THE IMPORTANCE OF EMPLOYEE ATTRIBUTES FOR ENTRY-LEVEL JOB SUCCESS: PERCEPTIONS OF EMPLOYERS AND SECONDARY STUDENTS

by

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(Under the Direction of Karen H. Jones)

ABSTRACT

The quality of the workforce is a key factor that impacts America's economic strength. U.S. companies continue to stress the need for a high quality workforce to allow them to compete in a global economy and report that finding qualified applicants is sometimes a struggle. The U.S. educational system plays an important role in workforce development as it provides a foundation for young people as they prepare to enter the world of work. Secondary schools are given the challenging task of helping high school students as they transition to college and careers. This transition requires students to adapt to the expectations of the workplace.

This correlational study sought to gain a better understanding of the relationship between employers' expectations of entry-level employees and high school students' perceptions of the employee attributes that are most important to employers. High school students and employers in Madison County, Georgia were asked to rate the level of importance of 26 employee attributes for entry-level workplace success. Point-biserial correlations were used to examine relationships between responses of students and employers, upperclassmen students and underclassmen students, and students with and without work experience. In addition, employers were asked to

share their perceptions of high school graduates' preparedness for employment and their thoughts on skills or qualities lacking in recent high school graduates.

Students and employers agreed that punctuality, maturity, and motivation were the most important attributes listed. Statistically significant correlations were found for multiple attributes. In most cases, these correlations were a result of students rating lower ranked attributes as more important than the employers. Notable findings include students' underestimation of the level of importance of initiative and enthusiasm in relation to how these attributes were rated by employers. Analysis of responses between upperclassmen and underclassmen students and students with and without work experience revealed few statistically significant correlations.

INDEX WORDS: Secondary Students, Employers, Employee Attributes, Perceptions, Correlational, Employability Skills, Career and Technical Education

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DEDICATION

I would like to dedicate this work to my wonderful family for all their love and support throughout my life. Mary, I am so fortunate to have you as my wife. You selflessly give so much for your family. Without your encouragement, I never would have been able to make it this far. I love you!

To Glenn and Gus, you brighten my life each and every day. I am so proud of you and happy that I get to be your Daddy. I wish you a life of learning and happiness.

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TABLE OF CONTENTS

APPENDICES

LIST OF TABLES

Page

CHAPTER 1

INTRODUCTION

The foundation of America's strength lies in its citizenry. A nation that espouses the value of hard work and champions the free market system relies on its people to power the economic engine. The country has enjoyed a long period of economic dominance built on continuous innovation and growth of industries. To continue to compete effectively, America must attend to the education and training of its people or risk losing its competitive edge over other nations (Achieve, Inc., 2012c; Adecco USA, 2014; Deloitte & Manufacturing Institute, 2015; Harvard Business School, 2014; ManpowerGroup, 2015; Miller & Slocombe, 2012; Porter & Rivkin, 2014; U.S. Chamber of Commerce Foundation, 2014). Today's youth, like those who came before them, will soon be called upon to supply the labor that keeps American industries in business. The nation's schools are assigned the task of preparing these students to meet the demands of an ever-changing workplace. Since the late 1990s, U.S. policymakers have pursued a college for all approach to preparing students for future careers with a primary focus on development of academic skills at the expense of other skills needed for career success (Lerman, 2008; Porter & Rivkin, 2014; Symonds & Gonzales, 2009; Symonds, Schwartz, & Ferguson, 2011). This former overemphasis on academic skills and test scores to address workforce demands shows a failure of the educational system to conceptualize and measure a broader set of skills that are needed for success in the workplace (Hart Research Associates, 2015; Lerman, 2008).

Fortunately, progress has been made in recent years to develop a more comprehensive approach to preparing young people for life beyond high school. Rather than focusing on a narrow set of academic skills as the sole measure of educational effectiveness, more emphasis is now being placed on ensuring students are ready for both college and careers (Georgia Department of Education, 2013; Georgia Department of Education, 2015a; Hart Research Associates, 2015; Holzer, 2012; Symonds, Schwartz, & Ferguson, 2011; Manyika, Lund, Auguste, & Ramaswamy, 2012). In addition to core academic skills, schools must provide students with skills needed to succeed in today's job market.

In order to provide students with the guidance they need to be successful in the working world, educators must become aware of workplace demands so they can adequately prepare students to make the transition from school to work (U.S. Chamber of Commerce Foundation, 2014). Unfortunately, these demands are not static. Over time, businesses and industries change the way they operate and this leads to changes in the expectations for American workers (Rojewski & Hill, 2014). An examination of research related to employer satisfaction with their employees reveals that these demands are not being met (Achieve, Inc., 2012a; Arkansas Department of Education, 2006; Buhler, 2012; Burning Glass Technologies, 2015; Casner-Lotto & Barrington, 2006; Deloitte & Manufacturing Institute, 2015; Georgia Department of Economic Development, 2014; Hart Research Associates, 2015; Holzer, 2012; National Association of Manufacturers, 2011; Rider & Klaeysen, 2015).

Many youth struggle to enter the workforce and, as a result, fail to gain valuable early work experience (Annie E. Casey Foundation, 2012; Federal Interagency Forum on Child and Family Statistics, 2014; ManpowerGroup, 2012; Rosenbaum, 2003; Symonds, Schwartz, & Ferguson, 2011). As seen during the recent recession, the challenge for young people to gain

work experience becomes even more difficult when the economy is struggling (Sum, Khatiwada, & McHugh, 2013). When hiring, employers demand that their employees have skill sets and a set of attributes that will enable them to accomplish the tasks assigned to them in the workplace. While they may be willing to provide a new employee with technical skills training that is specific to the industry, employers are less likely to offer training in basic employability skills (Rosenbaum, 2003). Young people who have not acquired these employability skills may be passed over for more rewarding employment opportunities.

A potential solution to these problems lies in career and technical education (CTE). CTE programs have long been offered throughout the United States and around the world as a means to provide learning experiences that will help students explore career areas and prepare them for employment and independent living (Rojewski & Hill, 2014; Scott & Sarkees-Wircenski, 2008). CTE programs were formerly known as vocational education. Vocational education throughout most of the twentieth century focused on industry-specific skills that were meant to prepare non-college bound students to enter these industries following high school. In the 1980s, vocational education began to evolve into what is now CTE (Schwartz, 2014; Stern, 2010). Current CTE programs offer educational experiences for all students and have been shown to improve employment outcomes for youth (U. S. Department of Labor, 2014). Following pedagogical principles of learning, these programs group together technical and general education content in order to raise the global competitiveness of their students (Schwartz, 2014; Wang & King, 2009).

In the early twentieth century, vocational education was focused on providing industries with skilled workers (Hyslop-Margison, 2005; Rojewski & Hill, 2014). Students were being prepared to go directly to work following graduation. Vocational education courses offered an educational track for those students who were not bound for college and were sometimes viewed

as a dumping ground for students of lower ability levels (Schwartz, 2014). As vocational education evolved into CTE, these programs developed a two-part mission (Gray & Herr, 1998). They attempted to promote individual opportunity for students while also promoting economic growth by solving human performance problems and increasing productivity. Although education for culture and education for work have long been viewed as separate, the current belief is that a fusion of these approaches is the best preparation for today's students (Hart Research Associates; 2015; Partnership for 21st Century Skills, 2010; Scott & Sarkees-Wircenski, 2008). While early vocational programs were concerned more with the needs of industry, today's CTE programs are primarily concerned with helping each student with career preparation (Schwartz, 2014). High quality CTE programs combine rigorous academics with career training in a way that provides students with skills needed in the world of work while also encouraging students to continue with postsecondary education after graduation (Partnership for 21st Century Skills, 2010; Schwartz, 2014).

In the spirit of CTE's mission to promote individual opportunity for its students while also promoting economic growth by meeting the needs of industry, this study attempted to bring both interests together by examining the relationship between perceptions of students and employers regarding attributes that are necessary for entry-level workplace success. By learning more about students' and employers' perceptions of the level of importance of employee attributes, CTE programs may be more equipped to fulfill their mission to promote individual opportunity and economic growth.

Rationale

American employers have expressed concern over perceived skills shortages in high school graduates. In a series of surveys conducted by the National Association of Manufacturers,

employers reported a persistent struggle to find qualified employees (National Association of Manufacturers, 2001; National Association of Manufacturers, 2005; National Association of Manufacturers, 2011). Three out of four employers identified a high-performance workforce as the primary factor that affects their future success. Without a well-trained workforce, the U.S. cannot hope to remain competitive in a global marketplace. The lack of qualified employees continues to have detrimental effect on business's abilities to remain competitive (Deloitte & Manufacturing Institute, 2015; Harvard Business School, 2014; PayScale, 2015; Porter & Rivkin, 2014; U.S. Chamber of Commerce Foundation, 2014).

