

EXPLORING THE RELATIONSHIP BETWEEN CULTURAL INTELLIGENCE AND  
TEACHER BURNOUT IN THE MISSISSIPPI DELTA

by

Lakeysha Yvette Hallmon

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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APPROVED BY:

Tracey Pritchard, EdD, Committee Chair

Tamika Hibbert, EdD, Committee Member

Monique Carry, PhD, Committee Member

Scott B. Watson, Associate Dean, Advanced Programs

## ABSTRACT

School districts in the Mississippi Delta are located within one of the poorest regions in the United States (United States Census Bureau, 2012). These school districts face challenges such as low reading and math scores, high concentrations of students living in poverty, and a critical shortage of teachers. Researchers link the critical shortage to high turnover rates and the associated teacher burnout (Darling-Hammond, 2010). The problem of teacher burnout and the consequential attrition that persists in the Mississippi Delta may be ascribed to a cultural disconnect between teachers and students (Brown-Jeffy & Cooper, 2011). Thus, in this exploratory, correlational study, the researcher explored if a significant relationship existed between the four subscales of cultural intelligence and teacher burnout, while controlling for the effects of demographic variables (gender, race, and years of experience), teacher efficacy and teacher recruitment programs using a hierarchical multiple regression analysis. The researcher drew from a sample of 112 teachers from five high schools in the Mississippi Delta. A significant relationship was found between teacher burnout and teacher efficacy. In addition, a significant relationship was found between cultural intelligence and personal accomplishments. Teachers completed a set of instruments via an online survey: Cultural Intelligence Scale (CQS), Maslach Burnout MBI-Educators Survey, Demographic Survey, and the Teacher Sense of Efficacy Scale (TSES)

*Keywords:* Cultural Intelligence, Teacher Burnout, Culture of Poverty, CQS, MBI, TSES

### **Dedication**

This is dedicated to my mother, Carolyn. I am because you were. Thank you for every book you ever purchased me, for every sacrifice you made for my peace, and for all the space in between. I miss you every single day. Peacefully rest. And, to my little sister, Whitney and nephews, Sean and Amir—it is my only prayer that each of you understand that there is nothing that can compete with unwavering faith and a determined mind. You three are the light and the laughter in my heart.

## Acknowledgments

I am a firm believer that nothing in life is ever achieved alone regardless of the level of time spent in solitude pursuing a dream or goal. For such reasons, as I celebrate this milestone on my academic journey and accept it with the awareness that I am Dr. Lakeysha Hallmon because of the lineage of women who traveled this journey before me. Because of their discipline and courageousness, a door was cracked open for me. I enter into this rank with the understanding that I am now a torch carrier for my family, my community, and other individuals who are pursuing such an endeavor. Education, knowledge, and wisdom are often wrapped in different packages, wearing different faces, sharing different yet similar narratives. I am extension of such unique wrappings--- the most intelligent women whom I have ever met never received a high school diploma, and they are the shoulders from which I stand: my mother, Carolyn, and my grandmothers, Bobbie and Josephine. I am because of the light you exude, your perseverance and the level of *knowing* and faith it takes to survive being brown women in Mississippi. It is because the life you lived, the sacrifices you made, the struggles you endured and your time in your *prayer closet* that I am who I am. I thank God that you were assigned to be monarchs for our family. I am equally grateful for my father. I live to make you proud. I honor the lessons you taught me and strive to exemplify them in my life. You set a bar before me, and it is my honor to rise and meet it. I am grateful for my sister Yolanda. I love you. You are always my greatest cheerleader. No matter what I strive for in life, I know that I can look to you to believe wholeheartedly in me. I only hope in this lifetime, I can give you what you naturally give to me. For my little brother, Roderick, I love you. I want to make you proud, always have. To my bestie, Ashley, we set out to be generation and narrative changers for our families—you are a first generation lawyer and I am a first generation *academic doctor*. I love you. I love you for

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### **List of Abbreviations**

Culture Intelligence Theory (CQ)

Culture Intelligence Theory Scale (CQS)

Emotional Intelligence (EQ)

Maslach Burnout Inventory (MBI)

Mississippi Delta (MS Delta)

Mississippi Department of Education (MDOE)

National Assessment of Educational Progress (NAEP)

National Center for Education Statistics (NCES)

Social Intelligence (SQ)

Socioeconomic Status (SES)

Teach for America (TFA)

Teacher Sense of Teacher Efficacy (TSTE)

## CHAPTER ONE: INTRODUCTION

### Background

The United States Census Bureau (2012) included a definition to explain poverty by a family's total income. Statisticians use the term *poverty* when a family's total income is less than the family's threshold for that family and every individual therein. In past studies, Payne (2005) examined how poverty affected the quality of education for students by examining cultural norms of students in high poverty areas. Payne (2005) suggested students in high poverty areas react and respond differently in school settings than do students in affluent neighborhoods. The social norms for students in high poverty areas differ from their wealthier counterparts. As such, these norms and behaviors can give rise to a particular set of beliefs or customs, which passed down through the generations, can create a specific culture of poverty. Payne (2005) explained this culture creates barriers for economically challenged communities. Payne's (2005) research found generational poverty caused debilitating struggles for children because of the psychological constructs of poverty. A vast percentage of the population in the Mississippi Delta has lived within generational poverty for decades (Griffin, Taylor, Varner, & White, 2012).

Mississippi is comprised of 163 school districts; 35 are located in the Mississippi Delta (United States Census Bureau, 2012). According to the 2012 United States Census Bureau, Mississippi has a poverty level of 24%, the highest in the nation. Leading as the fiftieth poorest state in the United States, approximately 33% of all families in Mississippi live below the poverty level (Lord, 2012). As further evidence of poverty, approximately 67% of all students are on free or reduced lunch, and 69.9% of schools receive Title I funding (United States Census Bureau, 2012).

The low income and poverty-stricken areas of Mississippi have historically suffered from low-test scores, low graduation rates, and a high concentration of special education students (Kober & Usher, 2012). In addition, a critical shortage of teachers affects Mississippi. To combat this, educational stakeholders have established several teacher recruitment programs in Mississippi such as the Critical Needs Program, Mississippi Teacher Corp, and Teach for America (TFA), which funnel young, ambitious, mostly White teachers into these underserved communities. The Mississippi Delta receives the highest number of young, novice educators in the country (Heilig & Jez, 2010). Although teacher recruitment programs are beneficial for school district impacted by critical teacher shortages, teacher recruitment programs such as TFA only require teachers to teach for two years (Heilig & Jez, 2010). Brewer (2014) found that TFA teachers are likely to burnout because of a lack of training and disillusionment. As a result, the schools in the Mississippi Delta continuously experience the *revolving door effect*, which negatively affects the classroom environment and the overall culture of the school by disrupting continuity. Each new teacher must acclimate to the school's culture and establish his or her own classroom norms; therefore, new teachers often miss the opportunity to move beyond merely confronting challenges into actual change (Buchanan, Lang, & Morin, 2013). In addition, class and race differences separate students from teachers. Differences in education, exposure, and income status can create different cultures, which contributes to a cultural divide between teachers, students, and parents (Bloom & Peters, 2012). An additional study indicated that a significant relationship exists between culturally diverse schools and teacher burnout (Miller, 2011). Educators can associate this cultural divide with the theory of cultural intelligence and link it to arising issues in the Mississippi Delta, which includes high teacher burnout.

Griffin et al. (2012) noted that poverty within the Mississippi Delta is pervasive. This area is considered one of the most chronically distressed regions in the United States. According to Towner (2010) and the United States Census Bureau (2012), in 2010, the Mississippi Delta consisted of 47 counties; 41 counties were considered chronically distressed and 17 of the residents of these counties survived solely off agricultural employment. The conditions of the Mississippi Delta affect the school system. Towner (2010) noted the following:

Approximately, 40 percent of the state's 1,097 schools are located in rural [areas], and over 60 percent of the state's 158 identified lowest performing schools are in rural locations. Seventy-eight percent of Mississippi's student populations are living in poverty, as designated by enrollment in the Free and Reduced Priced Lunch program, and all of the state's lowest performing schools are considered high poverty schools. (p. 53)

Historically, Mississippi's students rank either last or close to last in reading and mathematics on national assessments (Smith & Narrett, 2013). Conversely, within the state, significant discrepancies exist between affluent counties and those in the Mississippi Delta. The Mississippi Delta, whose citizens are predominately African American, continually ranks among the lowest in the nation when comparing test scores (National Assessment of Educational Progress [NAEP], 2013). The schools in the rural areas typically rank lower than do the schools in more affluent sections of the states that make up the Mississippi Delta (NAEP, 2013; United States Census Bureau, 2012). This ranking could be largely because of the impact of segregation that persists in the education system in the Mississippi Delta between poorer and affluent school districts. Historically, poor, Black Mississippians perform lower, have lower graduation rates, and score lower in college readiness than do students in the rest of the nation (Al-Fadhli & Singh, 2010; NAEP, 2013). In addition, such school districts suffer a significant critical shortage

of teachers. Teacher recruitment programs support the critical shortage of teachers. During the 2014-2015 school year, the TFA deployed approximately 320 TFA teachers to schools in the Mississippi Delta, which was the largest recruitment of this type in the country. TFA boasts of recruiting students from the top, most elite colleges and universities throughout the country to teach students in the Mississippi Delta (TFA, 2014).

Essentially, racial and class differences exist between the majority poor students in the Mississippi Delta and the transient teachers who teach them. These racial and economic differences could contribute to a general cultural disconnect between students and teachers. This disconnect could contribute to the lower performance of these schools and could share in the effects of teacher burnout and essentially teacher turnover in the Mississippi Delta (Ullucci & Battey, 2011).

Considering this, stakeholders could link the theory of CQ to the critical shortage of teachers, which may be a result of teacher burnout. Ang et al. (2007) defined CQ as, "...an individual's capability to function and manage effectively in culturally diverse settings. CQ is a multidimensional construct targeted at situations involving cross-cultural interactions arising from differences in race, ethnicity, and nationality" (p. 336). Domestically, Rockstuhl et al. (2011) used the concept to explore teacher attitudes toward student cultures. In these studies, researchers envisioned this more traditionally through the lens of ethnic identity. However, it is possible to expand the concept of CQ to include social class as possessing its own unique culture. In the present study, the researcher focused on the unique culture of poverty in the Mississippi Delta and its effect on teacher burnout.

The students in the Mississippi Delta are majority Black, and most have only lived within their communities, unlike their educators who come from colleges and universities across



America (Helig & Jez, 2010). These teachers generally work on short-term contracts (two years) and receive additional benefits such as student loan deferral for their tenure (Helig & Jez, 2010). The Mississippi Delta is one of TFA's targeted areas, which annually deploys over 300 teachers to the Mississippi Delta (TFA, 2013, 2014). Because of the high concentration of teachers from diverse backgrounds, a lack of cultural synchronization could exist. The lack of cultural synchronization, as explained by Irvine (2003), perpetuates the existence of a persistent gap between African American students and their teachers on micro and macro levels. Irvine suggested that disconnect from the household to the classroom (micro) and on a societal (macro) are the drivers of cultural de-synchronizations. Teachers' inability to identify with the life and cultural context of students unrelated to their own, can threaten the teacher's impact and the students' growth (Brown-Jeffy & Cooper, 2011; Ladson-Billings, 1995). Cultural de-synchronizations leave both the teacher and the student in a place of ineffectiveness and can contribute to teacher burnout (Brown-Jeffy & Cooper, 2011).

### **Problem Statement**

Teacher attrition in the Mississippi Delta has been higher in the last decade than in previous years and has been related to teacher efficacy and school conditions (Hayes, 2008; Jimerson & Malhoit, 2009; Towner, 2010). Schools in the Mississippi Delta experience high teacher turnover rates and are among the schools with the lowest national test scores in both reading and mathematics (NAEP, 2013). Students in the Mississippi Delta rank among the lowest in graduation rates, ACT scores, college readiness, and reading and mathematics (NAEP, 2013; Rutherford, Hillmer, & Parker, 2011). High teacher turnover rates affect student performance (Ronfeldt, Loeb, & Wyckoff, 2013). When a school experiences a high percentage of teacher turnovers, the school is unable to create a consistent, structured school environment or

a stable school culture for teachers or students (Donitsa-Schmidt & Zuzovsky, 2014; Ronfeldt et al., 2013). Moreover, researchers have found that teacher burnout has adverse effects on school environments (Tsouloupas, Carson, & Matthews, 2014). As such, researchers have linked turnover rates to teacher burnout suggesting factors that influence teacher burnout could ultimately contribute to teachers' decisions to leave the schools that employ those teachers (Zhang & Zhang, 2012).

Researchers identified teacher burnout as one of the leading factors contributing to the growing number of educators leaving the classroom or leaving the field of education (Pomaki, DeLongis, Frey, Short, & Woehrle, 2010). Moreover, research suggests that teacher burnout has contributed to the number of teachers leaving the Delta. Researchers named a number of variables that contribute to teacher burnout, which include gender, race, years of experience, teacher self-efficacy, and teacher recruitment programs (Brewer, 2014; Ingersoll & Strong, 2011; Klassen & Chiu 2010; Liu, 2012; Pas, Bradshaw & Hershfeldt, 2012). Specifically, in the MS Delta, researchers have noted that teacher efficacy is one of the most cited reasons for burnout (Towner, 2010). Teacher efficacy, moreover, teachers' beliefs, can be negatively impacted when teachers have not been properly trained to teach the students they are assigned to teach (Blooms & Peters, 2012). A teacher's capacity to relate to his or her students can be conceptualized as an important factor, which can influence his or her ability to feel effective. Thus, a teacher may not enjoy an ability to feel connected enough to the school environment or the students to remain in the job.

Considering the high influx of teachers in the Mississippi Delta who do not originate in the Delta (teachers who participate in a teacher recruitment program), some of these teachers could have difficulty relating to the racial and socioeconomic culture associated with the Delta

(Darling-Hammond, 2010), which could lead to teacher burnout and the high teacher turnover rate. Even so, little research exists on how teachers' CQ affects burnout rates when culture refers to socioeconomic status (SES) as opposed to ethnic identity. Traditionally, researchers have associated teacher burnout with teacher self-efficacy (Skaalvik & Skaalvik, 2014). However, researchers have not explored a possible relationship between CQ and teacher burnout. Little information exists regarding how the culture of poverty in the Mississippi Delta affects the teachers who teach there. In addition, researchers have not linked the presence or absence of cultural intelligence as a variable that influences teacher burnout. However, the significance of culturally responsive teaching is that teachers feel more confident teaching in suburban, affluent school districts than they do teaching in urban and rural districts (Siwatu, 2012). Approaching the phenomenon of teacher burnout through the lens of cultural intelligence provided a unique perspective on factors related to teacher turnover rates in the Mississippi Delta. This information could contribute to the development of relevant and comprehensive training programs for new teachers to the Delta. In addition, it can add to the literature on factors influencing turnover rates in impoverished, rural communities.

### **Purpose Statement**

The purpose of this exploratory, correlational study was to explore a possible correlation between cultural intelligence (CQ) and teacher burnout among teachers in the Mississippi Delta. The general population consisted of approximately 266 teachers from the Mississippi Delta. The geographic location for the study was the Mississippi Delta. The predictive variable CQ (as measured on a Likert-type scale) consisted of four components, which were measured as subscales: (a) meta-cognitive, (b) cognitive, (c) motivational, and (d) behavioral dimensions. CQ is a person's ability to function and manage effectively in culturally diverse settings (Ang et al.,

2007). CQ was measured using the Cultural Intelligence Scale (CQS). The researcher measured the criterion variable, teacher burnout, on a Likert-type scale ranging from low to high levels of burnout. Burnout is a response that occurs in individuals who work with people in health and educational professions (Maslach & Leiter, 1997). Teacher burnout was measured using the Maslach Burnout MBI-Educators Survey, which consists of three components: (a) depersonalization, (b) emotional exhaustion, and (c) reduced personal accomplishments. Variables included race, gender, years of experience, teacher efficacy, and teacher recruitment programs, which were controlled for in this study. Researchers have identified these components as contributors to teacher burnout (Klassen & Chiu, 2010; Liu, 2012; Pas, Bradshaw, & Hershfeldt, 2012). This study used an exploratory correlation design and a hierarchical standard multiple regression to investigate possible relationships between variables.

### **Significance of the Study**

In this study, the researcher attempted to fill the gap in the educational literature by exploring factors affecting teacher burnout in low income, rural high schools. Because teacher burnout continues to present challenges to educational systems within the Mississippi Delta, as evidenced by high turnover rates, this study provides more information on possible contributors to burnout and thus to the significant teacher turnover rates. The Mississippi Delta has significantly high teacher turnover rates, which could be a direct result of teacher burnout (Towner, 2010) and which negatively impacts already taxed school environments (Ronfeldt et al., 2013). Although the study of teacher burnout in the educational literature has found several contributing factors, including gender, race, years of experience, teacher efficacy, teacher recruitment programs, researchers have not investigated the ability of teachers to navigate cultural differences in the context of high poverty schools (Bloom & Peters, 2012; Heilig & Jez,

2010; Noor & Zainuddin, 2011; Watts & Robertson, 2011; TFA, 2013, 2014). These studies suggest that a relationship exists between this ability (CQ) and teacher burnout in the Mississippi Delta.

By exploring the relationship between CQ (as it relates to poverty) and teacher burnout while controlling for specific demographic variables, in this study, the researcher shed light on the ways the culture of poverty within the Mississippi Delta could impact the teachers who work there. Results of this study can be used to inform training and professional enrichment experiences for teachers, particularly novice teachers who are beginning their work in the Delta, by exposing them to some of the unique aspects of working in a high poverty area, teacher attrition rates will improve, which will positively impact the overall school environment. Researchers have established a link between professional development for teachers and higher attrition rates (Boyd et al., 2011). In addition, administrators and educators could have an opportunity to begin to address proactively the cultural gaps between teachers and students extending to a culture of poverty specifically in hopes of closing the cultural gap between teachers and students.

