomes (Rutledge, Harris, Thompson,

& Ingle, 2008). Therefore, it is reasonable for administrators to consider that other factors, such as personality characteristics that can be determined by personality assessments, can affect teacher job performance. For example, Rushton et al. (2007) found a link between personality type and varying levels of teacher effectiveness using the Myers-Briggs Type Indicator (MBTI), while Fenderson (2011) linked the personality characteristics of the National Teachers of the Year candidates using the Big Five Inventory (BFI). It is possible that there is a relationship between personality characteristics and highly effective teachers who are capable of improving student outcomes that lead to the closure of achievement gaps in socioeconomically advantaged and disadvantaged students, as well as urban and suburban school settings.

General Statement

Two of the main objectives of NCLB are to ensure that schools and districts do not consistently overlook underperforming students and schools and to close the achievement gaps between students of all racial, socioeconomic, and geographic backgrounds (Fursarelli, 2004; Hickok & Ladner, 2007). Socioeconomic status and race of students and location of schools (urban versus suburban) influence the quality of public school education, as noted in student achievement gap analysis (Darling-Hammond, 2012; Long, 2012). According to the 2015 National Center for Education Statistics, the national achievement gap in mathematics test scores in 2007 (the most recent year for which such statistics were widely available) between White and Black fourth grade students was 26 points with Black students scoring an average of 222 out of 500 and White students scoring an average of 248 out of 500 (as cited in Vanneman, Hamilton, & Anderson, 2009). Additionally, in 2007, fourth grade students eligible for free lunch (defined as socioeconomically disadvantaged, as determined by

parental income) scored 226 out of 500, while students not eligible for free lunch (defined as socioeconomically advantaged) scored 249 out of 500 (Vanneman et al., 2009).

In California, scores for socially advantaged and socially disadvantaged students follow similar patterns. According to Solano County Office of Education (n.d.), current statistics for academic achievement show the Vallejo school district (most urban in the Solano County) scored 715 in 2013 on the Academic Performance Index (API), which is significantly lower than Benicia school district (most suburban in Solano County) scores of 852 in 2013. The API scores reported by Benicia and Vallejo school districts represent the achievement gap notice nationwide.

In an attempt to hire effective teachers to reach its goal of closing achievement gaps, NCLB put forth requirements for teachers that are more stringent than the previous standards that only required a college degree and passage of aptitude test, to making teaching credentials mandatory. A highly-qualified teacher as defined by NCLB is a teacher who holds a bachelor's degree and a teacher's credential or certification. These qualifications are intended to increase student outcomes by placing highly qualified teachers who are capable of working within systems of education to cultivate high academic and behavioral standards that would improve institutional accountability in all classrooms (Darling-Hammond, 2012; Day-Vines & Patton, 2003; Fusarelli, 2004; Jacob, 2007).

Unfortunately, the 2008 administration of the National Assessment of Education Progress review reported that NCLB did not close achievement gaps (as cited in Hahnel, 2009). Fleming (2015) reported that NCLB failed because of its fundamental preference for the freedom of choice at the state level and the allowance of private businesses in developing educational reforms (i.e., charter schools). Additionally, highly qualified teachers are not

equally effective in different school settings (Hahnel, 2009; Hanushek, & Rivkin, 2010), and colleges of education are not uniformly successful in preparing future teachers to teach urban students who are scoring lower than their more affluent suburban counterparts (Darling-Hammond, 2012; Jacob, 2007).

Problem Statement

Poor academic achievement of urban, minority and socioeconomically disadvantaged students have been linked to lost instruction time due to student suspension or expulsion and lowered academic expectations for these students, and these are the by-products of ineffective teachers (Bainbridge & Lesley, 2002; Chiristle, Jolivette, & Nelson, 2007; Long, 2012). However, poor academic achievement has not only been seen in the urban setting; affluent minorities who seek to escape the pitfalls of urban school are also achieving below their majority counterparts in suburban schools (Ellis, 2014). In addition, Ispa-Landa and Conwell's (2015) study on the racial classification of schools found that people stereotype schools similar to students; urban schools are characterized as schools in communities of disorder and dysfunction and suburban schools are located in safe and secure communities. These assertions provide an argument that ineffective teachers and school locations can negatively influence student outcomes.

The general problem is that the criteria established by NCLB for highly qualified teachers that were used for teacher hiring are weak in predicting teacher effectiveness in both urban and suburban school settings, and they show no relationship with student outcomes (Rutledge et al., 2008). In addition, no significant progress has been made in linking teacher effectiveness to observable characteristics at the time of hire, and administrators have no clear guidelines about what makes an effective teacher in an urban setting as opposed to an

effective teacher in a suburban setting (Robertson-Kraft & Duckworth, 2014). Fenderson's (2011) and Rushton et al.'s (2007) findings associated with highly effective teachers suggested that testing personality characteristics could be a way to identify teacher effectiveness at the time of hire. The specific problem is that without a clear understanding of the specific personality characteristics of highly effective teachers, administrators will continue to hire ineffective teachers in urban and suburban school settings who will continue to impede the academic outcomes of students. The process currently used to evaluate potential effectiveness of teachers does not identify effective teacher candidates, and NCLB is not effective enough to guarantee highly suitable teachers for all classrooms (Hughes, 2014; Jacob, 2007). To increase the effectiveness of the hiring process in K-12 education, a non-certification factor, such as personality characteristics, could improve teacher selection in urban and suburban schools.

A Pennsylvania study of 177 school districts found that teacher characteristics could dramatically influence student outcomes (Vitale, 2009). Conducting research in a different industry, Cole, Feild, and Giles (2003) studied the evaluation of employment candidates by comparing recruiters' judgment of applicants' resume information to applicant results on the BFI that measures Extroversion, Agreeableness, Conscientiousness Openness, and Neuroticism. Cole et al. found a link between resume information and personality characteristics. The study found that the candidates' academic achievements shared a relationship with Conscientiousness and the resume information associated with social and extracurricular events correlated with applicants' Extroversion characteristics. Additionally, Agreeableness, Openness, and Neuroticism were linked to other social biographical data (Cole et al., 2003). Cole et al.'s findings suggested that recruiters could rely on the BFI to aid

in job selection by identifying applicants' job-relevant characteristics in lieu of generalizing about applicants' potential performance based on random review of resumes.

In education, studies using personality testing, such as the study by Rushton et al. (2007), found that the personality typology of Teachers of the Year in Florida suggested that effective teachers have job-relevant traits, and Fenderson (2011) discovered that the nation's most effective teachers shared job-relevant personality characteristics based on the Big Five personality dimensions. The studies on personality testing in education have linked specific personality characteristics to highly effective teachers (Fenderson, 2011; Rushton et al., 2007), and this suggests that administrators could benefit from incorporating personality assessment results when evaluating and hiring new teachers. Fallaw and Kantrowitz (2013) reported that personality testing is the second most frequently used prescreening assessment employed by human resources personnel in various industries worldwide.

The current requirements for hiring public school teachers cannot predict teacher effectiveness (Hughes, 2014, Jacob, 2007), creating the need for a more effective set of criteria by which to evaluate teacher effectiveness and improve teacher quality, including characteristics not based on credentialing, such as personality as assessed by the BFI. The understanding of personality characteristics associated with effective teachers could strengthen the hiring process, which could reduce the number of ineffective teacher hired who subsequently fail in improving student outcomes (Hughes, 2014; Jacob, 2007). Urban students are the most impacted by the problem of ineffective teachers because schools of education typically are not successful preparing teachers for the challenges of the urban classroom, and many experienced and effective teachers abandon the urban schools for a less challenging suburban setting (Darling-Hammond, 2012; Jacob, 2007; Milner & Tenore,

2010). Teachers in urban classrooms frequently encounter students with high poverty rates, English language learners, and students with cultures and traditions that are different from the teachers' experiences, as opposed to the affluent and culturally similar conditions teachers typically find in suburban schools (Darling-Hammond, 2012; Jacob, 2007). Teacher ineffectiveness is one of the factors associated with the high school dropout rate that has created social issues (Long, 2012). High school dropouts make up 82% of the nation's prison populace and 85% of all juvenile court cases (Chiristle et al., 2007; Long, 2012), and this reinforces the need to ensure that teachers in the urban setting are highly effective.

The specific problem is that without a clear understanding of the specific personality characteristics of highly effective teachers, administrators will continue to hire ineffective teachers for both urban and suburban settings who will continue to impede the academic outcomes of students. The intent of this study was to identify specific personality characteristics associated with highly effective teachers that could reliably help administrators to understand characteristics that contribute to making a teacher successful in either an urban or suburban setting at the time of hire. It is possible that these findings can contribute to new hiring practices in K-12 public schools, and this could help select and place teachers who are more likely to be effective in either an urban or suburban school settings. Teachers who are aware of their job-relevant characteristics might make better choices of their job location, placing them in favorable conditions based on their personal characteristics for improving student outcomes in either an urban or suburban school settings.

Purpose of Study

A review of literature on effective teachers suggested that the requirements of the NCLB Act have not increased the likelihood of hiring effective teachers (Darling-Hammond,

2006, 2012; Jacob, 2007; Ritter & Hancock, 2007). Literature also suggested that teacher evaluation systems are broken and that unions oppose objective evaluations that can identify effective and ineffective teachers, as the evaluation system is the primary means of eliminating ineffective teachers (Blume, 2011; Kimball & Milanowski, 2009; Papay, 2012). The purpose of this study was to evaluate the relationship of specific personality characteristics of highly effective teachers in urban and suburban school settings. The understanding of job-relevant personality characteristics in urban and suburban school settings can contribute to a broader understanding of what characteristics administrators need to identify, specific to school location, in order to hire the most effective teachers who can influence specific students' outcomes.

Urban and suburban schools have different types of challenges, as they tend to differ in socioeconomic background of students, as well as language acumen of students, racial and ethnic diversity, and access to monetary ressources (Howard, 2001; Jacob, 2007; Milner & Tenore, 2010). Teachers who are effective in suburban settings might not be successful in prone-to-failure urban settings because of lack of experience with diverse groups, insufficient cultural competence, and poor preparation by colleges of education (Darling-Hammond, 2012; Howard, 2001; Milner & Tenore, 2010). If administrators could identify job-relevant personality characteristics specific to urban and suburban locations, such characteristics could be analyzed by administrators and used to make wiser decisions when hiring teachers to work in specific schools (Darling-Hammond, 2012; Hughes, 2013; Jacob, 2007; Milner & Tenore, 2010). Characteristics associated with personality play an important role in teacher effectiveness, as teacher personality can influence classroom climate, and this impacts the teacher-student interaction (Milner & Tenore, 2010). For these reasons, an understanding of

personality characteristics could add vitality to the process of prescreening highly effective teachers for employment and increase the efficiency of hiring teachers for specific locations.

Fallaw and Kantrowitz (2013) reported that the use of personality testing by human resources personnel for prescreening candidates has grown, as 84% of organizations worldwide use personality assessments in 2013 compared with 66% in 2009. Evaluating personality characteristics of teaching candidates at the time of hiring may show administrators which candidates are more likely to be successful in either urban and suburban settings (Milner &Tenore, 2010; Watson, 2012). This study attempted to identify the specific personality characteristics of effective teachers by studying the personality characteristics of teachers who have been determined to be highly effective (i.e., Teachers of the Year). Additionally, the study attempted to determine if the specific personality characteristics of teachers who are highly effective in urban settings (Urban Teachers of the Year) are related to the personality characteristics of teachers who are highly effective in suburban settings (Suburban Teachers of the Year).

A quantitative design was the most appropriate research design to evaluate the relationship between personality characteristics and highly effective teachers in either an urban or suburban school setting, as quantitative studies can show how prominent a problem is by looking at projectable results compared to a larger population (Turner, Balmer & Coverdale, 2013). The researcher used the BFI 44-item self-report developed by Oliver (2009) to describe the personality characteristics of Teachers of the Year nominees in Solano County, California. The analysis of the participating teachers' scores determined which dimensions, if any, of the BFI were more or less related to urban Teachers of the Year or related to suburban Teachers of the Year. The descriptive data collected from the BFI

required quantitative analysis to examine the relationship between personality characteristics of highly effective teachers in urban and suburban school settings (Jamison, 2010; Turner et al., 2013), making a quantitative study the appropriate research design.

This study evaluated the possibility that personality characteristics of highly effective teachers might vary by geographic location of the teachers' schools. Because qualitative research aims to make sense of human behavior by understanding people's interpretation of reality at some point in time, in a specific setting, it was not used during the course of this study (Jamison, 2010). Additionally, qualitative research is capable of advocating claims or participatory perspectives by using open-ended questions, text, and image data to enact change or reform from circumstantial information (Jamison, 2010; Turner et al., 2013; Wolcott, 2009), which was not the purpose of this study.

Experimental designs are best for studying cause and effect; however, educational researchers sometimes face situations that do not allow the use of randomized experimental or quasi-experimental design that manipulate independent variables (Jamison, 2010; Turner et al., 2013). This study used a non-experimental descriptive correlational design because the independent variable (urban and suburban schools) could not be manipulated since teachers alone select their location of employment, not the researcher. The dependent variables were the BFI dimensions. The results of the study describe the personality characteristics of highly effective teachers and provide data for statistical analysis to explain the relationship between personality characteristics and highly effective teachers in urban and suburban settings. The results from the analysis explain the magnitude of the relationship between personality characteristics and school location among highly effective teachers (Jamison, 2010; Turner et

al., 2013). This produces information that can describe the personality characteristics most likely to be associated with highly effective teachers in both urban and suburban settings.

The implications of this study provide specific personality characteristics that match new and experienced teachers to the school environment that best fits their personality characteristics and potentially add a non-credentialing factor to the criteria for hiring teachers in K-12 public schools. The current practices for hiring teachers in the K-12 education profession are archaic as they still rely on aptitude testing and certification criteria to drive teacher selection even though the criteria are ineffective at predicting job performance (Darling-Hammond, 2012; Jacob, 2007). Globally, personality assessments are the second most frequently used type of assessment for prescreening candidates for employment (Fallaw & Kantrowitz, 2013). Using the BFI to determine personality characteristics associated with teacher effectiveness precipitates a shift in hiring practices in the education community by identifying an assessment that is valid and reliable for predicting job performance and that integrates easily into the current hiring assessment process.

Importance of Study

According to Heitner and Sherman (2014), acknowledging a knowledge gap is the first step that academicians take when proposing a study. The gap in the literature identified by the researcher should have inferences for investigators in the discipline and specialists in the field (Heitner & Sherman, 2014). In this study, the knowledge gap is the information regarding specific personality characteristics of highly effective teachers. The rationale for supporting this investigation is that federal and state public school administrators have long relied on aptitude testing and certifications from college or university level education programs to determine who is qualified to fill openings in in K-12 classrooms in both urban

and suburban school settings (Darling-Hammond, 2012; Jacob, 2007; Ritter &Hancock, 2007). However, current hiring criteria do not distinguish adequately between teacher candidates who will be effective and those who will be ineffective in either an urban or suburban school settings (Darling-Hammond, 2012; Jacob, 2007; Ritter &Hancock, 2001).

The academic importance of the current study is to add to the growing body of knowledge about the specific personality characteristics of highly effective teachers in both urban and suburban public schools. The practical importance of this study is to support administrators' understanding of the specific personality characteristics of highly effective teachers in urban and suburban school settings so that teacher candidates can be assessed more efficaciously. The use of a reliable job performance predictor, such as the 44-item self-report BFI developed by Oliver (2009), could be added as a non-credentialing factor to assist in evaluating potential teacher candidates at the time of employment, and this could increase the possibility of smarter hiring decisions for both urban and suburban teachers.

The research of this study was committed to identifying specific personality characteristics associated with highly effective teachers in two different school locations that could reliably help administrators understand characteristics that can indicate a teacher's potential for success in the urban or suburban classroom. It is possible that this study does contribute to new hiring practices in K-12 public schools. The new hiring practices could select and place teachers who are more likely to be effective in either an urban or a suburban school setting. Additionally, the contributions to the literature would include closing current gaps associated with understanding the specific personality characteristics of highly effective teachers.

Theoretical Framework

In 1923, Carl Jung determined by observation that individuals have regular differences unrelated to their psychopathology, and what seems to be random behaviors are essentially an example of the use of the brain's capacity (as cited by The Myers & Briggs Foundation, n.d.). Additionally, Jung observed that people's choice of action was one of two functions or preferences like perceiving and judging, where perceivers seek more information, and judgers just make decisions (The Myers & Briggs Foundation, n.d.). Myers and Briggs later applied Jung's theory to develop the taxonomy and assessment process that became the MBTI (Cooper, Knotts, McCord, & Johnson, 2012; The Myers & Briggs Foundations, n.d.). Rushton et al. (2007) noted the use of the MBTI to study the typology of 5,366 American teachers whose median typology was Extroverted-Sensing-Feeling-Judging (ESFJ). Rushton et al. then found that teachers selected as Florida Teacher of the Year had more in common than their achievement. The Florida Teachers of the Year shared the personality typology of Extroversion-Intuitive-Feeling-Perceiving (EIFP), which is different from the typical American teacher's median MBTI Profile. Rushton et al.'s research introduced into literature the use of personality typology for identifying teacher effectiveness in the field of education.

The MBTI is a psychological instrument that measures personality type and can help people understand themselves and their relationships with others (Roberts, Mowen, Edgar, Harlin, & Briers, 2007). Similar to the MBTI, the BFI is a psychological instrument that measures personality characteristics and is capable of predicting job performance and training needs (Fenderson, 2011; Judge, Higgins, Thoresen, & Barrick, 1999). Judge et al. investigated the relationships of the characteristics of the BFI with career success and found

that conscientiousness can predict essential and extrinsic career accomplishment. Additionally, other studies showed that Neuroticism is not a predictor of career accomplishment and that the BFI was strong in predicting career success (Judge et al., 1999).

According to Overman (2012), organizations screen for personalities, aptitudes, work ethic, technical skills, and job-fit to predict performance. Gardner, Reithel, Cogliser, Walumbwa, and Foley (2012) agreed that personality testing for job-screening purposes is a good method of matching applicant attributes with organizational culture. In researching job satisfaction using the BFI, Gardner et al. found that employees with pronounced evidence of personality characteristics as measured by the BFI were more aware of their emotional state and individuals who practice self-awareness are capable of identifying and influencing behaviors aligned with organizational visions and effective outcome (Sy, Tram, & O'Hara, 2006).

The BFI is better suited for this study than the MBTI, as the MBTI's 16 different personality types that require scoring and interpretation create a cumbersome amount of data. The BFI only has five dimensions to score and interpret (Fenderson, 2011; Rushton et al., 2007) which allows for the identification and description of personality characteristics instead of their categorization (Fenderson, 2011). Harvey, Murry, and Markham (1995) suggested that the Five Factor Model scale or BFI is convergent with the MBTI and can reduce the dichotomous scales of the MBTI to five factors as is shown in Table 1. However, Harvey et al. noted that neuroticism does not have a corollary in the MBTI inventory.

Table 1

Myers Biggs Type Indicator vs Big Five Inventory

Myers Briggs Type Indicator Dichotomous Factor	Big Five Inventory Dimensions
Extroversion (E) or Introversion (I)	Extroversion
Sensing (S) or Intuitive (N)	Openness
Thinking (T) or Feeling (F)	Agreeableness
Judging (J) or Perceiving (P)	Consciousness

Fenderson (2011) examined the personal profiles and common characteristics of highly effective teachers, as he and Delpit (2006) believed that teacher personality contributed to classroom success to a greater degree than skill set. Additionally, research has shown that personality characteristics are vital to the early prediction of job performance and career success (Rode, Arthaud-Day, Mooney, Near, & Baldwin, 2008). The purpose of Fenderson's study was to investigate the effective personality characteristics of candidates for the 2009 National Teacher of the Year. Fenderson built his study from the framework of the five-factor model of personality and chose the Neuroticism Extroversion Openness Five Factor Inventory (NEO- FFI) over the MBTI because he sought to improve future educators by demonstrating the strength of particular personality characteristics and not categorizing them. The results from his study showed very high Extroversion, high Agreeableness, high Conscientiousness, average Openness and low Neuroticism were common characteristics of National Teacher of the Year candidates in 2009 (Fenderson, 2011).

The current study followed Fenderson's (2011) framework in drawing on the five-factor model of personality that was noted by Tupes and Christal (1961) and Norman

(1963) who identified five cyclical factors during their analysis of language studies (as cited in Fenderson, 2011). The MBTI and the BFI have guided just a few studies (Fenderson, 2011; Rushton et al. 2007) that have examined the role of personality type and behavioral tendencies of effective teachers. For this study, the framework focused on evaluating the relationship between characteristics of highly effective teachers (as identified by Teachers of the Year in Solano County, California) in urban and in suburban school settings.

Rothstein and Goffin (2006) reported use of personality testing by human resources personnel, while Heller (2005) found that 30% of American organizations use personality testing for employee selection. Fallaw and Kantrowitz (2013) reported that 66% of employers worldwide used personality testing for pre-employment screening in 2009, increasing to 84% of employers worldwide in 2013. According to Piotrowski and Armstrong (2006), an employee's personality, interpersonal style, and response to stress are all characteristics that human resource professionals and industrial and organizational psychologists have identified though personality testing. For example, Conscientiousness and Neuroticism, which are two of the dimensions of BFI, have validity in predicting job performance. Passmore (2012) found that Openness showed value in predicting training outcomes because people with open personalities are more accepting to change. Agreeableness and Extroversion have been useful in predicting success in positions, such as sales and management, because people with flexible personalities and an affinity for people can identify with their customers' (sales) or employees' (managers) needs enough to sell to or manage them (Passmore, 2012).

Meta-analytic research studies in the early 1990s changed the view of theorists regarding the use of personality assessments to prescreen candidates for employment, as

researchers during this period found that personality assessments are reliable predictors of job performance (Rothstein & Goffin, 2006). Personality characteristics can influence career selection, social skills, and relationships, along with an individual's decision to continue in a specific career (Fenderson, 2011; Judge et al., 1999), which is why personality testing is the second most frequently used prescreening assessment by human resources in various industries worldwide (Fallaw & Kantrowitz , 2013). This study examined the relationship of specific personality characteristics of highly effective teachers (as identified by Teachers of the Year in Solano County, California) in urban and suburban school settings by measuring their personality characteristics using the BFI.

Research Questions and Hypotheses

Research Questions

The purpose of the study was to evaluate the relationship of specific personality characteristics of highly effective teachers in both urban and suburban school settings. The general problem is that the criteria established by the NCLB Act that are used for teacher hiring are inadequate for predicting teacher effectiveness, and show no relationship with student outcomes (i.e., academic achievement; Rutledge et al., 2008). The specific problem is that without a clear understanding of the specific personality characteristics of highly effective teachers, administrators will continue to hire ineffective teachers in both urban and suburban settings who impede the academic progress of students (Hughes, 2014). To address this problem, the following research questions will be answered:

RQ1. What is the relationship between the personality characteristic Extroversion and the school location of highly effective teachers?

RQ2. What is the relationship between the personality characteristic Agreeableness and the school location of highly effective teachers?

RQ3. What is the relationship between the personality characteristic Conscientiousness and the school location of highly effective teachers?

RQ4. What is the relationship between the personality characteristic Openness and the school location of highly effective teachers?

RQ5. What is the relationship between the personality characteristic Neuroticism and the school location of highly effective teachers?

The current K-12 teacher hiring process lacks effectiveness, as not all teachers meeting the requirements of NCLB are effective. This phenomenon creates a need for evaluating the relationship of specific personality characteristics of effective teachers in urban and suburban school settings so that hiring administrators will have a more reliable tool with which to evaluate the potential effectiveness of teacher candidates. Understanding the relationship between measures of Extroversion, Agreeableness, Conscientiousness Openness, and Neuroticism and school location of highly effective teachers can provide administrators who interview teacher candidates with the ability to identify specific personality characteristics at the time of hire that are needed to support student outcomes in either an urban or suburban school settings. The following hypotheses are proposed.

RQ1: Extroversion

H1o = There is no relationship in measures of Extroversion between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H1a = There is a relationship in measures of Extroversion between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ2: Agreeableness

H2o= There is no relationship in measures of Agreeableness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H2a= There is a relationship in measures of Agreeableness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ3: Conscientiousness

H3o = There is no relationship in measures of Conscientiousness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H3a = There is a relationship in measures of Conscientiousness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ4: Openness

H4o = There is no relationship in measures of Openness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H4a = There is a relationship in measures of Openness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ5: Neuroticism

H5o = There is no relationship in measures of Neuroticism between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H5a = There is a relationship in measures of Neuroticism between highly effective teachers in urban schools and highly effective teachers in suburban schools.