If schools are to meet the demands of employers when preparing students for life beyond high school, they must be aware of employers' perceptions regarding which attributes are most important and which skills are lacking. This knowledge allows schools to identify and address these areas of concern. Numerous studies have been conducted in an attempt to identify the attributes most important for success in the workplace (Achieve, Inc., 2012a; Burning Glass Technologies, 2015; Carl Vinson Institute of Government, 2013; Carnevale & Desrochers, 2002; Casner-Lotto & Barrington, 2006; Deloitte & Manufacturing Institute, 2015; Farkas, 2008; Hart Research Associates, 2013; Hart Research Associates, 2015; Manyika, Lund, Auguste, & Ramaswamy, 2012; National Association of Colleges and Employers, 2014; National Association of Manufacturers, 2011; National Center on Education and the Economy, 2006; Rider & Klaeysen, 2015). Results of these studies show there are several characteristics sought after by employers. Some of the most frequently identified important attributes include innovative thinking, problem-solving skills, communication skills, and basic employability skills.

In order to meet demands of the global marketplace, employers are seeking employees who can do more for them (Achieve, Inc., 2012a). Innovation and problem-solving skills are considered to be important to many employers (Carnevale & Desrochers, 2002; Floyd & Gordon, 1998; Gabric & McFadden, 2001; Hart Research Associates, 2013). Since highly-skilled, low-wage workers are becoming more available in other countries, some reports suggest the U.S. should focus more on preparing its workers to perform in creative, innovative jobs rather than jobs that involve routine tasks (International Labour Office, 2010; Miller & Slocombe, 2012; National Center on Education and the Economy, 2006; Rojewski & Hill, 2014). By doing so, the U.S. can potentially continue to remain competitive globally through the development of new products and technologies.

While innovative work is considered to be crucial in some industries, many employers place a high emphasis on the importance of communication skills (Bovinet, 2007; Burning Glass Technologies, 2015; Duke, 2002; National Association of Colleges and Employers, 2014). Employers need employees who can interact well with clients and coworkers from diverse backgrounds. Business models that are built around teamwork require that employees be able to clearly communicate messages to those around them. Oral and written communication skills have consistently been identified by employers as critical skills needed in the workplace (Bovinet, 2007; Burning Glass Technologies, 2015; Gaedeke & Tootelian, 1989b; Hafer & Hoth, 1981; Hart Research Associates, 2015; Miller & Slocombe, 2012).

While most in the field of career and technical education would agree the development of innovative thinking, problem-solving skills, and communication skills are all important goals for instruction, other fundamental skills cannot be ignored. A common complaint from employers is that workers do not possess the basic employability skills and work ethic required to be

successful (Georgia Department of Economic Development, 2014; Pratt & Richards, 2014; Rider & Klaeysen, 2015). Employability skills are defined as the set of skills required to acquire and retain a job and can also be used to describe the set of foundational skills that are needed for an individual to develop job-specific skills (Saterfiel & McLarty, 1995).

In an aforementioned National Association of Manufacturers survey, nearly half of employers reported that their current employees lack basic employability skills, including proper attendance, timeliness, and work ethic (National Association of Manufacturers, 2005). In another employer survey, 64.8% of respondents identified employability skills as the area most lacking in high school graduates (North Carolina Department of Labor, 2006). In their written comments regarding employability skills, these employers described high school graduates as "immature, disrespectful, irresponsible, and unethical" (p. 8). Finally, a nationwide survey of 400 employers conducted by Casner-Lotto and Barrington (2006) found that demonstrating professionalism and a good work ethic were the most important skills for high school graduates in the workplace according to 80.3% of the respondents. Although these were reported to be the most important skills for young employees to master, 70.3% of the respondents reported that high school graduates were deficient in these areas.

Clearly, previous research has shown that employers are concerned with the skill levels and attributes of the available workforce (Achieve, Inc., 2012b; Burning Glass Technologies, 2015; Looney & Greenstone, 2011; ManpowerGroup, 2012; Manyika, Lund, Auguste, & Ramaswamy, 2012; PayScale, 2015; Porter & Rivkin, 2014; Rider & Klaeysen, 2015; Wagner, 2008). Employers perceive a significant shortage of qualified workers. However, the other side of the employer-employee relationship has been largely ignored. There is a dearth of information relating to youth perceptions of attributes most important to employers. If educators are to

prepare youth to enter the workforce, they must understand not only employers' perceptions of those attributes that are most important for success, but also students' perceptions of what is required in the workplace. In gaining this more complete understanding, educators will be better prepared themselves to make successful connections between employer expectations and student skills.

Purpose Statement

The purpose of this correlational study was to identify attributes most important for entry-level workplace success and to examine the relationship between employers' and students' perceptions of the level of importance of employee attributes. Employers in Madison County, Georgia and Madison County High School students were asked to rate the level of importance of a list of employee attributes. These ratings were used to determine which skills are most important for entry-level workplace success according to employers and students. This study also examined students' and employers' ratings of the level of importance of each attribute to explore the nature of the relationship between perceptions of these two groups.

Research Questions

The following research questions were addressed in the study:

1. What are students' perceptions of employee attributes?
2. What are employers' perceptions of employee attributes?
3. Is there a relationship between employers' and students' perceptions of employee attributes?
4. Is there a relationship between underclassmen and upperclassmen students' perceptions of employee attributes?

5. Is there a relationship between students with and without work experience in regard to their perceptions of employee attributes?

Instrument

For this study, a new instrument was developed to measure perceptions of the level of attribute importance based on previous employee attribute research. The list of employee attributes used was based on studies by Hafer and Hoth (1981) and Holland and Herron (1982), whose lists of attributes originated with a study by Schneider (1978). These studies compared perceptions of employers and postsecondary business students regarding the level of importance of employee attributes for entry-level employment. Several items from the original instruments were modified in order to better meet the needs of the study and to make them more appropriate for use with secondary students. Two versions of the instrument were produced. The employer version of the instrument asked participants to rate 26 attributes based on their level of importance for entry-level workplace success (see Appendix A for employer questionnaire). The student version asked participants to rate the same attributes based on the students' perceptions of how employers would rate these items (see Appendix B for student questionnaire).

The instrument also collected demographic data about respondents to allow for further analysis of how these characteristics may impact perceptions of the level of importance of employee attributes. The employer version of the instrument asked respondents to identify their gender, business size, industry, employment status, hiring experience, and perceptions of recent high school graduates in the workforce. The student version asked participants to identify their grade level, gender, race/ethnicity, and work experience. Collection of this data allowed for comparisons between students and employers and between subgroups of students and employers.

Theoretical Framework

In order to meet the goals of the study in a way that would lead to a cohesive understanding of how they relate to career preparation, a theory was used to frame this study. A theory is a generalized statement that allows broad conceptualization about natural events and permits predictions about events involved in the framework under observation (Osipow & Fitzgerald, 1996). According to Creswell (2009), a theory is an "interrelated set of constructs formed into propositions, or hypotheses, that specify the relationship among variables" (p. 51). The theory for this study was chosen based on its ability to explain how the relevant constructs connect and affect one another and its potential for helping to predict outcomes of the study.

Following a review of several potential theories, the Learning Theory of Career Counseling (LTCC) was chosen as the theoretical framework for this study (Krumboltz, 1996). The LTCC was developed over time by John Krumboltz and is an extension of his earlier Social Learning Theory of Career Decision Making (Krumboltz, 1979). Both theories were based on the earlier work of Bandura's (1977) Social Learning Theory which focused on the way individuals learn new information and behaviors through the observation of models. Krumboltz applied these concepts to the field of career decision making and career counseling.

