TEACHER WORKING CONDITIONS:

PERCEPTIONS OF NOVICE AND EXPERIENCED K-12 VIRTUAL SCHOOL TEACHERS

by

Tiffany Ann Francis

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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APPROVED BY:

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ABSTRACT

The purpose of this study was to examine if there is a difference between novice and experienced teachers' perceptions of the working conditions at the K-12 virtual school. This study examined the teachers' total years employed at the school to determine if a difference exists in the groups' perceptions of the teacher working conditions. Teacher working conditions were measured by the North Carolina Teacher Working Conditions (NC TWC) survey that was administered to North Carolina teachers. A causal-comparative research design was used to conduct the study. A convenience sample of ($N = 318$) licensed K-12 virtual school instructors participated in the anonymous statewide survey. This study focused on 6-12 grade virtual school teachers. An independent-sample *t*-test was conducted to evaluate the difference between the means of the teachers' perceptions of working conditions of their school as measured by the NC TWC survey and the total number of years the teacher has been employed at the virtual school. The independent variable examined in this study was the years of employment (1 to 3 years and 4 to 10 years) and the dependent variable was the teachers' perceived working conditions of the virtual school. Applying Herzberg's Two-Factory Theory of Satisfaction, this quantitative study was conducted in a public virtual school consisting of middle and high school students in North Carolina. The findings of this study indicated that there is a statistically significant difference in the teachers' perceptions of the working conditions. Experienced teachers perceived school leadership, their use of time, and instructional practices and support at a higher level than novice teachers.

Keywords: teacher working conditions, teacher retention, K-12 virtual school, teacher job satisfaction, distance education

Copyright Page

Dedication

I would like to thank my Lord and Savior, Jesus Christ for His grace and love. Throughout my doctoral journey and dissertation process, I learned to lean on Him and trust Him even more. Prayer allowed me to stay focused and determined to complete my study. I knew that God would be faithful to bring me through and I thank God for my ability to complete this challenging task.

"The one who calls you is faithful, and he will do it." 1 Thessalonians 5:24

This study is dedicated to my grandmother, Martha (Mimi). Her love and support guided me through this process when I needed to be uplifted. Her continuous prayers and positive words kept me going when I needed it the most. Every time we spoke she asked about my study and the progress I was making. After a long week of class, she would talk to me on the phone as I drove home from Liberty. In March 2016, my Mimi passed away and I am comforted knowing that I will be able to see her again. I dedicate this study in her memory and I want to celebrate this accomplishment with her.

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I would also like to acknowledge my committee members, Dr. Charles Smith and Dr. Amy Schechter. Thank you for your time serving on my committee and for the contributions you made to the study. Your kind words and guidance allowed me to push through and complete my dissertation.

I would like to thank my husband Nathan for his unwavering support. He has been my greatest source of encouragement and I am forever grateful for your love. No matter what situation would arise, you always urged me to keep going. Thank you for all of your help when I needed it the most. I would also like to thank my two children, Jadin and Ayana. You have both been supportive and patient while I was completing my doctoral degree. You are my greatest blessing!

Additionally, I would like to acknowledge my parents. My dad taught me the importance of a good work ethic and my mom taught me the importance of putting God first. Thank you for your continued loving guidance. I am thankful to have two very special sisters that are always there for me. My grandfather, mother-in-law and father-in-law have been extremely supportive throughout this journey. I feel blessed to have a close and loving family.

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Institutional Review Board (IRB)

New Teacher Center (NTC)

North Carolina Department of Public Instruction (NCDPI)

North Carolina Teacher Working Conditions survey (NC TWC)

CHAPTER ONE: INTRODUCTION

Overview

Across America, distance education is transforming the educational system by offering K-12 students the opportunity to take courses virtually in a blended learning environment or entirely online. Authors Christensen, Horn, and Johnson (2011) suggested that half of all high school courses offered to students will be delivered in an online format by 2019, and by the year 2024, it will be increased to 80%. Although virtual schools utilize technology in a way that decreases dependence on conventional classroom teachers, the virtual format does not minimize the vital role of virtual teachers (Corry & Stella, 2012). Therefore, providing students with high quality instruction will require effective virtual teachers (Corry & Stella, 2012). Nevertheless, there is a limited research base on K-12 virtual school instructors and as virtual schools expand, the need for advanced research in this field is greater (Bernard et. al, 2009; Black, Ferdig, & DiPietro, 2008; Simonson, Smaldino, Albright, & Zva-cek, 2011; Smouse, 2005; Staker, 2011). The retention and evaluation of teachers is essential to the success and progression of the nascent distance education school sector (Huerta, Rice, & Shafer, 2013).

Research shows that educators, in general, are leaving the field of education to pursue a different profession within the first three to five years at a rate of 30-50% (AEE, 2014; Darling-Hammond, 2001; Dawson, 2001; Ewing & Manuel, 2005; Ingersoll, 2002; Ingersoll, Merrill, & Stuckey, 2014). Researchers Boyd et al. (2011) and Ladd (2011) surveyed teachers about their working conditions and career plans. The researchers discovered that working conditions significantly impacted their career plans along with salaries and benefits. Due to teaching conditions affecting teacher retention and the steady growth of K-12 online learning, it is

significant to study the K-12 teachers' perceptions of the working conditions and their level of job satisfaction.

Background

In the past decade, K-12 online learning has profoundly expanded since its inception in the 1990s. Carpenter and Finn (2006) identified by the 2001-2002 school year that in the states of Arizona, California, Florida, Michigan, and Texas over 70 virtual schools had opened. According to Setzer and Lewls (2005), virtual schools had been established in almost two dozen states by the 2004-2005 school year. By 2005, a private company K-12, reported that thirteen states had purchased distance education curriculum for their home school students, charter schools, and school districts (Gartner, 2004). It was estimated by Smith, Clark, and Blomeyer (2005) that at least one virtual course had been taken by approximately 1% of K-12 public school students in 2005.

School administrators were given a national survey in 2007 to evaluate the rate of expansion of online schools, which was one of the initial studies conducted in K-12 schools to gather data and evaluate blended and online learning (Picciano & Seaman, 2008). The national survey revealed that out of the school districts that participated in the study, three quarters offered students blended or online courses, and 66% of the districts had active student enrollments online (Picciano & Seaman, 2008). It was estimated in the 2007-2008 school year that 1,030,000 students engaged in K-12 courses online, an increase of 47% from the 2005-2006 school year (Picciano & Seaman, 2008).

The Evergreen Education Group's annual 2015 report, "Keeping Pace with K–12 Digital Learning," indicated that there were 31 states that had virtual schools entirely online, which guaranteed that learners across the entire state could access the virtual school. Virtual charter

schools are available in 25 out of the 31 states (Watson, Pape, Gemin, & Vasahw, 2015). In the 2014-2015 school year, it was estimated that the attendance rate was over 275,000 learners who were enrolled in more than 3.3 million semester-comparable courses online as well as charter schools online (Watson et al., 2015). Interestingly, in the 1997-98 school year, virtual schools began blossoming with the Virtual High School providing 24 Internet-based classes to over 10 states in 27 schools with 500 learners (Samuelsohn, Merisotis, Grunwald, Dabars, & Remondi, 2015). Barbara Stein, a board member of the Virtual High School stated, "It was really an effort to see if you can teach online in a quality way, where students learned as well" (Samuelsohn et al., 2015). At this time, the Internet was in its beginning stages and few people used email.

Virtual student enrollment has grown exponentially compared to the beginning stages of its conception. Watson et al. (2015) report that there are now twenty-four states operating virtual schools for students that offer supplemental courses with approximately 462,000 learners in attendance. The combined total is approximately 815,000 courses that are equivalent to semester courses, which increased by 10% from the 2013-2014 school year (Watson et al., 2015). Since the middle of the 1990s, enrollments in supplemental classes have increased by approximately 10% annually at the Virtual High School, consisting of over 160,000 international and U.S. enrollments (Samuelsohn et al., 2015). Based on the report by Watson et al. (2015), in addition to students at the state schools, it is estimated that an additional 2.2 million learners took approximately 3.8 million virtual courses. Collectively, in the 2014 -2015 school year, the total was more than 4.5 million supplemental distance education courses taken by K-12 learners (Watson et al., 2015).

Larger student enrollments continue propelling into motion the virtual school Domino. Just five years prior, in the 2009-2010 school year, state virtual schools supported approximately

450,000 enrollments in 31 states (Ferdig & Kennedy, 2014). According to Watson et al. (2015), the greatest number of enrollments in individual courses online have been for learners in grades 9-12; high school students have made up 84% of the supplemental classes. There has been a more equal distribution with enrollments in full time schools. High school students in grades 9-12 include 46% of the enrollment, middle school students in grades 6-8 include 28% of the enrollment, and elementary school students in grades K-5 make up 26% of the enrollment for full time virtual schools (Watson et al., 2015). Once nonexistent, virtual schools are now transforming the educational environment for many students. Numerous states are now shifting in the direction of mandatory virtual classes due to the fact learners will almost certainly be expected to enroll in a virtual course if he or she chooses to go to a university or college (Lynch, 2016). There has been an undeniable expansion in the virtual school environment.

Social Impact

Technology has become a huge part of society. The society at large has technology intertwined into their daily lives. Digital technology has allowed society to access information instantly through the Internet. In the United States, 81% of adults use the Internet; since the invention of the Internet, this is the greatest rate of use, which is a large increase from 14% in 1995 (Pew Research Center, 2012).

Teenagers in America, from ages 12 to 17, reported in a 2011 Pew Research survey that 95% used the Internet occasionally, 70% used Internet daily, at home 63% had Internet access, 30% had smart phones, and 74% had a computer (Pew Internet & American Life Project Surveys, 2011). With a changing society comes a changing student and therefore a changing educational system. With the touch of a button, students can now access their online classroom.

Meeting the needs of the learners in this generation should be a priority to the educational community.

To meet the needs of online students, schools must provide students with effective educators. Due to the looming threat of teacher attrition, the educational community is being forced to address the issue. This continues to be a significant issue in education. The US Department of Education (2013) reported that from 2004 to 2012, post-secondary teacher preparation programs have experienced a decrease in enrollment by almost 10% nationally. The United States spends as much as $2.2 billion each year on attrition as approximately half a million educators leave the profession or move yearly (Alliance for Excellent Education, 2014). The high teacher attrition rate severely jeopardizes the country's ability to guarantee that all learners have access to qualified educators. This costly phenomenon is being investigated but cannot be ignored in K-12 distance education.

Theories

Maslow and Herzberg are the prominent theorist in this study. Abraham Maslow is well known for the contribution of Maslow's hierarchy of needs to motivation theory. Tyson (2015) noted that Maslow arranged his hierarchy on the concept that people are wanting creatures whose actions are directed by goals and because of this, postulated an inventory of needs with different ranges, which vary: (1) Physiological: these are necessary for surviving; (2) Security or safety: these reference needs of being free from hazard and to reside in a secure, nonviolent setting; (3) Affiliation: having the companionship of other people; (4) Esteem: these consist of valuing the opinions of others and self-respect and (5) Self-actualization: these include the highest level of needs, these are satisfied by the opportunity for talents to develop to the fullest and to accomplish individual goals (Tyson, 2015).

There are two fundamental assumptions significant to Maslow's theory. First, when lower needs have already been met, then higher needs can become operational; when a need has become satisfied, it will no longer be a factor for motivating (Tyson, 2015). Maslow's categorization of the distinction of needs has offered an extremely valuable foundation for future research (Tyson, 2015). Maslow's theory can be utilized in an effort to identify and recognize factors that influence educators from leaving the field of education. Educational leaders can start by identifying felt needs that are considered to be existing in education, to assist in retention efforts that are equally purposeful and efficient.

As a progression of Maslow's theory, Fred Herzberg (1959) created the two-factor theory. Herzberg thought that there were two clearly distinct fields that must be employed to evaluate job satisfaction and dissatisfaction. As stated by Herzberg, job satisfaction has factors that are independent and distinctive from the factors that have an impact on job dissatisfaction. As outlined by Tyson (2015), two groups of needs were identified by Herzberg, which were motivating factors and hygiene factors. The category with motivating factors lists factors that are equipped to satisfy the employee and the hygiene factors listed are able to cause the employee to become dissatisfied in their job.

For that reason, if the job satisfaction factors lessen, satisfaction will be documented by the employee as neutral as opposed to dissatisfaction. In contrast, if there is a decrease in factors that give rise to dissatisfaction, the person would record possessing dissatisfaction at a neutral level as opposed to the level of satisfaction increasing. According to Tyson (2015), the hygiene factors are basically factors that are appealing to employees, by neglecting them it can lead to the employee becoming dissatisfied, nevertheless they cannot support satisfaction or motivate workers (Tyson, 2015). Hygiene factors need continual attention with the purpose of preventing

employees from becoming dissatisfied (Tyson, 2015). Herzberg's theory can be utilized to evaluate the factors that cause satisfaction and dissatisfaction for K-12 distance education instructors.

Problem Statement

The National Educational Policy Center (NEPC) frequently conducts reports on virtual schools and issued a recent report *Virtual Schools in the U.S. 2015: Politics, Performance, Policy, and Research Evidence*. This report stated that minimal action has taken place regarding the significant issues of retaining and assessing effective virtual educators (Molnar et al., 2015). However, there is no research available that addresses the teacher working conditions at K-12 virtual schools and its effect on teacher retention or job satisfaction. The International Association for K-12 Online Learning (iNACOL) revealed that researchers would discover "important gaps in the knowledge base in this emerging field" and in fact wants the federal government to be aware and pay better attention (Samuelsohn et al., 2015).

Due to the rapid expansion of K-12 virtual schools, it is important to understand how to retain and support these instructors. I have only discovered one study by Larkin (2015) that has examined the relationship between online K-12 teachers' perceptions of job satisfaction, organizational commitment, and turnover intention. Larkin (2015) identified the need to further study teacher retention in virtual K-12 schools, as there was no known research available at the time of the study. The quantitative study determined that there was a correlation between organizational commitment and a moderate-high level of job satisfaction (Larkin, 2015).

Virtual school instructors are faced with different challenges and working conditions than conventional classroom K-12 teachers (Richardson, Beck, LaFrance, & McLeod, 2016). As the number of K-12 students taking online courses continues to rise, so will the demand for qualified

K-12 virtual instructors. The National Education Policy Center (NEPC) report from 2015 determined that "More than 20 years after the first virtual schools began, there continues to be a deficit of empirical, longitudinal research to guide the practice and policy of virtual schooling" (Samuelsohn et al., 2015). It is important to understand how the teachers perceive the working conditions at the virtual school. The problem is there has been a no extant research on the virtual educators' perspectives of the teacher working conditions and its possible effect on satisfaction and retention.