Overview of Research Design

The purpose of this study was to evaluate the relationship of specific personality characteristics of highly effective teachers in urban and suburban school settings. The general problem was that the criteria established by the NCLB Act for highly qualified teachers that are used for teacher hiring are weak in predicting teacher effectiveness, and show no relationship with student outcomes (Rutledge et al., 2008). The research suggested that without a clear understanding of the specific personality characteristics of highly effective teachers, administrators will continue to hire ineffective teachers in both urban and suburban settings who will impede the academic progress of students (Fenderson, 2011; Hughes, 2014; Rushton et al., 2007). The academic importance of the current study is to add to the growing body of knowledge on specific personality characteristics of highly effective teachers in urban and suburban school settings. The practical importance of this study is to enhance administrators' understanding on specific personality characteristics of highly effective teachers in urban and suburban school settings to drive hiring decisions.

This study required a quantitative design and non-experimental methodologies (descriptive and correlational) because the researcher seeks to describe and evaluate the relationship in measures of specific personality characteristics of highly effective teachers in urban and suburban school settings. A quantitative research design uses numeric data to statistically test a hypothesis from a more comprehensive theory (Turner et al., 2013). According to Jamison (2010) and Turner et al., the goal of quantitative research is to gather numerical data using a large sample size to provide an objective awareness by using strategies, such as surveys and non-experimental and experimental designs to measure attitudes and rate behaviors. Quantitative research employs several data collection techniques

such as closed-ended questions and pre-test and post-test measures of attitudes to capture data that can influence a decision (Turner et al., 2013). The research questions drive the need for data, which drives the need for the design, which drives the data collection process, which drives the need for the analytical procedure used (Jamison, 2010; Turner et al., 2013).

Alternatively, qualitative research designs use philosophical assumptions of constructivist claims of individual accounts socially and historically with the intent to advocate claims or participatory perspectives. Qualitative research designs employ strategies of inquiry such as open-ended survey questionnaires, interviews, and text or image data to enact change or reform from contextual information (Jamison, 2010; Turner et al., 2013). Though qualitative research designs have benefits, qualitative methodologies purpose to make sense of human behavior by understanding peoples' interpretation of reality at some point in time, in a specific setting, it was not used during the course of this study (Jamison, 2010; Turner et al., 2013).

The purpose of descriptive research is to determine the description, cognition, or attitude of the sample population by collection data for hypotheses testing or answering questions about the subjects being studied (Turner et al., 2013). A predetermined, closed-ended survey (see Appendix A) was used to describe the specific personality characteristics of highly effective teachers in urban and suburban school setting (Jamison, 2010; Turner et al., 2013).

The purpose of correlational research is to explain the relationship between two variables (Turner et al., 2013). If the personality characteristics of the urban group share a relationship with those of the suburban group, a correlation coefficient clarifies the relationship between the two independent variables by using the standard deviation values,

which will fall between + 1.00 or -100 (Turner et al., 2013). A near + 1.00 correlation coefficient would indicate that the variables have a strong relationship, whereas, a near – 1.00 value would indicate that no relationship exists (Turner et al., 2013). A predetermined inventory, such as the (BFI), and the use of numeric data are common reasons for using a quantitative design (Jamison, 2010; Turner et al., 2013). Table 2 provides a brief overview of the key elements for this study.

Table 2

Overview of Research Design

RQ1. What is the relationship between the personality characteristic Extroversion and the school location of highly effective teachers? RQ2. What is the relationship between the personality characteristic Agreeableness and the school location of highly effective teachers? RQ3. What is the relationship between the personality characteristic Conscientiousness and the school location of highly effective teachers? RQ4. What is the relationship between the personality characteristic Openness and the location of highly effective teachers? RQ5. What is the relationship between the personality characteristic Neuroticism and	
Independent Variable	School Location (Nominal) Urban, Suburban
Dependent Variables	Personality Characteristics as Measured by the 44 Item self-report BFI (Ordinal) Extroversion, Conscientiousness, Agreeableness Openness, and Neuroticism
Methodology	Quantitative
Non-experimental Design	Descriptive/correlational
Statistical Analysis	Mean, median, mode and standard deviation (Independent sample)
	Percentile ranking (Very high, high, average, and low
	Spearman's correlation coefficient

The purpose of the study was to evaluate the relationship of specific personality characteristics of highly effective teachers in urban and suburban school settings (Darling-

Hammond, 2012; Hughes, 2014; Jacob, 2007). Teachers are capable of assigning themselves to either an urban location or a suburban location by their choice of employment, and this makes the school location the independent variable, as the variable differs by virtue of teacher choice (tacit manipulation). The dependent variable is the outcome measure or the specific personality characteristics associated with being a highly effective teacher (Darling-Hammond, 2012; Frankfort-Nachmias & Nachmias, 2008; Hughes, 2014; Jacob, 2007).

The application of a non-experimental descriptive correlational design evaluates the relationship between specific personality characteristics and highly effective teachers in urban and suburban school settings by using statistical data collected from the 44-item self-report BFI developed by Oliver (Oliver, 2009) to rank and describe the specific personality characteristics of highly effective teachers in urban and suburban school settings (Frankfort-Nachmias & Nachmias, 2008). The correlational part of the design explains the relationships between the personality characteristics of the highly effective teachers in both urban and suburban school settings (Rumrill, 2004).

Data collection by survey is the most efficient way to collect data from large groups (Jamison, 2010). According to John, Naumann, and Soto (2008), the Big Five is a taxonomy of personality traits that maps which traits correlate together, and is used for describing or rating people. TheBFI is a short multidimensional personality inventory with brief phrases and manageable vocabulary, and it is suitable for adults 20 to 60 years of age (Oliver, 2009). The rationale for using the 44-item BFI self-report survey is its ability to describe the personality traits of Extraversion, Agreeableness, Conscientiousness Openness, and Neuroticism, which are scored on a 5-point scale ranging from 1, disagree strongly, to 5,

agree strongly (Oliver, 2009). The BFI developed by Oliver uses a Likert type scale that asks respondents to choose from 1, disagree strongly, to 5, agree strongly (John et al., 2008), to measure each dimension of the BFI. The responses are scored and translated into numeric data. The scored numeric data are reported in percentile, and scores of greater than 50% confirm the respondent's personality characteristic. Additionally, the scores are ranked very high, high, average and low to indicate the level of behavioral tendencies (John et al., 2008). For example, in the Fenderson (2011) study, the national Teachers of the Year candidates for 2009 demonstrated very high Extroversion, high Agreeableness, high Conscientiousness, average Openness and low Neuroticism. In this study, all of the respondents' scores were scrutinized to determine the mean, median, mode and standard deviation to describe the specific personality characteristics of highly effective teachers for each dimension of the 44-item self-report BFI (Frankfort-Nachmias & Nachmias, 2008). Additionally, the participants were divided into an urban group and a suburban group depending on the location of each individual's school at the time each was given the designation of Teacher of the Year. The 44-item self-report BFI score was used to calculate the Spearman's correlational coefficients that explain the magnitude of the relationship between specific personality characteristics of participants in urban and suburban settings (Frankfort-Nachmias & Nachmias, 2008).

The study population was highly effective teachers as indicated by nomination for Teacher of the Year in Solano County, California, from 2009 through 2014. Every year, 106 schools in Solano County nominate one highly effective teacher from each school to compete for Teacher of the Year awards in all seven districts. However, this study focused on the Teachers of the Year nominees in urban and suburban, California school districts who competed for the Teacher of the Year in Solano County (Solano County Teacher of the Year,

n.d.). G* Power developed by Faul, Erdfelder, Lang, and Buchner (1996) was intended as a universal power analysis program for statistical assessment frequently used in social and behavioral research (Faul et al., 2007). According to Faul et al., G* Power 3 offers dedicated power analysis options for an assortment of commonly used t, F, z, x^2, and Exact test. The purpose of this study was to evaluate the relationship of specific personality characteristics of highly effective teachers located in urban and suburban school settings, which makes the school location the independent variable with two values (urban and suburban). In this study, the school location was a nominal independent variable that requires the use of the exact test of goodness-of-fit. The exact test of goodness-of-fit is commonly used when the research has only one nominal independent variable with only two values. The exact test of goodness-of-fit offers no test statistic, but it allows the research to calculate the probability of obtaining data under the null hypothesis (Faul et al., 2007). In the G*Power 3 program, when the exact option is selected, the correlation difference from constant (one sample case) is the option used for correlational studies. According to Faul et al., a priori power analyses were used for this study to calculate sample size (*N*) as a function of the necessary power and appropriate significance level and the population effective size as shown in (see Appendix B). A power analysis was requirement for this research because it provided an ample size required to detect an effect of a given size with a given degree of confidence (Agresti & Finlay, 2009).

Solano County Office of Education (SCOE) helped identify Teachers of the Year and provide contact information for the Teachers of the Year in urban and suburban school districts for the years 2009 through 2015. Teachers of the Year from urban school districts have a strong minority base population that is 22% Black, 22% Hispanic, 24% Asian, and

25% White non-Hispanic or Latino, and 17. 5 % are below poverty level (United States Census Bureau, n.d). Teachers of the Year from suburban school districts have a strong majority population that is 72 % White, with 5.7% below the poverty level, and its student test scores are the highest in the county (United States Census Bureau, n.d). Once the SCOE provided the contact information for the Teachers of the Year, the researcher sent an email requesting their participation in this study. The solicitation included a description of the study and an informed consent form (see Appendix C). The informed consent form will serve as the solicitation letter and a consent form. Teachers who agreed to participate by email received a link to the SurveyMonkey site to read the Informed Consent form, consent to their participation, and then complete the 44-item BFI developed by Oliver in (2000).

The 44-item self-report BFI dimensions of Extroversion, Agreeableness, Conscientiousness, Openness, and Neuroticism were the dependent variables, and the results from the survey were converted in to numeric values, and then the personality characteristics of the respondents' scores were ranked very high, high, average, and low. The Likert scale was converted to mean item raw score by reverse score designated items, summed across items in each scale, divided by number of items in scale, which was performed by SPSS Version 23.0 (see Appendix D). The converted Likert scale mean and standard deviation was used to calculate the z-score by using the following formula: z = (R-mean)/ standard deviation (Agresti & Finlay, 2009). Converting the z-score into percentiles was completed by SPSS Version 23.0 by using the transformation function in SPSS Version 23.0 with ranking selected. The numeric data was used in the calculation of Spearman's correlation coefficient to explain the strength of the relationship between personality characteristics of teachers in

schools located in urban and suburban school districts (Agresti & Finlay, 2009; Rumrill, 2004). All parts of the research design are explained in more detail in Chapter III.

Definition of Terms

Agreeableness. A positive social shared alignment toward others with aversion to characteristics such as unselfishness, trust, and humility (Gerber, Huber, Doherty, Dowling, & Ha, 2010).

Achievement gap. The measurable difference in academic performance between two or more groups of students. This term is typically associated with the differences in performance between Whites, Asians, African-Americans, and Hispanics, and between economically advantaged and economically disadvantaged groups (Carpenter, Ramirez & Severn, 2006).

BFI. A self-report survey that identifies the degree to which a survey taker self-reports his or her tendencies for the characteristics of Openness, Extraversion, Agreeableness, and Neuroticism, which are scored on a 5-point scale ranging from 1 disagree strongly to 5 agree strongly (Srivastava, 2014).

Conscientiousness. A public desire to control task-directed and goal-directed behavior, such as thoughtfulness before action, delayed gratification, following rules and procedures, forecasting, and listing task (Gerber et al., 2010).

Extroversion. Vibrantly approaching the social and material world using kindness, activity, and positive emotional characteristics (Gerber et al., 2010).

Neuroticism. A personality characteristic specific to an individual who is tense, moody and anxious, as opposed to calm and in control (John et al., 2008).

Openness. A personality characteristic specific to an individual who exhibits wide interest, and who is imaginative and insightful (John et al., 2008).

Suburban school. A school in a community that is socioeconomically advantaged (Jacob, 2007).

Urban school. A school in an inner-city community that has high poverty rates, and is composed mostly of minorities, English language learners, and socioeconomically disadvantaged students (Darling-Hammond, 2012).

Assumptions

Assumptions are the elements of the study that cannot be proven by the researcher but, without their presence, the research would be pointless (Simon & Goes, 2013). An assumption of this research was that the criteria established by NCLB for highly qualified teachers that are used for teacher hiring are weak in predicting teacher effectiveness, and show no relationship to improved student outcomes (Rutledge et al., 2008). A key assumption was that without a clear understanding of the personality characteristics of effective teachers, administrators will continue to hire ineffective teachers in both urban and suburban school settings who will impede the academic progress of students (Hughes, 2014). Another assumption made by the researcher for this study was that the definition of a Teacher of the Year means the honorees are model teachers, and their selection is an accurate example of teacher effectiveness.

A further assumption for this study was that teacher effectiveness in an urban setting is fundamentally different from teacher effectiveness in a suburban setting. Effectiveness in urban and suburban locations can differ because of the challenges of typical students in each setting. Urban teachers face students who live in poverty, students who are English language

learners, and student immigrants from various learning backgrounds (Darling-Hammond, 2012). In contrast, suburban teachers work with students who are mostly non-minority and socioeconomically advantaged, with parents who value education.

Limitations

According to Simons and Goes (2013), limitations are possible flaws to research. Random selection of participants is the preferred method for conducting quantitative research (Rumrill, 2004). According to Rumrill, studies in education commonly lack randomized participants, and this was a limitation for this study because random selection of participants can add to the validity of a study but was not possible in this study design. Using surveys for data collection creates another limitation, which is the possibility of participants falsifying answers to influence a desired outcome which is beyond the researcher's control (Gardner et al., 2012; Morgeson, Champion, Dipboye, Hollenbeck, & Murphy, 2007). According to Morgeson et al., one criticism of self-report personality testing is the possibility of faking by motivated applicants who understand the implications of the study and who try to help the research by answering the survey in such a way as to influence a desired outcome. Dishonest participation can be motivated by desires to help the researcher or by a false sense of self (Morgeson et al., 2012). Although faking may occur, Hough, Eaton, Dunnette, Kamp, and McCloy (1990) established that less than a one-third of respondents fake their responses on assessments and those who do rarely affect the validity of the results. The use of a survey can also result in a major limitation: a low response rate (Jamison, 2010; Turner et al., 2013). To overcome the limitation of using a survey, the research will use email reminders and incentives to encourage participation.

Using a non-experimental descriptive correlational design also offered some limitations. A non-experimental descriptive correlational design means there is no control over or ability to manipulate the independent variables, and this means that the results from this study can only provide inferences about the specific population. The correlation between each dependent variable (the subscales on the BFI) and the independent variables (suburban and urban schools) cannot support a generalized statement about specific personality characteristics of highly effective teachers in either an urban or a suburban school setting (Rumrill, 2004). What a non-experimental descriptive correlational design can explain is the statistical magnitude of the relationship between the independent variable and the dependent variables given a specific set of circumstances; what it cannot explain is the specific causes of the relationship because of the inability to control either variable (Rumrill, 2004).

Delimitations

Delimitation factors are those elements of research controlled by the researcher or boundaries set by the researcher (Simons & Goes, 2013). The lack of access to personnel files and teacher evaluations means that teacher effectiveness cannot be determined by formal matrices, such as written evaluations. This means that such criteria were unavailable to be used to select potential participants for this study, requiring, instead, a proxy for effectiveness. Participants identified by Solano County, California's Teacher of the Year selection process represented highly effective teachers. Solano County Department of Education provided each district with the evaluation and selection criteria for Teacher of the Year, and the guidelines for submitting a single nominee each year. According to Solano County Department of Education Teacher of the Year (n.d), each candidate submitted a written application to the Blue Ribbon Committee (BRC) that consisted of previous Teacher

of the Year honorees. Additionally, the BRC used scoring guidelines scrutinized by previous Teacher of the Year finalists, school administration, and peers who nominated each candidate. This rigorous selection process was the determining factor for using Teacher of the Year nominees as participants in this study. The data collection for 84 participants can be an expensive and lengthy process due to the potential for low response rate, which necessitates a well-developed survey. The delimitation for a low response rate required continuous contact with participants, a good transmittal letter, telephone follow up contact, and an incentive for participation (Jamison, 2010; Turner et al., 2013).

Summary

Classroom teachers have a significant influence on student outcomes, far outweighing the influence of other moderate factors on student performance, which makes hiring effective teachers a priority (Ritter & Hancock, 2007; Rushton et al., 2007). Hiring urban teachers is especially important because students in urban schools are more likely to face suspensions or expulsion, leave school before graduating, and score lower on standardized tests than students in suburban communities--factors which create achievement gaps, a major phenomenon facing the nation's education system (Brainbridge & Lesley, 2002; Chiristle et al., 2007; Long, 2012). In response to these issues, the federal government implemented the NCLB Act of 2001. The NCLB Act was enacted in part to fill the need to staff urban schools with quality teachers (Jacob, 2007). The results from the 2008 administration of the National Assessment of Education Progress review have shown that NCLB has not closed the achievement gaps between urban and suburban students. The general problem is that the criteria established by NCLB for highly qualified teachers that are used for teacher hiring are weak in predicting teacher effectiveness, and show no relationship with student outcomes

(i.e., academic achievement; Rutledge et al., 2008). The specific problem is that without a clear understanding of the specific personality characteristics of highly effective teachers, administrators will continue to hire ineffective teachers in both urban and suburban settings who will continue to impede the academic outcomes of students (Hughes, 2014).

The purpose of this study was to evaluate the relationship of specific personality characteristics of highly effective teachers in urban and suburban school settings. Despite research supporting the use of the BFI for predicting job performance when used appropriately, school districts continue to rely on the criteria established by NCLB for employing highly qualified teachers that are not effective in predicting teacher effectiveness (Hughes, 2014; Jacob, 2007). Research has indicated a positive increase in the use of personality testing to predict job performance (Fallaw & Kantrowitz, 2013; Rothstein & Goffin, 2006). According to Fallaw and Kantrowitz, personality testing is the second most frequently used prescreening assessment by human resources in various industries worldwide. In Chapter II, literature addressing human capital management, teaching success in urban and suburban settings, the reliability and validity of the BFI and the use of the BFI to predict job performance is discussed. In Chapter III, the research methodology and essential elements of the research study, such as the sample population, procedures, ethical concerns, data collection, and data analyses provided a guide for this study. Chapter IV details the research results of this study that addressed the particular research problem rearticulated in a set of research questions and subsequent research hypotheses. Results are presented in the framework of population and sample, data collection, data analyses with a description of results and conclusions. Chapter V is intended to interpret the results and discuss the implications of the results from Chapter IV.

CHAPTER II: LITERATURE REVIEW

The following section contains a synopsis of research and literature involving human capital management as related to hiring certificated teachers, the effectiveness of new teachers, the teacher evaluation system, and the challenges of employing effective teachers located in the urban and suburban school districts. This chapter reviews literature on reliability and validity, and it also reviews literature related to how the 44-item self-report BFI developed by Oliver (2009) is used to predict job performance. To introduce the 44-item self-report BFI factors (Agreeableness, Consciousness, Extroversion, Openness, and Neuroticism) to the hiring process with the intent to simplify effective personality characteristics by which to evaluate teacher effectiveness at the time of hire, the research will need to answer the following questions:

RQ1. What is the relationship between the personality characteristic Extroversion and the school location of highly effective teachers?

RQ2. What is the relationship between the personality characteristic Agreeableness and the school location of highly effective teachers?

RQ3. What is the relationship between the personality characteristic Conscientiousness and the school location of highly effective teachers?

RQ4. What is the relationship between the personality characteristic Openness and the school location of highly effective teachers?

RQ5. What is the relationship between the personality characteristic Neuroticism and the school location of highly effective teachers?

This literature review is comprised of three sections: Human Capital Management and Evaluation, The Validity of the BFI, and The Use of the BFI as a vital tool in talent

management. The human capital management section explores the literature on the organizational structure of educational improvements and evaluation, the importance of hiring effective teachers, and the success of teachers in urban and suburban settings. Section two will compare the BFI against the Myers Briggs Type Indicator (MBTI) and the Fundamental Interpersonal Relations Orientation Behavior (FIRO-B) assessment to establish the reliability and validity of the BFI. Section three explains the usefulness of the BFI.

Search Strategy

The literature review for this chapter was directed through variety of search strategies. The research was conducted using online searches in Google Scholar and the University of the Rockies (UOR) library to access ProQuest, Sage, and EBSCOHost databases with search terms, such as *Big Five Inventory*, *Myers Briggs Type Indicator*, *No Child Left Behind*, *Human Capital*, *Success of urban and suburban teachers*, in addition to other search terms. Research was also conducted using government websites, such as the United States Department of Education, the California Department of Education, and the Solano County Department of education using terms, such as *Teacher of the Year program*, *Districts API scores*, *highly qualified teacher requirements*, in addition to other terms. Most of the website research located and referenced in this chapter has been conducted in the last five years. However, research references related to the BFI and other psychological assessments used to validate the BFI survey are sometimes dated earlier, with some references preceding the 1990s. Other references include empirical sources within ten years to provide a foundation for the most current sources.

Human Capital Management and Evaluation

According to Donaldson (2013), many policy makers in education have adopted Human Capital Management (HCM) as an important tactic to increase the quality of education by viewing employees (teachers) as assets. Adopting HCM allows school districts to focus on teachers' individual career growth to aid student outcome. Donaldson believed that by describing HCM as the "people side" of educational improvement, school districts are able to align their mission statement with organizational policies that hold teachers accountable for student progress on state sponsored tests.

Donaldson (2013) reported that administrators are now utilizing factors, such as certification completion, and enrollment in colleges of education, career development, and teacher evaluations, to identifying and understanding the skills needed for student teachers' effectiveness, and for designing and executing specialized career development programs for teachers. In addition, employing and welcoming probable effective teachers, developing improvement-centered teacher evaluation programs that foster career growth, discharging ineffective teachers, and retaining effective ones have also been utilized by administrators for the purpose of improving teacher effectiveness and student out comes (Donaldson, 2013).

The purpose of this section of the literature review is to identify and review skills needed for student teachers who are most likely to work in urban schools. Research has shown inconsistencies between programs offered by colleges of education and their effectiveness in preparing teachers for the urban setting (Darling-Hammond, 2012; Jacob, 2007; Ritter &Hancock, 2001). Darling-Hammond noted that many teacher preparation programs do not prepare teachers for the impact of poverty, language, and cultural differences in urban settings. Teacher trainees have expressed contempt for their training,

citing that their course learning did not prepare them for the classroom and that their student teaching offered only modest benefits (Darling-Hammond, 2012). On the other hand, ineffective teachers are rarely discharged, and with the teacher shortage in urban settings, exploring a new system of evaluating characteristics of effective teachers could have influence on discharging ineffective teachers. For example, Gordon, Kane, and Stagier (2006) reported that school districts do minimal screening of their teachers once they are hired and tenure is rewarded after a few years of teaching. Few teachers leave their classrooms involuntarily. Identifying and understanding the skills required by student teachers in American's schools is daunting because of the number of student teachers who are not prepared for urban schools. Darling-Hammond (2006) noted that to teach in American schools which presumes that all students have an opportunity to learn is nearly overwhelming because in the classrooms of most new teachers in urban settings, at least 25% of the students are poverty-stricken, lacking the basic needs of food, clothing, shelter, and health care. In addition, 10% to 20% of urban students are English-language learners, 15% speak English as a second language, and 40% are members of a minority group with some recently emigrating from countries with different educational and cultural backgrounds (Darling-Hammond, 2006). Educating these students requires extremely complex, knowledge-intensive actions that demand extraordinary personal and professional talents to respond to a myriad of learning needs (Darling-Hammond, 2006). Conflicts between teachers and student are noted problems associated with educating a myriad of students who are misunderstood socioeconomically, culturally, and racially by their teachers (Milner & Tenore, 2010). The lack of cultural competence of teachers created by racial and

socioeconomic differences between students and teachers could create challenges for student-teacher relationships (Irvine, 2003; Schultz, 2014).

According to Darling-Hammond (2012), stringent federal and state requirements have forced teachers to broaden their skills to meet the ambitious standards for learning tied to new state-enacted expectations and assessments that teachers are required to meet for all students in the same classroom despite the variety of students' intellectual needs. Jacob (2007) and Darling-Hammond noted that urban teachers encounter students with learning differences and disabilities, linguistic barriers, and depressed family situations that include acute poverty, homelessness, violence and abuse cases, as well as abandonment issues. In urban settings, teachers need to be disciplinarians, facilitators of student personal learning, evaluators and diagnosticians, therapists, social workers, and community resource advocates. According to Lacour and Tissington (2011), many urban student communities and parents focus more on their basic needs, as opposed to education that leads to students who are unprepared for academic achievement.