John Krumboltz has developed several theories that address career decision making and the role career counselors play in this process. His earliest theory, the Social Learning Theory of Career Decision Making, focused on identifying factors that influence career decisions. These factors include genetic attributes and special abilities, environmental conditions, learning experiences, and task approach skills (Krumboltz, 1979). While this theory helped to explain career decisions after they had occurred, it was less helpful in proposing methods that practitioners could use to assist individuals as they undergo the career planning process (Mitchell

& Krumboltz, 1996). Krumboltz developed the LTCC to address this need. Following his development of the LTCC, Krumboltz developed a third theory that addresses another aspect of career counseling. The Happenstance Learning Theory attempts to explain how and why individuals choose their paths through life and describes how counselors can assist with this process (Krumboltz, 2009). In this theory, Krumboltz (2009) introduced the concept of happenstance, which he described as "the interaction of planned and unplanned actions in response to self-initiated and circumstantial situations" (p. 136). He again identified factors that influence behavior and then proposed ways career counselors can help clients to take full advantage of the countless planned and unplanned learning experiences in their lives. Over time, Krumboltz has explored different aspects of the career decision making process, factors that influence these decisions, and methods that career counselors can utilize to offer assistance to their clients. After reviewing these three theories as well as other related theories, the LTCC was selected as the most appropriate theory to frame this study because it addresses how practitioners can directly assist individuals in the career planning process in a way that is most consistent with the goals of this study.

With the LTCC, Krumboltz (1996) proposed that career development efforts should focus on helping young people learn as much as possible to prepare for their future careers by expanding their interests and capabilities, empowering them to take action, and offering a wider range of career development assistance. The LTCC explained the process of career choice and outlined ways career counselors could help individuals learn to be successful in the workplace.

The LTCC, like the Social Learning Theory of Career Decision Making before it, identified four factors that impact career choice and development: genetic attributes and special abilities, environmental conditions, learning experiences, and task approach skills (Krumboltz,

1996). Knowing these factors impact career development, career counselors may use these elements to help prepare their clients for successful entry into the workforce. The LTCC stressed the importance of the learning process for career development. Rather than being prescribed a career choice by an outside expert, individuals should arrive at a career choice through their own learning experiences. These experiences can include planned or unplanned events that help with the process of career development.

When applying the LTCC to this study, the explanation of the origins of career choice was especially helpful in explaining differences that may exist in respondents' perceptions. Individuals who have had more access to career-related learning opportunities would be expected to respond differently than those who have had little opportunity to learn about the workplace. It was expected that the differences in learning experiences of students and employers would result in variations in perceptions of attribute importance. In addition, it was also expected that experiential differences between upperclassmen and underclassmen and students with or without work experience would result in differing perceptions of the level of importance of employee attributes.

When conducting research with a survey instrument, it is important to ensure that the instrument is related to the constructs in the theory at hand (Hox, 1997). The survey instrument serves to test aspects of the selected theoretical framework and the theory can predict expected results. The chosen theory for this study, the LTCC, explains how planned and unplanned learning experiences contribute to career development, identifies factors that affect career decision making, and proposes methods for offering assistance to individuals as they deal with a variety of work-related issues. In this study, the instrument measured the perceived importance of employee attributes for entry-level employment and collected demographic information about

the respondents to allow for an examination of the relationship between the perceptions of students and employers. The LTCC explains that, based on differences in past learning experiences, environmental conditions, and task approach skills, individuals may differ in their perceptions of work-related issues, such as employee attribute importance. The survey instrument was appropriate for this study because it allowed for measurement of these perceptions.

Significance of Study

This study explored the career development of secondary students by measuring their perceptions of the level of importance of employee attributes, measuring perceptions of local employers, and analyzing the relationship between these perceptions. Results of this study may be used to make needed modifications to services being provided to secondary students to better prepare them for the workplace. In addition, by making results of the study available to students, they may become more aware of the work-related values in their own community. Armed with this knowledge, students will hopefully become more involved in guiding their own career development.

Schools are given the task of preparing students to meet employer expectations so their graduates can function successfully in the workplace. To help achieve this goal, schools must attend to career development of their students. This study provided the instructional programs at Madison County High School with a better understanding of the level of preparedness of its students in terms of their awareness of employer expectations. This understanding will allow programs to improve the way they administer career development activities to their students. The study informed schools of the current state of their workforce preparation efforts so CTE programs may use this information to remain responsive to the needs of industry and their

students. In the broader context, this study also contributed to the current understanding of the importance of employee attributes for entry-level employment.

CHAPTER 2

REVIEW OF LITERATURE

Secondary students face the simultaneous challenges of physically changing into adults, handling complex interpersonal relationships with family and friends, managing increasingly difficult coursework, and trying to decide on a path for their futures. For many students, it is an exciting but also stressful time in their lives. Secondary educators are given the opportunity to have a positive impact on these students as they provide the knowledge and guidance students will need as they prepare to enter the real world. Unfortunately, research indicates many students are not adequately prepared to make the transition from the classroom to the workplace (Achieve, Inc., 2012a; Arkansas Department of Education, 2006; Burning Glass Technologies, 2015; Casner-Lotto & Barrington, 2006; Hart Research Associates, 2015; National Association of Manufacturers, 2011; U. S. Department of Commerce, 1999; Zemsky & Iannozzi, 1995). Some studies suggest students need to improve their communication skills (Bovinet, 2007; Burning Glass Technologies, 2015; Gaedeke & Tootelian, 1989b; Hafer & Hoth, 1981). Other studies recommend that higher order thinking skills are most important (Carnevale & Desrochers, 2002; Floyd & Gordon, 1998; Johnston et al., 1987; National Association of Colleges and Employers, 2014). Some studies simply call for the need to address basic employability skills (Buhler, 2012; Georgia Department of Economic Development, 2014; Crain, 1984; Dutton, 2012; National Association of Manufacturers, 2001). Although employers have frequently been asked about what is most important for workplace success, students are rarely asked to share their perceptions about what it takes to get and keep a job. Without considering

student perceptions and misconceptions regarding attributes most needed for workplace success, a vital piece of information is missing that could potentially be used to help better prepare students for life beyond high school. To provide this additional piece of information, this study analyzed the relationship between student and employer perceptions of the level of importance of employee attributes for entry-level job success.

A review of literature was conducted in order to provide a foundation for this study. This chapter presents a review of relevant research literature that addresses: (a) history of career and technical education, (b) current trends in career and technical education, (c) status of career and technical education in Georgia, (d) perceptions and social cognition, (e) employee attributes and employability skills, (f) workforce development reports, (g) employee attribute research involving employers and students, and (h) relevant theories.

History of Career and Technical Education

Career and technical education is defined as a form of pedagogy that works to "increase individual opportunity in the labor market or to solve human performance problems in the workplace" (Gray & Herr, 1998, p. 4). Career and technical education, formerly known as vocational education, has a long history that extends back at least to the time when labor was divided among different groups of people. In order for society to progress, skills and techniques had to be passed down from generation to generation through some form of training. Eventually, more formal systems of training were established through guilds and apprenticeships, which allowed for concentrated on-the-job training. Finally, industrialization in America brought about mass production techniques and the deskilling of many trades (Gray & Herr, 1998).

The industrialization of American society resulted in widespread poverty for unskilled workers. Fearful of riots and crime, the country embraced the skills-employability paradigm

(Gray & Herr, 1998). According to this view, providing skills and jobs for the nation's poor would help ensure they become self-sufficient law-abiding citizens. At the beginning of the 20th century, the direction of vocational education was a topic of debate (Hyslop-Margison, 2005). On one side, John Dewey proposed that vocational education should be used to meet the needs of students by preparing them for various occupational challenges and empowering them to select personally rewarding occupational experiences. On the other side, David Snedden was a proponent of the social efficiency model of vocational education. According to this model, vocational education programs should be designed to meet specific labor market needs of American industries. This approach also involved placing students who were considered unfit for academic studies in training programs that would provide them with specific technical skills. The passage of the Smith-Hughes Act in 1917 set the direction of vocational education efforts throughout most of the 20th century. This law established separate vocational education programs supported by federal and state funding that fell in line with Snedden's social efficiency model (Hyslop-Margison, 2005).

Calls for Educational Reform

In 1983, a report titled *A Nation at Risk: The Imperative for Educational Reform* was published at the request of the federal government (National Commission on Excellence in Education, 1983). This report examined the status of the American educational system in relation to other advanced nations. The Commission found that America was at risk of falling behind other nations due to a climate of mediocrity in the educational system. The report cited falling test scores, poor academic performance, and the need for remediation for many of the country's students. *A Nation at Risk* pointed out that the world was on the verge of a scientific revolution

that would require increased science and math skills with a focus on application of technology. At the same time, America's students seemed to be falling behind in these areas.

The report suggested a series of reforms in terms of the content, expectations, use of time, and teaching methods utilized in the educational system. It suggested that schools should focus on the new basics, which included four years of English, three years of mathematics, three years of science, three years of social studies, and half a year of computer science in high school. While this study was focused more on the status of the educational system than the concerns of employers, concerns about the ability of the United States to continue to compete economically was at the heart of this study. In addition, the troubling findings from *A Nation at Risk* led to other studies that explored the status of the American workforce and the need to prepare young people for careers in an ever-changing global marketplace.