Purpose Statement

The purpose of this study was to examine if there is a difference between novice and experienced teachers' perceptions of the working conditions at the K-12 virtual school. A quantitative, causal-comparative research design was used to conduct the study. As a result of the minimal research available associated with these variables, causal comparative research is appropriate for this study (Gall, Gall, & Borg, 2007).

Looking at the worldwide technological revolution that is happening presently and the accessibility of K-12 online courses, virtual schools, and distance education programs, it is crucial that research begins to explore the distinctions between K-12 virtual instructors and K-12 traditional instructors. In an effort to retain qualified K-12 virtual instructors, it will be beneficial to understand if the teachers' perceptions of the working conditions are different based upon the length of time they have been teaching at the virtual school. This will assist schools and school administrators in understanding what areas of the working conditions at the school may have an impact on the decision teachers make when deciding to leave or stay at the school. Also, this will assist administrators in making decisions about how to better support novice verses experienced teachers.

For many states and school districts, K-12 virtual schools are still new and emerging programs. Due to the nontraditional school environment largely unstudied when compared to traditional schools, it is important to understand how virtual instructors view the virtual school working conditions. When examining the working conditions at a virtual school, it is beneficial to study the amount of time the teacher has been in a virtual role rather than the teachers' total years in education. Virtual school provides teachers with a different set of teacher working conditions than a traditional school and "effective virtual teachers have qualities and skills that often set them apart from traditional teachers" (Davis et al., 2007, p. 28).

The change in working conditions for teachers requires a paradigm shift in terms of how the teacher handles instructional practices, assessments, interactions with students, and their use of time in an online environment (Easton, 2003). Lowes (2005) pointed out that it is an expectation virtual school instructors make use of unique techniques and methods when assessing "how to reach and evaluate, students when you cannot interact with them face-to-face on a daily basis" (p. 12). It should not be presumed that instructors have the skills necessary to teach virtually just by switching into a different work environment or that the instructor will instantly be prepared to handle the unique requirements expected of them when teaching online compared to a traditional classroom (Davis et al., 2007). Instructors must learn to adapt to a different set of working conditions in a virtual environment. Therefore, this study focused on the North Carolina virtual teachers' perception of the teacher working conditions in North Carolina K-12 public virtual schools.

Significance of the Study

Many studies have been conducted to analyze the effects of the teaching and learning conditions of traditional schools (Cochran-Smith & Lytle, 1993; Darling-Hammond, 2006;

Levine & Trachtman, 1997; Zeichner & Liston, 1987). There are no known studies, however, to analyze the effects of the teaching conditions of K-12 virtual schools. The existing literature does not evaluate the differences in the teaching conditions of the virtual school based upon the teachers' years of employment. This study will contribute to the growing body of literature on K-12 virtual schools, teacher retention, and job satisfaction.

When instructors perceive a positive school climate, they are less stressed and less likely to burn out (Barry, 2010; Kapadia & Coca, 2007; Pepper & Thomas, 2002); because of this, they may not be as likely to leave the teaching profession. The complexity of teaching in a virtual environment results in challenges that need to be addressed in order to retain teachers (Barbour, 2012; Rice, 2006). When comparing the highest attrition rates of different professions, teaching is one of the highest on the list (Barry, Daughtrey, & Wieder, 2010). The significant role teachers play in education demands that the factors that influence retention must be dealt with and resolved (Ferdig & Kennedy, 2014). Virtual school teachers play a significant role in providing expelled or dropout students with the path to graduation (Ferdig, 2010). Not only do virtual instructors play a significant role in teaching credit recovery courses, but they also work with at-risk students (Watson & Gemin, 2008a). Highly qualified teachers are critical in every classroom setting, but virtual instructors have significant and complex roles; they must be equipped to meet the obstacles of teaching in an online environment which include engaging and communicating with students virtually (Charania, 2010).

The North Carolina Teacher Working Conditions survey for 2016 revealed that over 100,000 teachers throughout the state felt that the school leadership was the most important factor in their decision to remain teaching at their current school. The second most important factors cited by the teachers were use of time and instructional practices and support. As a result

of statewide survey, this research study was used to further examine those three specific aspects of the teacher working conditions since it notably affects the teachers' willingness to keep teaching at their current school. This study analyzed the perceptual data to focus on the specific areas of school leadership, use of time, and instructional practices and support. Through the research questions, the researcher investigated the working conditions.

Research Questions

RQ1: Is there a difference in the perception of school leadership between novice and experienced K-12 virtual school teachers?

RQ2: Is there a difference in the perception of use of time between novice and experienced K-12 virtual school teachers?

RQ3: Is there a difference in the perception of instructional practice and support between novice and experienced K-12 virtual school teachers?

Null Hypotheses

$H_0$1: There is no significant difference in teachers' perceptions of school leadership based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey.

$H_0$2: There is no significant difference in the teachers' perceptions of use of time based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey.

$H_0$3: There is no significant difference in the teachers' perceptions of instructional practices and support based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey.

Definitions

The definition of terms is provided for the reader to offer clarity for this study.

1. *Experienced teachers* – Teachers who have greater than three years of experience (Bastick, 2002)
2. *Hygienes* - Extrinsic factors associated with job dissatisfaction, which includes working conditions, supervision, pay, interpersonal relationships, and job security (Herzberg, Mausner, & Snyderman, 1959).
3. *Instructional practices and support* - Available supports and data for instructors to enhance student learning and instruction (Pugh, 2014).
4. *Job satisfaction* - A subjective feeling that is favorable or unfavorable in which an employee views their job and the level that the employee's needs are bring met in the work environment by reinforcers (Weis, Dawis, England, & Lofquist, 1967).
5. *Novice teachers* – Teachers who have been teaching for three years or less in North Carolina (North Carolina Department of Public Instruction, 2014)
6. *Perception* - "The processes that organize information in the sensory image and interpret it as having been produced by properties of objects or events in the external, three-dimensional world" (Gerrig & Zimbardo, 2002, p.80).
7. *School leadership* - The ability of the leadership at the school to produce an environment of support and trust and addressing instructor concerns (Pugh, 2014).
8. *Teacher attrition* - A decrease of employees as a result of employees retiring, transferring to another school or organization, and leaving education entirely (Larkin, 2015).
9. *Teacher retention* - Maintaining employees in their existing position and/or organization to maintain continued employment (Larkin, 2015).

10. *Traditional school* - Students receive face-to-face instruction in a brick-and-mortar school through oral, written, and some media or Internet, with 0-29% of the content online (Allen & Seaman, 2013).
11. *Turnover* - Permanent removal from an organization that is voluntary and involuntary (Robbins, Judge, Odendaal, & Roodt, 2009).
12. *Turnover intention* - The degree in which an employee plans to leave for continue working at their current place of employment and with their present employer (Lacity, Lyer, & Rudramuniyaiah, 2008).
13. *Use of time* - Time available to prepare, collaborate, and offer optimum instruction time throughout the school day (Pugh, 2014).
14. *Virtual school* - A school where the content and courses are offered 80% or more online and generally do not meet face-to-face (Allen & Seaman, 2013).
15. *Working conditions* - "Organizational structure of schools and the occupational conditions and characteristics of teaching" (Ingersoll, 1999, p. 26).

CHAPTER TWO: LITERATURE REVIEW

Introduction

Teacher working conditions can influence the teachers' job satisfaction, motivation, and efficacy, which can have an impact on their attrition or retention (Bogler, 2001; Ma & MacMillan, 1999; Mihans, 2008). Not only can teacher attrition be costly for schools, but it also disrupts the school cohesion (Hill & Barth, 2004; Iosava, 2010). To keep effective teachers, states and school districts must evaluate the teacher working conditions (Ma & MacMillan, 1999). This chapter will review research related to teacher working conditions, job satisfaction, and teacher retention while relating Herzberg's Two-Factory Theory of Satisfaction to the study of K-12 virtual schools.

Historical Analysis of K-12 Virtual Schools

Virtual schools have a historical past that extends back to 1892 when the University of Chicago had a mail-based correspondence school (Greenway & Vanourek, 2006). The progression of the mail-based correspondence classes led to televised courses, videoconferences, satellite broadcasts, radio programs, and now virtual courses via the Internet (Cavanaugh, 2009; Greenway & Vanourek, 2006). In the year 1995, the first K-12 virtual school appeared in Oregon by the name of the CyberSchool Project (Greenway & Vanourek, 2006). High school students were provided supplemental online courses. Afterward, virtual schools began growing in 1996, which included schools like WebSchool in Florida that led the way for Florida Virtual School (FLVS) in 1997 (Findley, 2009). The first Internet-based statewide public high school in the United States was the Florida Virtual School (FLVS), which is still serving students in grades K-12 and has received numerous awards and national recognition for their e-learning model (Florida Virtual School, 2016). The fully accredited Florida Virtual School (FLVS) not only

serves students in Florida but also throughout the United States and the world (Florida Virtual School, 2016). In excess of 315,000 learners across the country receive their education entirely from virtual public schools across 30 states (Galvin, 2015).

Theoretical Framework

Job satisfaction is understood to be a motivating factor behind a worker's choice to stay at their job. There is a correlation between job satisfaction and teacher retention (Houchins, Shippen, & Cattret, 2004), which is a critical issue in K-12 public schools. Landmark studies have been conducted by Maslow (1954) and Herzberg (1959) to research job satisfaction. When studying organizational behavior, researchers most regularly examine the variable of job satisfaction (Spector, 1985). Job satisfaction is so frequently analyzed because perceptions, feelings, thoughts, and attitudes impact the employees' behavior, which can potentially play a role in the failures or achievements of the organization (Knox & Anfara, 2013). To maintain a satisfied and effective staff, district and school administration must understand that job satisfaction of teachers is a controllable factor (Latham, 1998; Mertler, 2002).

Maslow's Hierarchy of Needs

Maslow's (1954) hierarchy of needs can provide a basis for comprehending how schools can attain higher levels of job satisfaction by making sure the job and working environment meet the teachers' needs. Maslow's theory outlines five hierarchical needs; these basic needs can be applied to educational institutions and the performance of teachers. In the hierarchy of needs, Maslow explained that the subsequent need cannot be met until the initial need was met (Upadhyaya, 2014). In accordance with Maslow's theory, the needs are psychological, safety, love, esteem, and self-actualization (Upadhyaya, 2014). Maslow's theory is relevant to the study as the hierarchy of needs is related to the teachers' job satisfaction and perception of the working

conditions. The higher level of needs can be met by an individual who senses connectivity, safety, and belonging at their job. By creating a unique culture within an organization and by properly applying the hierarchy of needs theory proposed by Maslow, over time the organization can meet the first level of the hierarchy pyramid through the appropriate cultural factors (Upadhyaya, 2014).

Herzberg's Two-Factor Theory

Herzberg's (1959) two-factor theory suggests that job satisfaction can be explained through hygiene factors and motivation (Vijayakumar & Saxena, 2015). The motivating factors include the work itself, responsibility, advancement, achievement, growth opportunities, and recognition, which can add to job satisfaction. The hygiene factors include work interpersonal relationships, policies and administration, job security, salary, supervision, and working conditions (Vijayakumar & Saxena, 2015). According to Herzberg (1959), the hygiene factors are extrinsic (not related to the job itself) and can create dissatisfaction for the employee; some examples are working conditions, pay, job stability, work relationships, and organizational politics. Hertzberg (1959) explained that motivators are intrinsic (the job itself) and connected with job satisfaction; some examples include advancement, growth, recognition, and accomplishment.

Related Literature

Distance education is in demand now more than ever and it has become a method that is essential for schools to offer their students. The virtual learning environment has increasingly become more prevalent for learners due to the fact that distance education provides students with a convenient method of delivery and a tremendously beneficial way of attaining their educational goals. Even the White House is taking notice of the benefits distance education provides

learners; in *Investing in Education: The American Graduation Initiative* proposed by President Barack Obama, the new online skills laboratory will assist students in learning more in less time than a traditional classroom by providing students with educational software (Brandon, 2009). The rising attractiveness of online courses has resulted in schools understanding the importance of ensuring that the virtual students are offered an education that is top quality. This rise has also led to the necessity to advance the field with more research (Bernard et al., 2009; Black et al., 2008; Simonson et al., 2011; Smouse, 2005; Staker, 2011).

K-12 Virtual Schools

Virtual K-12 schools are considered to be a regular school without the need of a building because students can learn online from any location by way of an online learning management system. Virtual learning is now a requirement for many students. The first state that required virtual learning for their students was Michigan in 2006 (Marrotte-Newman, 2009). As of 2014, there were five states that required students to complete an online course to fulfill a graduation requirement, which shows the significance of K-12 virtual schools in the United States (Watson, Pape, Murin, Gemin, & Vashaw, 2014). Students in other states are not required but encouraged to take courses online (Watson, Murin, Vashaw, Germin, & Rapp, 2013). The latest statistics revealed that roughly 30 states, including the District of Columbia, managed their own virtual schools (Barth, 2013).

While the name online course signifies that the learner will complete the course away from school, a survey indicated that many students (86%) are actually accessing the course resources from school (Vasquez & Straub, 2012). There are different methods that the educational institutions can use to implement online courses. Differentiating between the different types of virtual courses, Archambault and Crippen (2009) explained that online courses

have an online activity level that consists of a minimum of 80% of the content. Hybrid courses can be defined as courses where the online activity is greater than 20% and the class time is between 30% and 79%; while courses that are web facilitated consists of class time between 1% and 29% (Archambault & Crippen, 2009). Virtual school can be defined as a school that is accredited and through a distance education format delivers courses through the Internet (Barbour & Reeves, 2009).

School districts are providing virtual instruction to their students by developing internal virtual programs; districts are purchasing curriculum from state virtual schools or through distributors (Watson et al., 2013; Watson et al., 2014). By estimation, in the United States, state virtual schools, private schools, and charter schools are serving approximately 16% of K-12 learners; even so, millions of learners use electronics for education in traditional classrooms (Watson et al., 2014). Virtual classrooms have exploded with enrollment; there was a 38% increase in enrollment in just 2 years from the 2011-2012 school year (Barth, 2013). Predicting high school students use of the virtual environment, Harvard University researchers stated half of the courses offered to those students would be available online by 2019 (Corry & Stella, 2012).

To successfully assist the escalating number of online learners as well as the inclusion of the Internet and devices in the classroom, it will be a necessity that traditional classroom teachers come on board to meet the learning needs of the students, although many teachers have not actually taken an online course and are not familiar with online pedagogy (Dawley, Rice, & Hinck, 2010; Kennedy & Archambault, 2011, 2012). To fulfill the increasing demand for virtual instructors, preservice teachers are now being offered an opportunity to incorporate virtual courses into their education program to gain experience; nevertheless, it is not being done at a rate that is meeting the growing need (Archambault, 2011; Kennedy & Archambault, 2011,

2012). The predigital era was a time that many teachers were educated in and decided on a career in education, so most are often unwilling to invest time into searching the newest innovations (Peterson, 2013).