Aptitude testing and grade point averages are still the predictors for identifying and understanding the skills needed for teachers to be effective. For example, Mehrens and Philips (1989) reported that pre-entrance examinations are used to predict the success of students in programs offered by colleges of education (D' Agostino & Powers, 2009). In a meta-analysis, D'Agostino and Powers examined test scores and grade point averages of students enrolled in colleges of education as a means of predicting teacher effectiveness using 123 studies that produced 715 effect sizes. D'Agostino and Powers found that test scores and grade point averages only predicted the ability to complete the program, and did not predict teacher effectiveness post-graduation from such programs.

The way of assessing teachers who are assumed effective in suburban as opposed to in urban school districts can be quite different. Hiring teachers for a suburban community is not difficult because the suburban schools have less funding issues, more parental support, and fewer students with issues associated with poverty that can affect student outcomes (Jacob, 2007; Lankford, Loeb, & Wyckoff 2002; Schultz, 2014). Teachers who work in suburban districts are often fully credentialed, as opposed to some urban teacher who struggle with passing certification exams that are required for highly qualified teachers (Jacob, 2007). The suburban schools are more attractive to many highly qualified teachers, as the students are most similar to teachers' cultural backgrounds, salaries are often higher than in urban schools, and most suburban parents value education (Lankford et al., 2002; Schultz, 2014).

According to Jacob (2007), the issues urban districts face in staffing their schools with effective teachers are associated with a teacher shortage, despite the fact that all classrooms have a teacher. Jacob believed that the term *shortage* referred to the quantity of effective teachers wanted for employment by districts and not the number of uncertified or not fully credentialed teachers who some districts are forced to hire to place a teacher in every classroom. In response to the challenge of hiring a sufficient number of teachers, urban districts are forced to hire teachers without credentials or experience or to hire long-term substitutes and to increase classroom enrollment size (Jacob, 2007). Other problems with hiring in the urban school districts include already-hired teachers who are unable to pass certification exams, high teacher turnover rates at schools with high levels of impoverished students, and teacher self-selection, in which more highly-qualified teachers tend to leave

urban schools, while the less highly-qualified teachers remain in urban schools (Jacob, 2007; Lankford et al., 2002; Schultz, 2014).

Blume (2011) reported that educators have begun dialogue on the need to develop improvement-centered teacher evaluation programs in California because of issues related to the Stull Act of 1971. The Stull Act intended to improve elementary education by increasing awareness of the academic progress of individual students, clarifying definitive competency and incompetency as they relate to the performance of teachers and administrators, and establishing an objective evaluation system that promotes career development and professional growth (Gortner, 1976). The bill also looked to improve methods of communication between teachers and administrators about how to carry out the mission and the vision of school districts, as well as how to improve the use of funding resources.

Teacher Evaluation Challenges

According to Darling-Hammond and Lieberman (2013), the California Department of Education's Standards for the Teaching Profession serves as a guide to evaluate teachers on their ability to perform in the classroom, as well as provide administrators with a tool by which to structure teacher evaluation. The problem with the Standards for the Teaching Profession is that the standards are subjective and lack a rubric for consistency and objectivity that would provide greater understanding of teaching expectations for administrators and teachers. Administrator-teacher dialogue associated with constructive evaluations based on previously discussed criteria by which the evaluation was conducted often lacks clarity and thoroughness, as many administrators lack training and the ability to be fair and subjective toward the evaluation process (Darling-Hammond & Lieberman, 2013). Some educators view teacher evaluations as more of a compliance measure and not a

process by which to improve teacher quality. So, teacher evaluations that are meant to improve teacher quality are not effective in many school districts (Darling-Hammond & Lieberman, 2013).

Administrators at larger schools are not prepared to conduct effective evaluations due to time constraints, administrative demands, and the lack of qualified personnel to judge teachers' talents across a wide-range of content and developmental levels (Darling-Hammond & Lieberman, 2013). The evaluation process places little emphasis on student academic progress although the Stull Act requires consideration of student outcomes because student progress is not considered during the teacher evaluation process. In many evaluations, more focus is placed on classroom management as opposed to student mastery of learning objectives. Teacher evaluations are mostly compliance based, and lack the ability to improve teacher quality or promote professional growth (Blume, 2011; Darling-Hammond & Lieberman, 2013).

Teacher Evaluation Reform

Darling-Hammond and Lieberman (2013) suggested that a new evaluation system based on principles that require professional standards that assess the quality of performance throughout the course of the teacher's career. Teacher evaluations should include performance assessments that guide professional learning during a teacher's career and peer and self-assessments that focus on evidenced-based performance that contributes to student achievement and reflects teacher best practices that are relative to student outcomes. Although the above principles may strengthen the efforts to improve teacher evaluation and change the culture of evaluation from compliance to continuous improvement of teacher quality, they also require approval from collective bargaining unions.

Union leaders have criticized the teacher evaluation process, citing that it provided inadequate support for under-productive teachers (Blume, 2011). Blume reported that union leaders have not agreed to districts' use of students' standardized test scores as a means for evaluating teacher performance. According to Blume, the Stull Act demands that student progress measures are a part of teacher evaluation, yet unions' collective bargaining agreements have omitted such measures for more than four decades. Strunk and Grissom (2010) noted that many school districts' policy negotiations are between the school districts and a collective bargaining union because most teachers are under contracts that govern their wages and benefits. Policy negotiations are intended to come to conclusions about the framework for teachers' compensation, hiring practices, transfer procedures, and evaluations. But, unions' decisions have also affected the teacher evaluation process by lobbying for evaluation systems that are mostly subjective and not objective, which affects student outcomes (Strunk & Grissom, 2010). For example, Hoxby (1996) reported that unionized districts have higher dropout rates, while Lovenheim (2009) found no correlation between unionization and dropout rates, and Moe (2009) reported stagnate academic growth at districts with stringent teacher contracts (Strunk & Grissom, 2010). The theorists have differences of opinion; however, the researcher believes Hoxby's view was most accurate.

The problem is that unions that typically negotiate benefits and wages are blocking professional growth, and, more importantly, they are blocking a system to discharge ineffective teachers because of the union's position against objective teacher evaluation (Strunk & Grissom, 2010). In response to the ineffective system of teacher evaluations, the federal government enacted the Race to The Top grant program with the intent of improving low-performing schools, as well as increasing student academic progress in reading and math

(Branchero, 2014). Preliminary indicators have suggested that the program's progress is inconsistent, and some states are experiencing challenges reaching Race to the Top districts' proposed objectives, which forced some unions to repeal their contracts associated with teacher evaluation reform (Branchero, 2014). Branchero's study shows accountable programs and incentive that intend to increase teacher accountable and improves evaluation processes are unreliable.

Hiring Effective Teachers

According to Hughes (2014) and Jacob (2007), those involved with the hiring process need economic resources and tools to hire effective teachers. Urban school districts struggle with hiring effective teachers because few experienced teachers are willing to work in underfunded districts for lower pay than what is available in suburban districts (Jacob, 2007). Additionally, the lack of teacher preparedness to cope with problems related to low socioeconomics and student demographics in urban schools thwarts the ability of urban districts to hire experienced teachers (Darling-Hammond, 2012; Jacob, 2007; Milner & Tenore, 2010). Jacob (2007) noted that the NCLB Act established a succession of accountability measures for schools nationwide to ensure that all districts certified their core subject teacher to the highly-qualified level, but many urban districts are unable to meet these guidelines.

Ritter and Hancock (2001) explored relationships between traditional and alternative certification programs, new and tenured teachers, and classroom management orientation of classroom teachers to predict teacher effectiveness. They looked at teacher experience levels and certification backgrounds to define the possible effects of certification source and experience teaching classroom activities that contributed to student success. The results of the study found no relationship between teacher preparation programs or classroom

experience and teacher effectiveness. Darling–Hammond (2012) and Jacob (2007) noted that neither university curriculum nor student teaching programs are preparing student teachers for success in all educational settings and that the benefits of university curriculum and student teacher programs are not relative to teacher effectiveness. However, an investigation of 177 Pennsylvania school districts revealed that specific teacher characteristics could dramatically influence student outcomes (Vitale, 2009). Vitale's study was inspired by a previous study by Strauss (1998) that examined the comprehensive view of teacher preparation, program approval, and teacher selection practices in Pennsylvania and other states. Strauss reported that 501 school superintendents, school board presidents, and union presidents were surveyed in terms of their teacher recruitment practices, and findings suggested that the districts that paid attention to observed behavior such as empathy during their hiring process had better student outcomes.

According to Ingle and Rutledge (2010), the NCLB Act has made hiring teachers the most significant decision school administrators make because the law has placed more emphasis on teacher aptitude testing and certification programs to increase teacher quality. However, evidence fails to link teacher effectiveness to aptitude testing or certification programs (Jacob, 2007; Ritter & Hancock, 2007). Researchers have argued that the greatest influence on identifying and hiring an effective teacher is the behavior of the principal towards the hiring process, and teachers with higher expectations for students have produced higher gains in student academic progress in both urban and suburban school settings (Donaldson, 2013; Fuller, Young, & Baker, 2011; Ingle & Rutledge, 2010). Fuller et al. suggested that some administrators are biased toward teacher candidates who parallel their own academic paths. Preferential hiring of teachers with academic similarities to those of the

administrators are not effective predictors for identifying teacher effectiveness (Fuller et al., 2011).

The historical factors associated with hiring effective teachers, such as aptitude testing, grade point averages and teacher certifications, have had minimal success placing highly qualified teachers in urban school districts. The research has not shown that either credentialing programs or cognitive testing can predict teaching success in an urban setting (Darling-Hammond, 2012; Jacob, 2007; Ritter & Hancock, 2007). Policies, such as NCLB, that intended to increase accountability have failed at reducing the number of ineffective teachers in the classroom (Ingles & Rutledge, 2010).

Teaching Success in Urban Settings

The achievement gaps between the urban and suburban communities have grown over the past two decades; however, no significant changes to teacher education have shown improvement that results in more effective teachers in urban schools or gains toward closing the achievement gaps (Watson, 2012). In the past 20 years, educational research has changed focus from observing teacher behaviors that benefit student outcomes to studying teachers' beliefs and practices (Watson, 2012). According to Kyles and Olafson (2008), individual backgrounds and traditions normally develop peoples' belief systems; however, teachers in urban school cultures are often vastly different than the diverse population of urban students who are members of minority groups, English-language learners, and members of socioeconomically disadvantaged groups.

Teacher success in an urban setting may require more than passing aptitude tests and acquiring teaching certifications. Milner and Tenore (2010) suggested that teacher-student conflicts caused by personal experiences of rural and suburban born White teachers could

affect student and teacher performance. For example, Watson (2012) noted that most White teachers have limited experience serving cultures different from their own and few have extended periods of activities with people of other cultures, traditions, and background. The cultural differences between rural and suburban born teachers and urban students can make it difficult for some teachers to serve as role models at school or as cultural change agents who can combine student culture with educational instruction because of the teachers' lack of sustainable and meaningful interaction in urban communities (Watson, 2012). Rural and suburban born teachers and urban students have a natural disconnect because of their differing community experiences and cultural expectations. To be effective, teachers must become culturally competent and sensitive to urban students' challenges (Milner &Tenore, 2010; Watson, 2012). Agreeableness and Conscientiousness, personality traits measured by the BFI, are characteristics in the teaching profession known to promote cultural sensitive and competence that can help teachers succeed in an urban setting (Gay & Howard, 2000; Howard, 2001; Howard & Obidiah, 2005).

According to Lewis, James Hancock, and Hill-Jackson (2008), teachers—particularly those in urban settings—are experiencing challenges caused by personal cultural ideas and practices that disrupt their ability to relate to their students and student families culturally, and this leaves the teachers, students, and parents frustrated. Variances in experiences and lack of interaction with urban students may contribute to the inability of some rural and suburban born White teachers to connect with diverse students (Watson, 2012). Tran, Garcia-Prieto, and Schneider (2011) reported that social identity is the aptitude to acknowledge one's ability to belong to particular social groups collectively with emotional and value consequences to a group with two or more people of the same social category

(i.e., minority or non-minority). For example, suburban teachers may misinterpret urban appropriate language (slang) as academic inappropriate defiance that leads to teacher-student conflicts resulting in lost instructional time due to referrals or suspensions (Long, 2012). Tran et al. (2011) reported that intergroup context could build self-worth by maximizing differences between in-groups and out-groups, and this leads to self-efficacy. In other words, the more cultural similarities that rural and suburban born teachers and urban students can discover about each other, the more culturally connected they will become.

According to Gehrke (2005) and Schultz (2014), the urban setting is the site of the majority of America's poorest students where many student needs are so complex that they create financial burdens on district resources that otherwise would support initiatives such as class size reduction and tutoring services. Gehrke and Schultz believed that effective teaching is the result of a combination of strategies, materials, student individualities, and teacher characteristics that aid student learning. Love and Kruger (2005) reported that effective teachers are able to use students' cultural backgrounds and personal experiences to cultivate an environment that shares information and uses student experiences to create culturally responsive lessons to improve academic progress. Alderman and Green (2011) suggested that social competence and self-awareness are also required to influence the inner-city communities. For example, some rural and suburban born teachers believe that urban students are academically inferior to their suburban counterparts, resulting in rural and suburban born teachers lowering their expectations for achievement among urban students in the classroom (Jacob, 2007; Milner & Tenore, 2010). A rural or suburban born White teacher who is socially competent will rebut his or her maladaptive thinking regarding the learning capabilities of urban students and be mindful not to reduce his or her academic expectations

for urban students. Creating social competence leads to becoming individuals who can be more effective in urban classrooms (Milner & Tenore, 2010).

Gehrke (2005) argued that the success of an urban teacher is associated with the teacher's personal factors that have a substantial amount of influence on student academic progress. These factors include self-awareness and self-reflection, a strong knowledge base, and high expectations. Being self-aware allows effective teachers to develop coping skills that can improve their ability to understand the living conditions of urban students who often lack basic needs. Howard (2001) reported that teachers' behavioral practices in the urban classroom should reflect their students' home environment, accomplished by lessons associated with the student's personal traditions and backgrounds to improve student outcomes. According to "Now Home-schooled Black Children" (2005), more Black families are home schooling their children because of poor the performance of public schools in Black communities, increased violence on school campuses, and the desire of devout parents to avoid non-spiritual philosophy in the public schools. Additionally, this move to home schooling has shown a measurable benefit to Black K-12 students because home-schooled Black students have received scores on the Iowa Assessment Test equal to White home-schooled students in reading and slightly lower in math, and, notably, the math scores were 20% higher than Whites in public schools. Howard's conceptual ideas of teacher effectiveness were congruent with those of Alderman and Green (2011), Gehrke, and Tintiangco-Cubales et al. (2014), who argued that effective teachers are able to use their students' cultural traditions to develop culturally-relevant pedagogy. Teachers who are capable of developing culturally-relevant pedagogy will use students' cultural experiences to develop more engaging instructions to pique student interest while raising the teacher's

personal expectations that can lead to better student outcomes (Gay & Howard, 2000; Jacob, 2007; Long, 2012; Milner & Tenore, 2010; Tintiangco-Cubales et al., 2014).

Gehrke (2005), Jacob (2007), and Schultz (2014) suggested that urban teachers require strong subject matter knowledge to provide differentiated instruction because of the uniqueness of their students. Teachers also need to exhibit openness, a personality trait measured by the BFI, toward the students' conditions because many impoverished students may experience challenges, such as hunger, fatigue, and fear, that teachers may not be receptive to because of their lack of experience or cultural unawareness (Gehrke, 2005; Jacob, 2007; Schultz, 2014). Effective teachers are capable of building relationships with their colleagues, families, and communities by providing social, personal, and emotional resources for students who are lacking the necessities for life (Jacob, 2007). Researchers believe that without vital resources, teacher strategies, materials, and relevant pedagogy are worthless (Gehrke, 2005; Howard, 2001; Shaw, 2012; Tintiangco-Cubales et al., 2014). Despite the challenges that urban students who live in poverty may face, teachers are not social workers and cannot change students' conditions. However, teachers who exhibit high levels of personality characteristics measured by the BFI, such as Extroversion, Agreeableness, Conscientiousness, and Openness, could still offer students some form of support by exhibiting behaviors that allow their students to have a sense of belonging (Howard, 2001; Tintiangco-Cubales et al., 2014).

Many researchers and educators agree that successful teachers in urban settings have high expectations for all students regardless of the students' cultural background, socioeconomic status, or linguistic challenges (Gay & Howard, 2000; Gehrke, 2005; Howard, 2001; Love & Gruger, 2005; Tintiangco-Cubales et al., 2014). For example,

Castillo, Fernández-Berrocal, and Brackett (2013) believed that effective teachers encourage positive interactions that can influence a wide range of students despite adverse economic circumstances. Castillo et al. reported that teachers who can create an optimal learning environment that includes adequate communication amongst all stakeholders in the classroom could increase student academic progress. Many theorists (Gehrke, 2005; Milner & Tenore, 2010; Wrenn, 2005) have also reported that ineffective teachers lower their expectations for urban students out of the belief that urban students are inferior because of their traditions, financial status, and language barriers which makes achievement gap closures impossible regardless of evidence-based reforms. Theorists (Donaldson, 2013; Fuller et al., 2011; Gay & Howard, 2000; Gehrke, 2005; Howard, 2001; Ingle & Rutledge, 2010; Love & Kruger, 2005; Milner & Tenore, 2010) have posited that teacher success in urban schools is a reflection of teachers' personal characteristics, cultural competence, and other personality characteristics that are not associated with preparation programs or content knowledge measured by aptitude testing.

Some theorists have opined that teachers need certain personality characteristics to succeed in the urban setting, and personality testing for pre-employment screening for other professions is used globally (Donaldson, 2013; Fallaw & Kantrowitz, 2013; Fuller et al., 2011; Gay & Howard, 2000; Gehrke, 2005; Howard, 2001; Ingle & Rutledge, 2010; Love & Kruger, 2005; Milner &Tenore, 2010). Milner and Tenore stated that the predominately-White teaching community must rebut its personal ideas on teaching the increasingly non-White student population and become more accepting of the capabilities of urban students. Despite the claims that White teachers needed experience working in an urban environment to be successful, Young (2009) suggested that teachers with early

experience working in urban neighborhoods are no more successful than those without such experience. Young noted that great teachers reflect on their lessons and look inward to improve their classroom performance. This inward focus would include maximizing teachers' personal characteristics and attributes in service of their urban students.

Rural and suburban born teachers are capable of being successful teaching in the urban schools if they can practice Agreeableness, Conscientiousness, Extroversion, and Openness. The Agreeableness personality characteristic in a suburban born teacher will provide the teacher with a sense of humility and allow him or her to keep expectations high for urban students, despite the conditions associated with poverty (Gehrke, 2005; Milner & Tenore, 2010; Wrenn, 2005. Conscientiousness is a characteristic that rural and suburban born teachers need to possess to become culturally conscious of the similarities they share with urban students that can build trust and reduce cultural conflicts while connecting with their students positively, and this is characteristic of Extroversion. If rural and suburban born White teachers show the Openness characteristics with respect to rebutting their personal ideas, they could be more effective teaching students in urban schools.

Teaching Success in the Suburban Setting

Teacher effectiveness in a suburban setting has not been questioned as strongly as teacher effectiveness in urban settings because suburban school teachers commonly have been educated at highly competitive colleges and universities, typically completing credentialing programs and usually passing certification exams (Jacob, 2007). Unlike teachers in urban schools, suburban teachers typically have more experience, and suburban districts rarely use long-term substitute teachers to fill hiring gaps (Jacob, 2007). Although suburban public schools generally do not have difficulties attracting high quality teachers, the

need to understand cultural diversity still exists because students of color also attend suburban schools. Welton, Diem, and Holme (2013) reported that suburban public schools have experienced an increase in student populace of 3.4 million since 1990, due almost entirely to the enrollment of minority students. Research has shown that some suburban schools are not reacting to demographic changes to their student population or changing their personal ideas of low academic expatiations for students of color (Welton et al., 2013). Minority groups who move to suburban communities for better schools are now facing the same low expectations for students of color in urban schools.

According to Watson (2012), teachers use superficial behaviors, principles, and views of students' socioeconomic status, language, and country of origin to decide the academic expectations and standards for student placement. For example, teachers had higher academic expectations for students who appeared affluent (Watson, 2012). The more a student appeared to live in poverty, be a language learner, or come from a different country of origin, the lower the academic expectations the suburban teacher would have for that student (Watson, 2012).

Race and gender are dichotomous factors to suburban and urban settings because of the cultural mismatch or racial stereotyping of teachers who are predominantly White and female (Skiba et al., 2011). According to Skiba et al., the behavior patterns of Black males in the classroom are unfamiliar to White teachers who interpret impassioned or emotional interaction as antagonistic and confrontational. Black students experience out-of-school suspension and expulsion more frequently than do White students, and this puts Black students at risk for numerous negative outcomes such as limited opportunities to learn, poor

academic performance, and school dropout despite the location of their schools (Ferguson, 2001).

Figure-One shows the achievement gaps in science between urban and suburban students in support of previous statements of inequality between urban and suburban schools. Note the universally lower scores for minorities (except Asians) as well.

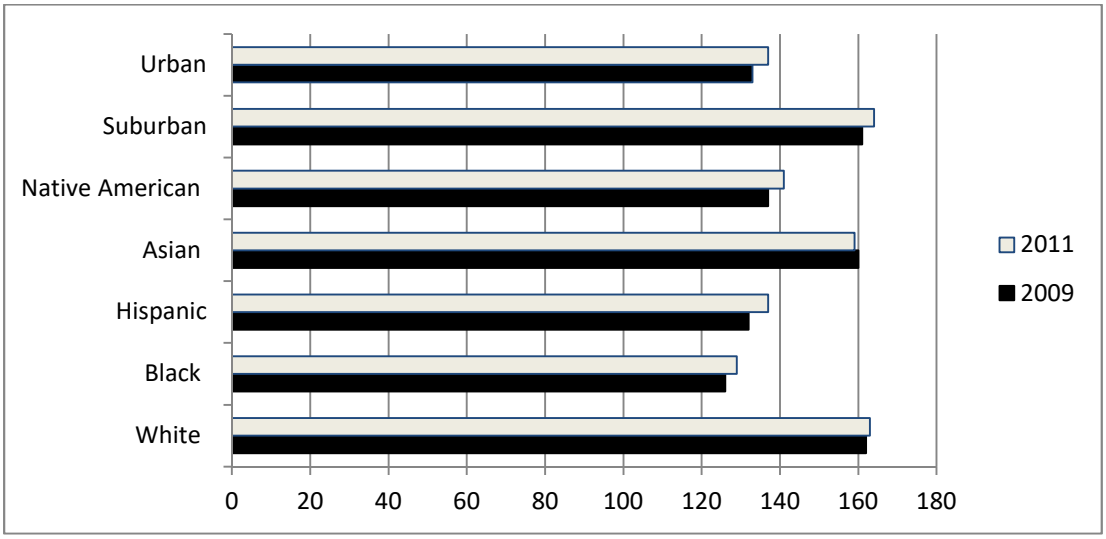

Figure 1. Eighth grade science scores by race and income.

The requirements for employment and the title of Highly Qualified teacher in urban and suburban schools are the same, and the majority of K-12 teachers are rural or suburban born White females who consciously or unconsciously have lower academic expectations for minority students (Darling-Hammond, 2012; Jacob, 2007; Milner & Tenore, 2010; Skiba et al., 2011; Watson, 2012). In addition, Ispa-landa and Conwell (2015) believed that the racial classifications of schools are stereotypically similar to students; urban schools are characterized as schools in communities of disorder and dysfunction, and suburban schools

are located in safe and secure communities. These assertions provide an argument that ineffective teachers and urban school locations can negatively influence student outcomes.

The current processes for hiring teachers have not been reliable for identifying new highly effective teachers, and certification score predictability for teacher effectiveness has been minimal (Rockoff, Jacob, Kane, & Staiger, 2008). Decades of Freudian and Jungian dominated theories have transitioned into simple empirical measures of vital dimensions of personality. Predicting job performance across various occupations has been accomplished by the BFI factors that show a link between Conscientiousness and positive job performance, and Extroversion and success in jobs requiring social interaction. Globally, personality testing ranked second for pre-employment screening in all industries in 2013 (Fallaw & Kantrowitz, 2013).

The majority of teacher certification programs focus on teaching student teachers' student engagement, classroom management, and differentiated instruction for language learners and student with special needs, and then provide a supervised platform for student teachers to practice their learned skills in a real classroom (Darling-Hammond, 2012). According to Okhremtchouk, Newell, and Rosa (2013), teachers must also demonstrate the ability to develop purposeful lesson plans that offer adaptations and accommodations that support student progress at the student's academic level on a Teacher Practice Assessment. Unfortunately, student teachers are not required to perform their student teaching in all settings. For this reason, some teachers believe that their certification programs did not properly prepare them to teach in all settings, notably in settings that differ from the teacher's own cultural setting (Darling-Hammond 2012; Jacob, 2007).