In response to *A Nation at Risk*, the National Commission on Secondary Vocational Education (1984) released its own report, *The Unfinished Agenda: The Role of Vocational Education in the High School.* While *A Nation at Risk* suggested a return to the new basics and emphasized an increased focus on academic subjects to address perceived weaknesses in the American educational system, *The Unfinished Agenda* suggested an alternate way to address these shortcomings. This report stressed the value of vocational education for all students and provided suggestions on how vocational education could be used to address these same issues. *The Unfinished Agenda* acknowledged that vocational education programs at the time were often given second-class status behind academic subjects and were often viewed as dumping grounds for students with lower ability levels. To counteract these negative views towards vocational education, the report provided a series of recommendations to improve vocational education and to integrate it in school reform efforts.

First and foremost, *The Unfinished Agenda* recommended that all secondary students need a balance of high quality academic and vocational education experiences to be properly prepared for life. It emphasized that all students should have access to a comprehensive and equitable selection of academic and vocational education course offerings. *The Unfinished Agenda* provided several recommendations to improve the content of vocational education courses. In regard to the focus on the new basics in *A Nation at Risk*, this report suggested that secondary vocational education courses should also provide instruction and practice in the basic skills of reading, writing, arithmetic, speaking, listening, and problem-solving. This report also suggested that increasing the rigor of vocational education courses and allowing them to satisfy graduation requirements would make them more attractive to all students, including the college bound. *The Unfinished Agenda* stressed that local, state, and federal leaders must work to provide adequate funding for vocational education, to promote a positive image for vocational education, to encourage articulation among all levels of education, and to increase the involvement of business, labor, and the community in the education process. The recommendations provided in this report laid the groundwork for changes to the field of vocational education.

CTE in the 21st Century

Historically, the purpose of vocational education has been to prepare students for entry-level occupations that require less than a four-year degree by providing them with specific vocational skills tied to particular professions (Hyslop-Margison, 2005; Scott & Sarkees-Wircenski, 2008). However, over the past two decades, vocational education has undergone a transformation into career and technical education (CTE) as a result of educational reform efforts and modifications to federal Perkins legislation (Schwartz, 2014; Stern, 2010). This change

coincided with a growing focus on accountability throughout the American educational system. The change from vocational education to CTE has involved a broadened approach to meeting the career needs of students. Rather than focusing only on skills needed in specific trades, CTE also stresses integration of academic skills and technical skills to prepare students for a wider range of postsecondary options including work or further education (Carl D. Perkins Career and Technical Education Improvement Act of 2006, 2006).

The American educational system underwent a significant change with the passage of the No Child Left Behind legislation in 2001. This law was intended to help close the achievement gap in American schools through the use of accountability measures, flexibility, and choice (No Child Left Behind, 2002). The law mandated that schools raise student achievement or face consequences for failure. All educational programs, including CTE, have been expected to contribute to increases in academic knowledge and skills. It was essential for CTE programs to prove that they contribute not only to workplace competencies, but also to academic proficiencies so students could improve on state-mandated assessments (Daggett, 2003). In order for CTE programs to continue to be successful in this age of accountability, they had to find ways to provide students with the competencies required of employers while also embedding academic skills in CTE courses to help meet standards of accountability.

Although in early vocational education legislation, programs were originally separated from academic programs, more recent legislation has highlighted the importance of integrating academic skills in the CTE curriculum. While this infusion of academic skills in CTE classes is beneficial from an accountability perspective, it is also consistent with reports that employers see a need for increased academic skills in their workers (Carnevale & Desrochers, 2002; Carnevale, Gainer, & Meltzer, 1990; Johnston et al., 1987; Hart Research Associates, 2013; Hart Research

Associates, 2015; Secretary's Commission on Achieving Necessary Skills [SCANS], 1991; Symonds, Schwartz, & Ferguson, 2011). In a paper outlining future directions for CTE, Lynch (2000) identified four purposes for high school CTE at the beginning of the 21st century based on research and opinion papers. These purposes include providing career exploration and planning, enhancing academic achievement and motivation to learn more, acquiring generic work competencies and skills useful for employment, and establishing pathways for continuing education and lifelong learning. More recently, Rojewski and Hill (2014) provided a framework to guide research and curriculum development to keep CTE relevant for today's 21st century workplace. They suggested that CTE should focus on three components to properly prepare students for the workplace: career navigation, work ethic, and innovation.

CTE in Georgia

Within the state of Georgia, CTE has been recognized as an important component of the state's educational system. In 2010, the passage of the Building Resourceful Individuals to Develop Georgia's Economy (BRIDGE) Act mandated that students in sixth, seventh, and eighth grades be provided with counseling, advisement, and career awareness activities to help them evaluate their academic skills and career interests. Before the end of eighth grade, each student is to have an individual graduation plan that is to be reviewed each year. This plan is to help ensure a seamless transition to postsecondary education, further training, or employment. In 2011, the Georgia General Assembly passed House Bill 186, which includes an expansion of career pathway options, a requirement that academic standards be embedded in CTE courses, and the establishment of a soft skills certification made available to high school students.

More recently, Georgia was granted a waiver from the provisions of the No Child Left Behind Act. In place of No Child Left Behind, Georgia adopted the College and Career Ready

Performance Index (CCRPI) to measure school effectiveness (Georgia Department of Education, 2011). While CTE was left out of school effectiveness measures under No Child Left Behind, CCRPI includes several items that involve CTE programs. These items include the percentage of students who complete a CTE pathway, percentage of pathway completers who earn an industry-recognized credential, percentage of graduates completing a work-based learning program or a career-related capstone project, and student enrollment in a Georgia college and career academy. These recent developments have placed CTE programs and the importance of students' career development at the forefront of educational efforts in the state of Georgia. CTE educators have been given the task of preparing students to enter the workforce, which includes providing them with the skills necessary to gain and keep a job. To meet this goal, educators must become familiar with expectations of employers, students' awareness of these expectations, and methods to bring the two into alignment.

Perceptions and Social Cognition

Perception is defined as the processes by which organisms interpret and organize sensation to produce a meaningful experience of the world (Lindsay & Norman, 1977). There are three primary approaches to the study of perception (Zebrowitz, 1990). The structuralist approach assumes that perceptions derive from basic sensations that result from interactions with the outside world. The constructivist approach suggests that perceptions are organized and constructed by the mind of the perceiver, which adds a subjective element to the field of perception. The ecological approach considers both external and internal factors in the study of perception. It assumes that external stimuli have structure and that perceptions are influenced by the perceptual experience of the perceiver.

Social perception was a key concept for this study because the student and employer respondents were asked to share their perceptions regarding the level of importance of employee attributes. The study of social perception is concerned with understanding the way an individual perceives the traits, emotions, and behavior of others (Zebrowitz, 1990). A related field of study is social cognition, which is the study of how people understand and make sense of others and themselves (Feldman, 2001). There are three main approaches to the study of social cognition. Person perception approaches to the study of social cognition deal with how individuals perceive and combine the traits of others to form overall impressions. Attribution approaches address how we come to understand the reasons behind the behavior of others. Schema approaches to social cognition consider how information is stored in memory and used to understand behavior.

Social perception and social cognition are key constructs in the study of employer expectations and the career development of students. These constructs help to explain the mental processes that lead to similarities and differences in beliefs and values. It can be expected that employers and students are likely to perceive the outside world in different ways because their past perceptual experiences are not the same. This study examined the relationship between employers' and students' perceptions of the level of importance of employee attributes in order to better understand how practitioners may help prepare students for workplace success.

Employee Attributes and Employability Skills

This study focused on analyzing the relationship between employers' and students' perceptions of the level of importance of employee attributes and how this relationship affects the career development of secondary students. An attribute is defined as a quality or feature of a person or thing (Cambridge Dictionaries Online, n.d.). Employability skills, on the other hand, refer to those skills required to acquire and retain a job (Saterfiel & McLarty, 1995). Overtoom

(2000) defined employability skills as "transferable core skill groups that represent essential functioning and enabling knowledge, skills, and attitudes required by the 21st century workplace" (p. 1). Employability skills consist of two sets of competencies: competencies that prepare people for employment and competencies in personal management/responsibility that allow them to hold and advance in a job (Carnevale, Gainer, & Meltzer, 1990).