Minimal literature is available that details the perspective of K-12 virtual instructors and their experiences (DiPietro, Ferdig, Black, & Preston, 2008; Means, Toyama, Murphy, Bakia, & Jones, 2010). An even smaller amount of literature addresses the perspectives of K-12 teachers in regard to job satisfaction and the teacher working conditions. The focus of current research on virtual instruction is student learning, professional development, evaluations, teacher preparedness, challenges, and unique needs (Corry & Stella, 2012). It is essential that research continues to add to the current body of literature. There is little to no research available regarding K-12 virtual school instructors and retention, although research is continuing to grow regarding K-12 virtual schools and students (Allen & Seaman, 2013; Archambault & Crippen, 2009; Deubel, 2008; Fournier, 2013).

For the fourth year, The National Education Policy Center (NEPC) has released an annual report on the virtual school sector in the United States. *The Virtual Schools Report 2016: Directory and Performance Review* report indicates that virtual enrollment has continued to grow as do the student-teacher ratios. Currently, the average ratio per teacher is 1:16 students in a public school; the student-teacher ratio in virtual schools is more than double with virtual teachers having approximately 1:35 students per teacher (Miron & Gulosino, 2016). Dominating this sector, for-profit education management organizations (EMOs) that are operating virtual schools have a ratio of 44 students per instructor, while blended schools have a ratio of 32.4 students per instructor (Miron & Gulosino, 2016). Nonprofit virtual schools operated by EMOs are at a ratio of 19.5 students per instructor (Miron & Gulosino, 2016). In the National

Education Policy Center (NEPC) Virtual Schools in the U.S. 2015 report, it was recommended that the issues with teacher retention were attended to by establishing guidelines for student-teacher ratios that were appropriate (Molnar et al., 2015). Evidently, the student-teacher ratio of virtual classrooms continues to be an issue that has not been resolved.

The Virtual Schools in the U.S. 2015: Politics, Performance, Policy, and Research Evidence report by The National Education Policy Center (NEPC) presented that retention and recruitment of top-quality instructors was a challenge policymakers have continued to deal with, along with the quality of instructional programs, governance, and funding (Molnar et al., 2015). The report stated that there was current research to assist traditional schools by presenting evidence to inform policies associated with recruitment, retention, and teacher supply; nevertheless, no parallel research was suited for employing effective virtual school instructors (Molnar et al., 2015). In prior reports, The National Education Policy Center acknowledged that switching from a conventional classroom to the virtual environment required an adequate number of experienced and new instructors who were equipped and motivated to engage in virtual instruction (Huerta et al., 2013). Research studies are needed to identify characteristics of effective virtual instructors and discover mechanisms when hiring and supporting instructors that can flourish in a virtual environment (Molnar et al., 2015). Unfortunately, empirical evidence on why teachers decide to teach in distance education has not progressed to keep up with the pace of the continuing development of virtual schools across the United States (Molnar et al., 2015).

In a recent study, Harris-Packer and Ségol (2015) assessed online instruction in 10 states to determine the effect virtual instruction had on student achievement, as measured by the percent of K-12 students proficient in mathematics and reading. The researchers utilized public data made available by the Department of Education. In the states of Florida, Michigan,

Minnesota, Nevada, Ohio, Pennsylvania, South Carolina, Utah, Washington, and Wisconsin, on average, it did not appear that the online students performed greater than the traditional schools (Harris-Packer & Ségol, 2015). In comparison to the traditional schools, some virtual schools appeared to effectively achieve results equal to or greater than the traditional schools (Harris-Packer & Ségol, 2015). A meta-analysis of research was performed to evaluate the learning outcomes of blended, face-to-face and online instruction. Means et al. (2013) determined that the reports displayed a slight gain of online learning in comparison to face-to-face instruction for learning outcomes.

Several reports were generated in 2008 by the International Association for K-12 Online Learning (iNACOL) recorded promising practices recognized in K-12 distance education (Powell et al., 2015). Since that time, remarkable developments have been observed regarding developing practice and policy that is transforming K-12 distance education and personalizing student learning (Powell et al., 2015). According to Harris-Packer and Ségol (2015), leaders at the state and district level have realized that the greatest potential for online and blended virtual learning depends upon transforming the educational system and making it possible for competency-based approaches in learning at a higher level.

Policy transformations are also taking place regarding certification policies for teachers that could impact K-12 virtual schools. The Invitational Summit on Redefining Teacher Education for Digital-Age Learners report supports the idea that teacher state certification policies should aid in new positions for teachers and new methods of school staffing, such as educators that facilitate instruction (Resta & Carroll, 2010). According to Natale and Cook (2012), systems that are accepting teacher preparation programs should hold college institutions

responsible for preparing the graduates to teach in a virtual environment by requesting proof that the educator has the ability and knowledge to teach online in a virtual environment.

Virtual Instructors

Virtual K-12 instructors are presently required to be highly qualified instructors that are also state certified (Natale & Cook, 2012). While some states including Nevada, North Carolina, Montana, and West Virginia do permit the virtual instructors to be state certified in another state (Center for Digital Education, 2009), proper training is required for K-12 virtual instructors in at least 22 states, while no certain training is required in 5 states (Bush, 2009). Presently, online teaching endorsements have been implemented in 6 states, which are voluntary at this time (Natale & Cook, 2012). Additionally, several states are looking at the adoption of online teaching endorsements for their state virtual instructors (Natale & Cook, 2012). Conditions have been set in Idaho and South Carolina in the regulation of certification which requires instructors to demonstrate online teaching competency (Natale, 2011). States perform a significant role in guaranteeing highly qualified virtual instructors in K-12 virtual schools.

The virtual environment has changed the teacher's role to a 21st century approach that student centered, which has moved from a teacher-centered approach of the 20th century (Grubbs, Pate, & Leech, 2009). In line with the constructivist model, the instructor becomes a facilitator in the virtual environment. Just as Vygotsky (1987) advocated, due to the style of instruction in a virtual school, the constructivist model could be effective by requiring learners to solve problems by implementing their knowledge. Students are enabled to take control of their learning with this instructional style (O'Neil, 2006). In keeping with the student-centered learning environment, Duncan and Barnett (2009) stated that social constructivism stimulates active learning since students are interacting with the facilitator and other learners.

A course facilitator can be defined as an individual that provides students with support, communicates with students in a virtual environment or at an actual site, and supports the student learning (Ferdig, Cavanaugh, Dipietro, Black, & Dawson, 2009). Distance education instructors, in some instances, will complete various job functions such as designing the course, which is in line with the national online standards that virtual courses are developed by the designer (Ferdig et al., 2009). Although the role of the virtual teacher varies from the role of a traditional classroom teacher, some shared common characteristics were noted by Davis and Niederhauser (2007) to include their classroom organization and communication. Nevertheless, it was discovered by the authors that the methods of communication were diverse with conventional classroom teachers mainly speaking with their students face-to-face, while an assortment of communication tools online assisted the virtual teacher in communicating effectively (Davis & Niederhauser, 2007). These discoveries indicate a significant need for virtual instructors to have communication skills that are precise.

In an online environment, the instructional strategies and online pedagogy are different and unique in comparison to the conventional classroom (Mupinga, 2005). An obstacle virtual instructors face is acquiring reading and writing time. As compared to a conventional setting, virtual classes demand more time to read and write (Humphries, 2010). These additional tasks required of virtual instructors can add additional hours onto the virtual teachers' workday. Therefore, use of time is extremely important to virtual instructors.

Researchers have greatly acknowledged that to teach virtually, instructors need specialized skills. In agreement with having specialized skills, it has been recognized that teaching virtual courses is much more complex than providing students with course materials online (Black et al., 2009; Tucker, 2007; U.S. Department of Education, 2004). Virtual

instruction presents opportunities for instructors to uniquely implement technology into the classroom to enhance the learning experience and should be assessed based on its use. Assessing the virtual school instructor on their ability to implement technology, for the benefit of the student, is a challenge that is distinctive in virtual instruction. When evaluating virtual instructors it is important to consider that the classroom is virtual and the instructor will need knowledge of content, technology, and pedagogy to determine how to deliver the course content uniquely using technology (DiPietro et al., 2008).

The unique obstacles and demands that virtual instructors face, such as students not having full engagement in the course material, can often cause frustration for the instructor (Watson & Gemin, 2008). Maintaining frequent communication with online students is important to help students stay engaged and complete the course. Researchers Hawkins, Graham, Sudweeks, and Barbour (2013) conducted a study of 2,269 learners that completed an 18 question survey to measure their perception of their interactions with the teacher at a statewide virtual high school. The study concluded that the student completion rate was impacted by regular interaction with the teacher and the quality of the interaction; however, the student grade was not impacted. The high school virtual students who completed the course perceived a positive interaction with teachers opposed to the students that did not complete (Hawkins et al., 2013).

Although virtual instructors enjoy a work schedule that is flexible (Archambault & Crippen, 2009), they can often feel isolated working in this particular environment. A recent qualitative study of eight virtual high school teachers explained that they experienced a sense of disconnect from coworkers, students, and the conventional thoughts they had of the teaching process (Hawkins, Barbour, & Graham, 2012). Some of the reasons the teachers felt isolated

was the lack of nonverbal communication, being uncertain about student understanding, and that they missed the opportunity for communication with other teachers (Hawkins et al., 2012). A fundamental component of job satisfaction for teachers was coworkers (Herzberg et al., 1959; Maslow, 1954). Instructors claimed higher levels of job fulfillment and professionalism when they believed that the team had worked collectively (Garner, 1995; Lipsitz, 1984). The teacher working conditions in a virtual environment are different from the working conditions at a traditional brick-and-mortar school. Understanding the teacher's perspective of the working conditions is important to maintain a healthy school climate.

Teacher Retention

Yearly, new teachers are filling the positions of teachers who decided to leave the field of education. Research identified a relationship between the attrition of teachers and the teacher working conditions (Skaalvik & Skaalvik, 2015). As reported by Chovwen, Balogun, and Olowokere (2014), a predictive relationship existed between teacher attrition and job satisfaction. The negative effects schools face due to teacher turnover can be significant. With the expansion of K-12 virtual schools, it would benefit the educational community to understand the perspectives of K-12 virtual teachers. Investigating the teacher perceptions of the working conditions of the K-12 online environment will add to the current research on teacher retention.

The problem of teacher retention has grown to be an issue that cannot be disregarded in education. There is not a deficiency in the United States of education graduates, instead retaining those teachers is the issue (Ingersoll, 2001, 2002). Early career teachers, within the first three to five years, are leaving the field 30-50% of the time seeking an alternate career path (Darling-Hammond, 2001; Dawson, 2001; Ewing & Manuel, 2005; Haynes, 2014; Ingersoll 2002; Ingersoll et al., 2014). Research indicates the continual conflict school districts face with

teacher shortages are due to teachers leaving the profession, retirement, and expanding student enrollment (Haynes, 2014; Ingersoll et al., 2014). In an effort to prevent teacher attrition, virtual schools need to examine what factors are influencing the distance education instructors to stay in their teaching position as well as teacher satisfaction. Moreover, a lower number of highly qualified teachers in low performing schools can also be the result of the teacher turnover rates being high because qualified teachers are more inclined to leave those schools (Teacher Policy Research, 2005).

Teacher retention and student learning, two important aspects of national interest, remain affected by the teaching and learning conditions. When an instructor decides to remain or leave a school, contextual factors matter, according to evidence in empirical research. Researchers reported in a meta-analysis of 34 studies that the career paths of teachers were influenced by the teaching and learning conditions, much greater than was formally reported (Borman & Dowling, 2008). As stated by Boyd et al. (2011), the greatest impact on the decisions regarding teacher retention is the perception teachers have of the school administration. Similar outcomes are discovered in other work (Pogodzinski, Youngs, Frank, & Belman, 2012). According to Johnson, Kraft, and Papay (2012), the administrators' leadership, the relationship between peers, and the school's culture are the conditions that make the most difference when teachers are determining if they will stay. There is little research that examines the teacher's perspective of the teaching conditions of the K-12 virtual school.

According to a report in December 2015 by the Georgia Department of Education, nearly half of the public school teachers in Georgia are leaving the field of education (Owens, 2015). A concerning statistic was revealed by The Georgia Professional Standards Commission; in the state of Georgia, within the first 5 years of employment, 44% of the teachers will leave the

profession (Owens, 2015). In response to the problem in the state, the Georgia Department of Education surveyed over 53,000 educators to seek the probable causes of attrition. The members of the Georgia Teacher Advisory Council reviewed the survey prior to distribution.

The Georgia Department of Education described that two participants out of three conveyed that it would be unlikely or very unlikely that they would suggest teaching as a career to a graduating high school student (Owens, 2015). Considering the significant role that instructors play when encouraging learners to pursue a career, this report demonstrated that teacher retention is an area in need of attention and understanding why can help with retaining teachers. The report included providing a list of possible reasons for the substantial attrition rate to the participants. These choices, selected from aspects of education, may be directly impacted through policy (Owens, 2015). Additionally, the participants received an area to expand upon why they think the issue, rated number one, remained such a problem.

As a result of these two questions, the teachers illustrated a job that was continually being modified, devoid of having any feedback from the teachers that are in the classroom, an overload of required testing, and being assessed by measures that were not fair or not reliable (Owens, 2015). The teachers reported that this was all transpiring while the compensation was poor, even with their experience and time taken into consideration (Owens, 2015). Lastly, teachers were presented with the final question, in search of further reasons why the attrition rate was so high. The replies, in the tens of thousands, displayed the results of Georgia's existing state of teaching: employees are under pressure continuously and feel devalued. If there are no substantial improvements, to what is now known as a considerable problem, it has the potential to become a crisis in the future of education.

As outlined by Owens (2015), the results of the Georgia Department of Education survey made it apparently clear that the leadership at both the school and district level have a tremendous influence on the perception of the teachers and causes of attrition. A notable trend was in the teachers' amount of experience, which revealed that the teachers with more experience were more unlikely to list leaders as a higher cause of attrition (Owens, 2015). Future research would be beneficial to understand the roles of school leaders and how it could be a reason for attrition and retention for some teachers.