The Validity of the 44-Item Self-report BFI

In 1936, Allport and Odbert extracted 18,000 personality-describing words from the most comprehensive dictionaries, and 4,500 personality-descriptive adjectives that they believed to describe observable personality traits (as cited in John ey al., 2008). A decade later, Cattell analyzed Allport's and Odbert's list of descriptive words, and then he reduced the words into 181 clusters (as cited in John et al., 2008). Cattell then asked participants to rate people by the adjectives on the list and hypothesized those personal descriptions using 16 different independent factors (as cited in John et al., 2008). In 1981, Goldberg, Takamoto-Chock, Comrey, and Digman reviewed what the most current personality test was then and concluded that the test that held the most value had measured a subset of five common factors similar to Norman's five orthogonal easily understood personality factors (Goldberg, 1981; Norman, 1963). The Lexical Hypothesis suggested that people's personality characteristics of importance will reflect their language, while findings in theoretical research led to a five aggregate- level descriptor, which is known as the Five Factor Model or Big Five (Goldberg, 1981; John et al., 2008).

The reliability and validity of the BFI derived from the work of John and Srivastava in 1999. John et al. (2008) compared the 44-item self-report BFI with the Neuroticism Extroversion Openness Five Factor Inventory (NEO-FFI) developed by Costa and McCrae (1992) and the scales on both the BFI and the NEO-FFI had a significant mean correlation (Martin, 2011). John et al. reanalyzed DeYoung's (2006) data and found that the self-report BFI ratings had validity correlations with the NEO-FFI and TDA.

According to DeYoung et al. (2010), behavioral psychology has encouraged an orderly methodology to acquire knowledge of individualized variances in behaviors, emotions, motivations, and cognitions, through the growth of wide-ranging classifications of

effective characteristics. A limiting number of principal factors accounts for much of the discrepancy in personality trait collaborative variations. Personality psychologists have reached a working agreement that personality traits can be widely theorized and reliably measured in terms of five qualities: Agreeableness, Openness, Neuroticism, Conscientiousness, and Extroversion (Gerber et L., 2010). John et al. (2008) reported that the 44-item BFI was a reliable instrument when compared to Trait Descriptive Adjectives (TDA) and Neuroticism Extroversion Openness, Five Factor Inventory (NEO-FFI). The mean of the alphas for all instruments are compatible with the TDA scales at .84, the BFI scales .83, and the NEO-FFI .81. Across instruments, Extraversion, Neuroticism, and Conscientiousness were measured and showed the most reliability with all scales above .80 (John et al., 2008). Agreeableness and Openness are less reliable, with the instrument with the lowest reliability being the NEO-FFI (John et al., 2008).

Denissen and Penke (2008) suggested that the BFI is an essential personality characteristic measure that predicts an individual's variances in behavior, as they relate to social cues. According to Denissen and Penke (2008), many theorists saw the measurement of the BFI as adaptive levels of peoples' beliefs, whereas MacDonald (1995, 1998) and Nettle (2006) used chronological theoretic data to develop areas of the BFI dimensions, as they relate to one behavior tendency. Ashton and Lee (2007) hypothesized the BFI can effectively predict differences in personality, as individual tendencies for behavior will reflect the individual's deeds; while McCrae and Costa (1996) believed that it influences an organization's perceptions, moods, and behaviors (Denissen & Penke, 2008; Pillow, Malone, & Hale, 2015). To understand the BFI from a theoretical perspective requires scrutiny of each of its dimensions as shown in Table 3.

Table 3

Big Five Inventory factors.

Extroversion	Vibrantly approaching the social and material world using kindness, activity, and positive emotionality characteristics (Gerber et al., 2010).
Agreeableness	A positive social shared alignment toward others characteristics such as unselfishness, trust, and humility (Gerber et al., 2010).
Conscientiousness	A public desire to control task-directed and goal-directed behavior, Such as thoughtfulness before action, delayed gratification, following rules and procedures, forecasting, and listing task (Gerber et al., 2010).
Openness	A personality characteristic specific to an individual who exhibits wide interest, and who is imaginative and insightful (John et al., 2008).
Neuroticism	A personality characteristic specific to an individual who is tense, moody and anxious, as opposed to calm and in control (John et al., 2008).

Extroversion. Extroversion is a collection of positive behaviors that classify tendencies to engage in social behaviors showing leadership potential, power, and dominance to achieve rewards in the presence of others (Denissen & Penke, 2008; DeYoung et al., 2010). According to DeYoung et al., social status was the reward frequently gained by Extroversion. Wright et al. (2006) supported the idea that extroversion is a positive personal

social interaction that is sensitive to personal cues in a situation. If a teacher has a personality that is high in Extroversion, then he or she would be more likely to be able to create a positive classroom environment.

Agreeableness. According to Denissen and Penke (2008), clarifications for agreeableness have linked Agreeableness to friendly public sociability, while other definitions have focused on parental investment in family closeness as the nucleus of this trait. Agreeableness is a key factor of extroversion because of the link to social appreciation. Agreeableness allows individuals with opposing views of behavior, such as direction versus disapproval, cooperative versus competitive, and confidence versus selfishness, to cooperate (Denissen & Penke, 2008). If a teacher has a personality that is high on Agreeableness, then he or she would be more likely to be able to create a positive classroom and develop a relationship with the students and their families.

Conscientiousness. Conscientiousness has typically referred to performance-based behaviors that are associated with a work atmosphere (Denissen & Penke, 2008; De Young et al., 2010). However, in a more in-depth look at these behaviors, DeYoung et al. found that conscientiousness is the propensity for people to practice discipline toward rules and/or transitional objectives. DeYoung et al. suggested that behaviors like organization, restraint, and self-will are acts of people who have Conscientiousness. Having Conscientiousness relates to perseverance and tenacity toward achieving goals (Denissen & Penke, 2008). If a teacher has a personality that is high on Conscientiousness, he or she would be more likely to have well organized lessons and strong classroom management.

Openness. Wrenn (2006) suggested that people who are high on openness focus on training and furthering their education. Openness reflects the propensity to process

theoretical and perceptual information that encourages imagination, curiosity, and intelligence (DeYoung et al., 2010; Wrenn, 2005. DeYoung et al. suggested that Openness is associated with anatomical differences in some or all of the brain structures involved in the regulation of working memory, attention, and reasoning, which is congruent with the opinion of Denissen and Penke (2008) who argued that Openness requires a high level of cognitive activity. If a teacher has a personality that is high on Openness, then he or she will continue to learn how to improve his or her skills as a teacher.

Neuroticism. Neuroticism has been seen as the result of people's differences in distress regulation or the ability to cope with stress (Denissen & Penke, 2008). Wright et al. (2006) reported that Neuroticism is a personality trait that exhibits consistent moodiness and anxiety, and expresses negative cues in the atmosphere. Wrenn (2005 argued that individuals with low Neuroticism scores are more likely to show emotions such as calmness, security, relaxation, and stress-tolerance.

The BFI has been used in many industries to evaluate or predict performance, and this has validated the Big Five as a predictor of employee job performance. Leutner, Ahmetoglu, Akhta, and Chamorro-Premuzic (2014) studied the relationship between the entrepreneurial personality and the Big Five personality traits and found that the BFI significantly predicted diverse forms of entrepreneurial success. Zaccaro (n.d.) reported that personality assessments are valuable for identifying flaws and valued traits, as ignoring personality during senior executive selections is considered foolish because an individual's personality drives his or her leadership style. According to Zaccaro (n.d.), leadership effectiveness has shown a significant correlation with all the dimensions of the BFI excepting Agreeableness.

Myers Briggs Type Indicator

According to Cooper et al. (2012) and Pillow et al. (2015), the Myers Briggs Type Indicator (MBTI) is the most well-known and used personality assessment worldwide. Fallaw (2013) reported increases in the uses of personality testing such as the Myers Briggs Type Indicator for prescreening employment candidates by human resources personnel from 2009 to 2013. In 1923, Jung determined by observation that individuals have regular differences that were not attributable to their psychopathology (as cited in Quenk, 2009). At first, he thought there were two distinctive attitude types, extrovert and introvert. After further investigation, he determined that other attitudes were at work, which prompted him to add other mental functions: sensing- intuition, thinking-feeling, and judging-perceiving (as cited in Quenk, 2009).

According to Cooper et al. (2012), Myers and Briggs developed a test for understanding Myers's personal relationship. The pair used Jung's work with psychological types to create a four-group dichotomous scale construct. Montequin, Balsera, Fernandez, and Nieto (2012) suggested that the Myers Briggs Type Indicator explains the variations of human behavior by placing such behaviors into four groups of mental functions. These variances explain how people favor their focus of attention, seek information, make decisions, and relate to the world.

Focus of attention. An individual's focus of attention can yield two opposing behaviors: Extroversion and Introversion. Extraverts seek comfort from personal interactions with the outside world; they live to meet new people, express their thoughts outwardly, and prefer to work in groups and not alone (Montequin et al., 2012; Rushton et al., 2007). On the other hand, introverts appear to be at their best when they are alone, and they prefer to work that way (Montequin et al., 2012). Unlike the Extravert, the Introvert contains his or her

thoughts, ideas, and concerns for inward processing before expression outwardly in meaningful conversations (Rushton et al., 2007).

Seeking information. According to Montequin et al. (2012), the way people seek information can be dichotomously expressed by Sensing or Intuition. People who are Sensing prefer to focus on the facts and details, and seek to make sense of data associated with the outside world (Montequin et al., 2012; Ruston et al., 2007). People who are Intuitive rely on intuition, speculation, possibilities, and imagination. Their primary focus is the big picture and the abstract at the expense of detail (Ruston et al., 2007).

Decision Making. Thinking and Feeling negotiate the variance in human behavior associated with decision-making. Montequin et al. (2012) suggested that people who are thinking make decisions by using sound judgments, laws, and policies. People who use Feeling to make decisions are more considerate of others' emotions and views based on values, piety, sympathy, and harmony, and they consider emotions and opinions (Montequin et al., 2012; Rushton et al., 2007).

Relating to the World. Judging and Perceiving are how people relate to the outside world. According to Montequin et al. (2012), people who identify as Judging are outcome oriented, structured, and decisive. Ruston et al. (2007) suggested that Judging types are orderly, organized, and self-disciplined, while Perceiving types are flexible and adaptive. People who perceive require additional information before they can make decisions or consider a new event.

The BFI Versus the MBTI

Big Five Inventory

Harvey et al. (1995) reported that the BFI taxonomy and the MBTI are different in origin; however, four dimensions on both scales have a correlation despite the fact one

assessment measures variances in behavior and the other measures typology. The BFI narrows down variances in behavior from four dichotomous groups like the Myers Briggs Type Indicator to the Five Factor Model. For example, the E and I (Extroversion and Introversion) in the Myers Briggs Type Indicator can be measured on the E (Extroversion) scale of the BFI. The scores by comparison suggest that both people who need others (E) and those who prefer their independence from the world (I) can also reflect their emotional intensity to show dominance, power, and sensitivity in most situations, which is the measure of Extroversion in the BFI (Denissen & Penke, 2008; DeYoung et al., 2010; Harvey et al., 1995; Wright et al., 2006).

According to Harvey et al. (1995), S and N (Sensing and Feeling) on the Myers Briggs Type Indicator scale are not completely synonymous with the Big Five's Openness dimension. The authors suggest that Openness on the BFI scale is most like the N (Intuition) scale on the Myers Briggs Type Indicator, and does not match the S (Sensing) scale of the Myers Briggs Type Indicator. The BFI Openness scale reflects the individual need for innovation and self-improvement, imagination, and the big picture, which is an N quality measure on the Myers Briggs Type Indicator (Harvey et al., 1995; Rushton et. al., 2007; Wrenn, 2005).

The T and F (Thinking and Feeling) scale on the Myers Briggs Type Indicator is very comparable to the Agreeableness scale on the BFI (Harvey et al., 1995). The Myers Briggs Type Indicator looks at decision making as dichotomous behaviors that are expressions of facts, laws and policies, or empathy for other's values, the show of piety, and expression of emotions (Montequin et al., 2012; Ruston et al., 2007). The Agreeableness scale in the BFI is dichotomous in its expression because the decision influences are personal gain in the form

of social acceptance, and/or cultivating family closeness (Denissen & Penke, 2008; Holmes, 2002; Nettle, 2006).

According to Harvey et al. (1995), the last compatible dimensions between the BFI and the MBTI are the correspondence of Judging and Perceiving with Conscientiousness. The J and P scale on the Myers Briggs Type Indicator reflects how people relate to outside entities with their structure and outcome orientation (J) or (P) their organization and discipline (Montequin et al., 2012; Rushton et al., 2007). The Conscientiousness scale on the BFI measures individual performance, which would correlate with the ability to organize, maintain focus, and practice self-discipline for the purpose of achievement (Denissen & Penke, 2008; DeYoung et al., 2010).

Fundamental Interpersonal Relationship Orientation

Sullivan (1953) and Pillow et al. (2015) defined personality itself as a social wonder. They saw personality as a stable arrangement of social activities that arise from interacting with others, mostly during vital developmental stages. According to Sullivan and Pillow et al., interpersonal abilities and the sense of self are products of human interaction. Ahmetoglu, Charmorro-Premuzic, and Furnham, (2010) suggested that the Fundamental Interpersonal Relationship Orientation instrument is able to predict leadership capacity and management qualities. The Fundamental Interpersonal Relationship Orientation (FIRO) is a three-group dichotomous assessment theorized by Shultz in 1958 that measures interpersonal needs for inclusion, control, and affection. The measure explains how individuals receive and express inclusion, control, and affection from the outside world (Furnham, Crump, & Charmorro-Premuzic, 2007; Pillow et al., 2015).

Inclusion. Inclusion measures a need to sustain a relationship with other people, to be included in their events, or to include them in one's own personal activities. Some people

seek to belong to a group, while others prefer solitude in their own environment. Personal behavioral variances between tendencies toward introversion and extroversion have benefits. However, individuals' benefits differ by their need for inclusion, which includes the need for involvement with others, or Expressed Inclusion (EI), and the need to be included by others, or Wanted Inclusion (WI; Furnham et al., 2007).

Control. According to Furnham et al. (2007), the need for control is an interpersonal need to sustain equal levels of power and influence in a relationship. Many people need to exert control over others, while maintaining independence from them. Per Furnham et al., some people need controlling while maintaining their freedom and individual preference. The variances of individual differences derive from the magnitude of the need to control others, or Expressed Control (EC), and the desire for a power exchange with others, or Wanted Control (WC).

Affection. Furnham et al. (2007) suggested that affection is the need to create closeness in personal relationships with others. These needs maybe expressed physically and romantically with warmth, intimacy and love. Personal bonds with others can be overwhelming when people become overcommitted. Wanted Affection (WA) varies from person to person, which can be overwhelming if any individual scores high for Wanted Affection and his or her partner scores low in Expressed Affection (EA). According to Furnham, people should maintain a balance between increased levels of affection and independent needs.

The BFI Versus the Fundamental Interpersonal Relations Orientation Assessment

According to Mahoney and Stasson (2005), comparing the BFI with the Fundamental Interpersonal Relations Orientation assessment (FIRO) shows the relationship that

personality has with interpersonal needs. The researchers recruited 192 students who were 57% White, 25% African-American and 18% Hispanic, and a small number of Asian students from a university in an urban setting for their study. The participating students received a packet containing the BFI and Fundamental Interpersonal Relations Orientation constructs and computer answer sheets. The results of the BFI and Fundamental Interpersonal Relations Orientation comparison show an optimistic correlation with Expressed Affection and Wanted Affection with Extraversion, Agreeableness, and Openness scales from the BFI, and this suggests a positive social interaction that is common to personality and interpersonal dimensions. On the other hand, Wanted Inclusion and Expressed Inclusion had an explicit correlation with Extraversion. However, the Expressed Inclusion relationship with Agreeableness was significant, while the Wanted Inclusion relationship with Openness was meaningful. The other positive correlation among personality and interpersonal skills was the positive relationship between Wanted Control and Expressed Control with Neuroticism.

Selecting an Assessment Instrument

The MBTI is the most commonly used personality test in corporate American; in fact, it has also had been the assessment of choice in the field of education to investigate teacher effectiveness (Cooper et al. 2012; Fenderson, 2011; Rushton et al., 2007). The downside to the MBTIs that it categorizes behavior into 16 typologies and works best with career development (Fenderson, 2011; Rushton et al., 2007). The Fundamental Interpersonal Relationship Orientation can predict leadership capacity and management qualities, which is not the focus of this study (Ahmetoglu.et al., 2010). On the hand, the BFI is best for determining job performance and success, and simplifies the factors of the Myer Briggs into

five factors that can be more user friendly with pre-employment screening (DeYoung et al., 2010; Fenderson, 2011). The BFI is most effective at predicting job performance and not career path, which makes it more appropriate for this study when compared to either the Myers Briggs Type Indicator or the Fundamental Interpersonal Relationship Orientation assessment.

The Utility of the BFI

According to Overman (2012), organizations are now considering bio data, social media presence, and personality testing before hiring personnel. However, the wrong data are often measured. For example, 60% of organizations use credit checks, while other companies screen out suitable candidates because of frequent job-hopping; however, no statistical research has shown a correlation between credit rating and job performance or any performance predictive values among job hoppers (Overman, 2012). Furthermore, many organizations screen for personalities, aptitudes, work ethics, technical skills, and job-fit to predict performance (Overman, 2012; Pillow et al., 2015). Gardner et al. (2012) agreed that a personality measure for job-screening purposes is a good method of matching applicant attributes with organizational culture. Unfortunately, the educational system has placed more importance on teacher credentialing programs that have not guaranteed teacher effectiveness than it has on personality (Dobbie, 2011. Unfortunately, there are no reports in the literature about personality testing being employed to better select teachers.

Summary

Policymakers and researchers are continuously looking for ways to improve K-12 education with the teacher as their primary focus (Zhang, 2008). According to Darling-Hammond and Berry (2006), the standards for quality teachers are higher than ever;

yet, the practice difficulty among urban educators is teaching students with a wide range of educational needs, which is a tremendously complex, knowledge intense responsibility that requires both personal and professional skills. However, teacher qualities and personality characteristics are rarely researched for contextual influence (Sachs, 2004). Haberman (1995) argued that having an effective teacher in every classroom is paramount to the future academic achievement of all students. However, the challenges facing teachers in the urban setting require unique characteristics to enable teachers to educate all students despite the students' socioeconomic standing, traditions, situations, and life skills (Brainbridge & Lesley, 2002; McKinney, Haberman, Stafford-Johnson, 2008). It is, therefore, imperative to identify teachers who have characteristics congruent with success in urban classrooms in order to preferentially place them where they are most needed.

Literature associated with hiring effective teachers highlights budgetary cutbacks, insufficient resources, and selection tools as the primary concerns for employing effective personnel (Jacob, 2007. Despite funding issues, the teacher selection process is inadequate because of its reliance on cognitive test results, certifications, and credentialing programs to identify highly qualified teachers, which is required by the No Child Left Behind Act of 2001(Coulson, 2010; Ingle & Rutledge, 2010; Papay, 2012). Findings show that some administrators have success selecting effective teachers whose education paths mirror that of the administrator's, but this method of personnel selection is unreliable (Donaldson, 2013; Fuller et al., 2011; Ingle & Rutledge, 2010).

Many theorists have posited that teacher success in urban settings is more dependent on behavioral attributes than credentialing factors, such as aptitude testing and certifications. Teachers with ethical understanding, self-awareness, cultural consciousness and empathy for

their students are more effective in the classroom (Gay & Howard, 2000; Howard, 2001, 2008; Howard & Obidiah, 2005; Ladson-Billings, 2000; Milner & Tenore, 2010; Tintiangco-Cubales et al., 2014). Researchers and educators believe that effective teachers are capable of building relationships with stakeholders, simulating home-like environments, finding vital resources, and maintaining high expectations for all students regardless of students' cultural background, economic status, and/or linguistic challenges (Gay & Howard, 2000; Gehrke, 2005; Howard, 2001; Love & Kruger, 2005). The reality is, teacher job performance in urban schools depends on teachers' personal characteristics, cultural competence, and other personal attributes (Donaldson, 2013; Fuller et al., 2011; Gay & Howard, 2000; Gehrke, 2005; Howard, 2001; Ingle & Rutledge, 2010; Love & Kruger, 2005; Milner, 2006; Tintiangco-Cubales et al., 2014). Watson (2012) and Milner and Tenore (2010) believed that teacher ineffectiveness lies in their White rural and suburban cultures, and these are different from the culture of students who are non-White, English-language learners, and poor. Most white teachers have limited exposure to the urban community, which impedes them from engaging their students effectively (Milner & Tenore, 2010).

The BFI correlates with the MBTI and FIRO. However, the Big Five is the most simplistic, as the MBTI has 16 personality types that require scoring and interpreting, and the FIRO assesses interpersonal relationships and does not describe behavioral tendencies, which makes the BFI more appropriate for this study. The utility of personality assessments for personnel screening is on the rise, and researchers have found that these assessments play an increasingly vital role in the workplace (Sy et al., 2006; Pillow et al., 2015).

The hiring process for K-12 teachers is broken, and implementation of the NCLB Act requirements has not resulted in meeting the needs of many students. Many ineffective

teachers are entering classrooms because the NCLB Act requirements for highly qualified teacher are weak and cannot predict teacher effectiveness. Personality assessments have been linked to job performance, and when used appropriately can be a valid and reliable tool for hiring more effective employees, including teachers (Gardner et al., 2012).

CHAPTER III: METHODS

The purpose of the study was to evaluate the relationship between specific personality characteristics of highly effective teachers in urban and suburban school settings. Understanding the specific personality characteristics of highly effective teacher could be vital to urban and suburban teacher effectiveness because the students they serve have different racial, educational, cultural, social, and economic backgrounds. Additionally, understanding specific personality characteristics that are unique to school location could lead to hiring teachers who can influence particular students' outcomes (Darling-Hammond, 2012; Hughes, 2014; Jacob, 2007). This chapter focuses on describing the methodology requirements for evaluating the relationships between specific personality characteristics of highly effective teachers in urban and suburban school settings, and this includes the research design, research question and hypotheses, population and sample, ethical concerns, instrument, data collection, data analysis, and validity.

Methodology

According to Cohen, Manion, and Morrision (2005) and Turner et al. (2013), a quantitative research design explains a phenomenon by collecting numeric data that is analyzed by mathematical statistics. Quantitative methods make post-positivist assumptions to identify factors that will influence a resolution, the effectiveness of intervention, or the understanding of the best predictor of outcomes (Turner et al., 2013). Jamison (2010) and Turner et al. (2013) suggested that the goal of quantitative research is to gather numerical data for objective awareness by using strategies, such as surveys and non-experimental and experimental designs, to measure attitudes and rate behaviors. Quantitative research uses several data collection techniques such as closed-ended questions and pretest and posttest

measures of attitudes to capture data that can influence a decision (Turner et al., 2013). The research question drives the need for data, which drives the need for the design. The design drives the data collection process, which drives the need for the analytical procedure used (Jamison, 2010; Turner et al., 2013).

Alternatively, qualitative research designs use philosophical assumptions of constructivist claims of individual accounts socially and historically with the intent to advocate claims or participatory perspectives. Qualitative research designs employ strategies of inquiry such as open-ended survey questionnaires, interviews, and text or image data to enact change or reform from contextual information (Jamison, 2010; Turner et al., 2013).

Though qualitative research designs have benefits, qualitative methodologies typically do not use numeric data to explain research phenomenon. This study sought to describe the specific personality characteristics of highly effective teachers in urban and suburban school settings, and explain the statistical relationships (Jamison, 2010; Turner et al., 2013).

A non-experimental, descriptive, correlational design was used in this study because neither experimental nor quasi-experimental design could not address the research question. The independent variable (school location) was not manipulated by a random process or research control because teachers self-selected their sites for employment (Fenderson, 2011; Jamison, 2010; Turner et al., 2013). A non-experimental design was used in this study because descriptive-correlational research emphases are on documenting the characteristics, frequency, and intensity of a phenomenon, and they use numerical data to explain the relationship that may exist between the variables (Jamison, 2010). The mean percentile for all five dimensions of the BFI results were used to describe the specific personality

characteristics of the Teachers of the Year based on either their urban or suburban group affiliation (Jamison, 2010; Turner et al., 2013). However, to explain the relationship between the independent variable required a correlation design (Jamison, 2010; Turner et al., 2013). A quantitative design was also required because the researcher sought to evaluate the relationship of specific personality characteristics of highly effective teachers in both urban and suburban school settings.