On a broader level, this exploration of cultural intelligence in the Mississippi Delta specifically can help stakeholders determine if teachers' lack of CQ contributes to their decisions to terminate their employment (Gupta, Singh, Jandhyala, & Bhatt, 2013). In July 2014, the Alliance for Excellent Education released updated information on teacher attrition in the United States (as cited in Haynes, 2014). Ingersoll, a contributor to the 2014 Alliance for Excellent Education, reported the United States spends between \$1 and \$2.2 billion per year because of teacher attrition (as cited in Haynes, 2014). According to the report, because of teacher attrition, in the 2008-2009 school year, Mississippi spent between \$15, 353, 389 (low estimate) and \$33,

418, 682 high estimate). Staff at the Alliance for Excellent Education found, “The greatest exodus taking place in high-poverty, high minority schools such as those in the Mississippi Delta” (as cited in Haynes, 2014, p. 3). If stakeholders can identify the reasons why teachers burnout, they can offer financial resolve to one of the poorest regions and educational systems in America (Poston et al, 2010). This study offers some insight on reducing teacher burnout; as a result, the state of education in Mississippi could improve for all stakeholders, especially the financial stability of the state. In addition, this study adds to the literature on factors influencing turnover rates in impoverished, rural communities.

### **Research Questions**

**RQ 1:** Do demographics, teacher efficacy, and teacher recruitment program variables show a significant correlation with CQ?

**RQ 2:** Is there a relationship among the four factors of CQ and teacher burnout for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, teachers who are from the MS Delta, and teachers participating in a teacher recruitment program?

### **Null Hypotheses**

The null hypotheses for this study were:

**H<sub>0</sub>1:** There is no significant relationship between the demographics and CQ.

**H<sub>0</sub>2:** There is no significant relationship between teacher efficacy and CQ.

**H<sub>0</sub>3:** There is no significant relationship between the teacher recruitment program variable and CQ.

**H<sub>0</sub>4:** Teachers' race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation does not significantly contribute to explanation of the variance in emotional exhaustion.

**H<sub>0</sub>5:** Teachers' four subscales of CQ does not significantly contribute to explanation of the variance in emotional exhaustion.

**H<sub>0</sub>6:** There is not a significant predictive relationship among the four subscales of CQ and teachers' emotional exhaustion for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.

**H<sub>0</sub>7:** Teachers' race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation does not significantly contribute to explanation of the variance in personal accomplishment.

**H<sub>0</sub>8:** Teachers' four subscales of CQ does not significantly contribute to the explanation of the variance in personal accomplishment.

**H<sub>0</sub>9:** There is not a significant predictive relationship among the four subscales of CQ and teachers' personal accomplishment for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.

**H<sub>0</sub>10:** Teachers' race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation does not significantly contribute to explanation of the variance in depersonalization.

**H<sub>0</sub>11:** Teachers' four subscales of CQ does not significantly contribute to explanation of the variance in depersonalization.

**H<sub>0</sub>12:** There is not a significant predictive relationship among the four subscales of CQ and teachers' depersonalization, for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.

### **Definitions**

1. *CQ* - CQ is a person's ability to function and manage effectively in culturally diverse settings. CQ consists of four subscales: cognitive, metacognitive, motivational, and behavior (Ang et al., 2007)
2. *Teacher burnout* - Teacher burnout syndrome is composed of the following the components: emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity (Maslach & Leiter, 1997).
3. *Teacher turnover* - Teacher turnover is leaving teaching employment (commonly referred to as attrition), moving to a different school, and a teaching area transfer, such as the transfer of a teacher from an assignment in special education to one in general education (Boe, Sunderland, & Cook, 2008).
4. *Income achievement gap* - Income achievement gap was defined by Reardon (2011) as the income achievement gap as is the distinction from child whose family is at the 90th percentile of the family income distribution and a child from a family of the 10th percentile.
5. *CQS* – CQS was used to measure the predictor variable CQ (Ang et al., 2007). The CQ Scale is a 20 item, 4-factor scale (Ang & Van Dyne, 2008). Four indicators, which



follow, break down the CQS: (a) meta-cognitive, (b) cognitive, (c) motivational, and (d) behavioral indicators.

6. *MBI Educators Survey* - MBI Educators Survey was used in this study to measure the criterion variable teacher burnout. The MBI Educator Survey, 22-item Likert-type scale is an adaptation of the original measure (Maslach, 1987). The measure is comprised of three subscales: (a) emotional exhaustion (b) depersonalization and (c) personal accomplishment (Maslach & Jackson, 1981).

## **CHAPTER TWO: REVIEW OF THE LITERATURE**

### **Introduction**

Each year, many teachers leave the teaching profession, which leaves many states with a deficit of quality teachers in the classroom (Struyven & Vanthournout, 2014). Although many teachers leave to pursue other professional endeavors, teachers who relocate to neighboring school districts affect a high number of low impoverished urban and rural school districts (Adamson & Darling-Hammonds, 2011). The neighboring schools typically possess more appealing school characteristics, provide higher salaries, and have fewer students with learning disabilities (Adamson & Darling-Hammonds, 2011).

In addition, researchers have credited low academic successes as another factor that causes teachers to leave struggling school districts. Researchers have suggested the lack of culturally responsive teaching, which results in disconnect between school culture, home culture, and community culture, and perpetuates the low achievement of poor students (Brown-Jeffy & Cooper, 2011; Ramirez, & Jimenez-Silva, 2014). As it relates to the current study, because of the critical shortage of teachers in urban and poverty stricken areas, at the time of data collection, teachers were being recruited from different regions of the country to teach students, which can lead to cultural barriers (TFA, 2014). For such reasons, education leaders recruit a large number of teachers to teach in the Mississippi Delta, which is a region with a unique culture of its own (Huye, Connell, Crook, Yadrick, & Zoellner, 2014).

Theorists suggest the academic successes of students can increase if schools and teachers reflect and draw upon the cultural and language strengths that are present within the community (Brown-Jeffy & Cooper, 2011; Gay, 2002; Ramirez, & Jimenez-Silva, 2014). Similarly, cultural intelligence theorist (CQ) suggests for an individual to acculturate successfully, manage, and

lead, he or she must possess a higher level of CQ (Earley & Ang, 2003). Fundamentally, a teacher's decision to leave or stay in a particular school could also be related to how well he or she connects with students and the culture of the school (Darling-Hammonds, 2010).

### **Theoretical Framework**

The cultural competence theory was built from international arenas. Several researchers used cultural competence as an indicator that has a significant relationship with burnout, primarily with healthcare workers (Choi & Kim, 2014; Fernet, Austin, Trépanier, & Dussault, 2013; Wright, 2011). The motivation behind the theory came during a time when the country faced extreme globalization. It was Hofstede's (1980) motivation to build cultural bridges in the business world. The cultural competence theory was derived from Hofstede's (1980) internal business model and research conducted with IBM employees.

Wiseman, Hammer, and Nishida (1989) defined cultural competence as the "ability to minimize misunderstandings with someone from another culture. Cultural knowledge has positive effects and maximizes intercultural competency" (p. 351). Hofstede (1980) built this theory from four international arenas: (a) power distance, (b) individualism, (c) femininity/masculinity, and (d) uncertainty and avoidance. Hofstede (1980) defined power distance as an individuals' ability to understand and accept that power is disseminated unequally. Individualism is defined as a society's discomfort with uncertainty. Femininity and masculinity is defined as the dominant dimensions in society. Hofstede (1980) went on to describe masculinity as not caring about the quality of life, a level of assertiveness, and the quality of life for communities and people; finally, the feminine characteristic are identified as caring and empathy. Hofstede's (1980) concept of cultural competence led to Schwartz's construct of culture. Schwartz (1994a) created the theory of culture values, which built upon Hofstede's (1980) theory of cultural

competence. Schwartz (1994a) tested this theory by using the Schwartz Value Survey (SVS), wherein he defined values as beliefs, which refer to desirable goals and serve as standards that transcend specific actions and situations. Schwartz's (1994b) most recent model has only three dimensions: (a) mastery versus harmony (which addresses the issue of economic and social viability), (b) hierarchy versus egalitarianism, and (c) embeddedness versus intellectual and affective autonomy. Schwartz's theory differs from Hofstede's theory because Schwartz (1994a, 1994b) explored this concept of cultural competence with teachers and students who stepped outside of the business world. Schwartz's research, which sampled both students and teachers, represented two generations outside of the business world and led to the most recent study of CQ (Fink & Mayrhofer, 2009). In his study, Schwartz found teachers and students feel culturally disconnected (as cited in Fink & Mayrhofer, 2009). Schwartz's targeted population is consistent with the current study as the present study explored teachers' relationship with students within differing cultures (as cited in Fink & Mayrhofer, 2009).

As mentioned, cultural competence and theory of cultural values led to cultural intelligence. Researchers Ang, Van Dyne, and Tan (2011) specifically created CQ to address past literature, which suggested that the theoretical foundation of cultural competence was disjointed. Ang et al. (2011) shared that because there is "no theoretical framework to tie the numerous cultural competency constructs together and there is little consensus on operationalizations, questions of construct validity arise and compromise the practical utility of the concept" (p. 583). Ang et al. (2011) created the construct of CQ based upon this framework. In addition, Earley and Ang (2003) conceptualized CQ based upon the theory of multiple loci of intelligence (Sternberg & Detterman, 1986). According to Earley and Ang (2003), CQ evaluates multiple levels of intercultural competence. Earley and Ang (2003) proposed intelligence should exceed cognitive

skill. As a result, Earley and Ang (2003) identified four ways of “conceptualizing level intelligence” (p. 584), which included metacognitive, cognitive, motivational, and behavioral.

### **Four Factor Model of Cultural Intelligence**

#### **Cultural Intelligence**

CQ focuses on an individual’s ability to interact effectively, manage, and engage with diverse persons (Earley & Ang, 2003). Researchers created CQ to offer insight into why people respond in diverse and drastic ways when adjusting to new cultures (Ang & Van Dyne, 2007). Although closely related to cultural competence, CQ actually suggests intercultural ability is a form of intelligence, which can be both measure and developed. According to Ang and Van Dyne (2008), CQ exists in four subscales: (a) cognitive, (b) metacognitive, (c) behavioral, and (d) motivation. Earley and Ang (2003) shared that without CQ, leaders and managers ineffectively navigate in cultures that are different from their own. Quite similarly, to measure an individual quotient (IQ), a scale measures the four subscales of CQ. As mentioned, Moon (2010) distinguished CQ from other types of intelligence such as general cognitive ability, emotional intelligence (EQ), and social intelligence (SQ) because CQ focuses on intercultural settings. Earley and Ang (2003) explained that cultures share in a sense of consistency for social interactions. IQ, EQ, and SQ do not always transfer automatically into effective intercultural interaction (Moon, 2010). Essentially, a person can have high scores on IQ, EQ, or SQ of his or her culture; however, this does not mean a person can effectively adapt and navigate successfully in diverse cultures (Moon, 2010).

**Metacognitive cultural intelligence.** Metacognitive deals with the mental processes of understanding different cultures and describes the level of consciousness and cultural awareness when corresponding or engaging with different cultures (Earley & Ang, 2003). Metacognitive

involves adjusting cultural knowledge when interacting with people with different cultural backgrounds and monitoring the accuracy of cultural knowledge during cross-cultural encounters (Ang et al., 2007). Metacognitive gauges the level of awareness and cultural sensitivity. Those who are conscious or have higher levels of metacognitive skills are more likely to be aware of cultural consciousness (Earley & Ang, 2003). There are two motivations for metacognitive intelligence.

First, it promotes active thinking about people and situations when cultural backgrounds differ and allows individuals to evaluate and revise their mental maps; therefore, it consequently increases the accuracy of their relationships (Ang, Van Dyne, & Koh, 2006; Smith, Couchman, & Beran, 2012). Metacognitive experiences shape what information to focus on and how to integrate knowledge and experience effectively to draw upon schema to interact and engage with different cultures (Earley & Ang, 2003; Smith et al., 2012). Metacognition involves the following process: (a) self-regulation, (b) planning, (c) monitoring, and (d) evaluating (Moon, 2010). According to Ng and Earley (as cited in Smith et al., 2012), people who examine their progress and make necessary behavioral modifications perform more effectively in diverse cultural setting. The metacognitive dimension reflects both King and Baxter-Magolda's (2005) constructive developmental theory of intercultural maturity and Bennett's (1993) origin of intercultural sensitivity. Both models focus on “interculturally competent citizens who can engage in informed, ethical decision making when confronted with problems that involve a diversity of perspectives” (as cited in King & Baxter-Magolda, 2005, p. 571). Individuals who score high on the metacognitive CQ are consciously aware of the norms, habits, and behaviors of other cultures. These individuals monitor and adjust cultural assumptions and schemas throughout their intercultural exchanges (Ang et al., 2007; Earley & Ang, 2003; Van Dyne, Ang,

& Livermore, 2010). High metacognitive individuals think in a culturally relativistic manner, engage in meaningful interdependent relationships with individuals from cultures different from their national culture, and realize and value human differences (Earley & Ang, 2003).

**Cognitive cultural intelligence.** Cognitive CQ indicates the level of an “individual’s concept of cultural norms, practices, conventions in different cultures” (Ang & Van Dyne, 2008, p. 17). Cognitive CQ specifies both cultural likeness and differences. As indicated by Ang and Van Dyne (2008), cognitive CQ is important because high levels of cognitive CQ are the “foundation of decision making and performance in cross-cultural situations” (p. 17). Cognitive CQ relies upon an individual’s ability properly to deduce culturally specific knowledge. Researchers consider individuals with high cognitive CQ to possess a greater appreciation and understanding of similarities and differences found between cultures (Imai & Gelfand, 2010). Cognitive CQ includes knowledge about the legal and economic systems, religious beliefs, the marriage systems, the arts and crafts, and language of different cultures (Ang et al., 2006; Earley & Peterson, 2004).

Typically, cognitive CQ is the focus of intercultural training (Earley & Mosakowski, 2004; Earley & Peterson, 2004); however, knowledge acquisition effectiveness is contingent upon reflective interactions with the remaining CQ dimensions (Van Dyne et al., 2010). To exhibit high cognitive CQ, flexibility, or the ability to redesign and regulate one's self concept to novel cultural environments should mitigate cognitive multi-facetedness (Earley & Ang, 2003).

**Motivational cultural intelligence.** An individual’s intrinsic desire to understand and relate to those from different cultures influences motivational CQ (Ang et al., 2007). Motivational CQ is an individual’s preference to be intrinsically motivated to adapt, to understand, to relate, and to adjust to diverse cultures. Ang et al. (2007) conceptualized

motivational CQ by using the expectancy-value framework. Self-efficacy and intrinsic motivation are indicators of those who have high levels of motivational CQ (Ang et al., 2007). Researchers found those who possess high levels of motivational CQ generally are eager to interact and engage with other cultures (Livermore, 2009). Lin, Chen, and Song (2012) added that those who possess high levels of motivational CQ have the ability to deal better with frustrating situations, which could come about when interacting with different cultures.

**Behavioral cultural intelligence.** Behavioral CQ is an indication that an individual has the ability to use appropriate verbal and nonverbal cues properly when interacting with those from differing cultures (Ang et al., 2007). Nonverbal language is equally critical because it displays subtle and overt actions by an individual and establishes the unspoken norms of a community (Ang et al., 2007). High levels of behavioral CQ exist in those who have a broad spectrum of behaviors. Behavioral CQ is important because when an individual interacts with a different culture, it is the most visible and noticeable attribute. According to Lin et al. (2012), individuals who score high on all four aspects of CQ have a desire continually to apply cultural knowledge to create strategies that will support promote verbal and non-verbal behaviors.

Stokes (2013) explored the relationship between cultural intelligence, transformational leadership, and burnout in 191 students in a doctor of education program. He found a significant relationship exists between motivational CQ and student burnout. Stokes (2013) postulated that for educators or leaders in education to be effective in leadership positions, they must be culturally sensitive, intelligent, and avoid burnout. In another study, Keung and Rockinson-Szapkiw (2013) sampled international school leaders to determine if a relationship exists between the factors of cultural intelligence and transformational leadership. The researchers sampled 193 international teachers. In their research, Keung and Rockinson-Szapkiw (2013)



found a positive relationship between the variables cultural intelligence and transformational leadership as it applied to international school leaders. Although this study did not focus on cultural intelligence and its relationship to teacher burnout, based on the findings, it can be suggested that those who possess higher cultural intelligence exemplify a greater capacity to manage and lead, which could suggest less possibility of teacher burnout.

Researchers explored CQ in the business sector (Huang & Huang, 2011).

Transformational leadership consists of leaders who are visionaries and who possess the ability to get followers to buy into their goal and mission (Bass & Avolio, 1994). Essentially, Bass and Avolio (1994) found leaders with higher levels of CQ were more effective in leading and managing within multicultural environments than were leaders with lower levels of CQ.

Teachers are leaders within their schools and classroom. Particularly in the Mississippi Delta, education administrators task many teachers with navigating a cultural environment, which may be dissimilar to their own environment (TFA, 2014). A large population of the teachers in the Mississippi Delta originates from states unlike the Mississippi Delta in terms of ethnic or racial makeup and proportion of impoverished schools, which exposes a potential cultural gap between the student and the teacher (Heilig, Cole, & Springel, 2010). As a baseline for the present study, Keung and Robinson-Szapkiw's (2013) predictive model was used, which suggest that teacher's behavior could be influenced by his or her own levels of cultural intelligence.

### **Teacher Recruitment in the Mississippi Delta**

Historically, affluent, wealthy communities have little trouble attracting highly qualified teachers (Holme, Diem, & Welton, 2014; Roth & Swail, 2000). Alternatively, high-poverty urban and rural schools districts are most likely to suffer from distressing teacher shortages (Ronfeldt et al., 2013; Roth & Swail, 2000). In addition, teachers in urban and rural school

districts educate roughly 50% of the minority students and 40% of the students with the lowest income (Ronfeldt et al., 2013; Roth & Swail, 2000). The Mississippi Delta is a region impacted by poverty. In addition, it is a region that suffers from a chronic teacher shortage (Towner, 2010). This shortage has led to many national and statewide initiatives to recruit quality teachers to the region.