Researchers acknowledge that employee retention is a critical topic of inquiry. Research studies have shown that key variables of motivation such as job security, salary, relationships, and the work environment affect retention (Harris, 2000; Kinnear & Sutherland, 2000; Maertz & Griffeth, 2004; Meudell & Rodham, 1998). Studies have shown that it is evident a person will make a job decision based upon their level of satisfaction. Addressing this, Loquercio, Hammersley, and Emmens (2006) stated that employee turnover is when a staff member departs in a timeframe that is ahead of the contracted time. According to Chovwen et al. (2014), job satisfaction has a significant predictive influence on turnover intent. When work conditions offer employees support, opportunities for growth, resources, and promote autonomy it is connected with job satisfaction, ultimately causing turnover at a low rate (Laschinger, 2012).

Teacher Working Conditions

Acknowledged by research, working conditions have been reported as the cause for teacher attrition (Buchanan, 2010; Connell, 2007; Gonzalez, Brown, & Slate, 2008; Ingersoll, 2001). Buchanan (2012) contemplated realizing why teachers left the profession and interviewed 22 former teachers to grasp a better understanding. The study revealed that discontent with the teacher working conditions was a motivator for leaving the field of education

(Buchanan, 2012). When examining the teachers' decisions to leave, the most frequent causes were professional development, inadequate support, self-efficacy, and difficulties with classroom discipline (Buchanan, 2012). This was echoed by Prather-Jones (2011), who found that when teachers were questioned why they decided to leave the profession, they confessed that it was regularly insufficient support by administration.

Among the most regularly reported factors that caused attrition was a lack of administrative support (Billingsley & Cross, 1992; Littrell, Billingsley, & Cross, 1994; Prather-Jones, 2011; Schlichte, Yssel, & Merbler, 2005). Defining a lack of administrative support, Bays and Crockett (2007) explained it as the school administration not attending to the needs of the teachers, administration being unavailable, contending priorities, and the inability to deliver feedback to the teacher that is meaningful. It was discovered by The Texas Center for Educational Research (2006) that special education teachers who were rating the working conditions unfavorably did not reveal that the school climate was strong in the instructional or administrative domain. Interestingly, special education teachers who had fewer than five years of teaching experience perceived that they did not have support from their administrators, while special education teachers with greater than five years of teaching experience perceived their administration as supportive, as reported by Otto and Arnold (2005). Prior research studies address the issue of job satisfaction and teacher attrition by identifying administrative support as a factor impacting those areas (Albrecht, Johns, Mounsteven, & Olorunda, 2009; House, 1981).

A study by Cancio, Albrecht, and Johns (2013) found a significant correlation between the teachers' intent to stay in the field and administrative support. Specific characteristics included the amount of support, job satisfaction, growth opportunities, a positive school perspective, trust and appreciation (Cancio et al., 2013). A recent study by Richardson et al.

(2016) examined administrators at 18 cyber schools in the United States to determine the differences between a traditional schools and their job now. The study found that the technology savvy leaders were predominantly new and the main difference in leadership was student interaction, professional development, supervision of teachers, and managing the daily procedures (Richardson et al., 2016).

Virtual instruction can often present new challenges for instructors due to the online format and can lead to job dissatisfaction. If these challenges are not understood, it can lead to a problem with teacher attrition for virtual schools. In a study conducted of 34 classroom instructors, four of whom were retired and 30 were current teachers, Skaalvik and Skaalvik (2015) found that severe fatigue, anxiety, and stress were the instructors' experiences. Additionally, if the school environment was positive, it was a motivating factor for teachers not to leave the profession (Skaalvik & Skaalvik, 2015). The study also found that because of all the demands in education, the teachers reported that they did not feel motivated anymore (Skaalvik & Skaalvik, 2015).

Teacher commitment to the organization can be influenced by the teacher believing they have influence over the school culture (Bogler, 2001; Ebmeier, 2003; Schein, 1992). A number of researchers (Jacobson, 2005; Marks & Lewis, 1997; Rice & Schneider, 1994; Thierbach, 1980) uncovered that the amount of control provided to teachers was proportionate to the amount of teacher job satisfaction. The conclusion, based upon research discoveries, was that job satisfaction was at a higher level when teachers were involved at a higher level. This supports the need for researching the teacher's perception of the working conditions of the school. When the school culture is not supported by the teacher, in all probability the job satisfaction will be

lower and will probably lead to a decline in student performance (Jacobson, 2005; Marks & Lewis, 1997; Thierbach, 1980).

Researchers McCarthy, Lambert, and Reiser (2014) conducted a quantitative study of 185 elementary school teachers. The teachers were grouped according to their perceptions of the level of their classroom resources and demands. The categories were then analyzed for variations in teacher job satisfaction, work commitment, and their individual coping methods (McCarthy et al., 2014). The outcome of the study revealed that the categorized teachers who perceived larger classroom demand with regard to resources revealed a lower level of job satisfaction and individual coping methods with a higher level of teachers leaving their current position (McCarthy et al., 2014).

Teachers in Massachusetts participated in the statewide survey (MassTeLLS) to analyze the working conditions (Johnson et al., 2012). The research discovered that when the teachers perceived the working conditions as positive, regardless of the student demographics, they are less likely to leave the profession or leave their current school and are more satisfied. It was also reported that the most important working conditions to teachers were the culture of the school, administrative leadership, and their relationships with coworkers (Johnson et al., 2012). Higher student learning outcomes were achieved in schools with better teacher working environments (Johnson et al., 2012).

Job Satisfaction

It is understood the serious impact teacher attrition can have on education and therefore the significance of retaining qualified teachers. Just as Knox and Anfara (2013) reported that job satisfaction was repeatedly studied due to the fact that the perceptions of teachers and the teachers' emotions had an impact on the staff's behavior. Subsequently, job satisfaction can be a

factor in the educational institutions failures and successes. A correlation was found between teacher retention and teacher job satisfaction (Houchins et al., 2004), in addition to teacher attrition rates being a significant problem in education. As the educational system changes, it is vital to continuously study job satisfaction in all areas of education. In order to maintain highly qualified teachers, the organizational community must address the issue by staying current with the changing needs of teachers.

Virtual K-12 instructors are presented with the unique set of challenges. Meeting the needs of their students virtually can cause stress as the teachers are learning a new job or experiencing changes in distance education. Metropolitan Life Insurance Company (2012), also known as MetLife, conducted a survey of over 1,000 teachers in the United States to determine their level of job satisfaction. The study revealed that 39% of the teachers disclosed that they were very satisfied in their current teaching position, which was the lowest drop in 25 years for teacher job satisfaction (MetLife, 2012). It was also identified by the MetLife survey that 51% of the teachers reported undergoing enormous stress during the week for multiple days (MetLife, 2012). When reporting feeling stressed at work, the 2012 Gallup-Healthways Well-Being Index reported that teachers came in second only to physicians (Gallup, 2013).

In the study by Perrachione, Petersen, and Rosser (2008), the relationship was discovered between the teachers' level of job satisfaction and their decision to stay in the field of education. It was reported by 201 elementary public school teachers that the level of job satisfaction they experienced motivated them to stay in the profession (Perrachione et al., 2008). Motivation was defined by Dessler (2001) as the individual's desire to take part in a task or activity.

In prior studies on the job satisfaction of virtual instructors conducted by Bolliger and Wasilik (2009) and Bolliger, Inan, and Wasilik (2014), the teachers expressed the highest level of

job satisfaction when they received instructional support, positive student interaction, assistance with setting up and preparing the online courses, and the opportunities that they were afforded from teaching online. A higher level of job satisfaction was reported when teachers felt that they were adequately supported at their school in contrast to teachers who felt that they were not supported (Bolliger & Wasilik, 2009; Bolliger et al., 2014). The level of job satisfaction at schools is greatly influenced by administration and for that reason they should be focused on the factors of the working conditions, supervision, supportive behavior, and teachers' frustrations (Knox & Anfara, 2013). Annually, administrators should quantitatively and qualitatively measure job satisfaction to address the issues teachers perceive to be a problem and then seek to resolve the issues with the formal plan (Knox & Anfara, 2013).

Organizational commitment over time has been compared to job satisfaction but researchers have not agreed on the causal relationship between the two. Some research addresses job satisfaction as the predictor for organizational commitment and other studies determine organizational commitment as the predictor for job satisfaction (Perrachione et al., 2008; Weiner & Gechman, 1977). Vandenberg and Lance (1992) explained that a correlation involving job commitment and job satisfaction would mirror simply because they are both driven by the same variables which includes leadership, demographics, policy, and job characteristics. According to Rusu (2013), organizational commitment and job satisfaction have a positive and significant correlation which is supported by studies regardless of the causal order.

A study by Akomolafe and Olatomide (2013) investigated 220 secondary teachers to measure job satisfaction and organizational commitment. To conduct the research, the researchers used Steers' Job Satisfaction Scale (JSS) and Allen and Meyer's Organizational Commitment Scale (OCS) as the instruments in the study. The research concluded that job

satisfaction significantly affected the teachers' organizational commitment ($p <. 05$) and was also an organizational commitment predictor (Akomolafe & Olatomide, 2013). The researchers revealed that this relationship signified that the greater level of job satisfaction the teacher had, the greater level of organizational commitment by the teacher (Akomolafe & Olatomide, 2013). Similar results were found in additional studies, discovering that a significant predictor of organizational commitment is, in fact, job satisfaction (Camilleri, 2002; Kacmar, Carlson, & Brymer, 1999; Oyewobi, Suleiman, & Muhammad-Jamil, 2012).

The National Education Policy Center (NEPC) report *Virtual Schools in the U.S. 2014: Politics, Performance, Policy, and Research* focused on virtual school teachers' job satisfaction and investigated if satisfaction could possibly be a key predictor of retention (Molnar et al., 2014). A consistent and apparent policy-related factor connected with virtual teachers job satisfaction was the teaching load (Molnar et al., 2014). The time teachers were spending with large class sizes was leading to job dissatisfaction. The student-teacher ratio in virtual schools has currently not been addressed by any states (Molnar et al., 2014).

After virtual instructors are already equipped for and determined to be successful in a virtual environment, retaining the teachers in those positions becomes a significant challenge (Molnar et al., 2014). Although there is minimal information regarding virtual school teacher retention rates, some details are starting to appear about the level of teacher satisfaction in virtual schools. Teacher satisfaction has been revealed as a predictor of teacher retention based upon current research (Ingersoll, 2001; Stockard & Lehman, 2004; Perrachione et al., 2008). The research and data on virtual teacher job satisfaction varies, with some studies reporting satisfaction and some studies reporting dissatisfaction. A national survey taken by K-12 virtual instructors reported that 63% of the virtual instructors felt positive toward their experience with

virtual instruction (Archambault & Crippen, 2009). The researchers categorized the answers as positive, although there was not a specific question on the survey about satisfaction (Archambault & Crippen, 2009).

Conversely, teachers and parents participated in a survey from the Colorado Virtual Academy (COVA) that revealed that job satisfaction and morale was incredibly low (Huerta et al., 2013). The report concluded that only 33% of the Colorado Virtual Academy (COVA) instructors felt satisfied at the school, with only 61% of the instructors indicating that they would probably remain teaching next year at the school (Huerta et al., 2013). Morale at the school was revealed to be low as only 22% of the teachers reported a high level of teacher morale (Huerta et al., 2013). Further, nearly three-fourths of the participants mentioned that they were performing more administrative work than desired; only half of the participants perceived their current teaching position at the school as gratifying and worthwhile (Huerta et al., 2013). Overall, virtual instructors listed the reasons for low job satisfaction and support which were high student-teacher ratios, insufficient school support, excessive focus on the 'business side' as well as testing, low salary, and long hours (Huerta et al., 2013). One of the participants in the study reported that they received over 300 students at the start of the school year, with the school requesting individualization for learners; this could not happen as a result of the unsustainable student-teacher class ratio (Huerta et al., 2013). Job satisfaction, however, was expressed by some instructors regarding great coworkers and a flexible schedule (Huerta et al., 2013). The findings in this report were no surprise considering that the majority of virtual schools have large student rosters for their teachers (Molnar et al., 2014).

It was reported in by the Nevada Department of Education that in 2001, the pupil-teacher ratio was 60:1 in a Nevada virtual school, compared to the average of 22:1 in the school's district

(Molnar et al., 2014; Nevada Department of Education, 2011). Similarly, pupil-teacher ratios in a number of Pennsylvania's largest charter virtual schools were in excess of 50:1 (DeJarnatt, 2013). When the pupil-teacher ratios reaches this number, leaders in education must analyze the degree in which a virtual instructor can offer students the time and attention required for sufficient instructional support. Attending to issues with ratio, the state of California passed legislation (AB 644) which mandated that the student-teacher ratio must be in line with programs in the surrounding district, except in the case where collective bargaining agreements have been negotiated (California Senate Committee on Education, 2012; Molnar et al., 2014). The state of Tennessee had a law passed in 2012 (TN H 3062) that stated virtual schools are required to maintain student teacher ratios which have been established by the Tennessee Board of Education (Molnar et al., 2014). It is not unexpected that there is little evidence of new state initiatives to tackle the problem of teacher loading due to the financial savings involved with reduced employees in the virtual environment (DeJarnatt, 2013; Molnar et al., 2014).

School Leadership

The perception of school leadership can vary based upon many factors such as the school environment. The school environment for virtual instructors will look much different than a school where instructors have regular face-to-face contact with administration. Lawrence (2012) conducted a study to evaluate the teachers' and principals' perceptions of the working conditions in Sinclair County, Georgia. Using the North Carolina Teacher Working Conditions Survey, the quantitative study revealed that there were significant differences in the areas of Facilities and Resources, Empowerment, and Leadership by the type of school. However, no differences were found in the three domains based upon teaching experience or age (Lawrence, 2012).

Due to little research existing on K-12 virtual school leadership, it is important to explore how school leadership is perceived by virtual school instructors. It is understood that regardless of the school setting, school leadership is extremely important. Even though much is known about educational leadership in a traditional school setting, minimal information is known about virtual school leadership. In *Education Transformation: How K-12 Online Learning is Bringing the Greatest Change to Education in 100 Years*, the way ahead for education was discussed by Packard (2013), describing the future using technology. Packard (2013) stated,

> What's clear today, however, is that a new system of educating children is unfolding, and the journey is far from compete. Although we don't know the journey's final destination, it's nonetheless worthwhile to look a little further down the road. (p. 203)

Enhanced accessibility of K-12 virtual school courses is now available to students due to the technological innovation that is now happening. It is essential that the educational community starts research to comprehend the distinctions between school leadership of traditional schools and virtual schools. Right now, the setting of brick-and-mortar schools and classrooms in the United States seems to look exactly how it did last century. However, the virtual schools and classrooms look different and therefore require different school leadership (Richardson et al., 2016).