The 44 item BFI developed by Oliver (2009) was used to describe the specific personality characteristics of highly effective teachers in urban and suburban school settings. The correlational analysis determined if a relationship existed between the specific personality characteristics of urban and suburban groups by rejecting or accepting the null hypotheses (Turner et al., 2013). Understanding a relationship between personality characteristics and urban and suburban highly effective teachers could be a valuable resource for administrators to use when selecting employees for specific school locations, and it could help teachers make better decisions on their place of employment. The determination of whether or not a correlation between specific personality characteristics of highly effective teachers in both urban and suburban school settings existed, ordinal numeric data was collected, which is why a quantitative design was most appropriate for this study (Jamison, 2010; Turner et al., 2013).

Research Questions and Hypotheses

Research Questions

The purpose of the research was to find solutions for existing problems. The problem this research intended to address was the challenge of identifying specific personality characteristics of effective teachers in urban and suburban school settings. Without a clear

understanding of the specific personality characteristics of highly effective teachers, administrators will continue to hire ineffective teachers in urban and suburban school settings who will continue to impede the academic outcomes of students (Hughes, 2014). To address this problem, the numeric results from the BFI were used to answer the following questions:

RQ1. What is the relationship between the personality characteristic Extroversion and the school location of highly effective teachers?

RQ2. What is the relationship between the personality characteristic Agreeableness and the school location of highly effective teachers?

RQ3. What is the relationship between the personality characteristic Conscientiousness and the school location of highly effective teachers?

RQ4. What is the relationship between the personality characteristic Openness and the school location of highly effective teachers?

RQ5. What is the relationship between the personality characteristic Neuroticism and the school location of highly effective teachers?

The purpose of the study was to evaluate personality characteristics of teachers in two different school settings. A potential use of the data is to introduce the BFI into the hiring process for teachers in public schools. The five attributes of personality as measured by the BFI will be evaluated to generate more obvious evidence of personality characteristics of effective teachers in urban and suburban school settings. These profiles will be investigated to determine the nature of the relationship between specific personality characteristics and school location of highly effective teachers.

Hypothesis 1: Extroversion

H1o = There is no relationship in measures of Extroversion between highly effective teachers in the urban schools and highly effective teachers in the suburban schools.

H1a = There is a relationship in measures of Extroversion between highly effective teachers in urban schools and highly effective teachers in suburban schools.

This researcher believes that both urban and suburban highly effective teachers will score high on Extroversion because, in Fenderson's (2011) study, the National Teachers of the Year candidates' scores were high for this personality characteristic. However, this research predicted that highly effective teachers in the urban group would score higher in Extroversion than their suburban counterparts. The higher score in Extroversion would be due to the diversity of the urban students requiring urban teachers to exhibit and expend more energy to effectively deal with student diversity and the multiplicity of needs of urban students (John et al., 2008).

Hypothesis 2: Agreeableness

H2o= There is no relationship in measures of Agreeableness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H2a= There is a relationship in measures of Agreeableness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

The research predicted that highly effective teachers in the urban and suburban location will score high in Agreeableness (Fenderson, 2011). However, the urban highly effective teachers would likely score higher than their suburban counterparts because the students in urban communities have a greater need for sympathy, kindness, and affection (John et al., 2008).

Teachers in urban settings have experienced students who were hungry and lacked the basic needs of food, clothing, and shelter (Milner &Tenore, 2010), and this is different from the affluent suburban students whose families are financial stability (Darling-Hammond, 2012; Jacob, 2007).

Hypothesis 3: Conscientiousness

H3o = There is no relationship in measures of Conscientiousness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H3a = There is a relationship in measures of Conscientiousness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

This researcher believed that both urban and suburban highly effective teachers would score high on Conscientiousness because, in Fenderson's (2011) study, the National Teachers of the Year candidates' scores were high for this personality characteristic.

Hypothesis 4: Openness

H4o = There is no relationship in measures of Openness between highly effective teachers in the urban schools and highly effective teachers in the suburban schools.

H4a = There is a relationship in measures of Openness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

The research predicted that urban highly effective teachers would score higher on Openness than their suburban counterparts who would score average on this personality characteristic. The Openness trait score describes the degree of imagination and insightfulness, which is

necessary for teachers who are instructing a diverse group of students like those in the urban community (Milner &Tenore, 2010).

Hypothesis 5: Neuroticism

H5o = There is no relationship in measures of Neuroticism between highly effective teachers in the urban schools and highly effective teachers in the suburban schools.

H5a = There is a relationship in measures of Neuroticism between highly effective teachers in urban schools and highly effective teachers in suburban schools.

The research predicted that both urban and suburban highly effective teachers would score low on Neuroticism because, in Fenderson's (2011) study, the National Teachers of the Year candidates' scores were low for this personality characteristic. However, this study predicted that poor conditions of the urban schools will cause the urban teachers to score higher in Neuroticism than their suburban counterparts (Long, 2012; Milner & Tenore, 2010).

Population and Sample

Population

In 2015, Solano County employed 2,884 teachers for its seven school districts to fill positions at 106 schools (Solano County Office of Education, n.d.). The student enrollment in Solano County between 2011 and 2015 averaged 63,431 students. Nearly half of the students 30,852 (48.2%) receiving free or reduced lunch subsidies, and 7,700 (26.6%) of all students identified as English language learners, and 7,263 (11.4%) of all students are enrolled in special education programs (Solano County Office of Education, n.d.). The academic progress for Solano County is shown in Table Four, which describes the performance for each school district in Solano County (Solano County Office of Education, n.d.). Table 4

provides an example of the ongoing achievement gaps between the urban and suburban students (Darling-Hammond, 2012). Benicia Unified School District is a suburban community where students' test scores are the highest in Solano County growing to 852 in 2013 from 842 in 2010. On the other hand, Vallejo Unified School District is located in an urban community with the lowest test scores in Solano County, falling to 715 in 2014 from 730 in 2010. Test scores for 2014 were not reported at the time of publication. However, this table still shows a comparison between 2010 and 2014.

Table 4

Academic Performance Index

	2010	**2011**	**2012**	**2013**	**2014****
Benicia USD*	842	853	853	852	
Dixon USD	751	750	754	749	
Fairfield/Suisun USD	750	768	784	790	
Travis USD	816	824	834	826	
Vacaville USD	769	778	786	789	
Vallejo USD	730	729	725	715	

* Unified School District ** test scores were not available at the time of publication

The population for this study included Teachers of the Year and nominees in Solano County, California from school locations in the Urban and Suburban school districts. The researcher selected urban and suburban school districts for this study, as their demographics

are closely aligned with urban and suburban communities. According to United States Census Bureau (n.d.), the local population of the anonymous suburban school district in Solano County, California, 2010 was 72 % White in 2010, with 5.7% below the poverty level in 2013. The local population of the anonymous urban school district in Solano County, California had a strong minority base that is 22% Black, 22% Hispanic, 24% Asian, and 25% White non-Hispanic or Latino in 2010; 17. 5 % were below poverty level in 2016.

The researcher gained access to the population for this study through the Solano County Office of Education (SCOE). According to information about the SCOE Teacher of the Year (Solano County, n.d), all nominees for Teacher of the Year participated in a rigorous selection process that begins at their respective school districts. As previously stated, the SCOE provides each district with the evaluation and selection criteria and the guidelines for submitting a single nominee from each school and then district. Each candidate must submit a written application to the Blue-Ribbon Committee (BRC) that consists of the former Teacher of the Year honorees. The BRC uses scoring guidelines and writing prompts to evaluate the selected finalist for each school and each district.

For this quantitative non-experimental descriptive and correlational research study, recruitment was very pragmatic. Permission granted by the Solano County Office of Education (SCOE) to conduct this study did not allow direct contact with the countywide Teachers of the Year. Instead, the SCOE agreed to communicate with the teachers directly, and if they were interested, the teachers were asked to respond to the researcher directly by email. At the district levels, some participating districts required additional internal approval and asked the researcher to submit the research summary before releasing the names of the Teachers of the Year nominees at the district and school levels. In addition to the contact

limitation, the districts' permission also required that the districts remain nameless and that a copy of the completed dissertation be submitted to the districts.

Once the SCOE and the school districts of interest agreed to provide access to their employees for this study, other challenges with recruitment became apparent. Some teachers change jobs or school districts, while others changed their professions entirely. In the urban districts, many schools had not participated in the Teacher of the Year program in years past. The suburban districts only tracked the Teacher of the Year who represented the district at the county level, which limited the possible number of participants to one per calendar year. Of the 62 Teachers of the Year names that the researcher received from the SCOE, school districts, and recommendations from other participants via snowball sampling, only 24 agreed to participate, resulting in 22 completed surveys. Snowball sampling is a technique used to recruit a population that is unknown or inaccessible to the researcher by normal pathways (Salganik & Heckathorn, 2004). For example, the SCOE has access to the Teachers of the Year who were honored by their perspective school districts, but not those nominees at the school level.

During the active recruitment phase, teachers were provided a brief overview of the research and were asked to sign an Informed Consent form before the onset of the survey. The members of the study were informed that they can withdraw from the study at any time without consequence and that their anonymity would be maintained. A copy of the Informed Consent can be reviewed in Appendix C. Some teachers who agree to become participants were eliminated at the beginning of the study because the BFI is normed for individuals in age ranges from 20 to 60.

However, after six months of recruiting and with the school year coming to a close, the researcher opened participation to Teachers of the Year over 60-years-old, which exceeded the normed age range of 20 to 60 years of age for the BFI. The researcher gained two additional participants who were a year or so over 60 years of age. The rationale for using participants older than the age range for the BFI developed by Oliver (2009) and utilized in this study was due to the low survey response rate and the NEO Five-Factor Inventory-30 (NEO-FFI-3). The 30-item version of the NEO-FFI is a personality assessment similar to the BFI that is normed to individuals aged 18 to 96 (Körner et al., 2015), and the original NEO-FFI was used to demonstrate the reliability of the BFI. The primary reason for using participants over 60 years of age was that they were only a year or so over 60 and they were nominated for Teacher of the Year before they were 60 years of age.

Sample

The sample for this study was Teachers of Year located in urban school districts and suburban school districts. The sample consists of 14 Urban Teacher of the Year and nominees two males and 12 females. The suburban sample consists of eight Teachers of the Year and nominees two males and six females. The researcher has selected school districts for this study, as their demographics were aligned with urban and suburban communities. According to (United States Census Bureau (n.d.), urban population has a strong minority base that is 22% Black, 22% Hispanic, 24% Asian, and 25% White non-Hispanic or Latino in 2010, and 17. 5 % are below poverty level 2013. The Suburban population in 2010 is 72 %, White, with 5.7% below the poverty line in 2013, all data was current as for 2016.

Israel (2013) reported that the purpose of a study, the population size, the danger of opting for a bad sample, and the acceptable sampling error are factors that influence

sampling. Sampling also requires other criteria such as level of precision or the range of the true significance of the population, confidence level, and the degree of inconsistency in traits being measured (Israel, 2013). Sampling errors are expressed in percentage (i.e., ±5 percent), while the confidence level will describe the average value of the traits measured relative to the true population value (Israel, 2013). The degree of variability refers to the sharing of traits by a population, and the more diverse a population, the larger the sample size needed to study a phenomenon (Israel, 2013). Teacher of the Year nominees from 2009 to 2015 in urban and suburban districts in Solano County were actively recruited to participate until a significant sample size is achieved. However, some members of study will be eliminated because the BFI is only suitable for a population aged of 20 to 60.

The sample size was determined by G* Power 3 analysis. G* Power, developed by Faul et al. (1996), was intended as a universal power analysis program for statistical assessment frequently used in social and behavioral research (Faul et al., 2007). According to Faul et al. (2007), G* Power 3 offers dedicated power analysis options for an assortment of commonly used t, F, z, x^2, and Exact test. The purpose of this study was to evaluate the relationship of specific personality characteristics of highly effective teachers located in urban and suburban school settings, and this makes the school location the independent variable with two values (urban and suburban). In this study, the school location was a nominal independent variable that required the use of the exact test of goodness-of-fit. The exact test of goodness-of-fit is commonly used when the research has only one nominal independent variable with only two values. The exact test of goodness-of-fit offers no test statistic, but it allows the research to calculate the probability of obtaining data under the null hypothesis (Faul et al., 2007). In the G*Power 3 program, when a specific option is selected,

the correlation difference from constant (one sample case) was the option used for correlational studies. The input parameters that used for this study are two tails, r = 0.3, Alpha of 0.05, and a power of .80 (see Appendix B). The resulting parameters shows that $N = 84$, which was the sample size.

According to Israel (2013), using an entire small population as the sample is suitable for populations that are 200 or less, which can be justified by published charts and studies or power analysis calculators (see Appendix E). Fenderson (2011) examined the personality characteristic of the 2009 National Teachers of the Year. Fenderson's sample size was 56 with 17 actual respondents. Rushton et al. (2007) identified the typology of Florida Teachers of the Year by asking 100 of them to take the MBTI, with 58 respondents. The Fenderson study is an example of using an entire population as the sample because the population was less than 200, while the Rushton et al. sample size and the number of respondents are similar to Israel's published chart (see Appendix F).

Ethical Concerns

This study required the recruitment of adult subjects to complete a 44-item personality survey. The risks to the subjects are minimal although it was possible that completing the survey could cause some stress to the participants. However, the participants contributed to their profession by providing information about non-credential factors that could help their colleagues succeed in either an urban or suburban school setting. All members of the study population were asked to review and sign an Informed Consent before they participated in this study (see Appendix C). The consent form gave a brief overview of the study without the use of deceptive tactics. All members of the study were emailed an informed consent form, and after members of the study have provided consent, they received

the BFI developed by Oliver (2009) via a link to the questionnaire which was hosted by SurveyMonkey. After logging into the website, participants filled out a brief survey that asked participant's age and school district. The participant was then direct to the BFI - 44-item self-reports developed by Oliver. If the participant failed to meet the age ranges for the survey, he or she was directed to a thank you page for their interest, and then provided the age restriction for the instrument being used for the study.

To protect their anonymity, the participants only identified their school district, and their age was used to determine if they can participate in the study due to the BFI sample population, which has an age range of 20 to 60. No other demographic or personal information was collected from participants. Informed Consent forms from all participants in the study were collected electronically via a password protected account. According to SurveyMonkey (2015), the user can collect data over an encrypted SSL/TLS connection that requires a password with minimum complexity requirements. Additionally, the data are secured by a data center that is staffed 24 hours a day and seven days weekly surveillance.

All participants had the right to withdraw from the study at any time. Participants were grouped by school location--those indicating a school district in a large minority area were assigned to the urban group and those identifying a school district in a largely majority area were assigned to the suburban group. Individual names were not included for purposes of confidentiality and anonymity in data collection, analysis, and reporting. The data collected during this study will be saved for five years in a password-protected file on a removable drive, and these will then be destroyed after the five-year period to ensure participant anonymity and confidentiality.

Instrument

The instrument used for this study was the BFI developed by Oliver (John et al., 2008; Oliver, 2009; see Appendix A). The 44-item self-report BFI survey was developed by Oliver to describe the personality traits Extroversion, Agreeableness Conscientiousness, Openness, and Neuroticism, which are scored on a 5-point scale ranging from 1, disagree strongly, to 5, agree strongly (John et al., 2008). The 44-item self-report BFI is a brief multidimensional personality inventory with short phrases and manageable vocabulary, which is suitable for adults 20 to 60 years of age. Unfortunately, the survey used for this study had an age restriction, and data from participants whose age did not meet the restricted age range were screened out of the study at the beginning of the SurveyMonkey survey. When asked for age range, any respondent who selected "60 years or older" was directed to a page thanking them for their time and explaining the age restriction for the study. According to Martin (2011), the BFI was developed by categorizing a copious amount of trait descriptors using proficient ratings and validated structure by factor analysis, which resulted in subscales representing each of the five factors: Extroversion (8 items), Agreeableness (9 items), Conscientiousness (9 items), Openness (10 items), Neuroticism (8 items).

The reliability of the BFI was demonstrated by the data collected by John and Srivastava in 1999, which shows the age and a comparison of the mean and standard deviation for each subscale of the BFI (see Appendix F). The validity of the BFI is shown adequately in previous studies by comparing the BFI against other valid versions of the self-report scores and peer viewed scores of Big Five Inventories (Martin, 2011). John et al. (2008) compared the 44-item self-report BFI with the Neuroticism Extroversion Openness Five-Factor Inventory (NEO-FFI) developed by Costa and McCrae (1992), and the scales on

both the BFI and NEO-FFI had a significant mean correlation (Martin, 2011). John et al. (2008) reanalyzed DeYoung's et al. (2010 data and found that the BFI developed by Oliver had validity correlations with other Big Five Inventories, such as the Trait Descriptive Adjectives (TDA). The data in Table 5 show the reliability and validity of the BFI developed by Oliver (2009) in comparison with the reliability of other widely used Big Five Inventories.

Table 5

Reliability and convergent validity coefficients (John et al., 2008)

Measures	**Extroversion**	**Agreeableness**	**Conscientiousness**	**Neuroticism**	**Openness**
			Internal consistency		
BFI	.86	.79	.82	.87	.83
NEO-FFI	.82	.75	.82	.87	.76
TDA	.88	.84	.84	.83	.83
Mean	.85	.80	.83	.85	.81
			Uncorrected convergent validity correlations across measures		
BFI	.90	.75	.79	.70	.79
NEO-FFI	.73	.76	.80	.81	.72
TDA	70	.66	.75	.64	.62
Mean	.80	.73	.78	.73	.72
			Corrected convergent validity correlation across measures		
BFI	.99	.93	.96	.82	.95
NEO-FFI	.87	.99	.97	.94	.90
TDA	.83	.83	.91	.76	.78
Mean	.94	.95	.95	.86	.90
			Standardized convergent validity coefficient		
BFI	.99	.91	.91	.84	.97
NEO-FFI	.83	.98	.95	.93	.90
TDA	.76	.84	.87	.78	.74
Mean	.92	.93	.92	.86	.91

**Neuroticism Extroversion Openness Five-Factor Inventory (NEO-FFI)*Trait Descriptive Adjectives (TDA).

The rationale for using the BFI is that the instrument is a five-minute multidimensional personality inventory with brief phrases and useful language, and is appropriate for adults 20 to 60 years of age (Oliver, 2009). Additionally, it is easily scored in SPSS Version 23.0, and is available in the public domain for non-commercial use (see Appendix D; Oliver, 2009). The BFI is highly compatible with other Big Five Inventories as shown in Table Five.

Data Collection

Teacher of the Year nominees for the years 2009 through 2015 from the urban and suburban school districts in Solano County, California were actively recruited with the assistance of the SCOE and urban and suburban school districts. The SCOE emailed the Teachers of the Years on the researcher's behalf, requesting their participation in the study. Those Teachers of the Years who were interested in participating in this study replied directly to the researcher by email.

The urban districts provided the names and email addresses of the Teachers of the Years at the district and school levels so the researcher could contact the Teachers of the Year directly by email. The suburban districts followed the same protocol as SCOE by emailing their Teachers of the Years, and those Teachers of the Year who were interested in participating in this study replied directly to the researcher by email. The email contact included a brief introduction to the researcher and the study, a request for participation, and a copy of the Informed Consent form (see Appendix C). As emails for participation were returned, the participants will be emailed a link to the SurveyMonkey site where the Informed Consent and survey resided, with the instructions and passwords to take a prescreening survey and the BFI. Data collection by survey is a potential limitation because

of low response rate (Jamison, 2010; Turner et al., 2013) that requires a well-developed brief survey that the researcher can administer in real time. The use of the Internet to deliver and recover the consent forms and surveys is helpful to the data collection effort, as the utility of the Internet makes it convenient for the researcher and participants.

The data collected by the study are personal, providing a behavior profile for each participant that must be kept confidential. It was imperative that the results obtained from the surveys were only reported as a part of the sum of a group; to maintain the anonymity of each participant, the data was collected and reported using the participant's school district's name only. Additionally, no data was reported or provided to a third party. Once the study was completed, all research data was saved in a password protected file on a removable drive and will be held for five years, then destroyed to ensure anonymity and confidentiality.

The data collection process was used to provide an answer to the research question using the location schools as the Independent Variable (IV) and the dimensions of the BFI, Extroversion, Agreeableness, Conscientiousness, Openness, and Neuroticism, as the Dependent Variables (DV). The BFI will be uploaded into SurveyMonkey for participants to complete. Once the data was collected, SurveyMonkey provides an option for exporting the data to an Excel file, and then saved on a personal computer. The researcher used a password protected personal computer for this process.

SurveyMonkey's security systems are ideal for collecting data because the security protocols help to protect the participants' anonymity and confidentiality, as their responses to the survey contain personal information about their personalities (see Appendix C). The data was collected following the steps described below:

1. Email SCOE to acquire permission to conduct the study and gain access to the list

of Teachers of the Year in urban and suburban school districts between 2009 and 2015.

2. Email Teacher of the Year in urban and suburban school districts a summary of the study.
3. Email all members of study the link to SurveyMonkey.
4. Resend an email to all Teachers of the Year who did not taken or completed the survey.
5. Request all participants who logged in to SurveyMonkey to take a prescreening survey that asked their age and school district.
6. All Teachers of the Year who were older than 60 were eliminated from the study and received a message that explained the age limitation of the survey and thanked them for their willingness to participate in this study.
7. Participants who were between 20 and 60 years of age were routed to the survey, and were able to complete the survey.
8. Once the survey was completed, all participants received a thank you message.
9. Data were saved into a password protected SurveyMonkey data storage file.
10. Repeated the process until the researcher received 84 completed surveys.
11. Once 84 completed surveys were received, the results were uploaded from SurveyMonkey into an Excel file on a password protected computer, and then uploaded into SPSS Version 23.0 to be scored and interpreted into statistical data.

Data Analysis

According to Larson (2006), quantitative data examination begins with calculating the descriptive statistics for the research variables that statistically summarize various aspects

of the data, providing details about the sample and population from which the data are drawn. The data for this study came from information gathered by the survey with a Likert type scale that asks respondents to choose from 1, Disagree strongly, to 5, agree strongly (John et al., 2008), as one of five responses to each survey question (Gadermannr, Guhn, & Zumbo, 2012). The study survey measured Extroversion, Agreeableness, Conscientiousness, Openness, and Neuroticism as subscales and the data collected by SurveyMonkey was exported and save on Excel file on a password protect drive and then upload into SPSS Version 23.0 for scoring (see Appendix D) and reported in percentiles.

The Likert scale was converted to mean raw item scores by reverse score designated items, summed across items in each scale, divided by the number of items in scale, which were performed by SPSS Version 23.0. Converting the z-score into percentiles was completed by SPSS Version 23.0 by using the transformation function in SPSS Version 23.0 with ranking selected. All compiled subscale scores above the 50th percentile indicated the sample was positive for that personality characteristic, and all compiled scores below the 50th percentile will indicate a tendency away from the defined personality trait (Srivastava, 2013).

Descriptive Statistics

To describe the specific personality of highly effective teachers, a compilation of all participant scores was analyzed to find the mean, median, mode and standard deviation of each of the five personality characteristics. A chart was used to show the mean, median, and mode for all five dimension of the BFI, which were converted into percentiles, and then use to describe the specific personality of highly effective teachers for the entire school location. The purpose of describing the specific personality characteristics of highly effective teacher

for the entire sample population was to establish mean behavioral tendencies among highly effective teachers.

Correlational Statistics

Jamison (2010) reported that survey scores from the same participants of two variables could have a theoretical correlation. The descriptive statistics of the entire sample population will establish the mean for behavioral tendencies among highly effective teachers. However, a correlation coefficient will determine the strength of the relationship between personality characteristics and highly effective teachers who schools are located in the urban school district and the suburban school district (George & Mallery, 2010; Turner et al., 2013). There were two types of correlation coefficient considered for this study, Pearson's and Spearman's rho correlation. Pearson's correlation coefficient, ordinarily designated as *r*, is a statistical value that measures the linear relationship between two variables. It ranges in value from $r = 1$ to $r = -1$, demonstrating a positive and negative linear relationship respectively between two variables (George & Mallery, 2010; Turner et al., 2013). A positive correlation specifies that as one variable's value increases the other variable's value increases as well. However, a negative correlation indicates that as the value of one variable increases the other variable decreases (George & Mallery, 2010). On the other hand, Spearman's rho correlation coefficient is a nonparametric (non-random) version of Pearson correlation that measures the strength of a relationship between two variables measured on an ordinal scale (George & Mallery, 2010). Spearman's correlation is used under two conditions, such as ordinal variables like Likert scales, and monotonic relationships with variables increase value collectively or one variable increase as one decrease. Spearman's correlation is denoted by the symbol r_s or rho = ρ. When $\rho 0 = 0$ the null hypothesis will be accepted, and when p1 is

greater than or equal to .5, the null hypothesis will be rejected (Corder & Foreman, 2014; Freedman, Pisani, & Purves, 2011; George & Mallery, 2010; (Jamison, 2010).). The calculation of the Spearman's rho correlation coefficient was performed using the statistical program SPSS Version 23.0.