Teaching programs recruit the majority of the teachers who teach in the Mississippi Delta (TFA, 2013, 2014). TFA boasts of having the highest concentration of teachers in the Mississippi Delta; however, the majority does not stay after their second year (Heilig & Jez, 2010). TFA recruits the largest number of novice teachers to the Mississippi Delta. In addition, the Mississippi Delta uses other recruitment programs that support the recruitment of teachers in high poverty areas: Mississippi Teacher Fellowship program, the Critical Need Scholarship, and the William Winters scholarship (Mississippi Department of Education [MDOE], 2014). Such programs offer incentives that allow teachers to receive college tuition, books, and moving expenses. Teachers are required to teach in critical need areas for three to five years (MDOE, 2014). Although the incentives attract teachers, approximately 30% of new teachers leave the area and relocate out of state (National Center for Education Statistics [NCES], 2012). To confront the problems of teachers leaving before they fulfill their obligation, stakeholders developed a strategic plan to support teacher sustainability (Enwefa, Enwefa, Jurden, Banks, & Buckley, 2001; Stirman et al., 2012). Trainings consist of supporting novice teachers, evaluating the workplace and conditions that teachers will face, and mapping their long-term goals as an educator. Although this is intricate, trainings do not assess cultural intelligence. Hypothetically, if such practices are currently in place, teachers will experience less burnout as they will be better prepared to face the challenges of teaching students who share a different cultural identity.

It is important to understand why teachers leave after their contract for TFA or other teacher recruitment programs expire. Because not every teacher who moves on does so because a two-year contract ends, other factors may be at play. One possibility could be the extent TFA teachers do or do not receive culturally relevant training for the contexts in which they will work. Of course, other reasons probably cause teachers to leave. As mentioned, there are high concentrations of TFA teachers in the Mississippi Delta.

According to TFA (2014), teachers go to their respective sites after five-weeks of summer training. During that time, teachers teach for two hours per day, and an experienced teacher observes them (TFA, 2014). According to the literature, teachers who have been recruited discuss the demographics of the various regions of their assignment and gain information on their future locations (TFA, 2014). However, it is unclear if the five-week training is sufficient to bridge the cultural gaps between teachers and students, particularly for those students in high poverty areas (Heilig & Jez, 2010). In addition, there is scarce research to indicate if TFA teachers are adequately trained to face the challenges of being a new teacher and a new teacher who is teaching in a region that is foreign to their current environment and surroundings. As indicated in the literature, TFA teachers are trained within the five-week training on diversity and cultural awareness; moreover, in the training, they focus on diversity. The training is entitled Diversity, Community, and Achievement and consists of a section specifically for low-income students and minority students, which is relevant to the population of students taught in the MS Delta. However, it is unclear of the support from the summer training provides the level of training needed to endure being a novice teacher who is teaching in chronically distressed regions of the country (TFA, 2014).

Anderson (2014) found that many TFA teachers chose to participate in TFA because of career uncertainty and an expressed desire to serve in some capacity. TFA successfully attracts service-minded individuals who probably did not initially have a desire to become an educator, which can add to the literature of why first year teachers are likely to experience burnout (Anderson, 2014). Many TFA teachers described the intensity of the pre-service training and felt the training did not provide enough support. TFA and teacher recruitment programs have supplemental services for their teachers, but the researcher suggested that they could do more to support corps teachers and properly prepare them for the challenges waiting at their selected schools. Ultimately, the findings of the study suggest that TFA will better serve teachers by providing more training and over a longer period. In addition, it is beneficial to host trainings in the regions and content areas in which recruits will be more beneficial and relevant to the teachers. Per the literature, a better implementation of TFA could lead to less teacher turnover.

### **Cultural Disconnection and Teacher Training**

Research exists on the cultural disconnection between teachers and students (Aragon, Culpeper, McKee, & Perkins, 2014). School settings with predominant student bodies comprised of children of color that also employ White teachers (such as TFA) could provide opportunities to explore the impacts of cultural disconnectedness on students. In addition, teachers who are outsiders to the Mississippi Delta and are unfamiliar with its culture, regardless of racial or ethnic background, could also evince cultural disconnectedness from students. Researchers have offered an array of labels in an attempt to describe the importance of cultural connectedness such as culturally appropriate (Au & Jordan, 1981), culturally congruent (Mohatt & Erickson, 1981), culturally responsive (Cazden & Leggett, 1981; Ladson-Billings, 1995), and culturally compatible (Ladson-Billings, 1995). Empirical and theoretical research offer a considerable

amount of information on the teaching practices of cultural relevance and teaching children of color in the United States (Boatright-Horowitz, Frazier, & Camangian, 2013; Harps-Logan & Crockett, 2013). These researchers also focused on the importance of teacher preparation in areas that are similar to teaching in high poverty areas such as the Mississippi Delta.

Heilig and Jez (2010) argued that novice teachers are not prepared to teach in the areas assigned because they are unprepared for the community; specifically, they are unprepared for the sociological confines of poverty and the educational weaknesses of students. According to Brown-Jeffy and Cooper (2011), teachers who have greater understanding of the context could experience an increase in their efficacy, which could positively affect the overall experience of teaching. Understanding the culture of poverty while exploring historical constructs for African American students in the Mississippi Delta and teacher-training could offer perspectives on another critical area affecting the Mississippi Delta and can add to the literature of for both cultural intelligence and teacher burnout.

Researchers suggest that officials create successful retention programs for teachers in rural areas to prepare educators to teach in such areas (Roth & Swail, 2000; Thomas & Ivey-Soto, 2014). For example, Shultz (1996) noted, “Pre-service student teachers are fairly naïve and have stereotypic beliefs about urban children” (p. 2). However, limited programs exist within the United States for the successful training of teachers to teach in rural areas (Darling-Hammond, 2010; Shultz, 1996). Research indicates that proper training can have a positive impact on teacher retention (Darling-Hammonds, 2010; Roth & Swail, 2000). Roth and Swail (2000) wrote, “The degree to which a rural teacher becomes involved in community educational and cultural programs influence his or her decision to remain; therefore, retention requires a coordinated school-community effort” (p. 3) heavily affects a teacher’s success in these settings. Zeichner

(2012) remarked that proper training could effectively retain and keep teachers motivated to teach in culturally diverse areas; as a result, there are fewer indications of teacher burnout. Zeichner (2012) suggested if teacher recruitment programs such as TFA invest more time training novice teachers to be culturally competent, the teachers will be better prepared to teach in critically distressed areas and less likely to experience teacher burnout. The empirical research detailed the recruitment process of teachers in the Mississippi Delta and established that the Mississippi Delta employs teachers from different regions of the country. Establishing that teachers teaching in Mississippi are not products of the Mississippi Delta supports the cultural relevance of the study.

### **Factors of Culture of Poverty**

Valentine (1968) defined poverty as the essence of inequality. In subsequent years, Bradshaw (2007) operationalized the definition as “the statistical measure established by annual income for a family to survive” (p. 7). Essentially, those living in poverty experience limited resources and financial income. The culture of poverty specifies “a subculture of poor people in ghettos, poor regions, or social contexts where they develop a shared set of beliefs, values and norms for behavior that are separate from but embedded in the culture of the main society” (Bradshaw, 2007, p. 9). Essentially, the culture of poverty categorizes those who experience generational or systematic poverty (Bradshaw, 2007). Various researchers and theorists have debated the theory of the culture of poverty. Some researchers noted that past academics formed their theory based upon skewed racial ideologies, which stigmatized those who are poor (Ahmed, 2013; Bradshaw, 2007; Shuffelton, 2013).

The first mention of culture of poverty derived from Lewis (1998). According to Lewis (1998), “[The culture of poverty theory] suggests that poverty is created by the transmission over

generations of a set of beliefs, values, and skills that are socially generated but individually held” (p. 7). Individuals are poor or remain as such because of their cultural beliefs and attitudes. Communities fail to overcome underdevelopment because of their national or collective cultures (Ahmed, 2013; Harrison & Huntington 2000). In one of the most argued claims in his findings, Lewis said, “The culture of poverty was self-perpetuating, so that people were unlikely to change their behavior even if the structural circumstances that led to it changed” (as cited in Lamont & Small, 2010, p. 172). This proposition is perhaps the most controversial, and it could be one of the least supported (Lamont & Small, 2010).

Historically, researchers have examined the long-term effects of those living in poverty. Goering and Feins (2003) examined the impact of neighborhood and community poverty and found compelling evidence that indicates environmental conditions influence the “behavior and life chances for children” (p. 7). Small, Harding, and Lamont (2010) observed residents in communities subjected to long-term effects of poverty displayed a level of distrust for those who are outsiders to their communities. This may hold particular relevance for teachers of a different socio-economic background and from a different place of origin who may be entering into impoverished schools outside of their communities of birth. Small et al. (2010) found that areas subjected to poverty for years are more likely to create diverse cultures within one community and those within the community make a conscious choice regarding how they behave. Payne (2009) suggested a critical need exists for those who are teaching in low-income level areas. Payne (2009) explained there are unique characteristics associated with those who are generationally poor. Payne (2009) suggested the poor have limited views of the world in a larger context than they do of their community; moreover, this marginalizes them. The culture of

poverty theory can be directly associated with the residence of the Mississippi Delta who have been beleaguered with generational poverty.

### **Poverty in the Mississippi Delta**

The Mississippi Delta is comprised of families that have survived years of generational poverty. Fontenot et al. (2010) remarked that many of the counties in these regions boast a poverty rate more than twice the national average, with the entire state showing poverty rates that exceed 24%. Fontenot et al. (2010) continued that 20% or more of the residents of the Mississippi Delta have been living in poverty for decades. Heilig and Jez (2010) related the level of poverty within the Mississippi Delta to few economic opportunities for families, as evidenced by the high unemployment rates and equally elevated high school dropout rates.

Coleman (2009) offered a historical perspective when he shared that many of the families of the Mississippi Delta are descendants of sharecroppers. Many did not own their own land or only owned small portions of land from which they did not earn a substantial profit. As such, while families may have been engaged in labor for generations, this work did not necessarily produce lasting or sustaining wealth (Coleman, 2009). Most families in the Mississippi Delta lineages consist of 50 years of sharecroppers, which subjected them to the insults that comes with second-class citizenship (Coleman, 2009). Historically, aside from sharecropping, the Mississippi cotton gins and catfish ponds formed the most viable economic opportunities for residents of the Delta (Coleman, 2009). The unique demographics of the Mississippi Delta characterize this area as one of the most rural and most impoverished regions in the United States (Fontenot et al., 2010).

The Mississippi Delta, which is predominantly rural and African American, has a unique history and cultural heritage that offers insight on the systemic and persistent poverty endured by



the residents of the region (Fontenot et al., 2010; Slack et al., 2009). Because of the technological advancements and factories moving out of the Delta, people are unable to find employment (Fontenot et al., 2010). In the past, Mississippi received huge stimulus from the government; however, the Mississippi Delta has not benefitted from the stimulus because business owners do not foresee sustainability or profit within the area because of a lack of resources (Jimerson & Malhoit, 2009). As a result, certain towns are transient and communities are becoming desolate, which leaves only the community elders, the untrained, and the unmotivated (Jimerson & Malhoit, 2009). Fontenot et al. (2010) wrote, “The Mississippi Delta is plagued by large shares of the population possessing limited human capital (e.g., job skills, education), which has consistently been found to contribute to an area’s poverty rate” (p 232). In turn, this situation attracts low-wage, unstable industries, which makes the Delta particularly vulnerable to negative impacts from industrial restructuring and globalization (Fontenot et al., 2010).

One of the greatest challenges in the Mississippi Delta is the selective appropriation of funds allocated to the region, such that the most prominent stakeholders in Mississippi are not necessarily concerned with improving the condition of the Delta (Jimerson & Malhoit, 2009). To give a historical perspective, Covello (1982) wrote, “The problem of poverty in America is importantly intertwined with the non-poor dominant ideology and consequent response to the issue” (p. 216). Non-poor persons decide the fiscal allowances of the region, which is dominant in the impoverished areas of Mississippi (Fontenot et al., 2010). Because the regions are poor, the government does not distribute stimulus funds (\$2.5 billion) into such areas; instead, the government funnels funds into sectors deemed more financially sound (Jimerson & Malhoit, 2009).

Literature suggests that students living in poverty are likely raised in single parent homes (Ladd, 2012). Subsequently, throughout Mississippi, there is a rise of single-female-headed families and the disproportionate risk of poverty faced by unmarried women (National Center for Children in Poverty, 2013). According to National Center for Children in Poverty, 76% of Mississippi children in poor families live with a single parent. The economic history of the residents, the lack of a skilled labor force, and the lack of investment by stake holders and its effects of the SES of low income communities contribute to and sustain the culture of poverty in the Mississippi Delta (Fontenot et al., 2010; Heilig & Jez, 2010).

The theory of the culture of poverty is only useful insofar as it provides particular language for describing the kind of social milieu that can develop in impoverished communities. However, it should be seen within a larger context and not used to blame poor people for being poor (Alkire & Foster 2011). Neither can it be used to ignore the beneficial qualities that have developed in these communities (Alkire & Foster (2011). Because those existing outside of the context of poverty developed this theory, it can easily be used to distort and belittle those existing within this context. However, the residents of the Mississippi Delta have been disenfranchised since slavery and have not been afforded much-needed governmental subsidies to revitalize a dying region (Alkire & Foster, 2011).

This disenfranchisement paralyzes the maturation of the Delta and limits the region to a high number of residents who are unemployed, have a limited education, and a high number of single-parent homes (Fontenot et al., 2010). Thus, because of the generational influences of poverty, culture of the Mississippi Delta is pervasive (Fontenot et al., 2010). Examining the inequities of the Mississippi Delta and the factors influencing its poverty provided a framework

for understanding the systems that exist within this environment. A portrayal of the unequal forces at work in the Delta, where the school systems exist, exemplify the context of poverty that persists throughout this area.

### **Poverty and Schools in the Mississippi Delta**

According to the U.S. Department of Education (NCES, 2011), 84% of the teachers in the United States are White American. However, only seven percent of teachers are Black. In the Mississippi Delta, 60% of the teachers are White, and 18% are Black (NCES, 2011). According to the Mississippi Department of Education (2014), 44% of the states' 1,097 schools are located in rural areas, and over 60% of the states' 158 identified lowest performing schools are in rural locations. Seventy-eight percent of Mississippi's student population lives in poverty, as designated by enrollment in the free and reduced priced lunch program; moreover, education leaders consider all the lowest performing schools in Mississippi as high poverty schools (Mississippi Center for Public Policy, 2012). Eighty percent of Blacks in the state live in the Mississippi Delta; moreover, the majority of students live below the poverty level in all but two school districts (U.S. Department of Education, 2010).

### **Achievement and Income Achievement Gap in the Mississippi Delta**

Over fifty years after the historic *Brown v. Board of Education* decision, the educational achievement gap exists between low-income minority students in impoverished school districts and their mostly White suburban counterparts (Borg, Borg, & Stranahan, 2012). The school districts in Mississippi continue to experience the academic and income gaps. The school districts in the Mississippi Delta have been isolated by the statistics observed in student achievement and income achievement (Fontenot et al., 2010). Historically, the achievement gap, which refers to lower academic performance for students of color versus their White

counterparts, has been a focus of education research and debate for decades. Schools in the Mississippi Delta exemplify this gap (Ford, Grantham, & Whiting, 2008). However, more recently, the income achievement gap surfaced as a more relevant and influential factor than the achievement gap alone (Reardon, 2011). In less than 50 years, the income gap has emerged as two times as large as the achievement gap (Reardon, 2011).

Reardon (2011) was discussing the income achievement gap when he wrote, “The difference between a child from a family at the 90th percentile of the family income distribution and a child from a family at the 10th percentile” (p. 4). Harwell and LeBeau (2010) identified free and reduced lunch as an indicator of students living in poverty. In light of such data, only 2 out of 35 school districts in the Mississippi Delta have less than half of their student population receiving free and reduced lunch (Kids Count Data Center, 2011). As such, the vast majority of schools in the Mississippi Delta serve predominantly impoverished students. Moreover, according to the Mississippi Department of Education (2014), 10% of the state's 151 school districts rated F for failing. Of those 15 districts, 11 are in the Mississippi Delta. The regional variables show a persistent minority achievement gap in the Mississippi Delta. These test score deficits illustrate the income and academic gap that has been established between what is colloquially identified as the *have and have nots*. Across the board, in both high-poverty and low-poverty schools, the results show poor, majority Black students in the Mississippi Delta are not reaching academic successes (Fontenot et al., 2010). According to the Anna B Casey Foundation (2013), low-income students are underperforming in Mississippi; moreover, 85% of students from low-income households fail to meet proficiency standards.

The impoverished setting of the Mississippi Delta creates a culture and a community, which is overwhelmed by poverty. Such regions are subjected to teacher shortages; therefore,

they recruit young teachers from communities and universities that are economically unlike the environment in which they will teach (Heilig & Jez, 2010). The climate, environment, and condition of the schools and communities are the most prevalent reasons teachers experience burnout (Harris & Sass, 2011).

### **The Burnout Syndrome**

Maslach, Jackson, and Leiter (1996) noted, “[Burnout] is a syndrome of emotional exhaustion, depersonalization, and low or reduced personal accomplishment that can occur among individuals who work with people in some capacity” (p. 4). The burnout syndrome, which initially centered on healthcare and social workers, established that those in that particular field often feel emotional and interpersonal stress (Maslach et al., 1996). Freudenberger (1974) and Maslach (1976), both from a social service background, began developing the foundations of the burnout syndrome through employee observations and interviews. Freudenberger (1974), through personal experience and through interviews with healthcare workers, explored the different levels of emotions felt, depletion, and the lack of motivation. Freudenberger (1974) called these emotions burnout. Freudenberger (1974) and Maslach (1976) found the core of the job was between the healthcare provider and the patient. From the interviews, the burnout syndrome was developed. Clinically, the researchers focused primarily on the symptoms of burnout. Socially, researchers focused on the relationship between the healthcare provider and the recipient (Maslach, Schaufeli, & Leiter, 2001). In early research, Maslach (1976) found healthcare providers experienced significant levels of emotional exhaustion and found high measures of cynicism, also called depersonalization.

The trajectory and the development of burnout syndrome have happened over time. Initially, a concept researchers centralized in the healthcare field was developed in the education

field. According to Maslach et al. (1996), the burnout syndrome affects teachers. Maslach et al. (2001) explained that teachers begin to feel overwhelmed, devalued, and unsuccessful in their attempts to engage students. If teachers cannot build a relationship with the students, it leaves them in a place of inefficacy, which is one of the most prevalent indicators of teacher burnout.