School leadership may look different at various virtual schools. With technology as the primary method of teaching and learning, the school leadership should have an understanding of how to meet the individual needs of the students and teachers. This idea was echoed by Abrego and Pankake (2010), stating that virtual school leaders should not be operating by reflecting the same leadership techniques used in traditional schools. An investigation of the engagement of Illinois K-12 virtual learning determined that the knowledge of school leaders, regarding

distance education and technology, did impact the level of participation in programs (Jancek, 2003).

School leadership is evaluated by the capability to generate a supportive and trusting environment and handling the concerns of educators. School leadership of K-12 virtual schools should be leaders capable of examining the design of courses, creating professional development for instructors, while strengthening the delivery of courses (Rice, 2009). A study conducted by Brown (2009) was centered on administrator's opinions about the possibilities and objectives of K-12 distance education. It was revealed in the study that the goal of virtual schools is to provide quality instruction, increase accessibility, and personalized instruction for students. According to literature, there are notable differences for K-12 virtual school leaders and therefore it is important to obtain a greater understanding of the perception of virtual school leadership.

Instructional Practices and Support

Instructional practices and support is the support and data accessible to instructors to enhance student learning and teaching. Freedman (2005) identified how K-12 virtual schools have led to a widespread academic shift that has not been seen in previous types of distance education, instructional technology, or alternate academic options. Instructional practices for K-12 virtual school instructors will likely look different than a traditional classroom teachers but some question whether or not they should be evaluated the same. Tobin (2004) suggested that virtual instructors and classroom instructors should have comparable or the same evaluations, due to the fact quality instruction goes beyond the setting. Tobin (2004) proposed that regardless of the environment, there should be an expectation of high quality instruction. Saleh and Lamkin

(2008), however, asserted that distance education should be assessed differently than traditional instruction since the setting affects how the quality is evaluated.

Instructors utilize the assessment data to drive the instruction, though it has been argued that virtual school students and instructors should be assessed differently. Currently, K-12 virtual schools are assessed in the same manner as brick-and-mortar schools. This can be a challenge for K-12 virtual instructors because the curriculum is often set for the students to follow. "Despite the increased amounts of data available, many educators still feel ill prepared to analyze and use their school data effectively. They are data rich, but information poor" (Ronka, Lachat, Slaughter, & Meltzer, 2009). Often, it is a challenge for instructors to receive data promptly from local and state assessments.

Professional learning communities can also be a challenge for virtual instructors due to the lack of face-to-face interactions with coworkers. Not having the daily accessibility to other instructors to help with improving instructional practices can be an obstacle for virtual instructors to overcome. As outlined by McLaughlin & Talbert (2006), professional learning communities operating appropriately should function with the premise that all learners can achieve academic success when the learner is actively involved in the learning process. McLaughlin and Talbert (2006) added that instructors must work alongside one another to analyze student work with the goal of examining and adjusting the instructional practices as needed. Working in a virtual environment and not alongside one another daily is a unique problem for K-12 virtual school instructors.

For educators, trying new ideas to improve instruction virtually can also be a challenge. With little to no face-to-face interaction with the students, instructors are limited in opportunities to enhance the learning environment. Many virtual instructors have a virtual classroom where

students can login and participate in a web-based live lesson. This allows students the opportunity to interact with other students in their class as well as live communication with their instructor. According to Kaplan and Chan (2011), instead of attempting to shape student learning into a standardized and predesigned plan, schools that are extremely effective form instructional time and teaching to suit student needs.

Tucker (2014) conducted a qualitative study to explore the teacher's perspectives in regard to the differences in teaching in a virtual and traditional environment. The ten Illinois teachers represented five virtual school instructors and five traditional instructors. The results indicated that within both settings, the instructors recognized that effective learning was highly regarded in both programs (Tucker, 2014). The research revealed that virtual schools and instructors did focus considerably on learning that was effective, while their pedagogy was much like the conventional classroom teachers (Tucker, 2014). Examination of the interview confirmed that there were clearly numerous commonalities among virtual and conventional curriculum to create a successful learning environment (Tucker, 2014). Conventional classroom teachers failed to believe that an online environment could offer the support needed to create an effective learning environment, while virtual instructors were considerably more receptive (Tucker, 2014). Overall, the perceptions of the instructional practices and support in the virtual classroom differed among the teachers in different educational settings.

Use of Time

Use of time can be defined as the time available for teachers to collaborate, prepare and deliver instruction throughout the school day while removing barriers to optimize instructional time. In a K-12 virtual school, non-instructional time can begin to blur with instructional time. Being readily available for students is also unique challenge for virtual school instructors. For

traditional classroom teachers, walking out of your classroom door is typically the end of your workday. For virtual school instructors, this is often the beginning of their workday because students who are co-enrolled are just leaving school and ready to begin working in their virtual classes. During the workday, instructors are also needed for full time virtual students and home school students taking virtual courses. It is not unusual the virtual school instructors have two to four times more students than classroom teachers in a brick-and-mortar setting (Hawkins et al., 2012). This can result in long workdays to be available to meet the needs of all virtual students.

Complaints by teachers about the lack of time is nothing new in education. Virtual instructors, however, may have a different perception of their use of time. It is essential that schools and districts are aware of the challenges virtual instructors face in their distinct classroom setting. In the K-12 virtual setting, instructors must take the time to teach beginners students the unique skill sets needed to be successful, such as reading and study skills, along with online note-taking (Ronsisvalle & Watkins, 2005). When virtual instructors have large course loads, there is a short amount of time to offer students individualized coaching and teachers feel as though they are mostly graders (Hawkins et al., 2012).

Virtual K-12 instructors must have adequate time to efficiently supervise student learning and conduct, which can be difficult in a virtual environment (Murphy & Rodríguez-Manzanares, 2008). Not having face-to-face interaction with the student means that virtual instructors must use much of their time attempting to make contact with the student and parent. As compared to adults, K-12 learners are inclined to have much lower levels of self-motivation, which places the teacher accountable for motivating the student (Weiner, 2003). This may require virtual school instructors to become creative to keep students motivated. In distance education, instructors may use their time to create videos for encouragement and reports to enhance student motivation and

involvement (Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004; Murphy & Rodríguez-Manzanares, 2009).

Students are provided access to their course from any location, 24 hours a day. In an effort to generate more time, school administration may seek to reduce disruptions during the school day in a traditional school setting. Schools that are successful have procedures created and consistently revised to remove unused time and interruption from activities including school arrivals, dismissals, and classroom changes (Kaplan & Chan, 2011). Yet, the virtual setting can make it difficult for administrators to create time for instructors and decrease workday routines that cause interruptions.

Creativity is important for virtual instructors to engage students in online lessons. Educators must create an online environment that piques the interest of learners. Living in the digital era, most students are accustomed to games and applications that hold their attention. To meet the needs of their students, instructors use their time to create lessons with illustrations or photos and video clips for their live lessons with breakout rooms in the virtual classroom for students to work in smaller groups. Acquiring time for professional learning is among the most regularly reported issue with employing transformation within education (Bill and Melinda Gates Foundation, 2010). Training is needed for virtual instructors that is over and above what is expected for standard classroom teachers, in an effort to effectively instruct in an online environment.

Research studies by DiPaola and Walther-Thomas (2003) and Renard (2003) have shown that there is a crisis confronting educators all over America due to a deficiency of time. These studies support the use of time for educators planning with other teachers. Renard (2003) determined that the improvement of use of time was a working condition that was critical to

retaining teachers. Discoveries in the study pointed out that educators invest more time preparing for instruction and grading than actually instructing learners. Present discussions about novice teacher attrition seldom handle the key problem of the expectation that new teachers will assume the exact tasks and obligations as experienced teachers. To combat these obstacles, novice instructors can be provided a knowledgeable mentor (Ferdig & Kennedy, 2014). Furthermore, novice teachers are supposed to conduct those responsibilities with the same knowledge and within the same time limits as experienced teachers. Novice instructors will be thankful when experienced mentors understand their problems (Hobson, Ashby, Malderez, & Tomlinson, 2009).

A study on the subject of teacher working conditions concerning use of time and how it affected teacher attrition was conducted by the Southeast Center for Teaching Quality (2004). The study evaluated the relationship between teacher attrition and how educators actually utilized their time. This study concluded that during the school day there was only so much time that obligations and duties could be met, not all were associated with providing instruction (Southeast Center for Teaching Quality, 2004).

Summary

Skyrocketing enrollments in K-12 distance education has prompted the need for further research in the online learning environment. Despite the dramatic enlargement in K-12 distance education and the forecast for additional expansion, research has not maintained the same speed and is greatly lacking merit and accessibility (Barbour, 2012; Barbour & Reeves, 2009; Natale, 2011; Reeves, 2006). Due to the fact K-12 education remains fairly new and rapidly developing, the absence of research can affect the unexamined population of virtual school instructors. Teacher working conditions affect teacher retention and teacher job satisfaction. The lack of

research on teaching conditions in the field of K-12 education could possibly impact teacher retention. The virtual classroom and job description for virtual instructors is much different than a traditional classroom. The K-12 virtual school will also look much different and therefore it is important that valid and reliable research is conducted to evaluate the teacher working conditions and job satisfaction of K-12 virtual instructors. Given the unique job requirements of K-12 virtual instructors, the job appears much more challenging for new virtual teachers. With teacher retention being a very serious problem in education, K-12 distance education can also encounter the issue of teacher turnover.

CHAPTER THREE: METHODS

The purpose of this study was to examine if there is a difference between novice and experienced teachers' perceptions of the working conditions at the K-12 virtual school. This chapter describes the methodology and research design utilized for this study.

Design

A quantitative, causal-comparative research design was used to conduct this study. The causal-comparative design was appropriate because the purpose was to examine the differences between teachers' perceptions of the teaching conditions based on the teachers' total years employed at the virtual school. A causal-comparative research design seeks to understand cause-and-effect relationships of variables by comparing groups, which is the purpose of this study (Gall et al., 2007).

The independent variable examined in this study was the years of employment (novice and experienced) and the dependent variable was the perceptions of the teaching conditions of the K-12 virtual school. In this causal-comparative study, the presumed cause was the total years employed at the virtual school and the presumed effect was the perception of the teaching conditions. The participants in the study were formed into two groups based upon the number of years employed at the virtual school to determine if there was a difference in the group's perception of the teaching conditions. The independent variable, years of employment at the virtual school, was measured in two categories on a nominal scale (1 to 3 years and 4 to 10 years). The teacher working conditions was measured to determine if the amount of time teaching at the virtual school had an effect on those variables.

Research Questions

The proposed research questions follow:

RQ1: Is there a difference in the perception of school leadership between novice and experienced K-12 virtual school teachers?

RQ2: Is there a difference in the perception of use of time between novice and experienced K-12 virtual school teachers?

RQ3: Is there a difference in the perception of instructional practice and support between novice and experienced K-12 virtual school teachers?

Null Hypotheses

The null hypotheses for this study are:

$H_0$1: There is no significant difference in teachers' perceptions of school leadership based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey.

$H_0$2: There is no significant difference in the teachers' perceptions of use of time based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey.

$H_0$3: There is no significant difference in the teachers' perceptions of instructional practices and support based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey.

Participants and Setting

The participants for the study were drawn from a convenience sample of middle school and high school North Carolina virtual school instructors from the 2015-2016 school year. The certified teachers provide courses to public school students in North Carolina. The K-12 virtual school instructors provide instruction through an online, mobile, and blended learning environment. The n = 318 participants in the study represented middle school and high school

licensed North Carolina virtual public school teachers. For this study, the number of participants sampled was n = 318 which exceeded the required minimum for a medium effect size. According to Gall et al. (2007), 100 participants is the required minimum for a medium effect size with statistical power of .7 at the .05 alpha level.

The sample for this study came from a public online virtual school in North Carolina. The online school offers courses to middle and high school students throughout the state of North Carolina. Yearly, over 25,000 learners take courses at the virtual school in North Carolina. In the demographics section of the instrument, the teachers record the amount of time they have been teaching at the virtual school. From the sample obtained for the study, the participants were placed into two groups based upon the total amount of years they have been employed at the virtual school (1 to 3 years and 4 to 10 years). North Carolina Department of Public Instruction defines novice or beginning teachers as those who have been teaching for three years or less (NCDPI, 2014), while experienced teachers can be defined as those with greater than three years of experience (Bastick, 2002; Gatbonton, 1999; Richards, Li, & Tang, 1998; Tsui, 2003, 2005).

Instrumentation

The instrument used for the research study was The North Carolina Teacher Working Conditions (NC TWC) survey. The North Carolina Teacher Working Conditions (NC TWC) survey is a statistically valid and reliable instrument that was created to measure the teachers' perceptions of the working conditions of the school. The NCTWC website explains that since 2002, this survey has been offered to licensed educators to determine the teaching conditions of the school and district in an attempt to aid in educator retention. The results of the survey are available to schools that have at least a 40% participation rate with a minimum of five participants.

This anonymous statewide survey was available to teachers online from March 1, 2016 to March 25, 2016. The participants were each given a letter with the different access code that was anonymous and could only be utilized once. The letters were handed to the licensed teachers at a designated school meeting. The access codes were associated with the specific school where the teacher was employed. Teachers could voluntarily take the survey from any computer with Internet access during the four-weeks it was available. Each school in the 115 school districts and charter schools in the state of North Carolina were encouraged to participate in the survey. In 2016, over 101,000 educators in North Carolina participated in the survey. The demographic information obtained from the survey included their position, years employed as an educator, and total years employed at the school in which they were working currently.

In attempt to address issues generating teacher attrition, The North Carolina State Board of Education supported the North Carolina Professional Teaching Standards Commission in 1999 to develop standards to address working conditions for schools. The existence of those standards for North Carolina schools continues to be evaluated biennially as a component of the NC TWC survey since 2002. In 2011, the state Board of Education unanimously implemented and modified the standards. Research studies continually confirm the existence of these conditions impacted effective teaching and significantly influenced teacher retention. A current peer review study investigated the results of the Charlotte TWC survey and 10 years of student achievement to conclude that when working in a positive school environment, teachers increased student achievement by 38% greater than their colleagues with less supports (Kraft & Papay, 2014). Ferguson and Hirsch (2014) reported that student value-added gains and the teaching conditions had a significant link.