When comparing employee attributes with employability skills, attributes is a more broad and inclusive term. Although employability skills do include specific skills, generic skills, and attitudes, they fail to include all factors that may be used by an employer to choose a job applicant. Employers may consider other applicant qualities when making hiring decisions such as willingness to relocate, membership in a fraternal organization, knowledge of the company, or mannerisms. In their study, Hager and Holland (2006) explicitly stated they chose to use the term attributes instead of skills when referring to the important qualities expected in higher education graduates because it is a more encompassing term. Employee attributes could include a variety of qualities such as skill components, attitudes, values, and dispositions. They are not limited to the more narrow definition of a skill, which is the special ability to do something (Cambridge Dictionaries Online, n.d.). Similarly, in this study, the term employee attributes was used to include a wider array of factors that employers consider when making hiring decisions.

Numerous studies have asked students or employers to share their perceptions of the importance of various skills or attributes (Bovinet, 2007; Donnangelo & Farley, 1993; Farkas, 2008; Floyd & Gordon, 1998; Gabric & McFadden, 2001; Gaedeke & Tootelian, 1989b; Hafer & Hoth, 1981; Hart Research Associates, 2015; Kelley & Gaedeke, 1990; Miguel & Foulk, 1984; Sproles & Warne, 1987). However, few studies have focused on the relationship between

perceptions of secondary students and perceptions of employers. The following section includes findings from workforce development reports that have addressed workforce skills and attributes.

Workforce Development Reports

This study explored the relationship between employers' and secondary students' perceptions of the level of importance of employee attributes. Students and employers rated the level of importance of employee attributes for entry-level job success. Students' and employers' perceptions of the level of importance of employee attributes were analyzed to determine the correlation between the perceptions of these groups. In this study, employer expectations of their employees play a central role. Since employers set the expectations for employee behavior, their perceptions of what is most important in the workplace is the standard that is used to determine if employees will be successful. The following workforce development research has attempted to identify skills and attributes employers are looking for.

In 1984, *The Quality of American High School Graduates: What Personnel Officers Say and Do about It* was published (Crain, 1984). This report revealed the responses of personnel officers to the Johns Hopkins University Survey of American Employers. Findings contradicted the warnings issued in the *A Nation at Risk* report (National Commission on Excellence in Education, 1983). The vast majority of respondents reported that they did not find it difficult to find graduates who had the basic skills necessary to do the work required of them. The study findings showed the one trait considered to be indispensable by nearly all the respondents was dependability, defined as coming to work regularly and on time. The next most important trait was having a proper attitude about work and supervisors. The third most important trait was the ability to get along well with other people. These traits were followed by basic literacy and arithmetic skills.

In the report *Workforce 2000: Work and Workers for the Twenty-first Century*, the authors predicted jobs at the end of the 20th century would require a higher level of skills than that required for previous decades (Johnston et al., 1987). This report suggested that the fastest growing occupations would require much higher math, language, and reasoning capabilities than jobs at that time. It predicted that workers who fail to acquire these skills would be more likely to have a difficult time finding work and would be limited to low-skill, low-wage employment.

In a joint effort, the U. S. Department of Commerce, U. S. Department of Education, and U. S. Department of Labor (1988) initiated a study titled *Building a Quality Workforce*. This study examined educators' and business leaders' perceptions of workforce skill deficiencies and anticipated workforce needs for the future. The study found that the economy and the workplace were changing rapidly and the jobs themselves were changing in terms of skills requirements. The perceived skills gap between workers' skill levels and needs of business was widening. Business leaders reported entry-level workers' competencies were deficient in reading, writing, communication, problem-solving, teamwork, initiative, and adaptability. These deficiencies led to a loss in productivity for the businesses and made it more difficult for them to remain competitive. In contrast, educators who participated felt their students were well-prepared for entry-level employment.

In its report *America's Choice: High Skills or Low Wages*, the National Center on Education and the Economy (1990) also addressed the issue of American competiveness in a global marketplace. In an unexpected finding, the researchers discovered that the perceived skills gap did not involve higher order thinking skills or specialized technical skills. Instead, they found the main concern of 80% of employers involved finding workers with a good work ethic and appropriate social behavior. However, the report stressed the importance of raising standards

in the educational system, switching businesses to high-performance organizational structures, and focusing on developing thinking and reasoning skills for the future workforce for the sake of remaining competitive.

Two national studies, one by the Secretary's Commission on Achieving Necessary Skills (SCANS) and one by the American Society for Training and Development (ASTD), are considered to be foundational works in identifying employability skills (Overtoom, 2000). The ASTD research team began their work in 1986 by examining the basic skills mentioned most often in the literature: reading, writing, computation, and problem solving (Carnevale, Gainer, & Meltzer, 1990). The team utilized the network of ASTD members to gain insight into skills employers were seeking. Public and private employer institutions were frequently asked to provide guidance on the ASTD's research. Out of these discussions, the researchers found that the skills sought by employers went far beyond these four basic skills. As a result, the ASTD researchers identified 16 skills that are needed in the workplace. The skills identified by the ASTD researchers included: learning to learn, reading, writing, computation, listening, oral communication, creative thinking, problem solving, self-esteem, goal setting-motivation, employability-career development, interpersonal skills, negotiation, teamwork, organizational effectiveness, and leadership.

In the other foundational report, the Secretary's Commission on Achieving Necessary Skills (1991) was asked by the Secretary of Labor to define the skills needed for employment, propose acceptable levels of proficiency, suggest ways to assess proficiency, and develop a strategy for dissemination of this information to the public. To carry out this task, the commission met with business owners, public employers, unions, workers, and supervisors to gather information related to a wide variety of jobs from manufacturing to government positions.

The commission explained that the world of work was changing due to the globalization of commerce and the growth of technology on the job. Although these changes had affected the workplace, the commission stated that the educational system had failed to adapt to these changes by modifying the way students are prepared for the world of work. To address shortcomings of the current system of workforce preparation, the report identified elements that must be taught to students.

The SCANS (1991) report stated that workplace know-how defines effective job performance. Workplace know-how consists of two elements: competencies and a foundation. According to the commission, five competencies and three-part foundation skills are necessary in all fields of employment and should be taught to all students regardless of their postsecondary plans. The three-part foundation consists of basic skills, thinking skills, and personal qualities. Basic skills include foundational academic skills including reading, writing, arithmetic, listening, and speaking. While having these basic skills will not guarantee access to a high-paying career, lacking these skills will ensure that many careers remain unattainable. Thinking skills include creative thinking, decision making, problem-solving, seeing things in the mind's eye, knowing how to learn, and reasoning. The ability to use these thinking skills allows a worker to develop the higher level workplace competencies. The personal qualities include responsibility, self-esteem, sociability, self-management, and integrity/honesty. These personal qualities are important attributes employers look for, but schools often do not teach directly.

The SCANS (1991) report explained that the five competencies represent those attributes employers seek from high-performance workers. The first competency is the ability to identify, organize, plan, and allocate resources. Resources could include time, money, material and facilities, and human resources. The second competency is the ability to work with others. This

includes working on a team, teaching others, serving clients, being a leader, negotiating, and working with diversity. The third competency is the ability to acquire and use information. The information competency includes the ability to evaluate, organize, interpret, communicate, and use technology to process information. The fourth competency, systems, is the ability to understand complex interrelationships. This competency involves understanding systems, monitoring and correcting performance, and improving and designing systems. The final competency involves the ability to work with a variety of technologies including selecting technology, applying technology to tasks, and maintaining equipment. When comparing the attributes and skills found in these two foundational reports, the sixteen ASTD skills are also listed in the SCANS report. These commonalities suggest that there is some consistency in employers' perceptions of the skills that are most needed in the workplace.

At the request of Governor Nathan Deal, the Georgia Department of Economic Development (2014) held meetings throughout the state to hear feedback from top employers as a part of the Governor's High Demand Career Initiative. The purpose of these meetings was to proactively identify and address concerns related to providing a trained, reliable, and consistent workforce to meet the needs of industry. Several key findings were included in the report that resulted from these meetings. The employers were concerned about the aging workforce and a shortage of workers for skilled trades. The employers stressed the importance of soft skills and basic educational skills. Recommendations included introducing science, technology, engineering, and mathematics (STEM) careers at an earlier age, increasing diversity in STEM career fields, increasing internships and co-op placements, and building partnerships with school systems and postsecondary institutions.

While these reports provide valuable information about the numerous skills that are required from employers in the workplace, they do not provide any indication of which particular skills are considered to be most important by employers. Research that has focused on employers' perceptions of the relative importance of employee attributes helps to identify those skills and characteristics that are essential for job seekers to possess. The next section examines this research.