Mantilla and Diaz (2012) explained that as in other social professions, burnout in teachers happens gradually over time. Mantilla and Diaz (2012) shared, “Burnout is revealed by symptoms such as a sense of inadequacy in one's work, lack of resources to face up to the job of teaching, reduced capacity for solving problems, etc.” (p. 1457). Maslach et al. (2001) developed three dimensions of burnout: (a) exhaustion, (b) depersonalization, and (c) reduced personal accomplishment.

### **Emotional Exhaustion**

Central to the experience of burnout is emotional exhaustion (Maslach et al., 1996). Teachers are subject to significant demands from administration, students, and parents. For teachers who experience emotional exhaustion, a negative response to stress causes a sense of emotional overload (Maslach et al., 1996). The concept of being emotionally exhausted comes from those educators who are invested in helping their students achieve success yet do not see beneficial impacts of their work on the children they teach (Maslach et al., 1996). Emotional exhaustion leaves the educators feeling drained, tired, and emotionally detached from their responsibilities. When detachment takes place, teachers have lost interest in their students, their successes, and their failures (Maslach, 2003).

Using the Maslach Burnout Inventory Scale, Leung and Lee (2006) conducted a predictive, correlational study with 379 elementary and secondary teachers; 71 were high school instructors. Leung and Lee (2006) noted emotional exhaustion predicted Hong Kong teachers’

intentions to leave the profession. Similarly, in Norway, Skaalvik and Skaalvik (2010) conducted a study with elementary and middle schoolteachers. Skaalvik and Skaalvik (2010) concluded that emotional exhaustion predicted the level of job satisfaction and predicted the number of Norwegian teachers who would leave the profession. This was particularly important for the present study, because there is research to support the relationship emotional exhaustion has on teacher burnout.

### **Depersonalization**

Maslach et al. (1996) suggested depersonalization refers to a teacher displaying uncharacteristically negative attitudes and dispositions toward his or her peers and students. When individuals feel deep levels of emotional exhaustion, they tend to experience depersonalization (Maslach et al., 1996). The experience of depersonalization suggests that individuals have negative, cynical, and pessimistic attitudes toward their work and their peers. Maslach (2003) confirmed that teachers who were experiencing depersonalization confessed to feeling intense dislike, anger, and resentment toward their current or former colleagues. In another past study, Friedman (2003) found depersonalization was significantly higher among males than it was among females at both elementary and high schools. Watts and Robertson (2011) noted the same findings among collegiate staff.

### **Low or Reduced Personal Accomplishment**

Low or reduced personal achievement takes place when an individual feels ineffective. Bandura (1986) defined inefficacy as an individual's beliefs that he or she is incapable of successfully completing a task. Educators often experience inefficacy, detachment, and display cynicism for their ability as an educator (Maslach, 2003). Educators who display this type of attitude are incapable of seeing themselves in a positive or healthy manner (Maslach, 2003).

Such behavior can lead to teachers' changing school districts or changing professions because they cannot be sustained in a role where they do not feel capable (Maslach, 2003). Students suffer when exposed to high teacher attrition rates.

## **Literature**

### **Causes of Burnout**

Research indicates numerous causes for burnout exist among teachers (Ferreira & Martinez, 2012; Retelsdorf, Butler, Streblow, & Schiefele, 2010; Yu, Wang, Zhai, Dai, & Yang, 2014). Maslach and Leiter (1997) identified six contributors to burnout: (a) work environment; (b) work load; (c) a teacher's lack of control (curriculum, scheduling); (d) lack of rewards or acknowledgement; (e) the feeling of being disrespected, mistreatment, and lack of appreciation; and (f) disjointedness between administration and a teacher's values. Because of such indicators, teachers can become gravely disconnected from the profession (Norlund et al., 2010). Maslach and Leiter (1997) found that even those teachers who began teaching because they were *called* or motivated by the profession experience burnout if there is a disconnect between personality and work place environment. Yu et al. (2014) found that teacher stress and burnout impede upon a teacher's level of motivation and efficacy. Because of the impact of burnout, research shows that teachers are susceptible to leaving the profession (Martin, Sass, & Schmitt, 2012). In addition, researchers have found that teacher burnout is moderately related to teacher self-efficacy (Yu et al., 2014). In summation, when teachers experience high levels of stress and lack the resources effectively to manage such stress, they risk experiencing a sense of reduced self-efficacy; therefore, they risk experiencing burnout.

Teacher burnout is a significant reason teachers leave the profession or relocate to different school districts (Steinhardt, Smith Jaggars, Faulk, & Gloria, 2011). The loss and



shortage of teachers most affect poverty-stricken areas. Researchers have studied the reasons why teachers burnout; however, researchers have not focused on the critical shortage of teachers in the Mississippi Delta as it relates to poverty, culture of intelligence, and teacher burnout.

According to Maslach et al. (1996), the burnout syndrome affects teachers. If teachers cannot build a relationship with the students, it leaves them in a place of inefficacy, which is one of the most prevalent indicators of teacher burnout. The factors of teacher burnout can result from external forces such as work environment and work culture, which are among the most prevalent, and internal forces, which are the effects of efficacy and the teacher's belief in his or herself influence burnout (Maslach et al., 1996). Teacher efficacy can be linked to CQ, as the factors of cultural intelligences are all intrinsically motivated (Maslach et al., 1996).

### **Burnout and Poverty**

Schools in the Mississippi Delta are generally rural, but can also fall into the category of serving a highly impoverished area; as such, these schools may present many opportunities for teachers to experience burnout and leave those schools. In particular, research explored why teachers burnout particularly in high poverty areas (Shernoff, Mehta, Atkins, Torf, & Spencer, 2011). Research shows that teachers burn out because of limited resources, years of experience, teacher income level, and the environment of the school (Darling-Hammond, 2011; Holbert, 2014; Santaro, 2011). Exploring contributions to teacher burnout was necessary to understand reasons teachers leave particular types of school and community environments.

Maslach et al. (2001) noted job burnout is an affective reaction to prolonged exposure to job stress. The literature details data that suggests between 12% and 20% of teachers report burnout symptoms at least once a week (Fernet, Guay, Senécal, & Austin, 2012). Teaching in high poverty areas, which often have limited resources and poor parental support, places

educators at high risk for stress and emotional exhaustion. These factors could explain the high number of teachers experiencing burnout (Yu et al., 2014). Pas, Bradshaw, and Hershfeldt (2012) found teacher burnout was predicted by teachers' perception of their job responsibilities and duties. Moreover, Pas et al. (2012) found that teacher preparedness, or lack thereof, contributed to burnout. Fernet et al. (2012) indicated teachers experience burnout because of overload, students' behaviors, the physical environment, and in response to a lack of adequate resources. Fernet et al. (2012) shared that teachers experience burnout by feeling overwhelmed with the level of responsibility that is required of them. For instance, Skaalvik and Skaalvik (2010) found teachers feel that school days have become more hectic because they are required to spend more time documenting and doing paper work because of high stakes testing. In addition, teachers felt overwhelmed because of the lack of time to plan. Administrative expectations and parenting expectations also lead to teacher burnout (Skaalvik & Skaalvik, 2009).

### **Burnout and Cultural Intelligence**

Numerous studies are available with a focus on burnout as it relates to teachers; however, a lack of research addresses CQ and teacher burnout. Past studies, instead, have focused on emotional intelligence and burnout (Chan, 2006; Gerits, Derksen, & Verbruggen, 2004). In addition, researchers have explored the influence of CQ on counselors' level of burnout (Chandras et al., 2000; Kim & Atkinson, 2002). These studies focused on the roles of counselors, counselors' cultural background, or diversity status, which may affect how a counselor copes with burnout and compassion fatigue (Chandras et al., 2000; Kim & Atkinson, 2002; Patrick, 2006; Wee & Myers, 2002). What makes the research conducted on counselors relevant to the current study is the similarity of the relationship experienced between counselor and patient and

educator and student. Because of the similarity of the relationships, the current study is essential to understanding how teachers cope with the diversity of their students.

Researchers have looked at CQ from the lens of future educational leaders, which differs from the present study, yet shares in the focus of educators, CQ, and burnout (Stokes, 2013). Stokes (2013) found leaders with high levels of CQ were likely to handle cross-cultural situations and interactions and were less likely to experience burnout. Moreover, the researcher found that population of doctorate of education students showed that in the area of motivational CQ, they were likely to be able to handle cross-cultural situations that may arise and were less inclined to experience burnout.

In addition, research has focused on cultural competence and burnout in the healthcare field. As mentioned earlier, CQ stemmed from the foundation of cultural competence (Ang et al., 2011), which makes Choi and Kim's (2014) study relevant to the current study. Choi and Kim (2014) focused on a nurse's cultural competence as it related to burnout. Similar to educators, nurses interact with different cultures and build relationships to establish trust. Choi and Kim (2014) found nurses who had cultural competence toward multicultural patients had a lower level of burnout. Moreover, nurses who had higher cultural attitude and cultural awareness had a lower level of burnout.

Teacher burnout is one most significant reason teachers leave the profession or relocate to different school districts (Steinhardt et al., 2011). To reiterate, the loss and shortage of teachers affect poverty-stricken areas. Researchers have studied extensively the reasons why teachers burnout; however, researchers have not focused on the critical shortage of teachers in the Mississippi Delta as it relates to poverty, culture of intelligence, and teacher burnout.

### **Teacher Sense of Efficacy and Demographics**

The theory of self-efficacy is derived from Bandura's social cognitive theory. Self-efficacy is an element of Bandura's social cognitive theory (Bandura, 1986). Bandura (1997) wrote, "[Self-efficacy is] an individual's belief in his or her own ability to organize and implement action to produce the desired achievements and results" (p. 3). Studies have established the relationship of self-efficacy and burnout (Betoret & Artiga, 2010; Friedman, 2003). Researchers deem self-efficacy important as an antecedent to CQ development (Earley & Ang, 2003; Earley & Peterson, 2004). Little empirical evidence supports self-efficacy and CQ. However, researchers have studied the influence that self-efficacy has on teacher burnout in the Mississippi Delta and have found that, statistically, a relationship exists between teacher efficacy and teacher burnout (Al-Fadhli & Singh, 2006; Towner, 2010). In addition, researchers used correlational studies in similar designs to predicting teacher efficacy and burnout (Bümen, 2010; Martin, 2010).

Towner (2010) noted teacher efficacy is one of the most cited reasons for burnout in the Mississippi Delta. Teacher efficacy is negatively impacted when education leaders do not properly train teachers to teach the students they are assigned to teach (Bloom & Peters, 2012). In addition, when a school experiences a high percentage of teacher turnovers, the school is unable to create a consistent, structured school environment or a stable school culture for teachers or students (Donitsa-Schmidt & Zuzovsky, 2014; Ronfeldt et al., 2013). However, low teacher efficacy may not completely account for the reasons teachers do burnout. Although using effective teaching styles holds importance for feeling successful as a teacher, thus increasing career longevity and minimizing the likelihood of burnout, possessing the skills to relate to students may prove significant as well.

From the foundation of self-efficacy, Bandura (1977, 1978, 1982) created teacher efficacy. Bandura's social cognitive theory influenced the study of teacher efficacy (Roberts & Henson, 2001). Bandura modeled the framework of teacher efficacy on the framework of the social cognitive theory. Tschannen-Moran and Hoy (2001) defined teacher efficacy as a teacher's "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (p. 783). In addition to social cognitive theory, Rotter's (1966) locus of control theory was influential in the creation of teacher efficacy (Roberts & Henson, 2001). Rotter (1966) suggested student learning and motivation were contingent upon the actions of the teacher. Researchers have questioned the psychometric attempts to assess the construct of teacher efficacy. As a response, Tschannen-Moran, Hoy, and Hoy (1998) created a thorough review, which supported the development of teacher efficacy and the validity of the construct (as cited in Roberts & Henson, 2001). Although researchers were initially resistance, they now regard teacher efficacy as a valuable variable in educational research. As indicated by past researchers, a positive relationship exists between teacher efficacy and teacher burnout (Pas et al., 2012; Skaalvik & Skaalvik, 2010). Similar to the current study, Steinhardt et al. (2011) controlled for gender, race, and years of experience.

Steinhardt et al. (2011) found that demographic characteristics statistically correlated to teacher burnout. Bloom and Peters (2012) researched race, burnout, and teacher efficacy. Blooms and Peters (2012) found, "Teachers are often unaware of their biases and expectations of culturally diverse students, yet increased awareness of their unintentional behaviors and viewpoints can enhance student achievement" (p. 74). Darling-Hammond and Post (2000) found a significant relationship exists among White teachers who experienced burnout while teaching

in schools that had a high concentration of urban or rural Black students. Renzulli, Parrott, and Beattie (2011) found teaching in racially mismatched schools (schools that have more of one race than the race of teachers) resulted in lower levels of satisfaction for White teachers.

Researchers have used correlational designs to test the relationship between varying variables and teacher burnout (Bümen, 2010; Martin, 2010). Different researchers used correlational studies in similar designs on teacher efficacy and burnout (Bümen, 2010; Martin, 2010). In addition, past studies established that the correlates of cultural competence and teacher efficacy and strong statistical relationships have been evidenced (Pang & Sablan, 1998; Phuntsog, 2001; Siwatu, 2007). Bloom and Peters (2012) used a correlational design to examine race and teacher efficacy.

Researchers have found gender has a positive relationship to teacher burnout. Noor and Zainuddin (2011) examined how emotional labor, work, and family issues contribute to burnout. Noor and Zainuddin (2011) noted this burnout particularly materialized as emotional exhaustion and depersonalization. The researchers sampled 102 married, female Malay teachers who had either a child or children living at home. The researchers found a positive correlation between emotional exhaustion and depersonalization, and saw where female teachers experienced higher levels of emotional exhaustion and male teachers experienced higher levels of depersonalization. In another study, Watts and Robertson, (2011) found male teachers were more susceptible to burnout than were female teachers and the most significant connection to teacher burnout for the male teachers were depersonalization. Furthermore, Watts and Robertson (2011) found depersonalization was significantly higher among male teachers than among female teachers and that male teachers were more likely to leave the teaching profession.

Gavish and Friedman (2011) found teachers' years of experience had a significant correlation to teacher burnout, which is relevant to the findings of previous studies, which suggest that teacher's years of experience, or lack thereof, connects directly to teacher burnout. Similar to the past findings, Gavish and Friedman (2011) found novice teachers experienced high levels of burnout by the end of the academic year. The researchers added that there was a consistency of burnout that existed for novice teachers and those teachers expressed higher levels of emotional exhaustion and depersonalization, which resulted in feelings of being disconnected from the students and teaching. Moreover, Gavish and Friedman (2011) noted among first year teachers needed a "A positive and supportive organizational culture embodies a clear professional working style with no internal or external job conflicts; its organizational climate is open and positive, fostering professional development and a sense of competence" (p. 163). The implications of professional development and organizational structure suggest a connection exists between teachers' feelings of burnout and the need for professional trainings to support teachers.

In addition, Gavish and Freidman (2011) found first-year and second-year teachers were more likely to experience burnout than were teachers that were more experienced; this was a result of school climate and a lack of support by the staff. Because the school districts within the Mississippi Delta experience critical shortages, novice teachers are prevalent in this area. Gavish and Friedman (2011) implied that new teachers are less inclined than veteran teachers are to burnout when they feel supported and their training has been subsequent.

As it relates to the current study, a large portion of the teachers in the Mississippi Delta are first year teachers, who by the time they teach their first classes have only participated in limited training. The lack of preparedness among teachers can contribute to feelings of inefficacy

and an actual experience of not having appropriate resources to address student needs (Harris & Sass, 2011). These influences of inefficacy and lack of preparedness, which are often the result of a lack of teacher training, can impact teacher burnout (Roeser et al., 2013). Another factor that has strong a strong correlation to teacher burnout is teacher salary typically earned by teachers in low-income school districts. Although the state of Mississippi has a base salary, affluent school districts offer supplements for teachers. For instance, affluent school districts have supplements that exceed \$6,000 per year, which is not found in schools that are in financially distressed regions of Mississippi. According to the U.S. Department of Education (2013), teachers in the Mississippi Delta have lower salaries as compared to other cities in coastal Mississippi or northern Mississippi yet has the highest numbers of recruited teachings.

Liu (2012) explored teacher burnout as it relates to teacher income level. Liu (2012) also explored the influence of school climate on teacher burnout. The participants in Liu's study included 510 teachers in northern China. Liu (2012) found income level had an inverse relationship to teacher turnover rates. Liu (2012) found teachers were less likely to burnout if they had realistic expectations of teaching and expressed an interest in teaching. School climate had a stronger effect on teacher burnout than did teacher income (Liu, 2012).

In contrast, using data from the Queensland State Government, Bradley, Green, and Mangan (2012) conducted an exploratory study, which examined the trends of public servants and their turnover rates. Bradley et al. (2012) found contracted teachers and nurses who received low wages were more likely to quit their jobs than were teachers who received moderate or high wages. Bradley et al. (2012) suggested that to increase teacher and nurse retention, employers must begin to investigate, and possibly alter the wages of those employees. Although Bradley et



al. (2012) did not explore burnout specifically; they hypothesized that high turnout rates could be directly related to teacher burnout.

Years of experience (novice and seasoned teachers) and teacher income contribute to teacher burnout (Darling- Hammond, 2011; Santaro, 2011). Santaro noted, “Burnout in high-need schools occurs because the scope of what counts as good teaching in these environments far exceeds what any single human being can accomplish” (2011, p. 2). Pas et al. (2012) explored predictor studies that investigated the relationship between teaching in high poverty, predominantly minority student settings, with teacher efficacy and burnout. Pas et al. (2012) found a significant relationship existed between teacher burnout, the environment, the setting in which they teach, which indicated that teachers in the study experienced levels of burnout because of the environment. The setting or school environment could be linked to the culture of the community and environmental challenges that hinder teachers from properly assimilating within the new community in which they have been selected to teach. As such, in the present study, the researcher explored the theory of CQ as a possible predictor for teacher burnout in the Mississippi Delta.