The confidential web-based NC TWC survey uses eight constructs to analyze the

teaching and learning research-based standards (Swanlund, 2011). The eight constructs empirically related to teacher retention and student achievement are: Time, Facilities and Resources, Community Support and Involvement, Managing Student Conduct, Teacher Leadership, School Leadership, Professional Development, and Instructional Practices and Support (Borman & Dowling, 2008; Buckley, Schneider, & Shang, 2004; Johnson et al., 2012; Kraft & Papay, 2013; Ladd, 2009; Loeb, Darling-Hammond, & Luczak, 2005; Pogodzinski et al., 2012). To focus on specific aspects of the virtual school, this study focused on school leadership, use of time, and instructional practices and support. The survey area of school leadership evaluated the ability of the leadership to create a school environment that was supporting and trusting while dealing with the concerns of teachers, with the Cronbach's Alpha coefficient at 0.948. The survey area of use of time evaluated the teachers time available for instruction, planning, and reducing obstacles to take full advantage of instructional time throughout the day, with the Cronbach's Alpha coefficient at 0.861. The survey area of instructional practices and support evaluated the support given to teachers to enhance student learning and instruction, with the Cronbach's Alpha coefficient at 0.910. The responses to the 22 core questions used a five-point Likert scale that ranged from Strongly Agree to Strongly Disagree. Responses were as follows: Strongly Agree = 5, Agree = 4, Strongly Disagree = 3, Disagree = 2, and Don't Know = 1. Each question on the self-report survey was calculated and given a score based upon the responses given by the teachers.

An external analyst was used to confirm that the composition and items incorporated in the survey lead to beneficial and meaningful data, which was a component of the MET project that was backed by the Bill and Melinda Gates Foundation (Swanlund, 2011). Data and information was used in the Swanlund analyses of 286,835 teachers representing 11 states in

which the validity and reliability are investigated through the external survey (Swanlund, 2011). Through these studies, results can be interpreted with confidence and patterns are recognized through the data to present a distinct structure for the survey.

Using the Cronbach's alpha and Rasch model, through an external review of reliability determined that the survey was able to generate reliable results throughout the groups of participants (Swanlund, 2011). To conclude, for measuring the teaching and learning conditions, it was confirmed by the internal and external analysis that the survey provided a statistically solid method (Swanlund, 2011). The North Carolina Teacher Working Conditions survey internal reliability produced a Cronbach's alpha coefficient ranging from 0.86 to 0.96 which are regarded as satisfactory due to the coefficients exceeding 0.70 (George & Mallery, 2003).

Procedures

To conduct the study, the researcher completed the application process for Institutional Review Board (IRB) approval to collect data from the North Carolina Teacher Working Conditions (NC TWC) survey. An exemption was requested and granted from IRB due to the researcher collecting and studying existing archival data and documents. The data was publicly available and no personal identifiable information was included in the data. Once IRB was approved, the researcher reviewed the North Carolina Teacher Working Conditions website to obtain contact information for the New Teacher Center (NTC). Although the results from the North Carolina Teacher Working Conditions survey (NC TWC) survey are public, the researcher requested for raw data from the NTC to analyze the independent and dependent variables, which was not publicly reported. To assist North Carolina in administering the North Carolina Teacher Working Conditions survey, the NTC was contracted to analyze the data and provide results to the state.

The researcher contacted the New Teacher Center (NTC) and was provided with

information on how to submit a request to obtain the data required for the research. The researcher completed a form provided by the NTC to explain the study and how the data could be utilized. The researcher requested that the raw data sent included the demographic information included in the survey responses. There was no personal identifiable information available from the demographic information or in the survey data. All data for the 318 virtual school instructors that completed the surveys were provided by the representative at NTC.

The data were obtained from NTC and transferred into an Excel document. The data provided from the constructs that was not being analyzed for the study was removed. The data were imported to the SPSS software program for further analysis, while guaranteeing safeguard procedures for access to the archival data is followed. The data collection provided the researcher with the ability to identify which teaching conditions were in need of improvement while comparing the perceptions of the teaching conditions based upon the amount of time the instructor has been teaching at the virtual school.

Data Analysis

Three independent-samples *t*-tests was conducted to evaluate the difference between the means of the teaching conditions of the school as measured by the NC TWC survey and the total number of years the teacher has been employed at the virtual school. The independent variable examined in this study was the years of employment (1 to 3 years and 4 to 10 years) and the dependent variable was the teaching conditions of the virtual school. The independent-samples *t*-test was a parametric test used to compare means of two groups on a dependent variable (Warner, 2013).

A statistical analysis of the teacher working conditions was conducted using the Statistical Package for the Social Sciences (SPSS) software. In order to use the independent-

samples *t*-test three assumptions was made. Data screening was conducted on each group's dependent variable, teaching conditions, regarding data inconsistencies. To detect if there were outliers, the researcher used the box and whisker plot. To determine whether the normality assumption was met, the Kolmogorov-Smirnov test was utilized. This was the preferred method because the sample size was greater than 50 (Warner, 2013). The assumption of homogeneity of variance was examined using the Levene's test.

CHAPTER FOUR: FINDINGS

The purpose of this causal-comparative study was to examine if there is a difference between novice and experienced teachers' perceptions of the working conditions at the K-12 virtual school. The three research questions compared the difference between the means of the teaching conditions of the school to address school leadership, use of time, and instructional practice and support. This chapter is structured into sections to present the research questions with the hypotheses, descriptive statistics, and the results of the study to provide a comprehensive conclusion of the outcomes of the study.

Research Questions

RQ1: Is there a difference in the perception of school leadership between novice and experienced K-12 virtual school teachers?

RQ2: Is there a difference in the perception of use of time between novice and experienced K-12 virtual school teachers?

RQ3: Is there a difference in the perception of instructional practice and support between novice and experienced K-12 virtual school teachers?

Null Hypotheses

$H_0$1: There is no significant difference in teachers' perceptions of school leadership based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey.

$H_0$2: There is no significant difference in the teachers' perceptions of use of time based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey.

$H_0$3: There is no significant difference in the teachers' perceptions of instructional practices and support based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey.

Descriptive Statistics

Three independent-samples *t*-tests were conducted to evaluate the difference between the means of the teaching conditions of the school as measured by the NC TWC survey and the total number of years the teacher has been employed at the virtual school. The independent variable examined in this study was the years of employment (1 to 3 years and 4 to 10 years) and the dependent variable was the teaching conditions of the virtual school. Table 1 displays the descriptive statistics for the dependent variables, school leadership, use of time, and instruction practices and support. The table shows that experienced teachers *(M* = 25.96, *SD* = 6.47, where (n= 193), perceive school leadership at a higher level than novice teachers *(M* = 23.07, *SD* = 4.39, where (n= 125). The table shows that experienced teachers *(M* = 10.21, *SD* = 2.42, where (n= 193), have a greater perception of their use of time than novice teachers *(M* = 9.61, *SD* = 2.20, where (n= 125). The table also shows that experienced teachers *(M* = 20.24, *SD* = 4.28, where (n= 193), perceive instructional practices and support at a higher level than novice teachers *(M* = 19.10, *SD* = 3.82, where (n= 125).

Table 1

Group Statistics

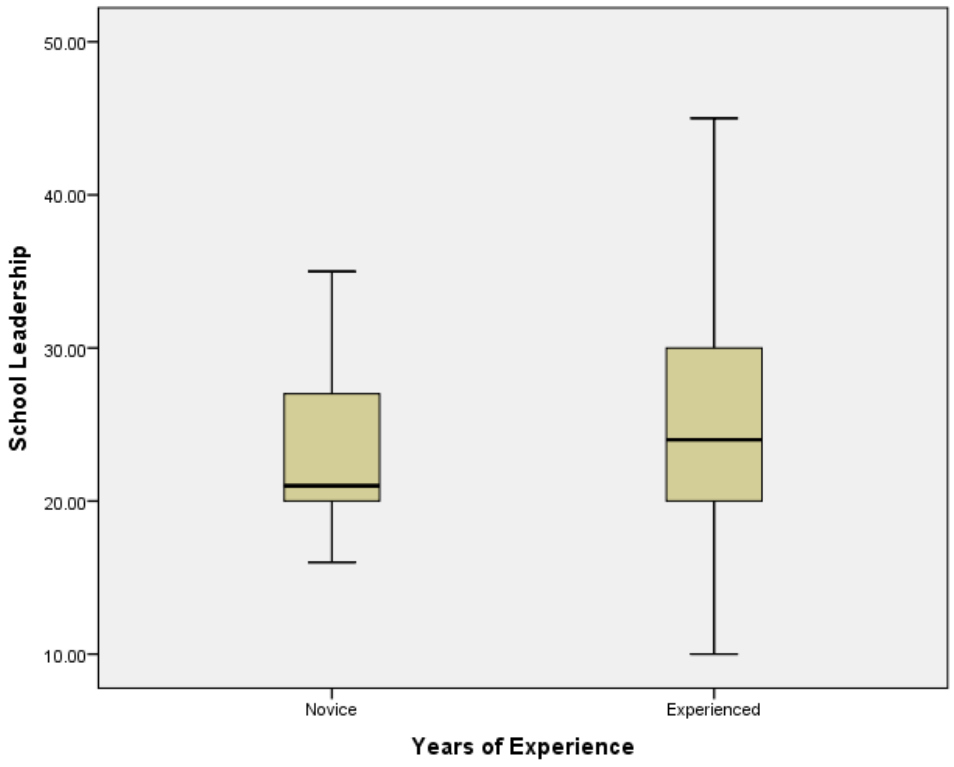
	Years of Experience	N	Mean	Std. Deviation	Std. Error Mean
School Leadership	Novice	125	23.0720	4.38689	.39238
	Experienced	193	25.9637	6.46736	.46553
Use of Time	Novice	125	9.6080	2.19933	.19671
	Experienced	193	10.2124	2.41554	.17387
Instructional Practices and Support	Novice	125	19.1040	3.81809	.34150
	Experienced	193	20.2435	4.27782	.30792

Results

Null Hypothesis One

An independent-samples *t*-test was used to analyze the first Null Hypothesis that looked at the difference in teachers' perceptions of school leadership based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey. Data screening was conducted on each group's dependent variables (novice and experienced teachers) regarding data inconsistencies, normality, and outliers. The researcher sorted the data on each variable and found that there were no outliers in the novice or experienced group. To identify if there were outliers on either dependent variable, the Box and Whisker Plot was used. The Box and Whisker Plot determined that there were no outliers. No data errors or inconsistencies were identified. See Figure 1 for box and whisker plot.

Figure 1. Box and Whisker Plot for school leadership.



Testing and Assumptions

A Kolmogorov-Smirnov test was used for the assumptions of normality since sample size was more than 50 (Warner, 2013). The Kolmogorov-Smirnov test, which displayed a significance level of (p = .000) for novice teachers and (p = .000) for experienced teachers. No violations of normality were found and the assumption of normality was met. See Table 2 for Kolmogorov-Smirnov test.

Table 2

Test of Normality

		Kolmogorov-Smirnov[a]		
	Years Employed	Statistic	df	Sig.
School Leadership	Novice	.245	125	.000
	Experienced	.172	193	.000

Using the Levene's test, the assumption of homogeneity of variance was evaluated. The assumption of homogeneity was not met as (p < .0005). Levene's test displayed a significance level that is less than the alpha level of .05 (p = .000). See Table 3 for Levene's Test. Because of the issues with homogeneity of variance for this question, the researcher used both a *t*-test and a non-parametric Mann-Whitney U-test to analyze the results.

Table 3

Test of Homogeneity of Variances

School Leadership

Levene Statistic	df1	df2	Sig.
24.381	1	316	.000

Results for Null Hypothesis One

To test the null hypothesis that there was no significant difference in teachers' perceptions of school leadership based upon the total years employed at the virtual school, an independent samples *t*-test was conducted. The test was statistically significant, $t(315.30) = -4.75$, $p = .000$, $d = .52$, and thus the null hypothesis was rejected. The effect size, $d = .52$ was medium. The null hypothesis was tested at a 95% confidence level. Table 4 displays the results from the independent samples *t*-test.

Table 4

Independent Samples Test

	t-test for Equality of Means						
						95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
School Leadership Equal variances not assumed	-4.750	315.304	.000	-2.89173	.60883	-4.08962	-1.69384

The assumption of homogeneity was not met as ($p < .0005$). Therefore, a Mann-Whitney U test was used to determine if there were differences in the school leadership score between novice and experienced teachers. Distributions of the school leadership scores for novice and experienced teachers were similar, as assessed by visual inspection.

School leadership score was statistically significantly higher with experienced teachers ($Mdn = 24.00$) than with novice teachers ($Mdn = 21.00$), $U = 8638$, $z = -4.345$, $p = .000$. There is a statistically significant difference in medians and therefore the null hypothesis is rejected. See Table 5 for group median values and Table for the Mann-Whitney U test.

Table 5

Group Median Report

Median

Years of Experience	School Leadership
Novice	21.0000
Experienced	24.0000
Total	22.0000

Table 6

Mann-Whitney U Test Statistics[a]

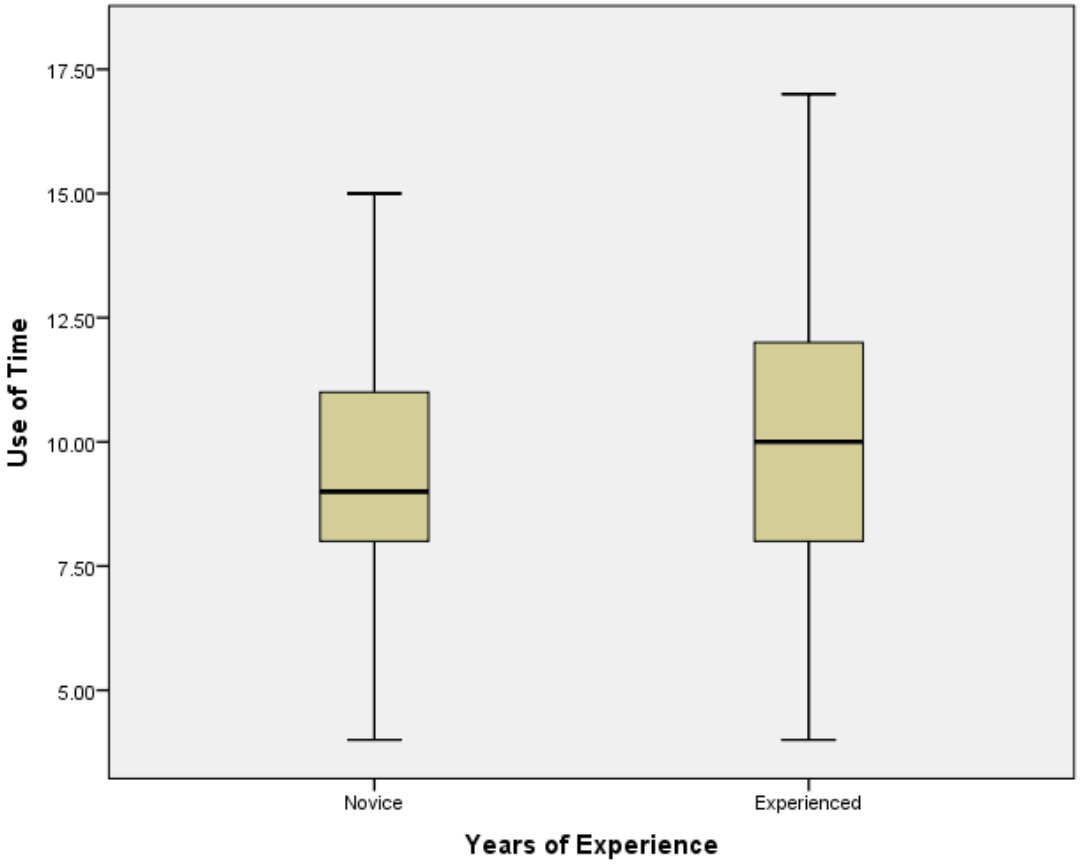
	School Leadership
Mann-Whitney U	8638.000
Wilcoxon W	16513.000
Z	-4.345
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Years of Experience

Null Hypothesis Two

An independent-samples *t*-test was used to analyze the second Null Hypothesis that looked at the difference in teachers' perceptions of use of time based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey. Data screening was conducted on each group's dependent variables (novice and experienced teachers) regarding data inconsistencies, normality, and outliers. The researcher sorted the data on each variable and found that there were no outliers in the novice or experienced group. To identify if there were outliers on either dependent variable, the Box and Whisker Plot was used. The Box and Whisker Plot determined that there were no outliers. No data errors or inconsistencies were identified. See Figure 1 for box and whisker plot.