Employee Attribute Studies

Numerous studies have been conducted in an effort to determine which skills and attributes are most important for workplace success. Studies have chosen to approach this question by measuring the perceptions of various groups. The following sections will review the existing employee attribute research as it relates to employers' perceptions, postsecondary students' perceptions, and secondary students' perceptions.

Perceptions of Employers

In a study of skills most important for marketing majors who are entering the workforce, employer recruiters for management, sales, and accounting positions from various industries shared their perceptions of the most sought after skills (Boatwright & Stamps, 1988). For those industries that are most relevant for marketing majors, retailing and consumer products, academic skills were considered to be less important than leadership skills, communication skills, and self-starter skills. For sales jobs, the most important skills were leadership skills and self-starter skills. Findings of this study suggest that marketing majors must consider the strength of their communications skills, leadership skills, and self-starter skills as they prepare to enter the workforce.

A similar study in the field of marketing education asked employers to identify the three most important criteria for hiring a candidate for an entry-level sales or marketing position (Gaedeke & Tootelian, 1989a). The survey found that the three most important criteria were oral communication skills, interpersonal skills, and enthusiasm/ motivation. These criteria were followed up by written communication skills and related work experience. This study also identified the greatest perceived weaknesses in college graduate applicants. The greatest weakness was a lack of communication skills, followed by unrealistic expectations of the business world and a lack of practical experience.

In 1994, the Educational Quality of the Workforce National Employer Survey was conducted to examine employers' practices in employee training, their perceptions of the quality of the workforce, and the most important factors considered in hiring decisions (Zemsky & Iannozzi, 1995). This large national survey found that employers were pleased with the skill proficiency levels of 80% of their employees. In terms of hiring decisions, the survey found employers considered attitude, communication skills, job experience, and industry credentials to be more important than academic credentials. The study recommended employers and schools work more closely together to identify skill areas that needed to be addressed.

In a report on the changing nature of the American economy, Carnevale and Desrochers (2002) explained that educational needs and skill demands changed as a result of the shift to a knowledge economy. While jobs in the past required only a narrow set of cognitive and occupational skills, jobs in the twenty-first century call for more general skills – including reasoning skills, problem-solving skills, and behavioral skills. According to this report, many new jobs in the knowledge economy require these skills because they involve more human interaction. For those who choose to enter the field of manufacturing, these skills are also

necessary because manufacturing jobs expected workers to do more than they have in the past. Since the development of these general skills is closely associated with educational attainment, employers may use educational attainment as a way to screen job applicants.

Periodically, the National Association of Manufacturers has conducted surveys to assess the status of skill levels of the American manufacturing workforce. In 2001, the survey found that U. S. manufacturers reported a persistent skills gap in the workforce (National Association of Manufacturers, 2001). The most serious shortages reported were for skilled hourly workers. When asked about the most common deficiencies in their workers, employers indicated that poor basic employability skills, including attendance, timeliness, and work ethic, were the biggest concern for hourly production workers. This was followed by poor reading/writing skills and inadequate math skills. For salaried professional workers, the most common reported deficiency was a lack of innovation/creativity, followed by poor supervisory skills and an inability to work in a team environment. The 2005 survey report stated that although the largest shortages were for technical skilled employees, more than one-third also claimed shortages of unskilled production workers (National Association of Manufacturers, 2005). Once again, the most cited skill deficiency was in the area of basic employability skills. Other areas of concern included problem-solving skills, reading skills, writing skills, and communication skills. When asked about the skills employees will need the most over the next three years, the employers' top responses included basic employability skills, technical skills, reading/writing/communication skills, and the ability to work in a team. The 2011 skills gap survey identified inadequate problem solving skills as the most serious skills deficiency in current employees (National Association of Manufacturers, 2011). Lack of basic technical training and inadequate employability skills were also areas of concern.

In an effort to explore the needs of business leaders in regard to hiring high school graduates, the Arkansas Department of Education (2006) conducted two focus groups meetings of human resource and business leaders. The research study hoped to gather information about the skills perceived to be lacking in the graduates, their perceived strengths, and current workforce needs. A majority of respondents reported that recent high school graduates were either not too well prepared or not well prepared at all to enter the workforce. The study compared complaints concerning hard skills with complaints concerning soft skills. The hard skills included writing, math, science, computer skills, and reading comprehension. The soft skills included work ethic, verbal and nonverbal communication, attendance, interview abilities, and attitude. This study found employers were more concerned with the lack of soft skills in high school graduates.

The 2006 report *Are They Really Ready to Work?* presented results of a nationwide survey of over 400 employers (Casner-Lotto & Barrington, 2006). This study focused on the skills that are most important for success in the workplace and the employers' perceptions of the skill levels of high school, technical school, two-year college, and four-year college graduates. Workplace skills were divided into basic knowledge/skills and applied skills categories. The basic knowledge/skills category includes skills generally taught in high school classes such as English, reading comprehension, writing, mathematics, science, government/economics, humanities/arts, foreign languages, and history/geography. Applied skills refers to those skills that enable workers to use basic knowledge acquired in school to perform in the workplace. The applied skills category included critical thinking/problem solving, oral communications, written communications, teamwork/collaboration, diversity, information technology, leadership, creativity/innovation, lifelong learning/self-direction, professionalism/work ethic, and

ethics/social responsibility. In general, findings showed that applied skills were more important to employers than basic skills. More specifically, the three skills rated as the most important of the applied skills were professionalism/work ethic, teamwork/collaboration, and oral communications.

A 2012 study asked 57 business executives to share their thoughts on the importance of soft skills (Robles, 2012). Each executive was asked to list the most important soft skills they wanted new employees to possess. The study analyzed their responses to identify the top ten most important soft skills for today's workplace. The final list included integrity, communication, courtesy, responsibility, social skills, positive attitude, professionalism, flexibility, teamwork, and work ethic.

In a study within the state of Georgia, the Georgia Department of Education, the Georgia Chamber of Commerce, and the Carl Vinson Institute of Government teamed up to conduct a survey of Georgia businesses. The goal of the survey was to determine what businesses believe are the most important skills and abilities students need to possess to be ready for college and careers (Carl Vinson Institute of Government, 2013). Over 6,000 respondents from across the state of Georgia participated in the survey. In addition to the electronic survey, facilitated discussions were held with industry participants to seek additional feedback regarding the survey results. The survey found that workplace honesty and accountability were rated as the most important employability skills, followed by punctuality and time management, effective communication and writing skills, respect for other people and other cultures, problem solving and working independently, adaptability to change, grooming and appearance, ability to work in teams, critical thinking, and finding and analyzing data.

Adecco USA (2014) is a staffing firm that conducted a survey of 500 senior executives across a variety of industries within the United States. This study focused on employers' perceptions of skills gaps that impact their organizations. Soft skills was the quality that was reported to be most lacking with 44% of the employers indicated this to be an area of concern. Other frequently identified skills gaps included technical skills (22%), leadership skills (14%), and computer skills (12%).

In 2015, the Washington State Human Resources Council launched a Workforce Readiness Initiative to measure employers' perceptions of soft skills (Rider & Klaeysen, 2015). The statewide survey of employers found that 90% of respondents indicated that soft skills were important as or more important than technical skills. The soft skills with the greatest impact on advancement included reliability, teamwork/interpersonal skills, and problem-solving/accountability.

Burning Glass Technologies is a labor market analytics firm based in Boston. The company collected job posting information from over 40,000 sources over the course of a year and analyzed this data to identify the skills that are most frequently requested by employers (Burning Glass Technologies, 2015). The study identified the 25 most frequently requested baseline skills and matched these skills with skill importance data from the U.S. Department of Labor's Occupational Information Network. When considering all career areas, the baseline skills that were most in demand were communication skills, organizational skills, writing, and customer service.

ManpowerGroup is an American human resource consulting firm that periodically conducts studies focused on reported talent shortages. In their *2015 U.S. Talent Shortage Survey*, the company surveyed over 5,000 hiring managers across the United States. The study found that

32% of the respondents reported facing difficulties filling jobs in 2015 and this impacted their ability to remain competitive. Rather than gathering information about the skills that were most important, this survey asked respondents to give reasons for their difficulty in filling jobs. The top reasons for hiring difficulties included lack of applicants in general, applicants with lack of experience, technical skills deficiencies, lack of industry qualifications, and lack of soft skills.