Validity

This descriptive correlational research is a non-experimental design, which has inherent to it an internal threat to validity because of the inability to manipulate the independent variable (school location) or to control other factors that may influence personality type (Cohen et al., 2005; Jamison, 2010). Part of the challenge to conducting this type of study was that teachers are able to self-select their job location which eliminates the researcher's ability to manipulate the independent variable. An ideal situation would have been to randomly place highly effective teachers in specific school locations, as this would have allowed for manipulation of the independent variable. Obviously, this was not possible in a natural setting.

The data collection required using a self-report survey, and this offers an additional internal threat to validity for this study because of the possibility of human error during the scoring of the survey (Cohen et al., 2005). Additionally, participant faking by falsifying answers to influence a desired outcome could also threaten the dataset (Gardner et al., 2012; Morgeson et al., 2007). Motivated participants with an understanding of the inferences of the study may try to sway the research by answering the survey in such a way as to influence a desired outcome. Dishonest participation can be motivated by desires to help the researcher or by a false sense of self (Morgeson et al., 2012). Additionally, human error can be a common threat to any study.

The external threat to the validity of the study is the inability to randomly select the population and sample (Cohen et al., 2005). The Teacher of the Year selection process is also not random, and the criteria for selection are arbitrary. In addition, the possibility that the Teachers of the Year nominees were selected because of politics and not performance has the potential to undermine the validity of the study. The lack of randomization in the selection process could have skewed the data limiting the generalizability of the findings from the specific population to the larger population of teachers in other states and other parts of California. The population for this study was Teachers of the Year in Solano County, California. However, the sample for this study was Teachers of Year located in urban school district and suburban school district. The urban school district has a total of 24 schools that participate in the Teacher of the Year program, while suburban school districts only have seven. Because the power analysis requires a sample size of 84 and the number schools in both districts are less than the required sample for a significant study, the participation for this study was open to Teachers of the Year form pervious years ranging from 2009 to 2015. Additionally, the difference in the number of schools was addressed by the date range, which allowed two or more Teachers of the Year from the same school to participate. The objective was to have homogenous number participants to represent both the urban and suburban school locations that take the entire population. Because the entire population was used as a sample for this study, the results from this study are not generalizable (Frankfort-Nachmias & Nachmias, 2008).

Despite that fact that this study cannot provide generalizable data, it can provide accurate measures of specific personality characteristics of the study population and enable clear inferences of the relationship between the personality characteristics of highly effective

teachers in urban and suburban school settings using simple statistical analyses (Bettis, Gambardella, Helfat, & Mitchell, 2014).

Summary

A quantitative non-experimental descriptive correlational design was used to investigate the relationship between specific personality characteristics of highly effective teachers in urban settings and highly effective teachers in suburban settings. The purpose of this study was to evaluate the relationship of specific personality characteristics of highly effective teachers in urban and suburban school settings. The intent of this study was to support administrators who are seeking to hire appropriate talent for K-12 classroom to promote an increase in student outcomes. The population was the Teacher of the Year nominees in Solano County, California. The sample was Teacher of the Year nominees from urban and suburban school districts between 2009 and 2015. All participants in the study who provided an informed consent were asked to complete the BFI survey developed by Oliver (2009). The completed surveys were scored and then translated into numeric data for statistical analysis to determine the mean, median, mode, and standard deviation, as these statistics described the evidence of specific personality characteristics of highly effective teachers and the will correlation coefficient determine the significant of the relationship. Chapter IV focuses on the compilation and analysis of data for the study. Chapter V interprets the results and debates the inference of the results from Chapter IV.

CHAPTER IV: RESULTS

Poor academic achievement of urban, minority, and socioeconomically disadvantaged students is said to be caused by lost instruction time due to student suspension or expulsion and lowered academic expectations for these students, which are by-products of ineffective teachers (Brainbridge & Lesley, 2002; Chiristle et al., 2007; Long, 2012). However, poor academic achievement has not only been seen in the urban setting; affluent minorities who seek to escape the pitfalls of urban school are also achieving below their majority counterparts in suburban schools (Ellis, 2014).

The purpose of this quantitative non-experimental descriptive and correlational research design was to evaluate the relationship of specific personality characteristics of highly effective teachers in both urban and suburban school settings. The general problem was that the criteria established by the NCLB Act that required a college degree and passage of aptitude test, and a mandatory teaching credential used for teacher hiring are inadequate for predicting teacher effectiveness and show no relationship with student outcomes (i.e., academic achievement; Rutledge et al., 2008). The specific problem was that without a clear understanding of the specific personality characteristics of highly effective teachers, administrators will continue to hire ineffective teachers in both urban and suburban settings who impede the academic progress of students (Hughes, 2014). Chapter IV details the research results of this study that addressed this particular research problem rearticulated in a set of research questions and subsequent research hypotheses. Results are presented in the framework of population and sample, data collection, data analyses with a description of results, and conclusions. The specific research questions address by this study are as follows:

Research Questions

RQ1. What is the relationship between the personality characteristic Extroversion and the school location of highly effective teachers?

RQ2. What is the relationship between the personality characteristic Agreeableness and the school location of highly effective teachers?

RQ3. What is the relationship between the personality characteristic Conscientiousness and the school location of highly effective teachers?

RQ4. What is the relationship between the personality characteristic Openness and the school location of highly effective teachers?

RQ5. What is the relationship between the personality characteristic Neuroticism and the school location of highly effective teachers?

RQ1: Extroversion

H1o = There is no relationship in measures of Extroversion between highly effective teachers in the urban schools and highly effective teachers in the suburban schools.

H1a = There is a relationship in measures of Extroversion between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ2: Agreeableness

H2o= There is no relationship in measures of Agreeableness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H2a= There is a relationship in measures of Agreeableness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ3: Conscientiousness

H3o = There is no relationship in measures of Conscientiousness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H3a = There is a relationship in measures of Conscientiousness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ4: Openness

H4o = There is no relationship in measures of Openness between highly effective teachers in the urban schools and highly effective teachers in the suburban schools.

H4a = There is a relationship in measures of Openness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ5: Neuroticism

H5o = There is no relationship in measures of Neuroticism between highly effective teachers in the urban schools and highly effective teachers in the suburban schools.

H5a = There is a relationship in measures of Neuroticism between highly effective teachers in urban schools and highly effective teachers in suburban schools.

Sample

The population for this study included Teachers of the Year and nominees in Solano County, California, from school locations in the urban and suburban school districts. The researcher selected urban and suburban school districts for this study, as their demographics

are closely aligned with urban and suburban communities. According to the United States Census Bureau (n.d.), the local population of the anonymous suburban school district in Solano County, California 2010 was 72 % White in 2010 with 5.7% below the poverty level in 2013. The local population of the anonymous urban school district in Solano County, California had a strong minority base that was 22% Black, 22% Hispanic, 24% Asian, and 25% White non-Hispanic or Latino in 2010; 17. 5 % were below poverty level in 2016.

For this quantitative non-experimental descriptive and correlational research study, recruitment was very pragmatic. Permission granted by the SCOE to conduct this study did not allow direct contact with the countywide Teachers of the Year. Instead, the SCOE agreed to communicate with the teachers directly, and if they were interested, the teachers were asked to respond to the researcher directly by email. At the district level, some participating districts required additional internal approval and asked the researcher to submit the research summary before releasing the names of the Teachers of the Year nominees at the district and school levels. In addition to the contact limitation, the district's permission also required that the districts remain nameless and that a copy of the completed dissertation be submitted to the districts.

Once the SCOE the school districts of interest agreed to provide access to their employees for this study, other challenges with recruitment became apparent. Some teachers change jobs or school districts, while others changed their professions entirely. In the urban districts, many schools had not participated in the Teacher of the Year program in years past. The suburban districts only tracked the Teacher of the Year who represented the district at the county level, which limited the possible number of participants to one per calendar year. Of the 62 Teachers of the Year names that the researcher received from the SCOE, school

districts, and recommendations from other participants via snowball sampling, only 24 agreed to participate, resulting in 22 completed surveys.

After six months of recruiting and with the school year coming to a close, the researcher opened participation to Teachers of the Year over 60-years-old, which exceeded the survey's stipulated age range of 20 to 60 years of age. The researcher gained two additional participants who were over 60 years of age. The rationale for using participants older than the age range for the BFI developed by Oliver and utilized in this study was due to the low survey response rate and the NEO Five-Factor Inventory-30 (NEO-FFI-3). The 30-item version of the NEO-FFI is a personality assessment similar to the BFI that is applicable to individuals aged 18 to 96, and the original NEO-FFI was used to demonstrate the reliability of the BFI. The primary reason for using participants over 60 years of age was that they were only a year or so over 60 and that they were nominated for Teacher of the Year before they were 60 years of age.

After utilizing older subjects to increase participation, the researcher had to end recruitment due to the closing of the school year. The decision to close the survey was due to time and financial constraints along with limited access to the population during summer months. This resulted in a sample size of 22 instead of the proposed sample size of 84. The results from this study lack external validity because of a small sample size that cannot be generalized to the urban and suburban settings, which are discussed in Chapter V.

The sample for this study was teachers of Year located in urban school districts and suburban school districts. The sample consists of 14 Urban Teacher of the Year and nominees, two males and 12 females. The suburban sample consists of eight Teachers of the Year and nominees, two males and six females. The researcher selected school districts for

this study with demographics that aligned with the norms of urban and suburban communities, and larger populations.

Data Collection

Following study protocols outlined in Chapter III, the SCOE emailed the Teachers of the Years on the researcher's behalf, requesting their participation in the study. Those Teachers of the Years who were interested in participating in this study replied directly to the researcher by email. The urban districts provided the names and email addresses of the Teachers of the Years at the district and school levels so the researcher could contact the Teachers of the Year directly by email. The suburban districts followed the same protocol as SCOE by emailing their Teachers of the Years. The Teachers of the Year who were interested in participating in this study replied directly to the researcher by email.

Beginning in February 2016, potential participants who responded to the researcher by email received a link to the study's SurveyMonkey site from the researcher's password protected account. The participants then logged into the study's SurveyMonkey site where they were required to read the Informed Consent form and then to click the corresponding box indicating that they had consented or declined participation in this study. Those who declined participation in this research were routed to a thank you page, while those who agreed to participate in this study were asked to describe themselves in the following manner:

1. I am older than 20 but younger than 60 years of age.
2. I am younger than 20 years of age.
3. I am older than 60 years of age.

At the beginning of the data collection process, if the participants were older than 20 but younger than 60 years of age, they were asked to name the school district that honored them as their nominee for Teacher of the Year, and then routed to the 44-item BFI. Those

participants who were younger than 20 and older than 60 years of age were routed to a thank you page.

Over several months, the researcher emailed the link to SurveyMonkey from the password protected account to those who replied. A weekly email reminder to participants who received the link but who had not responded was used to encourage the participants. Opening the research to participants older than 60 years of age was also used to increase the number of responses. After two additional responses in as many weeks, the data collection process was closed in June 2016. Of the 24 participants who agreed to the informed consent and started the survey process, 22 submitted completed surveys, which were included in the data analysis. Despite the low response, the research plan was followed as described in Chapter III.

Data Analysis and Results

Quantitative data examination begins with calculating the descriptive statistics for the research variables, which statistically summarizes various aspects of the data, providing details about the sample and population. The intent of this research was to identify specific personality characteristics of effective teachers in urban and suburban school settings. This investigation was premised on the specific research questions that formed the research hypotheses. The data necessary to address the study's research questions and corresponding hypotheses required solicitation of urban and suburban teachers by email for six month using the online website SurveyMonkey to administer the survey. Once the data collection process was closed, the data collected from eight suburban and 14 urban respondents to the 44-item BFI was exported from SurveyMonkey into an SPSS Version 23.0 compatible format. The responses to the 44-item BFI were uploading into SPSS Version 23.0 compiled into

quantitative values and analyzed using the formulas suggested in Appendix D and advised by SPSS Version 23.0.

Descriptive Statistics

To describe the specific personality of highly effective teachers, the compiled sum of participant scores were analyzed for the mean, median, mode and standard deviation of each of the five personality characteristic measured by the 44-item BFI for participants in urban and suburban settings. The results for participants in urban settings are shown in Table 6, and the result for participants in the suburban group is shown in Table 7. The 44-item BFI reported responses using a Likert-type scale where 1 = disagree strongly, 2 = disagree a little, 3 = neither agree nor disagree, 4 = agree a little, and 5 = agree strongly. The responses were translated into categorized descriptors resulting in subscales representing each of the five factors: Extroversion (8 items), Agreeableness (9 items), Conscientiousness (9 items), Openness (10 items), Neuroticism (8 items).

Table 6

Urban Participant Descriptive Statistics

		Extroversion	Agreeableness	Conscientiousness	Openness	Neuroticism
N	Valid	14.00	14.00	14.00	14.00	14.00
	Missing	0.00	0.00	0.00	0.00	0.00
Mean		27.79	38.21	40.07	40.29	19.57
Median		29.50	39.50	42.00	42.00	17.00
Mode		31.00[a]	42.00	44.00	42.00	17.00
Std. Deviation		8.06	5.16	4.55	5.3122	7.1330

a. Multiple modes exist. *r*

The sum of the responses associated with the 44-Item BFI was calculated in SPSS Version 23.0 and reported in Tables 6 and 7. The mean scores for participants in the urban group were 28 for Extroversion, 38 for Agreeableness, 40 for Conscientiousness, 40 for Openness, and 20 for Neuroticism. The mean scores for participants in the suburban group were 31 for Extroversion, 41 for Agreeableness, 39 for Conscientiousness, 40 for Openness, and 16 Neuroticism. The median scores for participants in the urban group were 30 for Extroversion, 40 for Agreeableness, 42 for Conscientiousness, 42 for Openness, and 17 Neuroticism. The median scores for participants in the suburban group were 34 for Extroversion, 43 for Agreeableness, 40 for Conscientiousness, 40 for Openness, and 15 Neuroticism. The mode scores for participants in the urban group were 31 for Extroversion, 42 for Agreeableness, 44 for Conscientiousness, 42 for Openness, and 17 Neuroticism. The

mode scores for participants in the suburban group were 34 for Extroversion, 44 for Agreeableness, 39 for Conscientiousness, 34 for Openness, and 14 Neuroticism.

Table 7

Suburban Participants Descriptive Statistics

		Extroversion	Agreeableness	Conscientiousness	Openness	Neuroticism
N	Valid	8.00	8.00	8.00	8.00	8.00
	Missing	0.00	0.00	0.00	0.00	0.00
Mean		31.87	40.62	38.62	40.12	15.75
Median		34.00	42.50	39.50	40.00	14.50
Mode		34.00	44.00	39.00	34.00[a]	14.0
SD		6.17	4.31	7.91	4.79	4.95

a. Multiple modes exist.

Additionally, to better understand the relationship of the specific personality characteristics of highly effective teachers in urban and suburban settings, both groups' scores were converted into a percentile. Converting the *z*-score into percentiles will be completed by SPSS Version 23.0 by using the transformation function in SPSS Version 23.0 with ranking selected. The participants in the urban group ranked in the 69th percentile for Extroversion, which was lower than participants in the suburban group who scored in the 80th percentile. However, the Agreeableness, Conscientiousness, and Openness personality characteristics of both urban and suburban participants were close in rankings, with Agreeableness showing the largest gap of five percentage points between the groups.

Participants in the urban group ranked in the 49th percentile for Neuroticism, which was higher than participants in the suburban group who ranked in the 39th percentile.

Correlational Statistics

The Spearman's rank correlation coefficient was used to determine the statistical relationship between specific personality characteristics and highly effective teachers in urban and suburban school settings. Spearman's rank correlation coefficient is a nonparametric (non-random) version of Pearson correlation that measures the strength of a relationship between two variables measured on an ordinal scale. Spearman's rank correlation requires two conditions such as ordinal variables like Likert scales, and monotonic relationships in which variables increase value collectively or one variable increases as one decreases. Spearman's rank correlation symbols include rs or rho = ρ. When ρ0 = 0, the null hypothesis will be accepted, and when $p1$ is greater than or equal to. 0.5, the null hypothesis will be rejected.

Spearman rank correlations were run in SPSS Version 23.0 to assess the relationship between personality characteristics measured by the 44-Item BFI and highly effective teachers in urban and suburban settings. These statistics are reported in Table 8**.**

Table 8

Spearman's Rank Correlation Coefficient of Personality Characteristics

Settings		**Personality**	**Characteristics**			
		Extroversion	Agreeableness	Conscientiousness	Openness	Neuroticism
Urban						
	rs	-.295	-.258	-.074	.169	.098
	p	.479	.538	.862	.690	.817
Suburban						
	rs	-.295	-.258	-.074	.169	.098
	p	.479	.538	.862	.690	.817

Note. Data correlated is categorical and ordinal, which requires Spearman rank correlation. rs = strength of relationship. p = significance level, where N = 22, (2-tailed). Personality Characteristics was reported by the 44-Iteam BFI.

RQ1: Extroversion. A Spearman's rank correlation was run in SPSS Version 23.0 to assess the relationship between the personality characteristic Extroversion and participants in urban and suburban settings using a sample size of 22 participants with 20 aged between 20 to 60 years of age, and 2 participants over 60 years old. There was a weak negative correlation between Extroversion and participants in urban and suburban settings, which was statistically insignificant, (rs = - .295, p = .479). This resulted in acceptance of the H1o null hypothesis that stated there is no relationship in measures of Extroversion between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ2: Agreeableness. A Spearman's rank correlation was run in SPSS Version 23.0 to assess the relationship between the personality characteristic Agreeableness and

participants in urban and suburban settings using a sample size of 22 participants with 20 aged between 20 to 60 years of age, and 2 participants over 60-years-old. There was a weak negative correlation between Agreeableness and highly effective teachers in urban and suburban settings, which was statistically significant (rs = - .258, p = .538). This resulted in the acceptance of the H2a alternative hypothesis that stated there is a relationship in measures of Agreeableness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ3: Conscientiousness. A Spearman's rank correlation was run in SPSS Version 23.0 to assess the relationship between the personality characteristic Conscientiousness and participants in urban and suburban settings using a sample size of 22 participants with 20 aged between 20 to 60 years of age, and 2 participants over 60-years-old. There was a weak negative correlation between Conscientiousness and highly effective teachers in urban and suburban settings, which was statistically significant (rs = - .074, p = .862). This resulted in acceptance of the H3a alternative hypothesis that stated there is a relationship in measures of Conscientiousness between highly effective teachers in the urban schools and highly effective teachers in the suburban schools.

RQ4: Openness. A Spearman's rank correlation was run in SPSS Version 23.0 to assess the relationship between the personality characteristic Openness and participants in urban and suburban settings using a sample size of 22 participants with 20 aged between 20 to 60 years of age, and 2 participants over 60-years-old. There was a weak positive correlation between Openness and highly effective teachers in urban and suburban settings, which was statistically significant (rs = .169, p = .690). This resulted in acceptance of the H4a alternative hypothesis that stated there is a relationship in measures of Openness

between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ5: Neuroticism. A Spearman's rank correlation was run in SPSS Version 23.0 to assess the relationship between Neuroticism and participants in urban and suburban settings using a sample size of 22 participants with 20 aged between 20 to 60, and 2 participants over 60-years-old. There was a weak positive correlation between Neuroticism and highly effective teachers in urban and suburban settings, which was statistically significant, (rs = .098, p = .817). This resulted in acceptance of the H5a alternative hypothesis that stated there is a relationship in measures of Neuroticism between highly effective teachers in urban schools and highly effective teachers in suburban schools.

Conclusion

Chapter IV detailed the research results of this quantitative non-experimental descriptive and correlational research study that addressed the specific research problem rephrased in a set of research questions, and resultant research hypotheses focused on the relationship between specific personality characteristics and highly effective teachers in urban and suburban settings. The population of interest was Teachers of the Year from 2009 to 2015 from Solano County, in urban and suburban settings, who represented highly effective teachers. The data generated on personality characteristics was gathered through the application of the 44-Item BFI. The participant sample was 22 Teacher of the Year nominees, with 20 aged between 20 to 60, and two participants over 60-years-old. There was no relationship with Extroversion; however, there was a significant relationship on all other personality characteristics between highly effective teachers in urban settings and highly effective teachers in suburban settings.

A Spearman's rank correlation was run in SPSS Version 23.0 to assess the relationship between the categorical and ordinal dependent variables of personality characteristics as measured by the 44-Item BFI and the nominal independent variables highly effective teachers in urban and suburban settings to test the research study's hypotheses. Research results produced the conclusion the null hypothesis was accepted that stated there is no relationship in measures of Extroversion between highly effective teachers in the urban schools and highly effective teachers in the suburban schools. However, the research results also accepted the alternative hypotheses for Agreeableness, Conscientiousness, Openness, and Neuroticism that stated that there is a relationship in the measure of these four personality characteristics between highly effective teachers in urban schools and highly effective teachers in suburban schools. Additionally, there were weak and negative correlations for Extroversion, Agreeableness, and Conscientiousness, and weak positive correlations for Openness and Neuroticism.

Results of the research findings showed that the null hypothesis was accepted for Extroversion that stated that there is no relationship in measures of Extroversion between highly effective teachers in the urban schools and highly effective teachers in the suburban schools. It was concluded that the alternative hypotheses for Agreeableness, Conscientiousness, Openness and Neuroticism were accepted, stating that there is a relationship in measures of these personality characteristics between highly effective teachers in the urban schools and highly effective teachers in the suburban schools. The correlations between Extroversion, Agreeableness, and Conscientiousness and highly effective teachers in urban schools and highly effective teachers in suburban schools were negative and weak. However, the correlation between Openness and Neuroticism were positive and similarly

weak. The overview of the research findings suggests a relationship between four of the specific personality characteristics of highly effective teachers in both urban and suburban school settings. These findings are discussed in Chapter V.

CHAPTER V: DISCUSSION

The purpose of this chapter is to discuss the findings of the study. Chapter V is intended to interpret the results and discuss the implications of the results from Chapter IV. The interpretation and discussion in this chapter link the importance of the study's findings to research and practice that place the findings contextually with prior research on the subject so that the reader can situate the results of this study with existing research.

The chapter is organized into six sections. The first section is the overview and interpretation of findings which restate the purpose of the study, the research questions and hypotheses, and general and major findings. The second section is the interpretation of major findings, which offers a discussion that links the study to prior research. The third section is the limitation of research, which describes the challenges that the researcher encountered during research, and explains the issues with generalizability and validity of the study. The fourth section is the implications for theory and future research, which discusses the study's convergence and divergence of findings with existing theories and research. The fifth section consists of recommendations for future research. The chapter concludes with an overall summary of the study.

Classroom size, curriculum, and student attendance are all important factors that affect student outcomes, but these factors cannot compare to the impact of classroom teachers' influence on student academic performance (Jacob, 2007; Larson, 2014; Ritter & Hancock, 2001; Rushton et al., 2007). Unfortunately, not all teacher influence leads to positive outcomes. Ineffective teachers in urban and suburban settings have been identified as one of the primary causes for achievement gaps (Darling-Hammond & Berry, 2006; Jacob, 2007; Long, 2012). Traditional hiring measures and the NCBL Act of 2001 used to place more teachers with credentials for effectiveness in classrooms were unproductive. The

current K-12 teacher hiring process in many school districts lacks effectiveness, as not all teachers who are hired based on meeting the requirements of NCLB are effective (Darling-Hammond, 2012; Jacob, 2007). This phenomenon created a need for evaluating the relationship of specific personality characteristics of effective teachers in urban and suburban school settings so that hiring administrators would have a more reliable tool with which to evaluate the potential effectiveness of teacher candidates.

Personality assessments are the second most frequently used type of assessment for prescreening candidates for employment (Fallaw & Kantrowitz, 2013), and academic research has linked personality type and behavior tendencies to highly effective teachers. Rushton et al. (2007) used the MBTI to study the typology of 5,366 American teachers whose median typology was Extroverted-Sensing-Feeling-Judging (ESFJ). Rushton et al. then found that teachers selected as Florida Teacher of the Year had more in common than their achievement. The Florida Teachers of the Year shared the personality typology of Extroversion-Intuitive-Feeling-Perceiving (ENFP), which was different from the typical American teacher's median MBTI Profile of ENSJ. Rushton et al.'s research introduced into literature the use of personality typology for identifying teacher effectiveness in the field of education. Fenderson (2011) used the Neuroticism Extroversion Openness Five Factor Inventory (NEO- FFI), which is a version of the BFI, to study the personal profiles and common characteristics of 17 candidates for the 2009 National Teacher of the Year. The results of Fenderson's study showed very high Extroversion, high Agreeableness, high Conscientiousness, average Openness and low Neuroticism were common characteristics of National Teacher of the Year candidates in 2009. Fenderson introduced into literature personality characteristics common to highly effective teachers.