Figure 2. Box and Whisker Plot for use of time.



Testing and Assumptions

A Kolmogorov-Smirnov test was used for the assumptions of normality since sample size was more than 50 (Warner, 2013). The Kolmogorov-Smirnov test, which displayed a significance level of (p = .000) for novice teachers and (p = .000) for experienced teachers. No violations of normality were found and the assumption of normality was met. See Table 2 for Kolmogorov-Smirnov test.

Table 7

Test of Normality

		Kolmogorov-Smirnov[a]		
	Years Employed	Statistic	df	Sig.
Use of Time	Novice	.224	125	.000
	Experienced	.133	193	.000

Using the Levene's test, the assumption of homogeneity of variance was evaluated. The assumption of homogeneity was met and no violation were found as (p = .321). Therefore, the researcher continued with the analysis. See Table 3 for Levene's Test.

Table 8

Test of Homogeneity of Variances

Use of Time

Levene Statistic	df1	df2	Sig.
.989	1	316	.321

Results for Null Hypothesis Two

To test the null hypothesis that there was no significant difference in teachers' perceptions of use of time based upon the total years employed at the virtual school, an independent samples *t*-test was conducted. The test was statistically significant, $t(316) = -2.26$, $p = .025$, $d = .25$, and thus the null hypothesis was rejected. The effect size, $d = .25$ was small. The null hypothesis was tested at a 95% confidence level. Table 4 displays the results from the independent samples *t*-test.

Table 9

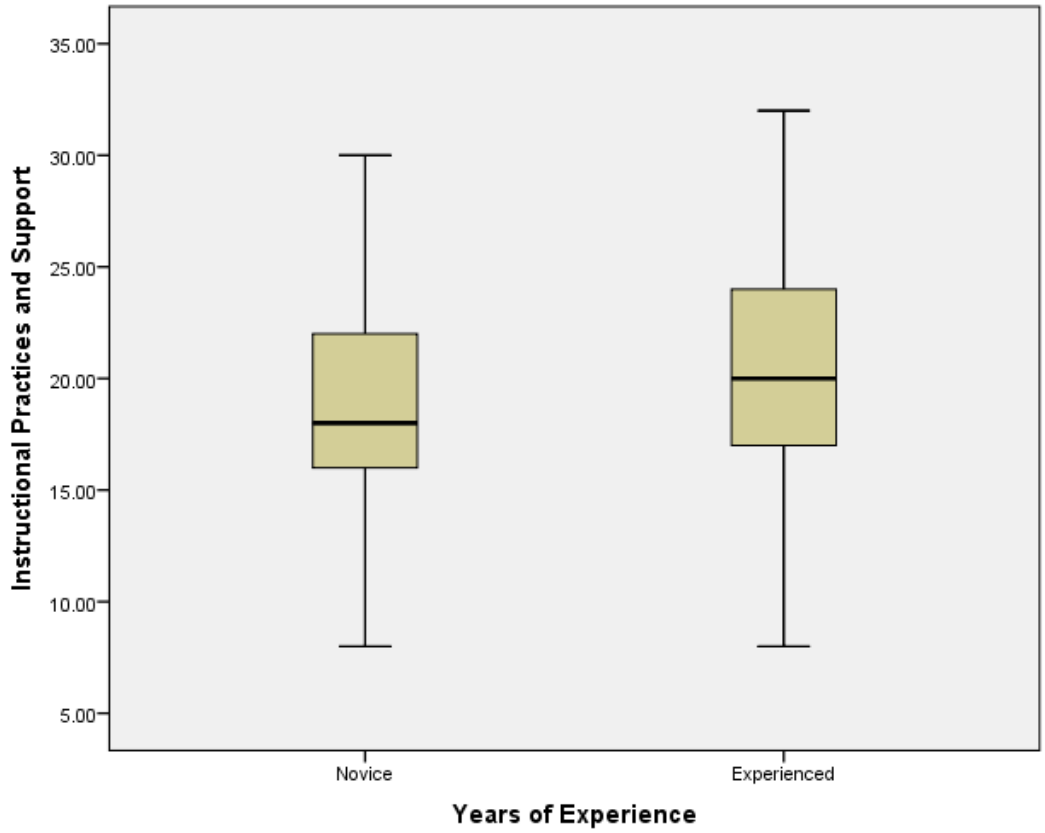
Independent Samples Test

		t-test for Equality of Means						
							95% Confidence Interval of the Difference	
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Use of Time	Equal variances assumed	-2.257	316	.025	-.60444	.26786	-1.13145	-.07742

Null Hypothesis Three

An independent-samples *t*-test was used to analyze the third Null Hypothesis that looked at the difference in teachers' perceptions of instructional practices and support based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey. Data screening was conducted on each group's dependent variables (novice and experienced teachers) regarding data inconsistencies, normality, and outliers. The researcher sorted the data on each variable and found that there were no outliers in the novice or experienced group. To identify if there were outliers on either dependent variable, the Box and Whisker Plot was used. The Box and Whisker Plot determined that there were no outliers. No data errors or inconsistencies were identified. See Figure 1 for box and whisker plot.

Figure 3. Box and Whisker Plot for instructional practices and support.



Testing and Assumptions

A Kolmogorov-Smirnov test was used for the assumptions of normality since sample size was more than 50 (Warner, 2013). The Kolmogorov-Smirnov test, which displayed a significance level of (p = .000) for novice teachers and (p = .000) for experienced teachers. No violations of normality were found and the assumption of normality was met. See Table 2 for Kolmogorov-Smirnov test.

Table 10

Test of Normality

		Kolmogorov-Smirnov[a]		
	Years Employed	Statistic	df	Sig.
Instructional Practices and Support	Novice	.157	125	.000
	Experienced	.120	193	.000

Using the Levene's test, the assumption of homogeneity of variance was evaluated. The assumption of homogeneity was met and no violation were found as (p = .170). Therefore, the researcher continued with the analysis. See Table 3 for Levene's Test.

Table 11

Test of Homogeneity of Variances
Instructional Practices and Support

Levene Statistic	df1	df2	Sig.
1.889	1	316	.170

Results for Null Hypothesis Three

To test the null hypothesis that there was no significant difference in teachers' perceptions of instructional practices and support based upon the total years employed at the virtual school, an independent samples *t*-test was conducted. The test was statistically significant, $t(316) = -2.41$, $p = .016$, $d = .28$, and thus the null hypothesis was rejected. The effect size, $d = .28$ was small. The null hypothesis was tested at a 95% confidence level. Table 4 displays the results from the independent samples *t*-test.

Table 12

Independent Samples Test

		t-test for Equality of Means						
							95% Confidence Interval of the Difference	
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Instructional Practices and Support	Equal variances assumed	-2.419	316	.016	-1.13952	.47113	-2.06647	-.21257

CHAPTER FIVE: CONCLUSIONS

Overview

This chapter will present the conclusion of the study and discuss the results of each research question with regards to related literature. The conclusion will provide the implications of the study, pertaining to the working conditions and theoretical framework. The limitations of the study will be assessed along with recommendations for future research.

Discussion

The purpose of this study was to examine if there is a difference between novice and experienced teachers' perceptions of the working conditions at a K-12 virtual school. This chapter will provide a summary of the research hypotheses and results. Conclusions from this study will be presented to further explain the differences in the perception of the working conditions. This study examined the teachers' total years employed at the school to determine if there was a difference in the group's perception of the teacher working conditions. Teacher working conditions were measured by the North Carolina Teacher Working Conditions (NC TWC) survey that was administered to (N = 318) North Carolina teachers. The two groups of teachers consisted of novice teachers (n=125) with 1 to 3 years of experience and experienced teachers (n= 193) with 4 to 10 years of experience.

Three independent-samples *t*-tests were conducted to evaluate the difference between the means of the teacher working conditions of the school as measured by the NC TWC survey and the total number of years the teacher has been employed at the virtual school. The three research questions compared the difference between the means of the teaching conditions of the school to address school leadership, use of time, and instructional practice and support. Experienced

teachers perceived school leadership, their use of time, and instructional practices and support at a higher level than novice teachers.

Research Question One

An independent-samples *t*-test was used to analyze the first Null Hypothesis that looked at the difference in teachers' perceptions of school leadership based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey. The test was statistically significant, $t(315.30) = -4.75$, $p = .000$, $d = .52$, and thus the null hypothesis was rejected. There is a difference in the teacher's perception and experienced teachers had a more positive perception of school leadership than novice teachers. A Mann-Whitney U test indicated that the school leadership score was greater for experienced teachers ($Mdn = 24.00$) than with novice teachers ($Mdn = 21.00$), $U = 8638$, $z = -4.345$, $p = .000$.

Research Question Two

An independent-samples *t*-test was used to analyze the second Null Hypothesis that looked at the difference in teachers' perceptions of use of time based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working Conditions (NC TWC) survey. The test was statistically significant, $t(316) = -2.26$, $p = .025$, $d = .25$, and the null hypothesis was rejected. There is a difference in the teacher's perception and experienced teachers had a more positive perception of use of time than novice teachers.

Research Question Three

An independent-samples *t*-test was used to analyze the third Null Hypothesis that looked at the difference in teachers' perceptions of instructional practices and support based upon the total years employed at the virtual school as shown by the North Carolina Teacher Working

Conditions (NC TWC) survey. The test was statistically significant, $t(316) = -2.41$, $p = .016$, $d = .28$, and the null hypothesis was rejected. There is a difference in the teacher's perception and experienced teachers had a more positive perception of instructional practices and support than novice teachers.

Perceptions of Working Conditions

Minimal research has evaluated the significant aspects of K-12 virtual schools. At this time, there are no known studies evaluating K-12 virtual teachers' perceptions of the working conditions at the K-12 virtual schools. Therefore, this section will discuss the results of the study in comparison with studies evaluating working conditions and length of employment in a traditional K-12 school. This study concluded that there was a significant difference in the virtual school teachers' perceptions of the working conditions based upon their length of employment at the virtual school.

The 2016 North Carolina Teacher Working Conditions survey revealed that school leadership, use of time, and instructional practices and support were the three constructs most important factors to teachers when determining if they will leave or remain at their current school. For that reason, this study focused on those three specific constructs of the survey. Horng (2009) identified administrative support, class-size, and school facilities as the three most significant working conditions. Johnson et al. (2012) identified that the biggest area of importance to teachers was school leadership and culture along with the relationship teachers had with their coworkers. Literature confirms that the working conditions evaluated in this study are of importance to teachers.

The North Carolina Teacher Working Conditions (NC TWC) survey was used to evaluate the perception of K-12 traditional classroom teachers based upon teaching experience

(Lawrence, 2012). Lawrence (2012) found that use of time was the domain all instructors, regardless of experience, scored the lowest. When evaluating teachers with 1-5 years of experience, use of time had one of the highest mean responses, compared with teachers that had 6-10 years of experience that only ranked use of time as somewhat existing in their schools (Lawrence, 2012). The results of the study might imply that the group of teachers with 6-10 years of experience could want additional input into the way they utilize their time, considering that use of time was the lowest rated domain among the other instructors (Lawrence, 2012).

The study by Lawrence (2012) had different results than this study, which concluded that teachers with 6-10 years of experience ranked use of time at a lower level than teachers with 1-5 years of experience. Teachers new to the virtual environment may need additional support with their use of time. Unlike traditional classroom teachers, the role of the teacher changes in the virtual environment (Ferdig & Kennedy, 2014). Virtual instructors must be properly equipped with the unique skill set required to engage virtual students, which is different from a conventional classroom and requires planning time (Ferdig & Kennedy, 2014).

It has been acknowledged that administrators play an important role in student gains and school achievements. It has been understood that the actions of school administrators in traditional and virtual environments are critical for school betterment. Knowledge about successful virtual school leadership can be compared similarly to what has currently been identified as successful leadership in a traditional school, though there will be differences considering students are in different locations geographically and facilitated by technology (McLeod & Richardson, 2014).

In this study, the teachers' perception of school leadership was at a lower level for teachers with less than 5 years of teaching experience in the virtual environment. In a previous

study by Otto and Arnold (2005), special education instructors with fewer than 5 years of teaching experience did perceive their support from their administration at insufficient levels. While special education teachers with greater than 5 years of teaching experience did perceive their administration at a satisfactory level (Otto & Arnold, 2005). The results of the study by Otto and Arnold (2005) and this current study both concluded that special education and virtual school instructors with less than 5 years of teaching experience perceived the school leadership at a lower level. Special education and virtual school instructors must modify their lessons for students according to the student's specific needs, as well as regularly considering student interests when planning and designing their instructional lessons (Spitler, Repetto, & Cavanaugh, 2013). Ingersoll (2001) stated that special education teachers in the United States are more likely to leave teaching or transfer out of special education than any other teachers. School leadership may need to recognize this by providing additional support for these instructors to create a more positive perception of their working conditions and subsequently retain these teachers.