The National Association of Colleges and Employers (2014) collected surveys from 260 of their employer members to acquire data for their *2015 Job Outlook* report. When asked to identify attributes they seek on a candidate's resume, the top five responses from the employers included leadership (77.8%), ability to work in a team (77.8%), written communication skills (73.4%), problem-solving skills (70.9%), and strong work ethic (70.4%). When given a list of candidate skills and qualities and asked to rate their importance, the top rated skills/qualities were ability to work in a team structure, ability to make decisions and solve problems, ability to verbally communicate with persons inside and outside the organization, and the ability to plan, organize, and prioritize work.

Perceptions of Postsecondary Students

While a large number of studies have been conducted to measure employers' perceptions of which attributes are most important for successful employment, the number of studies that have measured student perceptions of employee attribute importance is much smaller. Of those studies that have addressed student perceptions of employee attribute importance, many chose to focus on postsecondary students rather than secondary students. Many of these studies have included marketing and business majors (Bovinet, 2007; Duke, 2002; Farkas, 2008; Floyd & Gordon, 1998; Gabric & McFadden, 2001; Gaedeke & Tootelian, 1989b; Hafer & Hoth, 1981;

Kelley & Gaedeke, 1990). Most of these studies did find some differences in employee attribute importance ratings between employers and students.

Hafer and Hoth (1981) found both employers and marketing majors identified oral communication and motivation as the two most important attributes. While the employers' ratings showed they were looking for employees who hold to a certain value system, the students seemed to believe that employers were looking for more superficial qualities such as enthusiasm, appearance, and work experience. Written communication skills were rated surprisingly low by employers in comparison with the much higher rating given by students.

Business students once again identified oral communication skills to be the top rated attribute in the study by Gaedeke and Tootelian (1989b), but employers selected enthusiasm/motivation as most important. Both students and employers selected personal attributes, entrepreneurial skills, leadership characteristics, and specialized skills over academic and social characteristics. The students' top five attributes were oral communication skills, enthusiasm/motivation, self-confidence, ambition, and entrepreneurship. The employers' top five included enthusiasm/motivation, interpersonal skills, initiative, oral communication skills, and maturity. All of the top-rated attributes for employers and students fell under the categories of leadership, entrepreneurial, and personal characteristics.

In a survey of marketing students and employers who hire marketing and marketing-related majors, participants were asked to rate the importance of 34 items that could be used as hiring criteria (Kelley & Gaedeke, 1990). Employers and students were similar in their responses. Generally, a group of criteria related to personality, communication, and technical skills were rated as most important. Employers rated the following criteria significantly higher than students: initiative, interpersonal skills, maturity, willingness to relocate, grade point

average, and reputation of the college. The students' ratings of personal appearance, membership in a professional organization, and references were significantly higher than the employers' ratings.

Employee attribute importance ratings in a study of management graduates were slightly different than the other studies (Floyd & Gordon, 1998). Employers and students ranked problem-solving skills as the most important attribute, which is perhaps an indication of the importance of this particular skill for management positions. Both groups ranked the attributes in the same order, but there were some differences in mean importance weight. Problem-solving skills were followed by communication skills, work experience, and interpersonal skills.

Another study of management graduates found that both employers and students rated general skills to be more important than technical skills (Gabric & McFadden, 2001). This study found significant differences between students and employers in their ratings of general skills, technical skills, and personality characteristics, but most of these differences were not problematic because the students' ratings were higher than the employers' ratings in each of these areas. However, there were some areas of concern. While employers ranked ethics to be the most important personality characteristic, students ranked it much lower at sixth. Students also ranked conscientiousness to be of much lower importance than employers.

A study that included only business school students asked participants to rate the importance of various skills for their future jobs (Duke, 2002). Student respondents perceived technological skills and interpersonal skills to be the most important skill areas. Student responses, although not compared to employer responses in this study, seem to contradict the many previously cited studies that affirm employers' focus on the importance of communication skills over technological skills. Similarly, in a study that compared student and employer

perceptions of the importance of technical skills, students rated these skills much higher than employer respondents (Farkas, 2008). This may indicate that students place a higher emphasis on these types of skills than employers.

A study of marketing students and marketing employers confirmed the findings of the employee attribute studies previously discussed when it found that employers believe distinct capabilities such as written and oral communication skills, critical thinking skills, and decision-making skills are most important for initial successful performance in the working world (Bovinet, 2007). In contrast, student respondents indicated in their ratings that they perceive their own work background and working style to be most important. These students rated their work experience, ability to work with people, work ethic, and positive attitude as the most important attributes.

Two studies that involved postsecondary students from outside the fields of business and marketing also found differences between the perceptions of employers and students. A study of employers and postsecondary students in the field of home economics found that employers' ratings of initiative and empathy were higher than students' ratings (Sproles & Warne, 1987). The employers and students agreed that verbal communication skills and motivation were the most important employee attributes. Donnangelo and Farley (1993) replicated the Hafer and Hoth (1981) study with freshman students at Bronx Community College in New York. While employers in both studies ranked oral communication, motivation, and initiative as the most important attributes, students in this study ranked these attributes as second, fourth, and ninth. The students overestimated the importance of punctuality, ranking it as the most important attribute, while the employers ranked it seventh.

Perceptions of Secondary Students

Studies that focus on secondary students' perceptions of employee attribute importance are much less common than studies of postsecondary students. Miguel and Foulk (1984) chose to survey high school seniors in their study of youth's perceptions of employers' hiring and performance standards. Students were able to identify those items that had the most positive influence on employers' hiring standards. At the beginning of their senior year, students did not seem to understand how poor performance, absenteeism, or high turnover rates negatively affect workers. By the end of their senior year, students indicated they had a better understanding of these negative effects. However, students underestimated the seriousness of showing up for work intoxicated, refusing to do a job, and not calling in when sick. Many student respondents also underestimated job performance standards regarding missing work during the first month of employment, complaining about work conditions, and making numerous computational errors.

In a study that examined students' awareness of how their experiences in school prepare them for the world of work, sixth and ninth grade students were asked open-ended questions about the skills they will need in their future careers (Johnson, 2000). Only half of the students were able to identify a skill area needed for career success. Those who responded to the question identified computer and technical skills, job specific skills, interpersonal skills, communication skills, and problem-solving skills. However, almost 80% of the students were able to identify at least one attitude considered essential for career success. The researchers concluded that very few of these students had a good understanding of what skills are necessary for their future careers.

The most closely related studies to the current study were conducted by doctoral students from Wayne State University. These two doctoral dissertations compared perceptions of

employers and secondary students regarding the importance of workplace skills for entry-level employment (Bialczyk, 1997; Mitchell, 2001). Both studies used the Job Analysis Form to collect data. Using this questionnaire, students and employers indicated their perceptions of the importance of the foundation skills and workplace competencies from the SCANS report (1991). Bialczyk found that students rated all the workplace skill areas higher than the employer respondents. When comparing student responses based on grade levels, 12th grade students rated basic skills and informational skills significantly higher than students in 10th and 11th grades. Mitchell's study found similar results to Bialczyk. Students rated basic skills, thinking skills, resource skills, systems and technology skills and informational skills higher than employers. However, employers' ratings of personal qualities and interpersonal skills were significantly higher than students' ratings.

Relevant Theories

This study involved research in the area of human behavior and examined perceptions of participants as they relate to a particular theory or theoretical framework. A theory is a generalized statement that allows broad conceptualization about natural events and permits predictions about events involved in the framework under observation (Osipow & Fitzgerald, 1996). The theory for this study was chosen based on the degree to which it addressed the behaviors being studied and allowed predictions to be made about the outcome of the study. In order to help make the determination of which theory was most appropriate, several related theories were considered. These theories included the Theory of Reasoned Action (Fishbein and Ajzen, 1975), the Developmental-Contextual Approach to Career Development (Vondracek, Lerner, and Schulenberg, 1986), and the Learning Theory of Career Counseling (Krumboltz, 1996).

Theory of Reasoned Action

The Theory of Reasoned Action was proposed by Fishbein and Ajzen (1975) in an attempt to explain the reasons behind human behaviors as well as to help predict behaviors before they occur. This theory is based on the assumption that humans are usually rational beings who make decisions based on the information available to them. According to this theory, individuals consider the implications of their actions before they make decisions to act in a certain way. The theory suggests that human social behaviors are not controlled by unconscious motives or overpowering desires. The Theory of Reasoned Action suggests that most actions of social relevance are under the control of the person. Therefore, it is the person's intention to perform or not perform the behavior that serves as the determinant of what actually occurs (Ajzen & Fishbein, 1980).