This study sought to extend this use of personality characteristics to evaluate teacher effectiveness by using the 44-item BFI to describe the personality characteristics of highly effective teachers in urbans and suburban settings. This study also sought to determine if there is a relationship in the measures of Extroversion, Agreeableness, Conscientiousness, Openness, and Neuroticism between highly effective teachers in urban schools and highly effective teachers in suburban schools. The intent for this study was to close literature gaps on specific personality characteristics for highly effective teachers and provide administrators with a clear understand of those characteristics which influence teaching effectiveness in urban and suburban settings.

Interpretation of Findings

The purpose of this study was to evaluate the relationship of specific personality characteristics of highly effective teachers in urban and suburban school settings. The understanding of job-relevant personality characteristics in urban and suburban school settings will provide administrators with working knowledge of the characteristics that influence teaching effectiveness in these two settings. The analysis of the data forthcoming from the study provides details about the participants' personality characteristics as measured by the 44-item BFI. The personality characteristics measured by the 44-item BFI are essential to answering specific research questions:

RQ1. What is the relationship between the personality characteristic Extroversion and the school location of highly effective teachers?

H1o = There is no relationship in measures of Extroversion between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H1a = There is a relationship in measures of Extroversion between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ2. What is the relationship between the personality characteristic Agreeableness and the school location of highly effective teachers?

H2o= There is no relationship in measures of Agreeableness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H2a= There is a relationship in measures of Agreeableness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ3. What is the relationship between the personality characteristic Conscientiousness and the school location of highly effective teachers?

H3o = There is no relationship in measures of Conscientiousness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

H3a = There is a relationship in measures of Conscientiousness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ4. What is the relationship between the personality characteristic Openness and the school location of highly effective teachers?

H4o = There is no relationship in measures of Openness between highly effective teachers in the urban schools and highly effective teachers in the suburban schools.

H4a = There is a relationship in measures of Openness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

RQ5. What is the relationship between the personality characteristic Neuroticism and the school location of highly effective teachers?

H5o = There is no relationship in measures of Neuroticism between highly effective teachers in the urban schools and highly effective teachers in the suburban schools.

H5a = There is a relationship in measures of Neuroticism between highly effective teachers in urban schools and highly effective teachers in suburban schools.

Overview of Major Findings

The descriptive statistics data analysis showed one major finding from the 44-item BFI survey completed by participants in urban and suburban settings generated by SPSS Version 23.0 and reported in Table 6 and Table 7. The results showed that the urban participants' scores on the 44-item BFI were higher than the suburban group's scores in Conscientiousness, Openness, and Neuroticism. Conscientiousness is the behavior of an individual who thinks before he or she acts and follows rules and procedures, forecasting and listing tasks as a part of performance-based behaviors that are associated with a work atmosphere (Denissen & Penke, 2008; De Young et al., 2010; Gerber et al., 2010). Openness reflects the propensity to process theoretical and perceptual information that encourages imagination, curiosity, and intelligence (DeYoung et al., 2010; Wrenn, 2005). Wright et al. (2006) reported that Neuroticism is a personality trait that exhibits consistent moodiness and anxiety, and expresses negative cues in the atmosphere. Wrenn argued that individuals with low Neuroticism scores are more likely to show emotions such as calmness, security, relaxation, and stress-tolerance. Overall, the urban group scored in the 69th percentile or very high for Extroversion, in the 85th percentile or very high for Agreeableness, in the 89th

percentile or very high for Conscientiousness, in the 81th percentile or very high for Openness, and in the 49th percentile or average for Neuroticism. The suburban group scored in the 80th percentile or very high for Extroversion, in the 90th percentile or very high for Agreeableness, in the 86th percentile or very high for Conscientiousness, in the 80th percentile or very high for Openness, and in the 39th percentile for Neuroticism. The data in Table 6 and Table 7 suggest that highly effective teachers in a suburban setting have a higher propensity for the personality characteristics Extroversion and Agreeableness while the highly effective teachers in the urban setting have a higher propensity for Conscientiousness, Openness, and Neuroticism.

Three major findings emerged from the correlational analysis of the relationship between personality characteristics and school location for study participants. The first finding was that the personality characteristic Extroversion showed a weak negative correlation between highly effective teachers in the urban and suburban settings, which was statistically insignificant, resulting in the Extroversion personality characteristic not having a differential influence on teaching effectiveness in the two settings. The second finding was that Agreeableness and Conscientiousness showed weak negative correlations that were statistically significant between highly effective teachers in urban and suburban settings, resulting in the Agreeableness and Conscientiousness personality characteristics having an influence on teaching effectiveness in the two settings. The final finding was that the personality characteristics Openness and Neuroticism showed weak positive correlations that were statistically significant between highly effective teachers in urban and suburban settings, resulting in the Openness personality characteristic having an influence on teaching effectiveness in the two settings. Although the personality characteristic Neuroticism showed

a statistically significant relationship between the two settings, it had no deferential influence on teaching effectiveness in either setting because an individual with this trait may not create an environment conducive for learning (Tran et al., 2011).

The data showed that the Agreeableness personality characteristic showed a weak negative relationship between highly effective teachers in urban and suburban settings. The personality characteristic Conscientiousness also showed a weak negative relationship between highly effective teachers in urban and suburban settings. The weak negative correlations indicate that the personality characteristics Agreeableness and Conscientiousness have an influence on teaching effectiveness in the two settings, but are unreliable in predicting the impact the traits will have on teaching effectiveness because the correlational values were less than zero. The data showed that the personality characteristics Openness and Neuroticism showed weak positive relationships between highly effective teachers in urban and suburban settings. The weak positive correlations indicate that the personality characteristic Openness has an influence on teaching effectiveness but lacks a strong reliability in predicting the trait's impact on teaching effectiveness because correlational values closer to zero than one are weak in reliability. The personality characteristic Neuroticism also showed a weak positive relationship between highly effective teachers in urban and suburban settings. However, the personality characteristic Neuroticism has no influence on teaching effectiveness at either setting because neither group scores were positive for the trait.

Interpretation of Major Findings

Descriptive Statistics. A major finding was the urban group's scores were higher than the suburban group's scores in Conscientiousness, Openness, and Neuroticism. Prior to

implementing the study, the researcher predicted that both urban and suburban highly effective teachers would score high for the personality characteristic Conscientiousness because, in Fenderson's (2011) study, the National Teachers of the Year candidates' scores were high for this personality characteristic. The rationale for this prediction was also based on conscientiousness being a personality characteristic that seeks to control task-directed and goal-directed behavior. Individuals with a high level of Conscientiousness exhibit behaviors, such as thoughtfulness before action, delayed gratification, following rules and procedures, forecasting, and listing task (Gerber et al., 2010). These behaviors are considered vital to the teaching profession (Gay & Howard, 2000; Howard, 2001; Howard & Obidiah, 2005).

Both groups were predicted to have high scores in the personality characteristic Conscientious. The prediction was correct as both groups' scores were very high for the trait, which is consistent with Fenderson's (2011) findings. The personality characteristic Conscientiousness is a quality in the teaching profession known to promote sensitivity and cultural competence that can help teachers succeed in an urban setting (Gay & Howard, 2000; Howard, 2001; Howard & Obidiah, 2005). Therefore, the findings that urban teachers have a higher score on conscientiousness were both expected and confirmed by the study. This finding suggests that urban administrators who hire teachers with high Conscientiousness have a better chance at hiring a highly effective teacher.

Prior to the implementation of the study, the researcher predicted that urban group would score higher for the personality characteristic Openness than their counterparts in suburban settings. The prediction was shown to be correct. The urban group scored higher for Openness than the suburban group. The personality characteristic Openness as measured by the 44-item BFI is a personality characteristic in the teaching profession known to promote

an understanding of the students' condition and would seem to be critical for urban teachers because many impoverished students may experience challenges, such as hunger, fatigue, and fear that some teachers may not be receptive to because of their lack of experience or cultural unawareness (Gehrke, 2005; Jacob, 2007; Schultz, 2014). Therefore, the findings that urban teachers have a higher score on Openness were both expected and confirmed by the study. This finding suggests urban administrators who hire teachers with high levels of the personality characteristic Openness have a good chance at hiring a highly effective teacher.

Prior to the implementation of the study, the researcher predicted that both urban and suburban groups would score low on Neuroticism because Fenderson's (2011) study found that the National Teachers of the Year for 2009 candidates' scores were low for this personality characteristic. The prediction was not correct. The urban group's scores were higher (average) for the personality characteristic Neuroticism than the suburban group's scores and higher than the scores for Neuroticism among the National Teachers of the Year for 2009. Neuroticism is the result of people's differences in distress regulation or the ability to cope with stress (Denissen & Penke, 2008). Individuals with low Neuroticism scores are more likely to show emotions, such as calmness, security, relaxation, and stress-tolerance (Wrenn, 2005). The urban setting is characterized by students in poverty, underfunded schools, language barriers, and cultural differences that are frustrating for teachers, students, and families (Milner & Tenore, 2010; Watson 2012). The data analysis showed that urban teachers exhibited less calmness than did teachers in the suburban group. This suggests that the two settings are dichotomous and highly effective urban teachers may not be as calm at their schools as the highly effective suburban teachers.

Agreeableness, Conscientiousness, and Openness are personality characteristics found by the study to have an influence on teaching effectiveness in the urban and suburban settings. The higher scores for the personality characteristics Conscientiousness and Openness are consistent with the literature because both traits are qualities in the teaching profession known to help teachers succeed in an urban setting (Gay & Howard, 2000; Howard, 2001; Howard & Obidiah, 2005). Neuroticism was not a personality characteristic of highly effective teachers; however, the data showed that the urban group had a higher propensity for the personality characteristic Neuroticism than did the suburban group. A possible explanation of this finding is the urban setting is the site of the majority of America's poorest students where many student needs are so complex that they create financial burdens on district resources that otherwise would support initiatives, such as class size reduction and tutoring services, requiring teachers to do more with less (Gehrke, 2005; Schultz, 2014).

Correlational Statistics

RQ1: Extroversion. The influence of personality characteristic Extroversion on teacher effectiveness in urban and suburban settings is premised on the answer to RQ1: What is the relationship between the personality characteristic Extroversion and the school location of highly effective teachers? Study results show that the Spearman's rho value is not significant, resulting in the acceptance of the null hypothesis; there is no relationship between measures of Extroversion between highly effective teachers in urban schools and highly effective teachers in suburban schools.

The data analysis shows that the personality characteristic Extroversion has no influence on teaching effectiveness in either of the settings. Extroversion is an assortment of

positive behaviors that classify tendencies to engage in social behaviors showing leadership potential, power, and dominance to achieve rewards in the presence of others (Denissen & Penke, 2008; DeYoung et al., 2010). Very high scores in Extroversion would indicate that participants were producing a learning atmosphere that was effective and comfortable, meaning extroversion was expected to be observed as a common personality characteristic contributing to high effectiveness (Fenderson, 2011). The finding in this study conflicts with other literature because the personality characteristic Extroversion in this study showed no influence on teacher effectiveness in either setting. A possible explanation for this is that the Extroversion hypothesis testing could have type II errors due to a small sample size, resulting in falsely accepting the null hypothesis (no relationship) for this trait.

RQ2: Agreeableness. The influence of personality characteristic Agreeableness on teaching effectiveness in urban and suburban settings is premised on the answer to RQ2: What is the relationship between the personality characteristic Agreeableness and the school location of highly effective teachers? Study results show that the Spearman's rho value is statistically significant, resulting in the rejection of the null hypothesis and acceptance of the alternative hypothesis: There is a relationship in measures of Agreeableness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

The data analysis shows that the personality characteristic Agreeableness has an influence on teaching effectiveness in both settings. Agreeableness is a personality characteristic linked to friendly and sociability (Denissen & Penke, 2008). The findings in this study are not in conflict with other literature because the personality characteristic Agreeableness is a quality in the teaching profession known to promote sensitivity and cultural competence that can help teachers succeed in an urban setting (Gay & Howard,

2000; Howard, 2001; Howard & Obidiah, 2005). The scores for Agreeableness between the urban group and the suburban group are close with the urban group scoring in the 85th percentile and the suburban group scoring in the 90th percentile. This finding suggests the urban group is not as friendly or sociable as the suburban group but that both groups tend to be more friendly and sociable than the average person. An explanation for the difference in scores is that less agreeableness in the urban setting is associated with the diversity of the students that many teachers serve. According to Kyles and Olafson (2008), teachers in urban school cultures are often vastly different than the diverse population of urban students who are members of minority groups, English-language learners, and members of socioeconomically disadvantaged groups. This means that urban teachers use less agreeableness in the urban setting to be effective.

RQ3: Conscientiousness. The influence of personality characteristic Conscientiousness on teaching effectiveness in urban and suburban settings is premised on the answer to RQ3: What is the relationship between the personality characteristic Conscientiousness and the school location of highly effective teachers? Study results show that Spearman's rho value is statistically significant, resulting in the rejection of the null hypothesis: there is a relationship in measures of Conscientiousness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

The data analysis shows that the personality characteristic Conscientiousness has an influence on teaching effectiveness in urban and suburban settings. Conscientiousness is a personality characteristic that has typically been referred to as performance-based behaviors that are associated with a work atmosphere (Denissen & Penke, 2008; De Young et al., 2010).The findings in this study are not in conflict with other literature because the

Conscientiousness personality characteristic is a quality in the teaching profession known to promote sensitivity and cultural competence that can help teachers succeed in an urban setting (Gay & Howard, 2000; Howard, 2001; Howard & Obidiah, 2005). The scores for Conscientiousness between the urban group and the suburban group are close with the urban group scoring in the 89th percentile and the suburban group scoring in the 86th percentile, indicating the scores was close while still having significantly different teaching effectiveness in the settings. This finding suggests the urban group is more sensitive to diversity than the suburban group. An explanation for the difference in scores is that more Conscientiousness is needed the urban setting to be effective. Alderman and Green (2011) suggested that social competence and self-awareness are required to influence inner-city communities which may explain the slightly higher scores on Conscientiousness among highly effective urban teachers because the suburban setting is not as diverse.

RQ4: Openness. The influence of personality characteristic Openness on teaching effectiveness in urban and suburban settings is premised on the answer to RQ4: What is the relationship between the personality characteristic Openness and the school location of highly effective teachers? Study results show Spearman's rho value is statistically significant, resulting in the rejection of the null hypothesis: there is a relationship in measures of Openness between highly effective teachers in urban schools and highly effective teachers in suburban schools.

The data analysis shows that the personality characteristic Openness has an influence on teaching effectiveness in urban and suburban settings. Openness is a personality characteristic that reflects the propensity to process theoretical and perceptual information that encourages imagination, curiosity, and intelligence, as well as anatomical differences in

some or all the brain structures involved in the regulation of working memory, attention, and reasoning (Denissen & Penke, 2008; DeYoung et al., 2010; Wrenn, 2005). The finding in this study is not in conflict with other literature because the Openness personality characteristic is needed to adapt instruction due to the uniqueness of the students whom teachers face in different settings (Gehrke, 2005; Jacob, 2007; Schultz, 2014). The scores for Openness between the urban group and the suburban group are close with the urban group scoring in the 89th percentile and the suburban group scoring in the 86th percentile. This finding suggests the urban group needs to be more innovative to be effectives not as friendly or sociable as the suburban group. An explanation for the difference in scores is that more Openness is needed in the urban setting. Teachers who are capable of developing culturally-relevant pedagogy will use students' cultural experiences to develop more engaging instruction to pique student interest, while raising the teacher's personal expectations that can lead to better student outcomes (Gay & Howard, 2000; Jacob, 2007; Long, 2012; Milner & Tenore, 2010; Tintiangco-Cubales et al., 2014).

RQ5: Neuroticism. The influence of personality characteristic Neuroticism on teaching effectiveness in urban and suburban settings is premised on the answer to RQ5: What is the relationship between the personality characteristic Neuroticism and the school location of highly effective teachers? Study results show that Spearman's rho value is statistically significant, resulting in the rejection of the null hypothesis: there is a relationship in measures of Neuroticism between highly effective teachers in urban schools and highly effective teachers in suburban schools.

Although the data analysis shows that there is a relationship in measures of Neuroticism between highly effective teachers in urban schools and highly effective teachers

in suburban schools, neuroticism has no influence on the effectiveness in the settings because neither group scored above the level of average for the characteristic. This is important as teacher with high expectations for their students are effective (Jacob, 2007). The finding in this study is not in conflict with other literature because the personality characteristic Neuroticism is not trait of highly effective teachers. The trait has been seen as the result of people's differences in distress regulation or the ability to cope with stress caused by negative cues in the environment (Denissen & Penke, 2008; Wright et al., 2006). Individuals with low Neuroticism scores are more likely to show emotions such as calmness, security, relaxation, and stress-tolerance (Wrenn, 2005). The scores for Neuroticism between the urban group and the suburban are close with the urban group scoring in the 49th percentile and the suburban group scoring in the 39th percentile. This finding suggests the urban group is less calm under stress than the suburban group. The lack of resources could cause more stress for teachers in the urban setting. Researchers believe that without vital resources, teacher strategies, materials, and relevant pedagogy are worthless (Gehrke, 2005; Howard, 2001; Shaw, 2012; Tintiangco-Cubales et al., 2014). Reduced access to financial resources in urban setting may lead to a more stressful environment for urban teachers, indicated by a higher score in Neuroticism.

The findings in this study indicate that highly effective teachers in urban and suburban settings are descriptively aligned with Fenderson's (2011) National Teachers of the Year Nominees in 2009. The differences between urban and suburban groups are that the suburban group's scores were higher for the personality characteristics Extroversion and Agreeableness than the urban group; the urban group's scores were higher for the personality characteristics Conscientiousness, Openness, and Neuroticism than the suburban group. Also,

the scores were different for the personality characteristic Neuroticism, as the urban group is average for the trait and the suburban group is low for the trait. Therefore, this suggests there are more stressors associated with teaching in the urban setting than those that may exist in the suburban setting.

The ability to predict teaching effectiveness or job performance is one of the facets of the 44-item BFI. However, in the study, the results were unreliable at predicting teaching effectiveness in urban and suburban settings for the personality characteristics Extroversion, Agreeableness, and Conscientiousness because the results show that the strengths of the relationships between the two groups for these traits are negative but weak. The ability to predict teaching effectiveness by measuring Openness and Neuroticism in the study lacks strong reliability because the results show that the strengths of the relationships between the urban and suburban groups for these traits are weak.

The findings in the study suggest that the urban and suburban administrators could use the 44-item BFI to measure and evaluate all five descriptive personality characteristics. However, urban administrators should not be concerned if they find potential teacher applicants who score at the level of (average) for the personality characteristic Neuroticism. The correlational findings in this study suggest that urban and suburban administrators could use the 44-item BFI to identify potential teacher applicants who would have a differential influence on teaching effectiveness in the settings. The data from this study confirms that the urban administrators should focus on teacher applicants who score very high or above 85 percentiles on the personality characteristic Agreeableness and very high or above 80th percentile on the personality characteristics Conscientiousness and Openness. The data from this study also confirms that the suburban administrators should focus on teacher applicants

who score very high or close to the 90th percentile for the personality characteristics Agreeableness and Very high or above the 80th percentile for Conscientiousness and Openness. Extroversion in this study was found to have no influence on effectiveness in the two settings, yet Fenderson (2011) suggested that very high scores in Extroversion indicated that participants were creating a learning environment that was effective and comfortable, and a common personality characteristic that contributes to high effectiveness.

The data from this study have confirmed that personality characteristics can influence teaching effectiveness in both settings. However, some traits are more important to teaching effectiveness than others. Conscientiousness and Openness are key behavioral characteristics that can affect teaching effectiveness in urban schools, while Agreeableness is an essential trait for suburban schools. The most important information to take away from this data is that administrators in those settings have another factor to aid in the selection of highly effective teachers if they choose to evaluate personality characteristics of applicants for teaching positions.

Limitation of the Research

Limited Access to the Target Population

One limitation faced during the research process was limited access to the target population. Access to the target population was controlled by the SCOE, which did not allow direct contact with the countywide Teachers of the Year. The SCOE communicated with the teachers directly, and subjects interested in this study responded to the researcher directly by email. At the district levels, some participating districts required additional internal approval and asked the researcher to submit the research summary before releasing the names of the Teachers of the Year nominees at the district and school levels. However, the number of

possible subjects was limited as some districts and schools recorded only the names of the Teacher of the Year winners and not the nominees. In addition to recording anomalies at the district level that could not have been anticipated or corrected by the researcher, some subjects were unreachable due to job relocation, while others were unresponsive to emails related to this research. There were 24 responses to the solicitation emails indicating interest in this research; however, only 22 subjects completed surveys, far fewer than the 84 participants the research sought for the study.

The small sample size means that the results of this research may not be generalizable to highly effective teachers in the general urban and suburban populations; however, the findings can be useful as a foundation for continued research. Testing an entire population to reach a statistical conclusion can be costly. However, using a power analysis to select an appropriate sample size to represent the population would allow the researcher to make a generalization about the population of study. A power analysis was used to determine the sample size for this study to avoid type II errors. The power analysis recommendation was a sample size of N=84 participants, but the sample for this study was N=22. A small sample size for hypothesis testing could create type II errors that create false positives or negatives for the null hypothesis, which can cause the null hypothesis to be rejected or accepted erroneously (Israel, 2013). Nonetheless, Fenderson (2011) examined the personality characteristic of the 2009 National Teachers of the Year. Fenderson's sample size was 56 with 17 actual respondents. Rushton et al. (2007) identified the typology of Florida Teachers of the Year by asking 100 of them to take the MBTI with 58 respondents. In conclusion, however, the sample size for the study was small and subject to type II errors that mean findings cannot be generalized to all highly effective urban and suburban teachers.

Limited Time and Financial Resources

This study was conducted over a six-month period, from January 2016 to June 2016. Due to a restricted time-frame and limited resources and fewer responses toward the end of the school year, the study was concluded after six months. The email addresses of possible participants who had changed careers or moved to another district and additional names of Teacher of the Year nominees at the school levels could have increased the scope of participant solicitation. Working in a non-restricted time-frame of two school semesters and having greater financial resources may have resulted in the ability to increase the number of respondents. Some respondents who participated in the study were not timely, and with fewer time constraints and greater financial resources, a larger sample may have been secured, thus resulting in a more generalizable population.

The data collection required using a self-report survey, which offers an additional internal threat to validity for this study because of the possibility of human error during the scoring of the survey (Cohen et al., 2005). Additionally, participant faking by falsifying answers to influence a desired outcome could also threaten the dataset (Gardner et al., 2012; Morgeson, 2007). The external threat to the validity of the study was the inability to randomly select the population and sample (Cohen et al., 2005). The Teacher of the Year selection process was also not random, and the criteria for selection were arbitrary. In addition, the possibility that the Teachers of the Year nominees were selected because of politics and not performance has the potential to undermine the validity of the study. The lack of randomization in the selection process and the small sample size could have skewed the data limiting the generalizability of the findings from the specific population to the larger population.

Implication for Theory and Future Research

The research findings presented in this study could not be aligned directly with published literature on the association between effective characteristics for teaching in urban and suburban settings because theoretical literature associated with this topic was not locatable. Nonetheless, the theory that personality characteristics could predict or influence performance is congruent with this study. Rushton et al. (2007) found that Florida highly effective teachers had the same personality typology using the MBTI. However, the MBTI is too cumbersome to using during a hiring process because it can produce 16 different personality types. Fenderson (2011) used the NEO-FFI to determine what common personality characteristics existed among highly effective teachers. Fenderson found that the personality characteristics were very high Extroversion, high Agreeableness, high Conscientiousness, average Openness and low Neuroticism based on the following scale: Very low is scored up to the 34th percentile, low is scored from the 35th to 44th percentile, average is scored from the 45th to 55th percentile, high is scored from the 56th to the 65th percentile, and very high is scored from the 66th percentile and higher. The scales for the two different instruments are related and high or very high on one are the same on the other (John et al., 2008).

Extroversion, as noted by Fenderson (2011), is a personality characteristic that produces a learning atmosphere that is effective and comfortable and should be observed as a common personality characteristic contributing to high effectiveness. However, this study showed that Extroversion was not a personality characteristic that had an influence on teaching effectiveness in either an urban or a suburban setting. However, administrators should not ignore the personality characteristic Extroversion because it is a descriptive trait

of a highly effective teacher, and it is possible that the results for the trait in this study could have type II error influence. The personality characteristics Agreeableness, Conscientiousness, and Openness are all traits that this study and others (Fenderson, 2011; Rushton et al., 2007) have been shown to have an influence on teaching effectiveness in urban and suburban settings. Administrators can reliably use information about Agreeableness, Conscientiousness, and Openness to assess the potential effectiveness of teacher candidates at the time of hire. This is a primary finding of this study.