In addition to years of experience, the Mississippi Delta also recruits a large population of students through recruitment programs (TFA, 2014). Ingersoll and Strong (2011) found that teacher burnout primarily happens because of the lack of training and disconnects for teachers. The researchers investigated on-going teacher training that could better support the professional lifespan of teachers and found that more are inclined to leave when they have been ill informed of expectations. In addition, Brewers (2014) investigated TFA. He postulates that TFA theoretical framework offers a disillusioned reality for its teachers and for such reasons, teachers experience burnout.

### **Summary**

Because of the limited amount of research available on CQ and teacher burnout, research was needed to fill the gap in the literature. Most of the existing research explored the relationship of CQ and teacher burnout as they relate to counselors and business professionals. The empirical research documented in this chapter grounds the constructs of culture of poverty, CQ, and teacher burnout. It could be implied that cultural barriers exist, which lead teachers to burnout and essentially leave the Mississippi Delta. This study adds to the literature by filling in the gap in the empirical literature focusing specifically on teachers in the Mississippi Delta, CQ, and the relationship to teacher burnout. In chapter three, the researcher will explain the methodology used in this study. Chapter four will delineate the demographics and the results. Chapter five will present implications, conclusions, and recommendations.

## CHAPTER THREE: METHODS

### Design

In this study, the researcher employed a predictive, correlational design, to evaluate the relationship between the predictor variables, the four subscales of CQ (motivational CQ, behavioral CQ, cognitive CQ, and metacognitive CQ), and the criterion variable, teacher burnout. The researcher controlled for the variables race, gender, years of experience, teacher efficacy, and teachers participating in teacher recruitment programs. The researcher deemed a predictive correlational design as the appropriate design because it enables researchers to explore the linear relationship between multiple predictor variables and one criterion variable, which is congruent with the aim of this study (Fields, 2005). Past researchers have used predictive correlational designs to test the relationship between different variables and teacher burnout including the relationship between cultural competence and teacher efficacy (Pang & Sablan, 1998; Phuntsog, 2001; Siwatu, 2007), race and teacher efficacy (Blooms & Peters, 2012), years of experience, teacher burnout (Adamson & Darling-Hammonds, 2011), teachers participating in teacher recruitment programs, and teacher burnout (Brewers, 2014). In the present study, the researcher conducted an exploratory study to add to the literature on CQ and teacher burnout in the Mississippi Delta where there has been little to no previous research among this teacher population.

### Research Questions

**RQ 1:** Do demographics, teacher efficacy, and teacher recruitment program variables show a significant correlation with CQ?

**RQ 2:** Is there a relationship among the four factors of CQ and teacher burnout for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of

experience, teacher efficacy, teachers who are from the MS Delta, and teachers participating in a teacher recruitment program?

### **Null Hypotheses**

The null hypotheses for this study were:

**H<sub>0</sub>1:** There is no significant relationship between the demographics and CQ.

**H<sub>0</sub>2:** There is no significant relationship between teacher efficacy and CQ.

**H<sub>0</sub>3:** There is no significant relationship between the teacher recruitment program variable and CQ.

**H<sub>0</sub>4:** Teachers' race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation do not significantly contribute to explanation of the variance in emotional exhaustion.

**H<sub>0</sub>5:** Teachers' four subscales of CQ do not significantly contribute to explanation of the variance in emotional exhaustion.

**H<sub>0</sub>6:** There is not a significant predictive relationship among the four subscales of CQ and teachers' emotional exhaustion for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.

**H<sub>0</sub>7:** Teachers' race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation do not significantly contribute to explanation of the variance in personal accomplishment.

**H<sub>0</sub>8:** Teachers' four subscales of CQ do not significantly contribute to the explanation of the variance in personal accomplishment.

**H<sub>0</sub>9:** There is not a significant predictive relationship among the four subscales of CQ and teachers' personal accomplishment for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.

**H<sub>0</sub>10:** Teachers' race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation do not significantly contribute to explanation of the variance in depersonalization.

**H<sub>0</sub>11:** Teachers' four subscales of CQ do not significantly contribute to explanation of the variance in depersonalization.

**H<sub>0</sub>12:** There is not a significant predictive relationship among the four subscales of CQ and teachers' depersonalization, for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.

### **Participants and Setting**

The sample in this study consisted of high school teachers from five high schools in the Mississippi Delta. The participants were male and female high school teachers who represented varying years of teaching experience. The researcher obtained demographic information through a created demographic survey (see Appendix A). The demographic survey consisted of four items that asked participants to identify race, gender, years of experience, and if they were originally from the Mississippi Delta, and if they had participated in a teacher recruitment programs, which the researcher analyzed with descriptive statistics (Gravetter & Wallnau, 2008).

The sample was a convenience sample. The researcher elicited 132 teacher volunteer participants drawn from the accessible population of 266 high school teachers, which was the

total population of teachers from the five selected schools (Warner, 2013). Warner (2013) advised researchers to collect more participants than the minimum required for a valid statistical test. The researcher solicited potential participants for the study through the school superintendent.

The researcher calculated the needed sample size using the equation  $N > 104 + k$  (Warner, 2013) where  $N$  is the minimum sample size and  $k$  is the number of predictor variables appropriate for this study. Researchers need a sample size of 112 to run a hierarchical multiple regression and to have reasonable power.

### **Setting**

The researcher drew a sample from five rural high schools in the Mississippi Delta. The five high schools selected were within economically distressed areas wherein more than 80% of the student body received free and/or reduced lunch. The researcher identified the high schools as high school 1, high school 2, high school 3, high school 4, and high school 5. The student body at each high school was similar because the majority of the students was African American and economically disadvantaged. In addition, the majority of the students received free or reduced lunch, which was predicated on the household size and the income level of the family (USDE, 2013). The setting for the study was an online survey, generated by SurveyMonkey. The participants had the option of completing the online survey in an environment that was best for them. Table 1 illustrates the demographics of each site.

Table 1

*Setting*

Schools	Students on Free and/or Reduced Lunch	Male Teachers	Female Teachers
High School 1	95.0%	21	39
High School 2	98.2%	19	41
High School 3	93.2%	33	48
High School 4	89.3%	18	38
High School 5	86.2%	10	39

(Source: Children First Annual Report, 2012)

### **Instrumentation**

#### **Predictor Variable**

The CQS are the subscales of CQ (metacognitive, cognitive, behavioral, and motivational) (Ang et al., 2007). The scale consists of a 20-item, 4-factor model. The four subscales explored participants' knowledge/awareness of cognitive (six items), motivational (five items), behavior (five items), and meta-cognitive (four items). The CQS uses a 7-point Likert-type scale. The total score range is from 20 to 140. A score of 20 is the lowest possible score and indicates a lack of CQ and the highest score is 140, which indicates high levels of cultural intelligence. The subscale score for metacognitive CQ is 4 to 28. The subscale score for cognitive CQ is 7 to 42. The subscale score for behavioral and motivational CQ is 5 to 35. Participants chose their responses based on a seven-point scale, *strongly agree* to *strongly disagree*. The higher the score indicated the higher the level of CQ.

**Reliability and validity.** The CQS was developed by Ang et al., (2007) to measure cultural intelligence. It consists of 20 items to measure a four-factor model. Initial factor structure validity yielded 0.92. The CQS has also been cross validated across various samples, across time, and across countries (Ang et al., 2007; Moon, 2010a; Ward et al., 2009). The Cronbach alpha coefficient for the current study was .945. Ang et al. (2007) noted, “[The scale] includes four items for metacognitive CQ ( $\alpha = .76$ ), six for cognitive CQ ( $\alpha = .84$ ), five for motivational CQ ( $\alpha = .76$ ), and five for behavioral CQ ( $\alpha = .83$ )” (p. 110). Researchers cross validated the CQS (Ng, K. Y., Van Dyne, & Ang, 2009; Ward, Fischer, Lam, & Hall, 2009). Ang et al., (2006) validated the study by conducting a hierarchical regression analyses. The researchers sampled 338 business undergraduates and controlled for gender, years of experience, and age. Van Dyne et al. (2008) globally validated the CQS. Table 2 illustrates the survey tool, the variables of study, and the Cronbach’s

Table 2

*Variable Reliability Assessment for the CQS*

Variables	Cronbach’s alpha <i>a</i>
Meta-cognitive Cultural Intelligence	.76
Cognitive Cultural Intelligence	.84
Motivational Cultural Intelligence	.76
Behavioral Cultural Intelligence	.83



## Criterion Variable

The Maslach Burnout MBI-Educators Survey is an adaptation of the original measure for use with educators. The scale contains 22 items. The measure is comprised of three subscales: (a) emotional exhaustion (nine items), which measures feelings of being emotionally exhausted by one's work; (b) depersonalization (five items), which measures the person's removed feelings of their work; and (c) personal accomplishment (eight items), which measures the individual's level of self-confidence within their work (Maslach & Jackson, 1981). The results of this inventory consist of three separate scores, one for each factor. A combination of high scores on emotional exhaustion and depersonalization, and a low score on personal exhaustion, correspond to a high level of burnout.

The scoring for the scale consists of zero equals *never*, one equals *a few times a year or less*, two equals *once a month or less*, three equals *a few times a month*, four equals *once a week*, five equals *a few times a week*, and six equals *every day*. The researcher took the scores, added them together, and then divided them by the three categories to get a composite score for burnout. The Maslach Burnout MBI-Educators Survey (Maslach, Jackson, Leiter, Schaufeli, & Schwab, 1981) was normed on elementary teachers. Different researchers used the instruments in previous studies to measure CQ, teacher burnout, and teacher efficacy (Schwarzer, Schmitz, & Tang, 2000; Skaalvik & Skaalvik, 2010).

**Reliability and validity.** Researchers tested each subscale for the Maslach Burnout MBI-Educators Survey for burnout (Maslach et al., 1981) for reliability. Researchers estimated internal consistency for the MBI with Cronbach's coefficient alpha ( $N = 1,316$ ). The reliability coefficients for the subscales are “.79 for Emotional Exhaustion, .79 for Depersonalization, and

.71 for Personal Accomplishment” (Maslach et al., 1996, p. 12). For a different sample of ( $n = 53$ ) graduate students and health care administrators, “the test-retest reliability coefficients for the subscales were the following: .82 for Emotional Exhaustion, .60 for Depersonalization, and .80 for Personal Accomplishment. All are significant beyond the .001” (Maslach et al., 1996, p. 12). Table 3 provides an example of the items on the Maslach Burnout Inventory Scale.

Table 3

*Maslach Burnout Inventory (MBI)*

Variables	Cronbach's alpha $\alpha$
Emotional Exhaustion	0.79
Depersonalization	0.71
Personal Accomplishment	0.82

### Control Variables

The control variables for this study-included race, gender, years of experience, teacher efficacy, and teachers who participated in a teacher recruitment program. Teacher sense of efficacy is measured by using the Ohio State Teacher Efficacy Scale (Tschannen-Moran & Hoy, 2001). Tschannen-Moran and Hoy (2001) created the scale by showing teachers various items on a battery of instruments to foster the following: (a) item development, (b) item selection, and (c) factor analysis cycles. Tschannen-Moran and Hoy (2001) used numerous students and teachers to generate and analyze the items (as cited in Heneman, Kimball, & Milanowski, 2006). According to Heneman et al. (2006), the scale was normed on elementary and high school teachers. The TSES short form is a 12 item, 9-point Likert-type scale. Tschannen-Moran and Hoy (2001) wrote, “OTES extensively covers the three dimensions of efficacy and provides an in

depth look into teachers' work lives and the requirements of good teaching" (p. 801). The total score range is from 12 to 108.

**Reliability and validity.** Fives and Buehl (2009) conducted a study, testing the validity and reliability of both the short and long form versions of TSES, using 109 teachers. Fives and Buehl (2009) found the Cronbach's alpha .78, engagement .74, instruction .85, and management. Table 4 illustrates the survey tool, the variables of study, and the Cronbach's alpha.

Table 4

*Variable Reliability Assessment for the TSES*

Variables	Cronbach's alpha, $\alpha$
Engagement	.78
Instruction	.74
Management	.85

### Demographics Questionnaire

The demographic questionnaire included a question related to race, "Please indicate your ethnicity, (White, African American, or Other)." Responses were assigned the following numerical values, 0=White, 1= African American or 2 = Other). The gender question was phrased as follows: Please indicate your gender, (Male or Female). Responses were assigned the following numerical values: 0= Male and 1= Female. The demographic variable years of experience was coded as 0 = 0 - 5 years, 1= 6 - 10 years, 3 = 10 years of teaching or more. The questionnaire also included an item referring whether or not participants are involved in a teacher recruitment program (e.g., Teacher America and Mississippi Teacher Fellowship program). The teacher recruitment question was phrased: "Please indicate if you participate in a teacher

recruitment program (e.g., Teach for America).” Responses were assigned the following numerical values: 0= Yes and 1= No. The demographic variable survey replicated relationships previously established in the education literature (Bloom & Peters, 2012; Heilig & Jez, 2010; Noor & Zainuddin, 2011; TFA, 2013, 2014; Watts & Robertson, 2011).

### **Procedures**

A letter was emailed to the superintendent of each school district explaining the nature of the study, requesting approval to recruit and contact teachers within their school district to participate in this study. After the researcher received consent from each school district, the researcher received approval from Liberty University’s Institutional Review Board (IRB) committee. After approval from IRB was received, the researcher contacted school superintendents, principals and began distributing emails to teachers. The teachers' email addresses were accessed from the schools’ websites and the school’s principals. The researcher and the principals emailed the survey packet. In addition, the email contained a secure link to the survey on SurveyMonkey website. The consent information was the first page participants saw when they clicked on the survey link with a *take the survey* button at the bottom of the consent information. Participants were informed on the first page that completing the survey indicated his or her consent for participation in the study.

The complete survey contained a 5-item demographic survey, 12-item Teacher Sense of Efficacy Short survey, 22-item Maslach Teacher Burnout Survey, and the 20-item CQ Survey, which could all be accessed on the link provided to SurveyMonkey. Once participants answered all questions, he or she reached a thank you screen with researcher contact information. Contact information was provided in the event a participant had questions or desired to withdraw from the study. SurveyMonkey maintained the survey for one month to ensure all potential

participants had a reasonable amount of time to take the survey. To lower the amount of non-respondents, on each Monday for three weeks, the researcher sent a friendly reminder and the survey link to all teachers (Gall, Gall, & Borg, 2007).

After one month, after the desired number of participants had completed the surveys, the researcher closed access to the survey. The researcher then downloaded all data from the SurveyMonkey database to Excel and SPSS for analysis. The researcher secured the data on a password protected-external drive. After the researcher had collected data, she used SPSS software to analyze the data and identify any relationships that existed between the variables. The researcher secured all electronic data, reports, and communication on a password-protected computer to protect participants for a period of five years. After five years, all data will be destroyed.

### **Data Analysis**

For the two research questions, the researcher used for the first question Pearson's and the second a hierarchical multiple regression. A preliminary data analysis was conducted using descriptive statistics to examine the distribution and variance of scores in the sample. The researcher calculated frequencies and descriptive statistics for all demographic variables (race, gender, and years of experience), predictor (total CQ score, cognitive, metacognitive, behavioral, and motivational), criterion (teacher burnout), and control variables (race, gender, years of experience, teacher efficacy, and involvement in teacher recruitment program). The researcher identified potential outliers in the data (any score more than two standard deviations from the mean) (Gravetter & Wallnau, 2008). The Cook's distance ( $D_i$ ) equation was used,  $4/[n-k-1]$ , where  $n$  is the amount of participants and  $k$  is the amount of predictors to identify outliers in the distribution (Rovai, Baker, & Ponton, 2013). Prior to the analysis, the researcher removed

extreme scores as identified at the upper or lower ends of the distribution (Warner, 2013). For a stronger test of the presence of outliers within the dataset, the Mahalanobis distance ( $D^2$ ) test was employed with values of  $D^2$  at 0.001 or less identifying outliers (Rovai et al., 2013).

As hierarchical regression analysis has several assumptions. After removing extreme outliers, assumption testing was conducted to examine normality, outliers, homoscedasticity of variance, linearity, and multicollinearity (Fields, 2013; Tabachnick & Fidell, 2013). The researcher identified and examined non-normal distributions of data with histograms. Histograms were constructed for each variable to examine visually the normality of each variable's underlying distribution. Researchers identify normality as the normal distribution of each variable and all combinations of variables (Tabachnick & Fidell, 2013). In addition, the curve of the distribution was examined for skew and kurtosis. Values of kurtosis ( $< -2$  or  $> +2$ ) were not considered normal whereas when both skew and kurtosis have values of zero, the distribution was considered normal (Rovai et al., 2013; Tabachnick & Fidell, 2013).

The researcher used scatterplots to explore homoscedasticity and linearity; data points on the scatterplot should be evenly distributed. The assumption of homoscedasticity was considered met when the distribution was shown to be normal, and the variance of one variable remained constant at all levels of the other variables (Tabachnick & Fidell, 2013). Linear relationships between variables satisfy the assumption of linearity. In addition, a bivariate correlation matrix was used to assess relationships between variables and to test the assumption of multicollinearity and singularity. Pearson's correlation matrices of all the variables were used to identify instances of covariance and to reduce multicollinearity within the data, with  $-1$  indicating a perfect negative relationship,  $+1$  indicating a perfect positive relationship and  $0$  indicating no relationship at all (Tabachnick & Fidell, 2013). The  $r$  value was considered to determine a

relationship between the variables (Warner, 2013). Correlations of .7 or higher indicated a high level of multicollinearity. If any variables were highly correlated ( $r > 0.90$ ) or perfectly correlated ( $r = 1.00$ ), the variable in question was removed from the analysis (Rovai et al., 2013). When the correlation coefficient was equal to 1.0 or -1.0, this was an indication of singularity, which occurs when the predictor variables are perfectly correlated, and one predictor variable is a combination of one or more of the other predictor variables (Tabachnick & Fidell, 2013). A correlation matrix was used to assess the interrelationships among variables (Healey, 2010) to test the assumption of multicollinearity and singularity (Tabachnick & Fidell, 2013).