Lawrence (2012) reviewed the results of the study based upon the type of school (elementary, middle, and high school) to determine differences in the perception of the working conditions. The lowest domain score at all schools was use of time. Interestingly, high school teachers noted that collaboration was of greater importance than reported by elementary and middle school teachers (Lawrence, 2012). Similarly, this current study found that secondary novice virtual teachers perceived their use of time at a lower level than experienced virtual teachers. Field experience in a virtual environment is a challenge for novice teachers which involves a comprehensive and in-depth collaboration with a mentor or experienced virtual instructor (Archambault & Kennedy, 2014). Comparing the studies, use of time is a concern for secondary teachers; specifically, collaboration is important and may be what secondary novice

teachers need to perceive their use of time at a higher level.

Lawrence (2012) found that leadership was ranked highest by elementary, second by high school, and lowest by middle school. In comparison with middle and high school teachers, elementary had the highest mean scores in all of the domains (Lawrence, 2012). Though the study did not review virtual schools, there was a difference in the teachers' perceptions of the working conditions based upon the school type, which is important to note. This current study focused on 6-12 grade virtual school teachers. There are many notable differences between the school environment of elementary, middle, and high schools, which can also be true in a virtual environment. In an elementary virtual school environment, the parents act as a facilitator to a greater extent than with secondary students (Wicks, 2010). Future research is recommended to examine the elementary virtual school teachers' perceptions of the working conditions as compared to middle and high school virtual school teachers.

Irvin (2013) conducted a quantitative study comparing the perceptions of school culture as measured by the Tennessee Teaching, Empowering, Leading and Learning (TELL) Survey and the overall composite Tennessee Value-Added Assessment System (TVAAS) score. The TELL Tennessee survey found no significant difference in the teachers' perceptions of school leadership, use of time, and instructional practices and support among schools receiving a 1, 2, 3, 4, or 5 on their Tennessee Value-Added Assessment System score (Irvin, 2013). This study showed no difference in the teachers' perceptions of the working conditions based upon the school's TVAAS score, which assesses student growth achieved during one school year (Irvin, 2013). The study by Irvin (2013) analyzed the perceptions of school culture based upon the teachers' perception of the working conditions and there were no differences found. However, the current study did not seek to determine the perceptions school culture. Abrego and Pankake

(2010) emphasized that school leadership has a vital role in facilitating the culture of the virtual school. Comparing studies, it was determined that novice teachers view the virtual school leadership at a lower level than experienced teachers. These studies may provide school leadership with insight into the teachers' perceptions of the school culture, working conditions, and how school leadership may influence the virtual school culture.

A quantitative study surveyed teachers to examine the relationship between the teachers' perspective of their working conditions and self-efficacy (Guenther, 2014). A significant correlation was discovered involving those two main constructs (Guenther, 2014). This study also found that use of time was the lowest domain of all of the working conditions on the Teaching, Empowering, Leading and Learning (TELL) survey (Guenther, 2014). It was discovered that time was significantly connected with teacher self-efficacy in the areas of instructional strategies and classroom management based on the Teachers' Sense of Efficacy Scale (TSES) (Guenther, 2014). In the same way, the current study found that novice teachers expressed a lower level of satisfaction concerning use of time and instructional practices and support. Traditional teachers have been hesitant to move from the brick-and-mortar setting to the virtual environment because insufficient knowledge of technology and the lack of self-efficacy concerning their ability to teach virtually (Fullan, 2007). For this reason, novice teachers may have a lower perception in these domains which could be affecting their self-efficacy.

Burkhauser (2016) examined four years of panel data produced from the North Carolina Teacher Working Condition (NC TWC) Survey. The study used value-added modeling methods to examine the relationship among the school principal and the teachers' perceptions of the working conditions (Burkhauser, 2016). The study discovered that the teachers rated the environment of the school based upon which administrator was the school leader, separate from

others district and school factors. This indicates that the districts being affected by teacher turnover will need to evaluate school climate, while utilizing those facts and information to guide and assist school administration. In contrast, the findings of this study are based upon the same school leadership since this study was conducted at the same virtual school. Therefore, it can be concluded that the novice and experienced teachers have different perceptions of the working conditions since they work at the same school administration. Further research could be conducted to determine if the perceptions of the working conditions changed based on the school administrator at the virtual school.

In 2016, nearly 102,000 participants had taken the North Carolina Teacher Working Conditions (NC TWC) survey, which represented 86% of the North Carolina public school teachers (Stewart & Shephard, 2016). One outcome showed that only 62% of the teachers felt the class sizes were suitable to meet student needs. Only 66% of the participants noted for instructional practices and support that state assessment data are available in time to impact instructional practices (Stewart & Shephard, 2016). The constructs of the survey are linked to teacher retention and student achievement. School leadership was noted by 30% of the participants as the component that most influences their desire to remain at their school. Use of time and instructional practices and support was noted by 15% of the participants as the component that most influences their desire to remain at their school; the other five constructs of the NC TWC survey fell below 11% each (Stewart & Shephard, 2016). Out of the eight constructs, use of time was rated the lowest at 70%, the highest was school leadership at 85%, and instructional practices and support was averaged at 82%. The North Carolina Teacher Working Conditions (NC TWC) survey found that the items associated with school leadership vary the most between instructors who intended to stay at their present school in comparison

with those who intended to leave (Stewart & Shephard, 2016).

For this study, The North Carolina Teacher Working Conditions (NC TWC) survey also determined that 93% the virtual school instructors planned to continue teaching at their current school (Stewart & Shephard, 2016). When asked which aspect of their working conditions most affected their willingness to keep teaching at the virtual school, 42% of the virtual instructors reported their time during the work day and 30% of the virtual instructors reported instructional practices and support. The virtual school instructors reported that instructional practices and support was the working condition most important to promote student learning. The virtual school instructors were asked if the virtual school was a good place to work and learn, 62% of the virtual instructors strongly agreed and 27% of the instructors agreed. Only 5% of the virtual instructors strongly disagreed and 6% of the virtual instructors disagreed. Overall, 89% the virtual instructors agreed that the K-12 virtual school was a good place to work and learn (Stewart & Shephard, 2016).

Connection to Theory

Herzberg's Motivation-Hygiene Theory revealed that working conditions, policies within the company, and supervision were factors connected with job dissatisfaction (Herzberg, 1959). These hygiene factors would not necessarily cause contentment when satisfactorily addressed but it could be used as a tool for employers to recognize when employees are dissatisfied (Tyson, 2015). The results of this study indicated that novice teachers perceived the working conditions at a lower level than experienced teachers. This provides the school administration and school districts with an opportunity to provide novice teachers with additional support and recognize a potential need.

Herzberg's (1959) hygiene factors revolve around performing the job. These factors

consist of working conditions, supervision, salary, administration, and policies. By satisfying hygiene needs, it can protect against an employee's poor work performance and dissatisfaction (Herzberg, 1959). When researchers analyzed the impact on the turnover, overall performance, and attitude toward the establishment, it was discovered that a person's attitude does have an effect on the way in which the work is performed. If the employee's attitude is favorable, can have an impact on the job performance and if the attitude is unfavorable, it can have an impact on turnover resulting in some level of disengagement from the job. The employees' level of loyalty and commitment varies with the level of job satisfaction (Herzberg, 1959).

The results of this study provide evidence that there is a difference in teachers' perceptions of the working conditions based upon the total years employed at the virtual school. These hygiene factors can be used as a tool for the school to identify potential dissatisfaction in novice instructors as opposed to experienced instructors at the North Carolina virtual school. By addressing the needs of novice instructors, it could prevent teacher turnover and increase the level of job satisfaction for those instructors. This can also result in a change in the employee's attitude toward the job and potentially produce an increase in work performance. Recognizing the potential need of novice instructors can prevent future dissatisfaction for employees.

Implications

The conclusion of this causal-comparative study implies that the perception of the working conditions was at a higher level for experienced virtual teachers than novice virtual teachers. This signifies that the novice virtual school instructors perceive these aspects of their working conditions at a lower rate and therefore this provides leadership with the opportunity to evaluate the procedures in place for novice and experienced teachers. Novice teachers may need additional support by school leadership and coworkers. It is appropriate to examine the school

leadership, use of time, and instructional practices and support, in an effort to retain teachers and improve working conditions.

Johnson et al. (2012) offered evidence that teachers' motivation or choice to depart a school was primarily defined by their satisfaction with their working conditions as well as school culture and leadership. Perceptual data was important when determining the attitude of the employee. The opinion and beliefs of the employee can be obtained by reviewing their perception of the working conditions. This study uncovered that there is a difference in the perceptions of novice and experienced virtual school instructors. By addressing these areas of the working conditions that cause dissatisfaction, it can assist in employee retention and job performance. Understanding that there is significant difference in perceptions, is the first step in resolving the issue and can assist school districts with the problem of teacher turnover. Across the country, each year 16% of teachers in public schools are leaving (Goldring, Taie, & Riddles, 2014). With the results of the study, school districts and administration can address the gap between novice and experienced teachers in regards to their working conditions. Duke University (2006) conducted a study that revealed when teachers are satisfied with the school leadership, they are very likely to stay teaching.

Starting a new job can often be stressful and overwhelming. Offering additional assistance for novice employees can produce a positive school climate. School leadership can reach out to novice instructors to determine ways they can improve their working conditions and school environment. School leadership can play a vital role in the success of novice instructors by implementing strategies and training to assist new teachers. Establishing a school atmosphere that has respect and trust is important for school leadership. Consistently providing feedback to novice instructors can assist in improving their teaching. Novice teachers should feel

comfortable with presenting school leadership with concerns and issues they face. Overall, school leadership is responsible for the operation of the school. Therefore, understanding the difference in perceptions of teachers is vitally important to managing the school.

Asking experienced teachers to assist novice employees can bridge the gap in the teachers' perceptions of the working conditions. Experienced teachers and administration can assist novice teachers with advice and options to help make better use of their time. This will be beneficial for not only the novice teachers but also the school overall and students as well. Having less experience can be a challenge for novice teachers taking on a new role as a virtual school instructor.

Changing from the traditional brick-and-mortar environment to a virtual environment will cause the novice teachers to make modifications to how they use their time. The hours of their school day have now changed and their availability to students is expanded past traditional school hours. Finding a balance with their time is important for novice virtual teachers. Novice virtual instructors may notice their use of time changes by having a change in non-instructional time, class sizes, and possibly fewer opportunities for collaboration with colleagues. Traditional and virtual meetings with staff, students, and parents will require the instructor to allocate their time accordingly. Preparing for lessons may take additional time for novice instructors. Additionally, professional development will likely be a priority for novice instructors as they are new to the virtual environment.

Instructional practices and support will look different in a virtual school when compared to a traditional school. It is important that assessment data is used by teachers to make informed decisions about instruction. Novice teachers are experiencing changes in the curriculum and virtual environment. Providing support for novice instructors by providing opportunities to

participate in professional learning communities will assist novice instructors with their instructional practices. Additional support can be given to novice instructors by providing them with additional instructional coaching and by encouraging them to improve instruction by trying new things. Being aware of the class size for novice instructors is important so that they do not feel overwhelmed and students are successful. Providing autonomy to novice instructors regarding instructional delivery is important so that they can make decisions about pedagogy, classroom materials, and pacing.

Limitations

Ecological validity was a limitation in the study due to the generalization of the North Carolina virtual school population. The sample size of the study was limited to North Carolina licensed school-based virtual school instructors with 1 to 10 years of teaching experience at that specific school. The total years of teaching experience or total years of experience at another virtual schools was not evaluated in this study.

The anonymous statewide survey was available for instructors from March 1-25, 2016. This allowed teachers adequate time to complete the teaching conditions survey at any time from work or home. The results are limited to the instructors who voluntarily participated in the survey during the four-week window. Subsequently, the archival data was limited to North Carolina public schools with a 40% minimum response rate.

The participants should answer each question about the school environment and not about a specific individual at the school. Self-reported surveys are limited to each participant's understanding of the objective questions. Consequently, it is assumed that each participant understands the questions and answers truthfully. Due to the survey providing data for school

improvement, participants could be concerned with answering truthfully even though the survey is anonymous. This could potentially limit the accuracy of the data.

Recommendations for Future Research

Further research is essential to supporting K-12 virtual school instructors and administrators. Expanding K-12 virtual schools will require educational research to provide resources and support for school personnel. Future studies could examine virtual school instructors from different populations including various counties and states. Comparing new and established virtual schools can provide data to evaluate trends. Evaluating the perceptions of instructors based upon the total years employed as an educator can add to the field of study.

The statistically valid and reliable instrument used in this study assessed whether the perception of the working conditions support effective teaching at each specific school. Future research can evaluate why instructors perceive the working conditions as they do. Teacher efficacy remains a significant area of research study and can be explored for teachers in a virtual environment.

Minimal research in this field provides an opportunity to explore all aspects of virtual school environment. Teacher working conditions can also be assessed in the additional survey constructs:

1. managing student conduct
2. professional development
3. facilities and resources
4. teacher empowerment
5. community support and involvement
6. overall growth

7. teacher leadership
8. new teacher support

Assessing additional challenges perceived by virtual educators can add to the existing body of literature regarding teacher working conditions. Additional research will provide schools and educators with the opportunity to grow and make improvements. The lack of research gathered regarding the K-12 virtual environment has led to a significant gap in literature. Future research will add to the current research by increasing knowledge of teacher working conditions and future employment plans.

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APPENDIX A

Liberty University IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

November 3, 2016

Tiffany Francis
IRB Application 2685: Teacher Working Conditions: Perceptions of Novice and Experienced K- 12 Virtual School Teachers

Dear Tiffany Francis,

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 does not classify as human subjects research. This means you may begin your research with the data safeguarding methods mentioned in your IRB application.
Your study does not classify as human subjects research because it will not involve the collection of identifiable, private information.

Please note that this decision only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued non-human subjects research status. You may report these changes by submitting a new application to the IRB and referencing the above IRB Application number.

If you have any questions about this determination or need assistance in identifying whether possible changes to your protocol would change your application's status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School
Liberty University | Training Champions for Christ since 1971

APPENDIX B

Permission from New Teacher Center

Tiffany Francis,

You have been approved to access the 2016 North Carolina Teacher Working Conditions Data with Demographics. To access the database, go to www.ncteachingconditions.org/files and click on the blue download link next to the NC TWC 2016 Data with Dem.zip file, and enter the following:

Password: XXXXXXX

You will be asked to open or save the zip file. Inside the zip file, you will find 3 Excel (xlsx) files. The database, the codebook, and the response rate file (which you can use to decode the school and district ID numbers).

Your access will be valid until January 1, 2017.

I have also attached the NCVPS data and the associated codebook.

If you have any technical questions, please let me know.

Best wishes,
Keri Feibelman
Associate Director, Teaching and Learning Conditions Initiative
New Teacher Center, NC Office

Keri Feibelman
Associate Director
Teaching and Learning Conditions Initiative