Administrators must get it right the first time when hiring teachers for their classrooms as hiring ineffective teachers can lead to achievement gaps, increased dropout rates, juvenile delinquencies, and a large prison populace (Jacob, 2007; Long, 2012; Shultz, 2014). Teacher evaluation programs developed by school districts and bargaining unions are not effective in identifying highly effective teachers or those who need improvements; once tenured, ineffective teachers are hard to dismiss (Blume, 2011; Darling-Hammond, 2012). Administrators could use the 44-items BFI based on the findings of this study to identify the descriptive personality characteristics of teacher candidates and more confidently assignment to either urban or suburban settings. Urban administrators who focus on candidates who score very high on Conscientiousness and Openness could have a better chance of hiring a teacher who would be effective in urban locations, while suburban administrators can benefit by hiring teachers who score very high in agreeableness. Unfortunately, the statistical weakness of the relationships between the two groups on these personality characteristics reduces the likelihood of predicting the impact of the personality characteristics effectiveness of the settings. These findings should be used cautiously, however, because the small sample size means the study lacks external validity.

Research using a large sample size is needed to generalize the results and theoretically substantiate the research. Further research conducted by Human Resource Managers within the field of education could be more effective because of their access to teacher performance records and their ability to track the performance of new hires and Teacher of the Year Nominees who take the 44-item BFI over a defined period, or until a power analysis sample size is reached to avoid type II errors for hypothesis testing (Israel, 2013). The data confirmed that personality characteristics in this study are aligned with other research (Fenderson, 2011; Rushton et al., 2007) and that the personality characteristics could influence teaching effectiveness in either setting. These findings provide administrators with a valuable tool to use during their hiring process.

Implications for Practice

In practice, administrators could use the descriptive characteristics as a benchmark for first pass applicants who meet the minimum criteria for employment that was defined by the NCBH Act to expedite the hiring process. This practice could limit the use of long-term substitute teachers to staff classrooms without primary teachers. The descriptive personality characteristics should only be used to identify potential effective candidates and not as an exclusionary tool. Although the findings of this study correlate with other research on the topic of personality characteristics of highly effective teachers, administrators should not exclude candidates based solely on the findings of this study, as the findings are not generalizable to urban and suburban settings. Past researchers have agreed that teachers are the most influential factor for student achievement (Jacob, 2007; Long, 2012; Shultz, 2014). Other researchers who research the urban community believe that personality characteristics can aid in teaching effectiveness in the setting (Gay & Howard, 2000; Howard, 2001;

Howard & Obidiah, 2005). This study confirmed that personality characteristics could have influence on teaching effectiveness.

The correlational findings in this study suggest that the personality characteristics Agreeableness, Conscientiousness, and Openness have an influence on teaching effectiveness in urban and suburban settings. In practice, urban administrators should focus on candidates who score in very high in Conscientiousness and very high for Openness, as the study suggests that these traits have an influence on effectiveness in the urban settings. Very high scorers for the personality Conscientiousness tend to be reliable, well organized, and self-disciplined, while low scorers tend to be disordered and unreliable (John et al., 2008). Very high scorers for the personality Openness tend to be pioneering and inquisitive, while low scorers tend to be uncreative and unoriginal (John et al., 2008). In practice, suburban administrators should focus on candidates who score very high for the personality characteristic Agreeableness, as the study suggests that this trait has an influence on effectiveness in the suburban settings. Very high scorers for the personality characteristics Agreeableness tend to be trustworthy and sympathetic, while low scorers tend to be corrupt and cruel (Gay & Howard, 2000; Howard, 2001; Howard & Obidiah, 2005; John et al., 2008).

The findings in the study suggest that Agreeableness, Conscientiousness, and Openness have an influence on teaching effectiveness in the urban and urban settings. However, Agreeableness and Conscientiousness were also found unreliable at predicting the traits' impact on teaching effectiveness because the strength of the relationship between highly effective urban teachers and highly effective suburban teachers was negative and weak. On the other hand, Openness was found reliable but weak at predicting the trait's

impact on teaching effectiveness because the relationship between highly effective urban teachers and highly effective suburban teachers for Openness was positive and weak. Overall, the findings in this study suggest that these personality characteristics can influence teaching effectiveness in the urban and suburban settings. The correlational findings in this study should only be used to identify potential effective candidates and not as an exclusionary tool. Administrators should not exclude candidates based solely on the findings of this study, as the findings are not fully generalizable to urban and suburban settings.

Recommendations for Future Research

The findings of this study suggest that personality characteristics can influence teaching effectiveness. The ability to predict the impact that personality characteristics could have on teaching effectiveness could be a useful tool for personnel selection, and predicting job performance; however, more research is needed on this topic. The scores by the urban group for very high Conscientiousness and very high Openness suggest that these traits are needed more in urban settings to influence teaching effectiveness than other personality characteristics. It would be advantageous for urban administrators to understand the dynamics at those locations that require higher scores for the personality characteristics Conscientiousness and Openness so that they may have a clear understanding as to why high scores for those traits are required for teachers to be effective.

Neuroticism is also a personality characteristic of interest because the study suggests that there is a relationship in measures of Neuroticism between highly effective teachers in urban schools and highly effective teachers in suburban schools. But, the trait has no influence on teaching effectiveness in either setting. The researcher recommends research in the area of job satisfaction in the urban setting because the urban group in this study showed

a propensity for average Neuroticism, which is higher for the trait than the low scoring suburban group. Neuroticism is a personality characteristic that can be influenced by atmosphere, and urban school districts often are lacking in funding, adequate teacher teaching personnel, and students who suffer from the effects of poverty (Gehrke, 2005; Schultz, 2014). It is possible that constant exposure to these events could affect the mood and job satisfaction of the teachers who work in these environments. The field of education has not used personality assessments as a part of a pre-screening process for employment, and personality assessment use could result in an increase in the number of highly effective teachers in the classroom.

Conclusion

Teachers are the primary influence on student outcome, and this is why the structure and nature of their employment process is crucial to closing achievement gaps. Ineffective teachers in urban and suburban settings have been identified as one of the primary causes for achievement gaps (Darling-Hammond & Berry, 2006; Jacob, 2007; Long, 2012). Traditional hiring measures and the NCBI Act of 2001 used to place more teachers with credentials for effectiveness in classrooms have been unproductive. The current requirements for hiring public school teachers cannot predict teacher effectiveness (Hughes, 2014, Jacob, 2007), creating the need for a more useful set of criteria by which to evaluate teacher effectiveness and improve teacher quality, including characteristics not based on credentialing, such as personality as assessed by the BFI.

Personality characteristics can influence career selection, social skills, relationships, and an individual's decision to continue in a specific career (Fenderson, 2011; Judge et al., 1999), which is why personality testing is the second most frequently used prescreening

assessment by human resources professionals in various industries worldwide (Fallaw & Kantrowitz, 2013). Rushton et al. (2007) found that the Florida Teachers of the Year shared the personality typology of Extroversion-Intuitive-Feeling-Perceiving (EIFP), which was different from the median typology of a large group of American teachers. Fenderson examined the personal profiles and common characteristics of highly effective teachers, as he and Delpit (2006) believed that teacher personality contributed to classroom success to a greater degree than skill set. Fenderson used the NEO- FFI, which is a version of the BFI and found that the National Teachers of the Year shared the same descriptive personality characteristics that were very high Extroversion, high Agreeableness, high Conscientiousness, average Openness, and low Neuroticism.

The purpose of this study was to evaluate the relationship of specific personality characteristics of highly effective teachers in urban and suburban school settings, and to address the academic knowledge gaps on personality characteristic of highly effective teachers that can create practical improvements. A quantitative non-experimental descriptive and correlational research design was used to evaluate the relationship of specific personality characteristics of highly effective teachers in both urban and suburban school settings. A total of 22 Teachers of the Year nominees completed the 44-item BFI, 14 urban participants and 8 urban participants. The results from the 44-item BFI provided both descriptive and correlational findings to support the purpose of this study.

The results of this research study led to one descriptive conclusion that the descriptive personality characteristics of highly effective teachers in = urban and suburban settings are very high Extroversion, very high Agreeableness, very high Conscientiousness, very high Openness, and low to average Neuroticism. In practice, these traits can be used for first pass

identification of potentially effective teacher applicants. However, the correlational results from the study provide administrators with a better understanding of the specific personality characteristics of highly effective teacher in urban and suburban school settings that can have an influence on teaching effectiveness. The study added to the body of knowledge on highly effective personality characteristics, such as Agreeableness, Conscientiousness, and Openness which have an influence on teaching effectiveness in the urban and suburban settings. However, predicting the impact of the teaching effectiveness for Agreeableness and Conscientiousness is unreliable, and for Openness reliable and weak in both settings. Unfortunately, the results for the influence of the personality characteristic Extroversion conflict with the current literature on this topic; findings from this study could have been influenced by type II errors. Also, Neuroticism was average for highly effective urban teachers, suggesting future research is necessary to better explicate this finding.

In practice, the 44-item BFI can be used to evaluate specific personality characteristics in urban and suburban settings during the teacher applicants' process. However, predicting the impact on teaching effectiveness is not reliable enough for practical use for either setting. Administrators should not exclude candidates based solely on the findings of this study, as the findings are not generalizable to either setting because of the small sample size of the study. The study adds to the body of literature that addresses personality characteristics and the influence that they have on teaching effectiveness in both urban and suburban settings. If generalized to urban and suburban settings by future research, administrators will be able to identify highly effective personality characteristics that can influence teaching effectiveness and the impact that they have in different school settings.

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Appendix A: 44-Item Big Five Inventory

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others?* Please click a number next to each statement to indicate the extent to which **you agree or disagree with each statement below.**

1 Disagree Strongly	**2** Disagree a little	**3** Neither agree nor disagree	**4** Agree a little	**5** Agree strongly

I am someone who…

1.___ Is talkative

2.___ Tends to find fault with others

3.___ Does a thorough job

4.___ Is depressed; blue

5. ___ Is original, comes up with new ideas

6.___ Is reserved

7.___ Is helpful and unselfish

8.___ Can be somewhat careless

9.___ Is relaxed, handles stress well

10.___ Is curious about many different things

11.___ Is full of energy

12.___Starts quarrels with others

13.___ Is a reliable worker

14.___Can be tense

15.___ Is ingenious, a deep thinker

16.___ Generates a lot of enthusiasm

17.___ Has a forgiving nature

18.___ Tends to be disorganized

19.___ Worries a lot

20.___ Has an active imagination

21.___ Tends to be quiet

22.___ Is generally trusting

23.___ Tends to be lazy

24.___ Is emotionally stable, not easily upset

25.___ Is inventive

26.___ Has an assertive personality

27. ___Can be cold and aloof

28.___ Perseveres until the task is finished

29.___ Can be moody

30.___ Values artistic, aesthetic experience

31.___ Is sometimes shy, inhibited

32.___ Is considerate and kind to almost everyone

33.___ Does things efficiently

34.___ Remains calm in tense situations

35.___ Prefers work that is routine

36.___ Is outgoing, sociable

37.___ Is sometimes rude to others

38.___Makes plans and follows through with them

39.___ Gets nervous easily

40.___ Likes to reflect, play with ideas

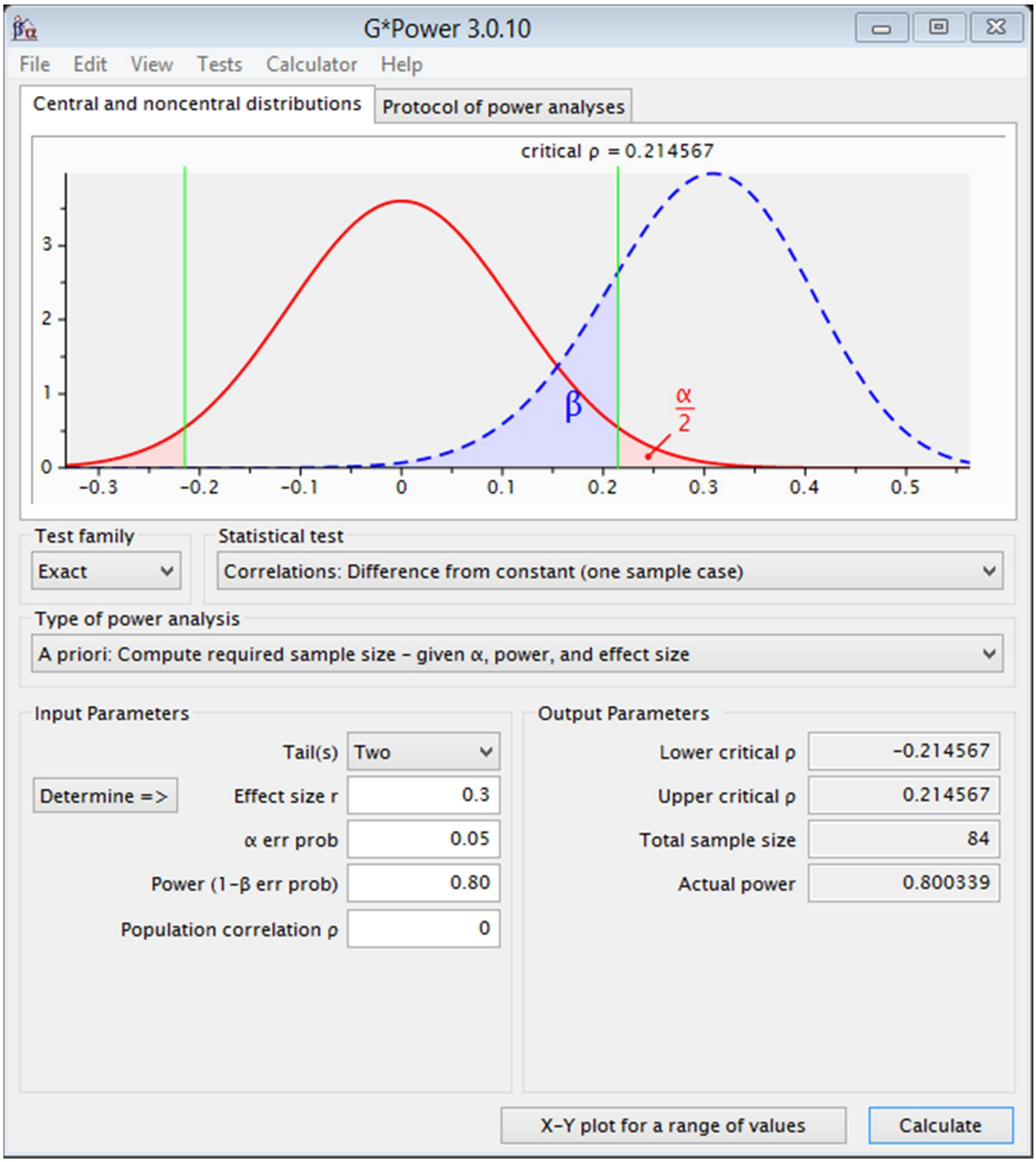
41.___ Has few artistic interests

42.___ Likes to cooperate with others

43.___ Is easily distracted

44.___ Is sophisticated in art, music or literature

Appendix B: Power Sample Calculation



Appendix C: Informed Consent

Dear Research Participant,

I would like to invite you to participate in an important research study. This document intends to provide you with information regarding the research, and to gain your consent to participate in this research. Please review the information below, and then sign in the appropriate area if you are willing to participate.

The purpose of this study is to evaluate the relationship of specific personality characteristics of highly effective teachers in urban and suburban school settings. The understanding of job-relevant characteristics in urban and suburban school settings could contribute to a broader understanding of what characteristics administrators need to identify, specific to school locations, in order to hire the most effective teachers who can influence specific students' outcomes. I will be asking participants to complete the 44-item BFI that measures Extraversion, Agreeableness, Conscientiousness and Openness, Neuroticism, which are scored on a 5-point scale ranging from 1 disagree strongly to 5 agree strongly. One of the potential disadvantages associated with this is that self-report assessments may provoke stress. You may answer questions that might be sensitive or emotionally associated with your personal experiences. If you experience any of these issues during the assessment, please contact the researcher.

The benefits include contributing to a body of literature which may result in the identification of a non-credentialing factor that could benefit students in urban and suburban school settings. The knowledge gained from this study may help educators understand the unique characteristics that successful teachers need to have to work effectively with students in all settings. If you decide to participate in this study, please be advised that your

participation is voluntary and that you can withdraw your consent at any time without consequence. To withdraw your consent, please email the researcher, Dissertation Chair and IRB. The disposition of your participation will be removed from the study, and you will have a right to a copy of your assessment results.

Anonymity is important to this study. Therefore, no individual results will appear in any publication or presentation. The data collected by survey will not be identified or associated with any individual teacher. Participants will receive the assessment, which will include an attached link to SurveyMonkey with instructions on how to access the survey from a secured password protected account. All information retrieved by this research will be kept confidential. However unlikely, all records of this research can be obtained by court order or subject to federal regulatory inquiry.

If you have any questions about this study, please contact me, my Dissertation Chair or the IRB by email. Contact information: [redacted] (Dissertation Chair), and IRB@Rockies.edu.

Sincerely,

Shawn Jones MBA, M Ed
[redacted]
IRB# 15-056-0

Once again, thank you for your participation in this important research. Please sign below to indicate your understanding of study parameters and your willingness to participate, and then return the signed page to my password protected email account listed above.

Signature_____ Date_____

Printed Name: _____ Expiration Date 01/15/17

Appendix D: Scoring

To score the BFI, you'll first need to **reverse-score** all negatively-keyed items:

Extraversion: 6, 21, 31
Agreeableness: 2, 12, 27, 37
Conscientiousness: 8, 18, 23, 43
Neuroticism: 9, 24, 34
Openness: 35, 41

To recode these items, you should subtract your score for all reverse-scored items from 6. For example, if you gave yourself a 5, compute 6 minus 5 and your recoded score is 1. That is, a score of 1 becomes 5, 2 becomes 4, 3 remains 3, 4 becomes 2, and 5 becomes 1.

Next, you will create scale scores by ***averaging*** the following items for each B5 domain (where R indicates using the reverse-scored item).

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

SPSS SYNTAX

***** REVERSED ITEMS**

```
RECODE
  bfi2 bfi6 bfi8 bfi9 bfi12 bfi18 bfi21 bfi23 bfi24 bfi27 bfi31 bfi34 bfi35
  bfi37 bfi41 bfi43
  (1=5)  (2=4)  (3=3)  (4=2)  (5=1)  INTO  bfi2r bfi6r bfi8r bfi9r bfi12r bfi18r bfi21r bfi23r bfi24r
  bfi27r bfi31r bfi34r bfi35r bfi37r bfi41r bfi43r.
EXECUTE .
```

***** SCALE SCORES**

```
COMPUTE bfie = mean(bfi1,bfi6r,bfi11,bfi16,bfi21r,bfi26,bfi31r,bfi36) .
VARIABLE LABELS bfie 'BFI Extroversion scale score.
EXECUTE .

COMPUTE bfia = mean(bfi2r,bfi7,bfi12r,bfi17,bfi22,bfi27r,bfi32,bfi37r,bfi42) .
VARIABLE LABELS bfia 'BFI Agreeableness scale score' .
EXECUTE .

COMPUTE bfic = mean(bfi3,bfi8r,bfi13,bfi18r,bfi23r,bfi28,bfi33,bfi38,bfi43r) .
VARIABLE LABELS bfic 'BFI Conscientiousness scale score' .
EXECUTE .

COMPUTE bfin = mean(bfi4,bfi9r,bfi14,bfi19,bfi24r,bfi29,bfi34r,bfi39) .
VARIABLE LABELS bfin 'BFI Neuroticism scale score' .
EXECUTE .
```

```
COMPUTE bfio = mean(bfi5,bfi10,bfi15,bfi20,bfi25,bfi30,bfi35r,bfi40,bfi41r,bfi44) .
VARIABLE LABELS bfio 'BFI Openness scale score' .
EXECUTE .Soto et al.(2008)
```

Appendix E: Sample Size

Sample size for precision Levels, and confidence level is 95% and P =.5.

Size of Population	Sample Size (n) for Precision (e) of:		
	±5%	±7%	±10%
100	81	67	51
125	96	78	56
150	110	86	61
175	122	94	64
200	134	101	67
225	144	107	70
250	154	112	72
275	163	117	74
300	172	121	76
325	180	125	77
350	187	129	78
375	194	132	80
400	201	135	81
425	207	138	82
450	212	140	82

Appendix F: Comparison Sample: Means and Standard Deviations for BFI

		Extraversion		Agreeableness		Conscientiousness		Neuroticism		Openness	
AGE	N	M	SD	M	SD	M	SD	M	SD	M	SD
21	6076	3.25	.90	3.64	.72	3.45	.73	3.32	.82	3.92	.66
22	5014	3.26	.89	3.64	.72	3.50	.72	3.30	.82	3.94	.65
23	4828	3.30	.89	3.64	.70	3.52	.70	3.28	.82	3.94	.66
24	4494	3.28	.89	3.67	.70	3.55	.71	3.29	.82	3.95	.65
25	4499	3.31	.91	3.66	.71	3.58	.71	3.27	.83	3.96	.66
26	3683	3.31	.91	3.66	.70	3.57	.71	3.28	.83	3.95	.66
27	3529	3.28	.91	3.68	.69	3.60	.71	3.26	.82	3.95	.66
28	3497	3.29	.92	3.67	.70	3.61	.71	3.23	.83	3.94	.66
29	3213	3.29	.91	3.67	.70	3.61	.70	3.25	.83	3.93	.67
30	3007	3.28	.90	3.67	.69	3.63	.72	3.22	.84	3.94	.67
31	2307	3.31	.90	3.68	.71	3.63	.72	3.24	.83	3.92	.67
32	2111	3.27	.89	3.72	.68	3.63	.72	3.21	.84	3.93	.67
33	1907	3.26	.92	3.75	.68	3.65	.72	3.20	.83	3.91	.67
34	1735	3.29	.93	3.73	.69	3.66	.73	3.19	.84	3.92	.67
35	1760	3.29	.91	3.75	.68	3.68	.73	3.19	.85	3.90	.68
36	1509	3.24	.91	3.78	.68	3.65	.74	3.19	.86	3.87	.70
37	1541	3.26	.92	3.82	.68	3.72	.72	3.15	.84	3.88	.69
38	1406	3.23	.90	3.84	.66	3.74	.71	3.13	.85	3.87	.69
39	1269	3.23	.91	3.83	.67	3.75	.71	3.17	.84	3.88	.69
40	1393	3.30	.89	3.81	.67	3.74	.72	3.14	.84	3.88	.69

41	1115	3.25	.91	3.87	.66	3.76	.71	3.15	.87	3.86	.65
42	1244	3.25	.90	3.89	.65	3.76	.74	3.11	.86	3.90	.69
43	1064	3.22	.93	3.90	.66	3.75	.70	3.14	.88	3.88	.72
44	1051	3.26	.88	3.86	.66	3.79	.70	3.11	.87	3.93	.65
45	1135	3.22	.89	3.88	.67	3.77	.69	3.10	.87	3.90	.70
46	900	3.23	.91	3.93	.68	3.81	.73	3.05	.87	3.85	.75
47	856	3.25	.89	3.90	.67	3.84	.68	3.06	.90	3.92	.75
48	809	3.24	.91	3.90	.62	3.80	.69	3.09	.87	3.88	.69
49	735	3.21	.89	3.91	.63	3.83	.72	3.05	.90	3.89	.72
50	791	3.26	.90	3.97	.66	3.85	.71	2.98	.89	3.90	.70
51	600	3.29	.94	3.96	.65	3.88	.67	3.02	.92	3.91	.67
52	563	3.30	.87	3.91	.67	3.85	.71	3.05	.92	3.90	.72
53	456	3.25	.92	3.99	.64	3.82	.72	3.04	.90	3.91	.66
54	328	3.17	.91	4.01	.67	3.84	.69	3.03	.93	3.86	.75
55	346	3.25	.85	3.91	.65	3.87	.66	2.93	.83	3.89	.71
56	317	3.26	.85	3.93	.66	3.88	.71	2.96	.83	3.86	.71
57	246	3.12	.91	3.96	.68	3.84	.69	2.94	.95	3.85	.73
58	210	3.18	.89	4.02	.66	3.93	.73	2.98	.85	3.79	.73
59	161	3.13	.89	3.90	.66	3.88	.74	3.06	.96	3.80	.70
60	162	3.10	.85	3.99	.68	3.86	.71	2.92	.99	3.80	.73

Appendix G

Appendix G: BFI Approval