To identify the presence or absence of multicollinearity, a collinearity diagnostic SPSS output table provided the collinearity statistics for tolerance and variance inflation indicator (VIF) (Warner, 2013). VIF “provides an index of the amount that the variance of each regression coefficient will increase relative to a situation in which all of the predictor variables are uncorrelated” (Cohen, Cohen, West, & Aiken, 2013, p. 423). Low levels of VIF are preferable because higher levels are an indication of high multicollinearity, which can have an adverse effect on the results. Tolerance (i.e.,  $1-R^2$ ) is the reciprocal of VIF (Rovai et al., 2013; Warner, 2013). High levels of tolerance are desired over lower levels, which could have adverse effects on the results. Perfect multicollinearity is a tolerance of 0 and the maximum possible tolerance of 1.00 (Warner, 2013). A value of  $\leq 10$  for VIF (Rovai et al., 2013; Warner, 2013) and .10 for the minimum level of tolerance (Rovai et al., 2013; Tabachnick & Fidell, 2013) is considered acceptable levels. To diminish or eliminate the impact of singularity or multicollinearity, the highly correlated variable was removed or the sample size was increased (Tabachnick & Fidell, 2013).

Parametric testing of a correlational design requires the use of interval data (for example, the difference between data points is equidistant), independent groups, and equal variances among variables, indicating that the variance of one variable holds stable at all levels of the other variables (Fields, 2013). The current study used data drawn from interval scales with independent groups. The researcher determined equality of variances through the aforementioned tests.

### **Hypothesis Testing**

Three hierarchical regressions were used to analyze relationships between multiple predictor and control variables and three separate criterion variables (Warner, 2013). The hierarchical multiple regression analysis is commonly used to examine the predictive relationship of predictor variables on a single criterion after controlling for variables (Warner, 2013). Hierarchical regression analyses have also been used to predict teacher three subscales of burnout, (Davis, 1993; Davis, Bagozzi, & Warshaw, 1989). Uniquely, hierarchical multiple regression analysis allows data to be entered in blocks (Warner, 2013), which then provides information about how well each predictor variable (cultural intelligence) predicts the criterion variable (teacher burnout), while removing effects of the control variables. Adding variables in blocks allowed the researcher to determine unique relationships more specifically (Warner, 2013). In a hierarchical regression analysis, researchers enter variables based on theory and research (Brace, Kemp, & Snelgar, 2012). It determines if the predictor variables, entered in a specific order, will predict the incremental change in variance, in the criterion variable, by evaluating variances in adjusted  $R^2$  after the addition of each predictor set (Brace et al., 2012; Rovai et al., 2013).



Data were entered into the regression model in blocks. The same order was used to create a model for each subscale of burnout. Block 1 contains all control variables (race, gender, years of experience, teacher efficacy, and teachers participating in a teacher recruitment program), and block two includes the four-predictor variables (cognitive, meta-cognitive, behavioral, and motivational CQ (see table 5)). For each block, a predictor or set of predictors was added to the model. The change in  $R^2$  for each block illustrates the predictive utility of each predictor variable (Warner, 2013). The rationale behind the order of entry of the variables is causal sequence such that the researcher enters variables based on a logical understanding of the causal relationships between the criterion and predictor variables rather than theory. To date, no theoretical grounding exists to suggest that one aspect of CQ influences teacher burnout any more than any other does.

To include categorical and ordinal data, dummy coding was used (Warner, 2013) for the control variables of race, gender, years of experience, teacher efficacy, and teachers participating in a teacher recruitment program. Race was coded as 1=White, 1=African American, or 2=Other. The gender variable was coded as 0=Male and 1=Female. Years of experience were coded as 0=0-5 years, 1=6-10 years, 3=10 years of teaching or more. Responses for teachers' involvement in a teacher recruitment program were coded as 0=Yes and 1=No. The researcher investigated the correlations between these demographic variables and the criterion variable, teacher burnout in order to replicate relationships previously established in the education literature (Bloom & Peters, 2012; Heilig & Jez, 2010; Noor & Zainuddin, 2011; TFA, 2013, 2014; Watts & Robertson, 2011).

Table 5

*Data Input Sequence for the Present Study*

Data Source Blocks	Variables
Block 1	(Control Variables)
Block 1	Race
Block 1	Gender
Block 1	Years of Experience
Block 1	Teacher Efficacy
Block 1	From the Mississippi Delta
Block 1	Teacher Recruitment Program
Block 2	(Predictor Variables)
Block 2	Metacognitive CQ
Block 2	Cognitive CQ
Block 2	Behavioral CQ
Block 2	Motivational CQ

To address the specific research questions regarding cultural intelligence and each subscale burnout, the researcher entered composite scores of each subscale of CQ into the model (Block 2) to predict the outcome variable teacher burnout. In addition, the total CQ score was entered into Block 2 of a separate hierarchical regression model after control variables were entered into Block 1 to explore the overall contribution of the total CQ score to the model. The  $F$  statistics were examined to determine the significance of each block and the entire regression model. The measure of most importance for the interpretation of hierarchical multiple regression is  $R^2$ , which represents the variation in the criterion variable explained by the predictor variables. The researcher examined the change in  $R^2$  to determine changes occurring in the criterion variable following the addition of each predictor variable. The significance value of  $p > .05$  was

used to detect an effect and thus to reject the null hypothesis whereas the null hypothesis was accepted at a  $p$  value below .05.

The researcher determined the effect size to examine the magnitude of the regression model's overall effect. Cohen (1988) specifically detailed the magnitude of effect sizes:  $r = .10$  (small effect),  $r = .30$  (medium effect) and  $r = .50$  (large effect). To determine the effect size for individual predictor variables, they were labeled  $sr_{inc}^2$  or  $R_{inc}^2$  (Warner, 2013). For adequate statistical power in detecting medium effect sizes,  $N > 104 + k$ , where  $N$  is the number of cases and  $k$  is the number of predictors, is a good rule of thumb (Warner, 2013). A two-tailed test was used to test the alpha level of significance  $p < .05$  level. A two-tailed test was also used because the test is non-directional (Fields, 2005), which was appropriate for the current study as it did not propose a particular direction of the associations between variables. To determine effect size, a multiple  $R$  was used (Warner, 2013). Researchers use the  $r$  value to determine the relationship between the variables (Gall et al., 2007).

The researcher examined the demographics, teacher efficacy, and teacher recruitment program variables and their relationship with CQ using Pearson's  $r$ . A correlation measures the strength or degree of the relationship between X and Y. The strength of relationship (how closely they are related) is usually expressed as a number between -1 and +1, the so-called correlation coefficient. A zero correlation indicates no relationship. As the correlation coefficient moves toward either -1 or +1, the relationship gets stronger until there is a "perfect correlation" at either extreme. Perfect correlation is referred to as singularity. Pearson product-moment coefficient ( $r$ ): The most common measure of correlation is the Pearson product-moment coefficient, which is used if one of the two variables are measured on the ratio or interval scale.

## CHAPTER FOUR: FINDINGS

The purpose of this study was to explore the relationship between the demographics, teacher efficacy, teachers who are from the Mississippi Delta, teachers participating in recruitment program, and Cultural Intelligence. Survey data from 112 teachers were collected for this study. The chapter begins with descriptive statistics depicted in tables followed by tables supporting the analysis of the data.

### Research Questions

**RQ 1:** Do demographics, teacher efficacy, and teacher recruitment program variables show a significant correlation with CQ?

**RQ 2:** Is there a relationship among the four subscales of CQ and teacher burnout for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, teachers who are from the MS Delta, and teachers participating in a teacher recruitment program?

### Hypotheses

**H<sub>0</sub>1:** There is no significant relationship between the demographics and CQ.

**H<sub>0</sub>2:** There is no significant relationship between teacher efficacy and CQ.

**H<sub>0</sub>3:** There is no significant relationship between the teacher recruitment program variable and CQ.

**H<sub>0</sub>4:** Teachers' race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation do not significantly contribute to explanation of the variance in emotional exhaustion.

**H<sub>0</sub>5:** Teachers' four subscales of CQ do not significantly contribute to explanation of the variance in emotional exhaustion.

**H<sub>0</sub>6:** There is not a significant predictive relationship among the four subscales of CQ and teachers' emotional exhaustion for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.

**H<sub>0</sub>7:** Teachers' race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation do not significantly contribute to explanation of the variance in personal accomplishment.

**H<sub>0</sub>8:** Teachers' four subscales of CQ do not significantly contribute to the explanation of the variance in personal accomplishment.

**H<sub>0</sub>9:** There is not a significant predictive relationship among the four subscales of CQ and teachers' personal accomplishment for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.

**H<sub>0</sub>10:** Teachers' race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation do not significantly contribute to explanation of the variance in depersonalization.

**H<sub>0</sub>11:** Teachers' four subscales of CQ do not significantly contribute to explanation of the variance in depersonalization.

**H<sub>0</sub>12:** There is not a significant predictive relationship among the four subscales of CQ and teachers' depersonalization, for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.

### Descriptive Statistics

Table 6 displays the frequency counts for selected variables. The most common racial/ethnic groups were African-American/Black (60.7%) and Caucasian/White (28.6%). Most of the teachers were female (75.9%). The years of teaching experience ranged from “0–5 years (33.9%)” to “11 or more years (42.0%)” with the median being eight years. Most teachers did not participate in a teacher recruitment program (78.6%). In addition, most (75.0%) were not born and raised in the Mississippi Delta (Table 1).

Table 6

*Frequency Counts for Selected Variables (N = 112)*

Variable	Category	<i>n</i>	%
Race/ethnicity	African-American/Black	68	60.7
	Caucasian/White	32	28.6
	Other	12	10.7
Sex	Male	27	24.1
	Female	85	75.9
Years of Teaching <sup>a</sup>	0-5 years	38	33.9
	6-10 years	27	24.1
	11 or more	47	42.0
Participated in a teacher recruitment program.	No	88	78.6
	Yes	24	21.4
Born and raised in the Mississippi Delta	No	84	75.0
	Yes	28	25.0

<sup>a</sup> Years of teaching: Median = 8 years

Table 7 displays the psychometric characteristics for the nine scales. Total CQ had a mean of  $M = 4.03$  ( $SD = 0.57$ ). Among the four CQ subscales, the highest was motivational CQ ( $M = 5.72$ ) and the lowest was cognitive CQ ( $M = 4.55$ ). Also included are the three burnout scores and the teacher efficacy score ( $M = 7.31$ ) (Table 7). The Cronbach alpha reliability coefficients for the nine scale scores ranged in size from  $\alpha = .56$  to  $\alpha = .90$  with a median sized alpha being  $\alpha = .83$  (Table 2). This suggested that all scales except depersonalization ( $\alpha = .56$ ) had adequate levels of internal reliability (Gravetter & Wallnau, 2008).

Table 7

*Descriptive Statistics for Selected Scales (N = 112)*

Scale	Number of Items	<i>M</i>	<i>SD</i>	Low	High	$\alpha$
Metacognitive CQ	4	5.72	0.74	3.75	7.00	.70
Cognitive CQ	6	4.55	1.22	1.99	7.00	.90
Motivational CQ	5	5.77	0.74	3.80	7.00	.80
Behavioral CQ	5	5.16	1.02	2.60	7.00	.83
Total CQ	20	4.03	0.57	2.85	5.38	.90
Emotional Exhaustion	9	27.24	11.52	5.00	51.00	.90
Personal Accomplishment	8	38.37	6.27	23.00	48.00	.78
Depersonalization	5	7.16	5.25	0.00	19.00	.56
Teacher Efficacy	12	7.31	0.94	5.33	9.00	.89

CQ = Cultural Intelligence Scale

### Testing the Statistical Assumptions

Initially, 132 teachers completed surveys. Inspection of boxplots and  $z$  scores for the nine scale scores revealed 18 respondents with univariate outliers. Two additional respondents with multivariate outliers were identified based on the results of the Mahalanobis distance test. This left 112 usable surveys for the study. Normality was then deemed adequate based on inspection of histograms for the scale scores and for the dichotomous variables, none had 90/10 splits in

their distributions. No evidence of multicollinearity was noted based on VIF and tolerance statistics. Further tests of the assumptions of normality, linearity, and homoscedasticity were performed by plotting the standardized residual scores from the regression models against the predicted scores. In addition, frequency histograms and normal P-P plots of the regression standardized residuals were created. Taken together, these procedures suggested that the dataset adequately met the assumptions for Pearson product-moment correlation and multiple regression model.

### **Results**

Research Question 1 asked, “RQ 1: Do demographics, teacher efficacy, and teacher recruitment program variables show a significant correlation with CQ?” This research question had three related hypotheses.

Null Hypothesis 1 predicted that, “H<sub>0</sub>1: There is no significant relationship between the demographics and CQ.” To test this, Tables 8 and 9 display the Pearson product-moment correlations for the five demographic variables with the five CQ scores. In Table 8, Black teachers had lower scores for Metacognitive CQ ( $M = 5.57, SD = 0.75$ ) than did teachers from other races ( $M = 5.94, SD = 0.68$ ),  $r(110) = -.24, p = .009$ . Black teachers also had lower scores for Cognitive CQ ( $M = 4.26, SD = 1.26$ ) than did teachers from other races ( $M = 5.00, SD = 1.02$ ),  $r(110) = -.30, p = .002$ . In addition, in Table 9, Black teachers had lower scores for Total CQ ( $M = 3.93, SD = 0.54$ ) than did teachers from other races ( $M = 4.19, SD = 0.57$ ),  $r(110) = -.22, p = .02$ . Given that only 3 of 25 correlations were significant, this combination of findings provided support to retain the Null Hypothesis 1.



Table 8

*Correlations for Selected Demographic Variables with Metacognitive, Cognitive, and Motivational Cultural Intelligence Scales (N = 112)*

Variable	Metacognitive CQ	Cognitive CQ	Motivational CQ
Black <sup>a</sup>	-.24 **	-.30 ***	-.09
White <sup>a</sup>	.10	.13	-.07
Sex <sup>b</sup>	.08	-.07	-.06
Years of Teaching	-.02	-.15	-.18
Born and raised in the Mississippi Delta <sup>a</sup>	-.12	-.07	-.12
Participate in a teacher recruitment program <sup>a</sup>	.01	.21 *	.07
Teacher Efficacy	.08	-.06	.04

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .005$ . \*\*\*\*  $p < .001$ .

<sup>a</sup> Coding: 0 = No 1 = Yes

<sup>b</sup> Sex: 1 = Male 2 = Female.

CQ = Cultural Intelligence Scale

Table 9

*Correlations for Selected Demographic Variables with Behavioral and Total Cultural Intelligence Scales (N = 112)*

Variable	Behavioral CQ	Total CQ
Black <sup>a</sup>	-.01	-.22 *
White <sup>a</sup>	-.08	.04
Sex <sup>b</sup>	-.03	-.04
Years of Teaching	-.06	-.14
Born and raised in the Mississippi Delta <sup>a</sup>	-.08	-.12
Participate in a teacher recruitment program <sup>a</sup>	-.02	.12
Teacher Efficacy	-.01	-.01

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .005$ . \*\*\*\*  $p < .001$ .

<sup>a</sup> Coding: 0 = No 1 = Yes

<sup>b</sup> Sex: 1 = Male 2 = Female.

CQ = Cultural Intelligence Scale

Null Hypothesis 2 predicted that, “H<sub>0</sub>2: There is no significant relationship between teacher efficacy and CQ.” To test this, Tables 8 and 9 display the Pearson product-moment correlations for the teacher efficacy score with the five CQ scores. None of the five relevant

correlations were significant. This combination of findings provided support to retain the Null Hypothesis 2.

Null Hypothesis 3 predicted that, “H<sub>0</sub>3: There is no significant relationship between the teacher recruitment program variable and CQ.” To test this, Tables 8 and 9 display the Pearson product-moment correlations for the teacher program recruitment variable with the five CQ scores. In Table 8, recruited teachers had higher scores for Cognitive CQ ( $M = 5.05$ ,  $SD = 0.85$ ) than did non-recruited teachers ( $M = 4.42$ ,  $SD = 1.27$ ),  $r(110) = .21$ ,  $p = .02$ . Given that only one of five relevant correlations was significant, this combination of findings provided support to retain the Null Hypothesis 3.

Research Question 2 asked, “RQ 2: Is there a relationship among the four factors of CQ and teacher burnout for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, teachers who are from the MS Delta, and teachers participating in a teacher recruitment program?” There are nine associated hypotheses (three hypotheses for each of the three burnout variables). This question was answered in Tables 10 through 14. Tables 10 and 11 are preliminary tables of bivariate correlations. Tables 12 through 14 are three two-step hierarchal regression models predicting emotional exhaustion (Table 12), personal accomplishment (Table 13), and depersonalization (Table 14). Step one includes the demographic variables and teacher efficacy. In step two, the four CQ scores were added.

As a preliminary set of analyses, Table 10 displays the Pearson product-moment correlations for seven demographic variables with Emotional Exhaustion, Personal Accomplishment, and Depersonalization. Emotional Exhaustion was higher for white teachers ( $M = 32.06$ ,  $SD = 11.08$ ) than for non-white teachers ( $M = 25.31$ ,  $SD = 11.18$ ),  $r(110) = .27$ ,  $p = .005$ . Teachers with less experience had more emotional exhaustion ( $r[110] = -.28$ ,  $p = .003$ ) and

more depersonalization ( $r [110] = -.25, p = .008$ ). Teachers in the recruitment program had more emotional exhaustion ( $M = 33.46, SD = 10.75$ ) than non-recruited teachers ( $M = 25.55, SD = 11.19$ ),  $r (110) = -.28, p = .002$ . Teachers in the recruitment program also had more depersonalization ( $M = 10.00, SD = 6.06$ ) than non-recruited teachers ( $M = 6.39, SD = 4.76$ ),  $r (110) = .28, p = .002$ . Higher teacher efficacy was related to lower emotional exhaustion ( $r [110] = -.36, p = .001$ ), higher personal accomplishment ( $r [110] = .39, p = .001$ ), and lower depersonalization ( $r [110] = -.44, p = .001$ ) (Table 10).

Table 10

*Correlations for Selected Variables with Emotional Exhaustion, Personal Accomplishment, and Depersonalization (N = 112)*

Variable	Emotional Exhaustion	Personal Accomplishment	Depersonalization			
Black <sup>a</sup>	-.17	-.07	-.14			
White <sup>a</sup>	.27	***	.12			
Sex <sup>b</sup>	.01	-.11	-.13			
Years of Teaching	-.28	***	-.25	**		
Born and raised in the Mississippi Delta <sup>a</sup>	.01	-.15	.14			
Participate in a teacher recruitment program <sup>a</sup>	.28	***	.01	.28	***	
Teacher Efficacy	-.36	****	.39	****	-.44	****

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .005$ . \*\*\*\*  $p < .001$ .

<sup>a</sup> Coding: 0 = No 1 = Yes

Table 11 displays the Pearson correlations for the five CQ scores with the three burnout scores. For the resulting 15 correlations, six were significant at the  $p < .05$  level. Specifically, emotional exhaustion was positively related to Cognitive CQ,  $r (110) = .19, p < .05$ . Personal Accomplishment was positively related to four of five CQ scores with the largest correlation

being with Metacognitive CQ,  $r(110) = .32, p < .001$ . Depersonalization was positively related to Cognitive CQ,  $r(110) = .19, p < .05$  (Table 11).

Table 11

*Correlations for CQ Scores with Emotional Exhaustion, Personal Accomplishment, and Depersonalization (N = 112)*

Variable	Emotional Exhaustion	Personal Accomplishment	Depersonalization
Metacognitive CQ	.03	.32	****
Cognitive CQ	.19 *	.23	* .19 *
Behavioral CQ	.02	.20	* -.03
Motivational CQ	.05	.04	.07
Total CQ	.12	.26	** .09

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .005$ . \*\*\*\*  $p < .001$ .

CQ = *Cultural Intelligence Scale*

Null Hypothesis 4 predicted that, “H<sub>0</sub>4: Teachers’ race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation do not significantly contribute to explanation of the variance in emotional exhaustion.” Table 12 displays the results of two-step regression model that predicted Emotional Exhaustion. The seven-variable first step was statistically significant ( $p = .001$ ) and accounted for 22.7% of the variance in Emotional Exhaustion. Specifically, Emotional Exhaustion was higher for teachers with lower levels of teacher efficacy ( $\beta = -.26, p = .005$ ). This combination of findings provided support to reject Null Hypothesis 4 (Table 12).

Table 12

*Two Step Hierarchical Regression Model Predicting Emotional Exhaustion Based on Selected Variables (N = 112)*

Model	Variable	B	SE	$\beta$	p
1	Intercept	47.04	9.98		.001
	Black <sup>a</sup>	1.42	3.39	.06	.68
	White <sup>a</sup>	5.58	3.65	.22	.13
	Sex <sup>b</sup>	.45	2.46	.09	.32
	Years of Teaching	-2.03	1.42	-.15	.16
	Teacher Efficacy	-3.22	1.12	-.26	.005
	Born and raised in the Mississippi Delta <sup>a</sup>	1.16	2.38	.04	.63
	Participate in a teacher recruitment program	3.95	3.01	.14	.19
	2	Intercept	39.79	14.74	
Black <sup>a</sup>		3.13	3.65	.13	.39
White <sup>a</sup>		6.66	3.80	.26	.08
Sex <sup>b</sup>		2.66	2.49	.10	.29
Years of Teaching		-1.80	1.47	-.14	.22
Teacher Efficacy		-3.18	1.14	-.26	.006
Born and raised in the Mississippi Delta <sup>a</sup>		1.06	2.43	.04	.66
Participate in a teacher recruitment program <sup>a</sup>		3.46	3.08	.12	.26
Metacognitive CQ		-0.39	1.72	-.03	.82
Cognitive CQ		1.45	1.09	.15	.18
Motivational CQ		0.39	1.63	.03	.81
Behavioral CQ		-0.33	1.17	-.03	.78

Model 1:  $F(7,104) = 4.36, p = .001. R^2 = .227.$

<sup>a</sup> Coding: 0 = No 1 = Yes

<sup>b</sup> Sex: 1 = Male 2 = Female.

Model 2:  $F(11,100) = 2.94, p = .002. R^2 = .244. \Delta R^2 = .017 (p = .68).$

<sup>a</sup> Coding: 0 = No 1 = Yes

<sup>b</sup> Sex: 1 = Male 2 = Female.

CQ = Cultural Intelligence Scale

Null Hypothesis 5 predicted that, “H<sub>0</sub>5: Teachers’ four subscales of CQ do not significantly contribute to explanation of the variance in emotional exhaustion.” In the second step of the model, the change in variance from step one to step two by adding the four subscales of CQ ( $\Delta R^2 = .017, p = .68$ ) was not significant. This provided support to retain Null Hypothesis 5 (Table 12).

Null Hypothesis 6 predicted that, “H<sub>0</sub>6: There is not a significant predictive relationship among the four subscales of CQ and teachers’ emotional exhaustion for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.” The overall eleven-variable model was statistically significant ( $p = .002$ ) and accounted for 24.4% of the variance in the Emotional Exhaustion. Examination of the beta weights in the second step found emotional exhaustion to be higher with lower levels of teacher efficacy ( $\beta = -.26, p = .006$ ) and *tended* to be higher for White teachers ( $\beta = .26, p = .08$ ). This combination of findings provided support to reject Null Hypothesis 6 (Table 12).

Null Hypothesis 7 predicted that, “H<sub>0</sub>7: Teachers’ race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation do not significantly contribute to explanation of the variance in personal accomplishment.” Table 13 displays the results of two-step hierarchal regression model that predicted Personal Accomplishment. The seven-variable model in the first step was statistically significant ( $p = .001$ ) and accounted for 21.0% of the variance in Personal Accomplishment. Specifically, Personal Accomplishment was higher for higher teacher efficacy scores ( $\beta = .42, p = .001$ ) and *tended* to be higher for male teachers ( $\beta = -.18, p = .06$ ). This combination of findings provided support to reject Null Hypothesis 7 (Table 13).

Table 13

*Two Step Hierarchical Regression Model Predicting Personal Accomplishment Based on Selected Variables (N = 112)*

Model	Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>p</i>
1	Intercept	23.15	5.49		.001
	Black <sup>a</sup>	-0.79	1.86	-.06	.67
	White <sup>a</sup>	0.55	2.00	.04	.78
	Sex <sup>b</sup>	-2.62	1.35	-.18	.06
	Years of Teaching	0.02	0.78	.00	.98
	Teacher Efficacy	2.81	0.62	.42	.001
	Born and raised in the Mississippi Delta <sup>a</sup>	-1.85	1.31	-.13	.16
	Participate in a teacher recruitment program <sup>a</sup>	0.22	1.65	.01	.90
	2	Intercept	12.65	7.53	
Black <sup>a</sup>		0.87	1.87	.07	.64
White <sup>a</sup>		1.32	1.94	.10	.50
Sex <sup>b</sup>		-2.79	1.27	-.19	.03
Years of Teaching		0.06	0.75	.01	.94
Teacher Efficacy		2.77	0.58	.42	.001
Born and raised in the Mississippi Delta <sup>a</sup>		-1.82	1.24	-.13	.14
Participate in a teacher recruitment program <sup>a</sup>		0.23	1.58	.02	.89
Metacognitive CQ		2.23	0.88	.26	.01
Cognitive CQ		0.67	0.56	.13	.23
Motivational CQ		-1.73	0.83	-.21	.04
Behavioral CQ	0.76	0.60	.12	.21	

Model 1:  $F(7, 104) = 3.95, p = .001. R^2 = .210.$

<sup>a</sup> Coding: 0 = *No* 1 = *Yes*

<sup>b</sup> Sex: 1 = *Male* 2 = *Female*.

Model 2:  $F(11, 100) = 4.54, p = .001. R^2 = .333. \Delta R^2 = .123 (p = .002).$

<sup>a</sup> Coding: 0 = *No* 1 = *Yes*

<sup>b</sup> Sex: 1 = *Male* 2 = *Female*.

CQ = *Cultural Intelligence Scale*

Null Hypothesis 8 predicted that, “H<sub>0</sub>8: Teachers’ four subscales of CQ do not significantly contribute to the explanation of the variance in personal accomplishment.” The change in variance from step one to step two ( $\Delta R^2 = .123, p = .002$ ) was significant when the four subscales of CQ were added to the model (Table 13). Specifically, Personal Accomplishment was higher for higher Metacognitive Cultural Intelligence scores ( $\beta = .26, p =$

.01) and lower Motivational Cultural Intelligence scores ( $\beta = -.21, p = .04$ ). This combination of findings provided support to reject Null Hypothesis 8.

Null Hypothesis 9 predicted that, “H<sub>0</sub>9: There is not a significant predictive relationship among the four subscales of CQ and teachers’ personal accomplishment for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program.” The entire eleven-variable model was statistically significant ( $p = .001$ ) and accounted for 33.3% of the variance in Personal Accomplishment. This combination of findings provided support to reject Null Hypothesis 9 (Table 13).

Null Hypothesis 10 predicted that, “H<sub>0</sub>10: Teachers’ race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and teacher recruitment program participation do not significantly contribute to explanation of the variance in depersonalization.” Table 14 displays the results of two-step hierarchal regression model that predicted Depersonalization. In the first step, the seven-variable model was statistically significant ( $p = .001$ ) and accounted for 27.2% of the variance in Depersonalization. Specifically, Depersonalization was higher for lower levels of teacher efficacy ( $\beta = -.39, p = .001$ ) and *tended* to be higher for teachers born and raised in the Mississippi Delta ( $\beta = .17, p = .06$ ). This combination of findings provided support to reject Null Hypothesis 11 (Table 14).



Table 14

*Two Step Hierarchal Regression Model Predicting Depersonalization Based on Selected Variables (N = 112)*

Model	Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>p</i>
1	Intercept	24.98	4.42		.001
	Black <sup>a</sup>	-2.13	1.50	-.20	.16
	White <sup>a</sup>	-1.32	1.61	-.11	.42
	Sex <sup>b</sup>	-0.29	1.09	-.02	.79
	Years of Teaching	-0.42	0.63	-.07	.51
	Teacher Efficacy	-2.15	0.50	-.39	.001
	Born and raised in the Mississippi Delta <sup>a</sup>	2.00	1.06	.17	.06
	Participate in a teacher recruitment program <sup>a</sup>	2.12	1.33	.17	.12
2	Intercept	25.24	6.45		.001
	Black a	-1.67	1.60	-.16	.30
	White a	-0.97	1.66	-.08	.56
	Sex b	-0.09	1.09	-.01	.94
	Years of Teaching	-0.33	0.64	-.05	.61
	Teacher Efficacy	-2.10	0.50	-.38	.001
	Born and raised in the Mississippi Delta	1.89	1.06	.16	.08
	Participate in a teacher recruitment program	1.74	1.35	.14	.20
	Metacognitive CQ	-1.11	0.75	-.16	.14
	Cognitive CQ	0.80	0.48	.19	.10
	Motivational CQ	0.58	0.71	.08	.42
	Behavioral CQ	-0.40	0.51	-.08	.43

Model 1:  $F(7, 104) = 5.55, p = .001. R^2 = .272.$

<sup>a</sup> Coding: 0 = *No* 1 = *Yes*

<sup>b</sup> Sex: 1 = *Male* 2 = *Female*.

Model 2:  $F(11, 100) = 3.98, p = .001. R^2 = .305. \Delta R^2 = .033 (p = .33).$

<sup>a</sup> Coding: 0 = *No* 1 = *Yes*

<sup>b</sup> Sex: 1 = *Male* 2 = *Female*.

CQ = *Cultural Intelligence Scale*

Null Hypothesis 11 predicted that, “H<sub>0</sub>11: Teachers’ four subscales of CQ do not significantly contribute to explanation of the variance in depersonalization.” The change in variance from step one to step two by adding the four CQ subscales ( $\Delta R^2 = .033, p = .33$ ) was not significant. This provided support to retain Null Hypothesis 11 (Table 14).

Null Hypothesis 12 predicted that, “H<sub>0</sub>12: There is not a significant predictive relationship among the four subscales of CQ and teachers’ depersonalization, for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, being raised in the MS Delta, and participation in the teacher recruitment program. The full eleven-variable model was statistically significant ( $p = .001$ ) and accounted for 30.5% of the variance in the Depersonalization (Table 14). This combination of findings provided support to reject Null Hypothesis 12.

## CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

### Discussion

The purpose of the study was to explore the relationship between cultural intelligence (CQ) and teacher burnout in the Mississippi Delta, while controlling for demographic variables, and teacher efficacy. This study used a predictive, correlational study to explore a possible correlation between CQ and teacher burnout among teachers in the Mississippi Delta who participated in teacher recruitment programs.

Teachers were recruited from five high schools in the Mississippi Delta and were surveyed via an informed consent and demographic questions. The survey included three instruments: the Cultural Intelligence Scale (CQS [Ang et al., 2007]), the Maslach Burnout Inventory (MBI [Maslach, 2003]), and the Teacher Sense of Efficacy Scale (TSOES [Duffin et al., 2012; O'Neill & Stephenson, 2012; Sharma et al., 2012]). A hierarchical regression analysis was used to analyze data and to determine if there was a relationship between the four subscales of CQ (predictor variables), control variables, and teacher burnout (criterion variable [Warner, 2013]).

### Demographic Variables and CQ

H01: There is no significant relationship between the demographics and CQ.

For the sampled population, Black teachers had lower scores for metacognitive CQ ( $r = -.24, p = .009$ ) and for cognitive CQ ( $r = -.30, p = .002$ ). Black teachers had lower total CQ Scores ( $r = -.22, p = .02$ ). The results revealed that White teachers, which made up 28.6% of the sample population, and teachers participating in a recruitment program, which made up 21.4% of the sample population, scored higher in Metacognitive CQ, Cognitive CQ, and overall CQ scores.

H<sub>0</sub>2: There is no significant relationship between teacher efficacy and CQ.

For this sampled population there is no significant relationship between teacher efficacy and cultural intelligence. However, teacher efficacy had the strongest correlation to why teachers were experiencing burnout. Past researchers have studied the influence that self-efficacy has on teacher burnout in the Mississippi Delta and have found that, statistically, a relationship exists between teacher efficacy and teacher burnout (Al-Fadhli & Singh, 2006; Pas et al., 2012; Skaalvik & Skaalvik, 2010; Towner, 2010). Similar to the current study, Steinhardt et al. (2011) found a significant correlation between low teacher efficacy and teacher burnout. Steinhardt et al. (2011) also found that gender statistically correlated to teacher burnout. The results indicate that emotional exhaustion is higher when teachers have lower teacher efficacy scores, which is relevant as it is likely that teachers with low efficacy have less confidence in their ability to teach.

Because of low confidence, teachers are likely to experience burnout. Blooms and Peters (2012) found that teachers who experience low levels of efficacy also experience high levels of emotional exhaustion, which resulted in feelings of burnout and job dissatisfaction. Although there is a significant relationship between cultural intelligence and emotional exhaustion, none of the four CQ factors was significant to emotional exhaustion.

H<sub>0</sub>3: There is no significant relationship between teacher recruitment program variables and CQ.

The hypothesis was rejected. The study revealed that teachers participating in a teacher recruitment program had higher cognitive CQ scores. In addition, teachers participating in a recruitment program, which made up 21.4% of the sample population, scored higher in Metacognitive CQ, Cognitive CQ, and overall CQ score. According to these results, non-Black

teachers had overall higher cultural knowledge than did Black teachers. It is possible that White teachers scored higher in cultural intelligence because of the cultural capital, which was initially introduced by theorist Bourdieu (Bourdieu & Passeron, 1977). Cultural capital implies that there are advantages for dominant subgroups regarding knowledge, education, and the advantages that offer them more opportunities in society (Simon & Ainsworth, 2012). Cultural capital is assumed one of the central, family-based endowments whose social class value affects offspring's intergenerational educational probabilities unequally (Tzanakis, (2011).

As it relates to this study, it can be suggested that because of cultural capital, White teachers have higher cultural intelligence because of the level of exposure and experiences with other cultures than do subordinate subgroups. Because this study was exploratory in nature, the findings add to the growing body of literature on cultural intelligence. This study suggests that dominant cultural groups, due to more opportunities, possess higher levels of CQ. In addition, by expanding the concept of CQ to include social class as possessing its own unique culture and diverting from its foundation of internationally globalization and ethnic identify, this study explored cultural intelligence nontraditionally. Because of this, it is possible that the CQ Scale did not capture questions that accurately assess cultural intelligence as it relates to the culture of poverty. Moreover, the positive correlation between teachers in recruitment programs possessing higher CQ scores than traditional teachers supports literature that suggests that teachers who are recruited through recruitment programs receive significant cultural training that prepare them to teach in cultures that are dissimilar from their own (TFA, 2014).

### **The Four Subscales of CQ and Teacher Burnout**

The following hypotheses were established for the four subscales of CQ:

**H<sub>04</sub>:** Teachers' race, gender, years of experience, and teacher efficacy do not significantly contribute to explanation of the variance in emotional exhaustion.

The linear combination of control variables (teachers' race, gender, years of experience, and teacher efficacy) does statistically significant predict emotional exhaustion. There is significant evidence to reject the null hypothesis and conclude that the control variables significantly contribute 22.7% of the explanation for teacher's emotional exhaustion. As previously suggested, teachers race, gender, years of experience have a significant correlation to teachers experiencing feelings of emotional exhaustion. This study adds to the scarce educational literature from the MS Delta that focuses on teacher burnout in the MS Delta and can suggest that greater emphasis should be placed on the emotional welfare of teachers in the MS Delta. The study also suggests that although teachers possesses cultural intelligence, they are experiencing burnout; this study reveal that there is support needed in the emotional support of teachers.

**H<sub>05</sub>:** Teachers' four subscales of CQ do not significantly contribute to explanation of the variance in emotional exhaustion.

The addition of CQ variables to the prediction model for teachers' emotional exhaustion was not significant. The addition of the CQ variables only explained increase 1.7 % in the variance of the criterion. As this context of cultural intelligence, as it relates to poverty, does not indicate a connection to why teachers are experiencing emotional exhaustion. Cognitive CQ also showed positive associations with all components of burnout, including emotional exhaustion and depersonalization with the strongest relationship demonstrated between cognitive CQ and personal accomplishment. This indicates that teachers who possess high levels of cognitive CQ

also experience emotional exhaustion and depersonalization. Several factors from the surveys for this study were not captured. Essentially, the context of environmental and culture, as it specifically was not address, which could suggest why there was no connection to CQ and emotional exhaustion.

**H<sub>0</sub>6:** There is not a significant predictive relationship among the four factors of CQ and teachers' emotional exhaustion for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy.

Model 2, including the linear combination of the four subscales of CQ and the control variables, does statistically significant predict, emotional exhaustion. There is significant evidence to reject the null hypothesis and conclude that the model does significantly explain 24.4% of variance in teachers' emotional exhaustion. The study indicated that White teachers and teachers participating in recruitment programs experienced higher levels of emotional exhaustion. As previous studies found, teachers are the minority in a school system and teacher participating in a recruitment programs, which are often minority teachers, report higher levels of emotional exhaustion. Previous researchers also have suggested that the emotional exhaustion is experienced because of the cultural disconnect between the teachers and the students.

**H<sub>0</sub>7:** Teachers' race, gender, years of experience, teacher efficacy do not significantly contribute to the explanation of the variance in personal accomplishment variance.

The linear combination of control variables (teachers' race, gender, years of experience, and teacher efficacy) does statistically significant predict emotional exhaustion. There is significant evidence to reject the null hypothesis and conclude that the control variables significantly contribute 21% of the explanation for teacher's personal accomplishment. Based on

the responses for this study, teachers with higher levels of teacher efficacy, equally exemplified higher levels of personal accomplishment. Previous research supports the results of this study.

**H08:** Teachers' four subscales of CQ do not significantly contribute to the explanation of the variance in personal accomplishment.

The addition of CQ variables to the prediction model for teachers' personal accomplishments was significant. The addition of the CQ variables only explained increase 1.23% in the variance of the criterion. When the control variables were removed, CQ did not significantly support the personal accomplishments of teachers. As mentioned earlier, it can be suggested that the CQ scale did not properly capture the context of CQ as it relates to the MS Delta and the context of poverty.

**H09:** There is not a significant predictive relationship among the four factors of CQ and teachers' personal accomplishment for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy, teachers.

Model 2, including the linear combination of the four subscales of CQ and the control variables, does statistically significant predict, personal accomplishment. There is significant evidence to reject the null hypothesis and conclude that the model does significantly explain 33.3% of variance in teachers' personal accomplishment. For this study, there was a relationship to metacognitive CQ and teacher burnout. Personal accomplishment showed the strongest association with any subscale of the cultural intelligence measure and was positively associated with metacognitive CQ at  $p < .001$ . However, cognitive CQ is most strongly associated with high levels of personal accomplishment. Behavioral CQ was positively associated with personal accomplishment such that teachers who had high levels of behavioral CQ also possessed a sense of personal accomplishment. Of all of the subscales of teacher burnout, personal accomplishment



appeared to be more highly associated with aspects of cultural intelligence than any other aspect of burnout in this sample was.

In terms of the overall scores, the only significant relationship between cultural intelligence and teacher burnout was found with teachers' sense of personal accomplishment, which showed a positive association to the overall cultural intelligence measure. This indicates that teachers with high levels of personal accomplishment also have high levels of overall cultural intelligence. This was the only aspect of burnout associated with overall cultural intelligence in this sample. Several positive associations were found among the subscales of CQ and teacher burnout.

Personal accomplishment had the highest correlation to cultural intelligence. This was consistent with past studies that indicated that those who experienced high levels of personal accomplishments were less likely to experience burnout (Stokes, 2013). Research in the area of burnout and cultural sensitivity has shown one of the root causes of burnout was cultural development (Schaufeli, Leiter, & Maslach, 2009). It was found that the more a person interacts with others who are diverse, the less likely he or she will become burned out (Tatar & Horenczyk, 2003). This is consistent with the current results demonstrating a negative relationship between cultural intelligence and burnout. Those high in cultural intelligence have lower levels of burnout and vice versa.

**H<sub>0</sub>10:** Teachers' race, gender, years of experience, and teacher efficacy do not significantly contribute to explanation of the variance in depersonalization.

The linear combination of control variables (teachers' race, gender, years of experience, and teacher efficacy) does statistically significant predict, depersonalization. There is significant evidence to reject the null hypothesis and conclude that the control variables significantly

contribute 27.2% of the explanation for teacher's depersonalization. Teacher's years of experience, who participated in recruitment programs, and who indicated low teacher efficacy reported depersonalization. As discussed previously, research has established that teachers who either have few years of experience or are close to retirement, are more likely to feel detachment and research suggests the same for teachers who participate in recruitment programs and teachers who have lower levels of efficacy. Because of the lack of research in the MS Delta, the findings can suggest why novice teachers are more likely not return and why teachers in recruitment programs are less likely to return.

**H011:** Teachers' four subscales of CQ do not significantly contribute to explanation of the variance in depersonalization.

The addition of CQ variables to the prediction model for teachers' depersonalization was not significant. The addition of the CQ variables only explained increase 0.3% in the variance of the criterion. When the control variables are excluded, the participants reported very little indication that CQ has a relationship to depersonalization. Such findings can indicate that there are other factors that are causes teacher to experience burnout.

**H012:** There is not a significant predictive relationship among the four factors of CQ and teachers' depersonalization, for teachers serving in the Mississippi Delta, while controlling for their race, gender, years of experience, teacher efficacy.

Model 2, including the linear combination of the four subscales of CQ and the control variables, does statistically significant predict depersonalization. There is significant evidence to reject the null hypothesis and conclude that the model does significantly explain 30.5% of variance in teachers' depersonalization. The findings contribute to the developing body of

literature on CQ and teacher burnout in the MS Delta. As mentioned, this study is new in nature and the findings signify that factors affect the quality of teaching for teachers in the MS Delta.

### **Conclusions**

Overall, the most significant findings that this study revealed was teacher efficacy had the strongest connection to why teachers are experiencing burnout in the Mississippi Delta, and that a link exists between CQ and personal accomplishments. Although teacher efficacy was the strongest indicator of teacher burnout, it only accounted for 13% of why teachers experience emotional exhaustion and 19% of why teachers experience depersonalization. CQ did not have significant relationship to why teachers experience burnout. In addition, this study did not suggest that teachers were experiencing burnout because of CQ. As it relate to the demographic variables, White, novice teachers and teachers who were participating in recruitment program experienced high levels of burnout, specifically, emotional exhaustion. Although these teachers were experiencing burnout, it is important to note that these teachers had higher CQ scores, which is in fact, a contrast to past research.

It has been found that higher CQ scores would suggest burnout and vice versa. This study revealed that teachers can have high levels of CQ, specifically metacognitive and cognitive CQ, yet still be subjected to burnout, which suggests that the scale did not capture culture in the context of poverty. The results of this study can speak to the scarce literature exploring teacher burnout as it relates to the culture of poverty. In addition, the study did not have significant findings that Black teachers were experiencing burnout. The findings could suggest the concept of relational demography (Fairchild et al., 2012). Past researchers have studied and found significant correlations that teacher-student racial congruence was positively associated with job satisfaction (Fairchild et al, 2012; Renzulli et al., 2011). When the racial composition of students

is equal to or exceeds 70% of the entire student population (what Kanter [1977] referred to as a majority), and the teacher shares the same race with the majority of students at the school, this racial congruency was positively associated with job satisfaction. In addition, past researchers have found that White teachers experience higher levels of job satisfaction when teaching a majority of students who are not racially congruent.

In this study, 71% of the teachers who completed the survey identified as Black or African American, and the high schools identified as 98%-99% African American. The relational demographic theory could be consistent with this study because the Black or African American teachers did not express a significant correlation to burnout while non-Black teachers did. As it relates to cultural intelligence, there was a significant correlation to all four subscales and overall CQ scores and personal accomplishment, with the exception of motivational CQ. This is not surprising as there were positive correlations with high CQ scores and high personal accomplishments. However, this study found a contrast regarding cognitive CQ. This study found a significant correlation to emotional exhaustion and depersonalization and cognitive CQ. Based on the literature, if there is a cultural disconnect, there should be higher burnout. Even with high CQ scores, the teachers experienced burnout, which could suggest that the survey did not adequately capture the responses based on the culture within the Delta, yet culture, in a global sense.

### **Implications**

There are several implications from this study. As mentioned, teacher efficacy was the strongest indicator of teacher burnout but only accounted for 13% of why teachers experience emotional exhaustion, and 19% of why teachers are experiencing depersonalization. By adding CQ to the model, it only accounted for 3.6% of the reason why teachers are experiencing

burnout. The findings imply that teachers are experiencing burnout; however, other factors also affect teachers that this study did not address. This is critical for administrators and school districts because it offers a look at five schools within the Mississippi Delta that are economically similar to all the schools in the Delta. It could be suggested that other teachers have similar experiences.

Administrators and educational leaders can use this study to explore why teachers are experiencing burnout. Furthermore, this study explored if there was a possible relationship that existed between CQ and teacher burnout in the Mississippi Delta. The finding contributes to the growing literature of CQ by exploring the contradictory findings—teachers can possess high CQ yet experience burnout. This study also revealed that teachers who possess higher personal accomplishments also had higher overall scores of CQ. This is significant because the findings gave specific insight on the connection of CQ and burnout and can support the literature as CQ as it is furthered explored in the education system.

Results of this study could be used to inform training and professional enrichment experiences for teachers, particularly novice teachers who are beginning their work in the Delta, in hopes that by exposing them to some of the unique aspects of working in a high poverty area, teacher attrition rates will improve, which will positively impact the overall school environment. Researchers have established a link between professional development for teachers and higher attrition rates (Boyd et al., 2011). As noted in the literature review, teacher training is essential to the attainment of teachers. If stakeholders can identify the reasons why teachers burnout, they can offer financial resolve to one of the poorest regions and educational systems in America (Poston et al., 2010). This study identified what population of teachers experience burnout in the Mississippi Delta. Because teacher burnout continues to present challenges to educational

systems within the Delta, as evidenced by high turnover rates, this study hoped to provide more information on possible contributors to burnout and thus to the significant teacher turnover rates.

### **Limitations**

The design was limiting because it did not establish casual inferences. Given that this was a correlational study, the researcher was establishing a relationship, such that, if significant results were found, these results could only speak to a relationship between cultural intelligence and burnout but not to the direction or the causality of this relationship. Future researchers can use a different design to establish the cause and the effect of the relationships between the variables.

Another limitation that can affect the internal validity was sample selection bias. Out of the 35 school districts in the Mississippi Delta, the researcher only selected teachers from five high schools. The geographic location and demographic of each high school was similar. The five high schools were all within the Mississippi Delta, 80% of their students received free or reduced lunch, and over 80% of the student population was African American. In addition, because of the convenience sample, the researcher may not have captured the schools that most exemplify what the researcher was trying to study. Moreover, the demographics of the participants in the study may not be representative of the entire population of the Mississippi Delta, which means the results cannot be generalized to other populations (Rovai et al., 2013). Future research that focuses on other demographics and geographical locations may allow for more generalizability.

Because of social desirability, teachers may not have reported their honest feelings and may have responded based on what they felt was socially acceptable because of social desirability (Warner, 2013). To limit the impact of this, the participants were allowed to

complete the survey during their leisure. By doing this, the participants had privacy and discretion needed to respond honestly.

### **Recommendations for Future Research**

Because this study was exploratory in nature, many areas can be furthered examined to support the limited literature on the Mississippi Delta and the factors that contribute to the alarming rates of teacher turnout. First, more in-depth and detailed research is needed to examine the culture within the Mississippi Delta, which will provide future researchers an opportunity to approach the culture of poverty within the Delta empirically. By having a working knowledge of the culture, future researcher can provide more insight on why more critical-need schools have been identified within the Delta. They can also look at why many have historically struggled to meet and/or maintain minimum accreditation standards based on student achievement on standardized tests. They can also explore why the students have lower graduation rates as compared to other school districts within Mississippi.

Future researchers can explore the Mississippi Delta qualitatively with an ethnographic approach. Next, future researchers could focus on the quality of teacher training in the Delta to examine if policy makers are making a systematic effort to assess the type of staff development and training that is being provided to teachers. In the same vein, future researchers could interview teachers to examine the types of training that they may need to identify with students and that will better support their teaching experiences in the Delta. Because this study revealed that teacher efficacy continues to be a problem but does not account for the overall reasons teachers are experiencing burnout, interviewing teachers to better understand what is leading them to burnout will add to the literature of identifying why teachers, who teach in rural areas, experience more burnout. By conducting interviews, it will provide more details on why Black

teachers did not have a significant correlation to the burnout scale, and it will provide what leads Black teachers to burnout in areas with predominately-Black students.

Finally, future researchers can use this study to explore cultural intelligence but with another instrument that better captures the types of questions that examine the culture of poverty. Approaching the phenomenon of teacher burnout through the lens of cultural intelligence with a more appropriate instrument can provide a unique perspective on factors related to teacher turnover rates in the Mississippi Delta. Such information could contribute to the development of relevant and comprehensive training programs for new teachers to the Delta. Another method that future researchers can evaluate this study is by having a larger sample size. Because of the number of variables for this present study, it is a great chance that if the sample size is increased, it could possibly offer more insight on why teachers are experiencing burnout. Future researchers could also replicate this study to focus on school leaders and administrative teams. In addition, it can add to the literature on factors influencing turnover rates in impoverished, rural communities.



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**APPENDIX A. DEMOGRAPHIC AND EXPERIENCE ITEMS**

## Demographic Survey

- a. Please indicate your sex.
  - a. Male
  - b. Female
- b. Please indicate your ethnicity.
  - a. African-American/ Black
  - b. White
  - c. Other
- c. Please indicate your years of experience.
  - a. 0-5
  - b. 6-10
  - c. 10+
- d. Please indicate if you participate in a teacher recruitment program (e.g., Teach for America).
  - a. Yes
  - b. No
- e. Please indicate if you were born and raised in the Mississippi Delta.
  - a. Yes
  - b. No



**APPENDIX B.****IRB APPROVAL LETTER**

Dear Lakeysha,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:  
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Your IRB-approved, stamped consent form is also attached. This form should be copied and used to gain the consent of or provide information to your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document should be made available without alteration.

Please retain this letter for your records. Also, if you are conducting research as part of the requirements for a master's thesis or doctoral dissertation, this approval letter should be included as an appendix to your completed thesis or dissertation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at [irb@liberty.edu](mailto:irb@liberty.edu).

Sincerely,

**Fernando Garzon, Psy.D.**  
*Professor, IRB Chair*  
**Counseling**

**(434) 592-4054**

The Liberty University Institutional  
Review Board has approved this  
document for use from 1/29/15 to --  
Protocol # 2086.012915

## **APPENDIX C. INFORMED CONSENT**

### **EXPLORING THE RELATIONSHIP BETWEEN CULTURAL INTELLIGENCE AND TEACHER BURNOUT IN THE MISSISSIPPI DELTA**

Lakeysha Hallmon  
Liberty University  
School of Education

You are invited to be in a research study designed to explore the relationship between cultural intelligence and teacher burnout in the Mississippi Delta. You were selected as a possible participant because you are a teacher in the Mississippi Delta. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Lakeysha Hallmon, doctoral candidate at Liberty University.

#### **Background Information:**

The purpose of this study is to identify if there is a relationship between the four subscales of cultural intelligence and teacher burnout in the Mississippi Delta while controlling for race, gender, years of experience, and teacher efficacy.

#### **Procedures:**

If you agree to be in this study, I would ask that you click on the secure URL link (below) to complete a 30-45 minute survey to determine if there is a relationship between the four subscales of cultural intelligence and teacher burnout.

#### **Risks and Benefits of being in the Study:**

The risks are no more than what any participant would encounter during your normal work hours. If you choose to participate, the survey can be completed during your free time so that no instructional time is interrupted.

There are no direct benefits of the participants. The benefits of this study include the opportunity to be a part of a study that will lend a voice to the possible reduction of teacher turnover rates in the Mississippi Delta. The results of this study can help you, the participant, gain a clearer understanding of the factors that can predict teacher burnout, and it can assist educational administrators in taking preventative measures to counteract teacher turnover.

#### **Compensation:**

Participants will not be compensated.

#### **Confidentiality:**

The records of this study will be kept private and all of the collected data will be anonymous. Published reports will not include any identifying information or names of the participants.

Pseudonyms will be The Liberty University Institutional Review Board has approved this document for use from 1/29/15 to -- Protocol # 2086.012915

used to refer to your school in write-ups. Data will be stored on a password-protected computer and is only shared with the research team. After a period of three years, information will be deleted from the computer and the researcher will destroy any remaining electronic copies used for data analysis. The results of the study will be available to the participants upon request.

**Voluntary Nature of the Study:**

Participation in this study is voluntary. You are free not to answer any questions. Your decision whether or not to participate will not affect your current or future relations with Liberty University, the school of education, or the researcher. If you decide to participate, you are free to withdraw at any time without affecting those relationships.

**Contacts and Questions:**

The researcher conducting this study is Lakeysha Hallmon. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at (770) 624-6480, [lhallmon@liberty.edu](mailto:lhallmon@liberty.edu). You may also contact his dissertation chair with any questions: Dr. Tracey Pritchard, (302) 437-4620, [tbpritchard@liberty.edu](mailto:tbpritchard@liberty.edu).

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Suite 1837, Lynchburg, VA 24515, or email at [irb@liberty.edu](mailto:irb@liberty.edu).

**Click on this secure link or paste it into your Internet browser to access the survey**

**APPENDIX D. RECRUITMENT EMAIL**

(Emailed to the district and teachers)

Greetings:

I am Lakeysha Hallmon, a doctoral candidate in the education department, at Liberty University. As part of the requirements for my degree, I am conducting a research study to explore if there is a relationship between cultural intelligence and teacher burnout in the Mississippi Delta. I am requesting your assistance in helping me in this process. I am recruiting educators to assist me by taking an online survey. The survey will take approximately 20-25 minutes of your time and ask questions regarding cultural knowledge, burnout, teacher efficacy, and demographic information (race, gender and years of experience). This survey is completely anonymous. Please keep in mind; you must be a teacher in the Mississippi Delta to complete this survey. Participation in this study is voluntary. Your decision to participate will not affect your professional relationship with your district. If you decide to participate, you are free to withdraw your survey at any time. If the results of the research study are published, your name and identity will not be used. If you choose to participate in this study, you will be entered into a drawing to win a gift certificate. One teacher from each school will qualify in a drawing to win a \$20 Visa card.

Please do not hesitate to contact me if there are questions or concerns regarding taking the survey.

Educationally yours,

Lakeysha Hallmon,  
Doctoral Candidate