Since intentions determine what behavior actually occurs, it is necessary to gain an understanding of how intentions are formed in order to better understand human behavior. According to the Theory of Reasoned Action, a person's intention is based on two basic factors (Ajzen & Fishbein, 1980). The first factor is the person's attitude toward the behavior. The person will view the behavior either positively or negatively. This determination varies depending on individual viewpoints. Not every person will view a behavior the same way. The second factor that affects a person's intentions is the social pressures for or against performing a behavior. This factor, the subjective norm, is based on the perceived views of individuals who are important to the person considering the behavior. In general, if a person views a particular behavior in a positive way and believes that important others want them to perform that behavior, then they will intend to perform the behavior.

In some situations, the attitudinal factor and the normative factor are at odds with one another. In such a case, the relative importance of these factors may determine what the person's intentions will be. Therefore, two people who have the same attitude and subjective norm may have different intentions based on the relative strength of these opposing forces. By measuring attitudinal factors, normative factors, and their relative weights, it is possible to gain a better understanding of a person's intentions and why decisions are made.

To go a step further in helping to understand human behavior, the Theory of Reasoned Action also attempts to explain why people hold certain attitudes and subjective norms (Ajzen & Fishbein, 1980). Both attitudes and subjective norms are a function of beliefs. Behavioral beliefs are the beliefs that underlie a person's attitude toward a behavior. If a person believes performing a behavior will result in positive outcomes, it is more likely the person will have a positive attitude toward this behavior. Likewise, a belief that the behavior will lead to a negative outcome will result in a negative attitude toward the behavior.

Subjective norms are also connected to beliefs. However, these beliefs are normative beliefs rather than behavioral beliefs. Normative beliefs are based on a person's perceptions regarding how important others in their lives feel about a particular behavior. If a person believes that important others view the behavior in a positive or a negative way, this viewpoint will affect the person's subjective norm for that behavior accordingly.

The Theory of Reasoned Action could have served as the theoretical framework for this study because it helps to explain the connection between attitudes and behavior (Fishbein and Ajzen, 1975). The connection between attitudes and behavior is significant because it allows for predictions about future behavior based on an individual's beliefs and attitudes. When applied to this study, this theory helps to explain how the participants decided on their employee attribute

importance ratings and it allows for conclusions to be made about the significance of these decisions.

However, there are also weaknesses in applying this theory to this study. Since this theory addresses attitudes instead of perceptions, it did not fit exactly with the constructs measured in this study. Also, the Theory of Reasoned Action does not specifically address career development. While the fact that it applies to many areas could also be considered a strength, comparing this theory to other theories that directly address career development made it less relevant. In addition, the Theory of Reasoned Action does not help to explain the source behind the beliefs that lead to the behavioral intentions. While this theory is useful in predicting the ultimate behavior, it is not a good process model (Albert, Aschenbrenner, & Schmalhofer, 1989). The theory is not helpful in explaining what goes on before the decision is made or why decisions are made. Therefore, this theory was not chosen as the theoretical framework for this study.

Developmental-Contextual Approach to Career Development

The second theory considered for this study was the Developmental-Contextual Approach to Career Development (Vondracek, Lerner, & Schulenberg, 1986). This theory focuses on the area of career development. However, it is built on broader theoretical work in the general area of human development (Bronfenbrenner, 1979; Lerner, 1976). This approach was formulated in order to address perceived weaknesses in the career development theories at the time (Vondracek, Lerner, & Schulenberg, 1983). Much of the previous theoretical work focused on the process of career choice rather than career development (Super, 1980). Theories that did address career development are criticized for their simplistic approach to a complex process. These theories often ignore contextual factors that impact an individual's career development

such as family, schooling, surrounding community, and socioeconomic status. They also suggest that career development involves a progression of universal stages based on personal variables that are independent of contextual variation. In contrast to these previous models, the Developmental-Contextual Approach to Career Development chose to include these factors.

The key feature of the Developmental-Contextual Approach to Career Development is the ongoing interaction between an individual and the environment and the way this interaction affects career development (Vondracek, Lerner, & Schulenberg, 1986). Two assumptions are critical for understanding this approach. These assumptions are central to the life-span view of human development (Lerner, 1976; Lerner, Skinner, & Sorrell, 1980). First, embeddedness is the assumption that humans exist at multiple levels of analysis and factors from these levels of analysis contribute to the way humans function at any point in time. Examples of these levels of analysis include biological, cultural, societal, and community factors. The second assumption involves the concept of dynamic interaction. According to this concept, personal factors and contextual factors influence one another. While previous approaches suggested that contextual factors affect career development, the Developmental-Contextual Approach goes a step forward in stating that individuals affect their environment. This approach also suggests that contextual factors affect not only the individual, but also one another. The authors of this theory suggested that the former practice of examining isolated factors that affect career development is not as useful as this more holistic approach.

The assumptions of embeddedness and dynamic interaction hold several important implications for the Developmental-Contextual Approach to Career Development and the life-span view of human development in general (Vondracek, Lerner, & Schulenberg, 1986). The first implication is that there is a plastic nature to individual development. Since the multiple

levels of analysis of human existence are continuously affecting one another, change is possible at any level. Multiple factors affect career possibilities and as these factors change, the possibilities change as well. The second implication is that individuals have the capacity to play a part in their own career development. As previously stated, dynamic interaction includes the ability of individuals to influence contextual factors while also being influenced themselves. Therefore, individuals play an active role in determining the direction of their career development. The third implication is that intervention is possible throughout an individual's life-span. The plastic nature of individual development allows for targeted intervention to decrease negative aspects or increase positive aspects of career development. These interventions could originate from within the individual or from a contextual factor.

The Developmental-Contextual Approach to Career Development leads to the idea that individuals provide a basis for their own development by interacting with their changing context. Vondracek, Lerner, and Shulenberg (1986) created a goodness-of-fit model of person-context relations in order to help explain how the interactions between a person and the context affect development. Just as an individual brings a set of characteristics to a particular setting, the setting also brings forth a set of characteristics that place demands on the individual. These demands may be attitudes, values, or expectations held by others, they may be a consequence of behavioral attributes of others that forces the individual to adapt, or they may be physical characteristics of the setting. The individual's personal characteristics may or may not fit well with these contextual demands. The individual receives feedback from the socializing environment accordingly. Due to variability in individual characteristics and variability in contextual demands, someone who fits well in one context may not fit well in another.

Several features of the Developmental-Contextual Approach to Career Development were applicable to this study. This theory helps to explain why differences in perceptions of the level of importance of employee attributes may be detected between students and employers. Contextual differences between these groups could contribute to different views of the characteristics that are most important in the workplace. Since this approach suggests that career development is plastic, can be guided by the individual, and is open to interventions throughout the life-span, this framework appears to be a good starting point for helping students to become more aware of employer expectations in the workplace. However, there are also shortcomings of this theory. According to Super (1992), the complexity of this model tends to discourage research. The multitude of constantly changing contextual factors that can potentially impact career development make this theory difficult to test. While this theory could be beneficial for a study that is more focused on contextual factors that impact career development, it was not appropriate for this study.

Learning Theory of Career Counseling

The third theory that was considered as a framework for this study was John Krumboltz's (1996) Learning Theory of Career Counseling (LTCC). This theory was created for application in the field of career counseling to address a perceived shortage of viable career counseling theories. Krumboltz stated that career counselors have previously based their efforts on the trait-and-factor theory that arose from the three step model proposed by Parsons (1909). These three steps include: becoming aware of the individual's characteristics, becoming familiar with occupational requirements, and using true reasoning to match the individual to an occupation. The trait-and-factor approach served as the foundation for career counseling throughout the

majority of the 20th century. While the importance of this approach cannot be denied, Krumboltz suggested that it is no longer adequate for addressing modern day career counseling problems.

Krumboltz (1996) identified several criticisms of the trait-and-factor approach to career counseling that he hoped to remedy with a new theory. Overall, his argument was that the trait-and-factor approach focuses on current characteristics of the individual and matching occupations rather than focusing on growth and change. One criticism pointed out that the use of interest inventories to identify potential career choices is flawed because it channels individuals into fields of expressed interest based on limited past experience. Relying on an individual's past experience discourages exploring potential new career interests. One of the key features of Krumboltz's approach is to encourage clients to explore a wide range of possibilities and to learn as much as possible to prepare for their future careers. A key recent change in the job market is the necessity of being able to learn new skills and attitudes to keep up with the demands of the workplace (Senge, 2006). The stable nature of occupations that marked the majority of the 20th century is now a thing of the past. Krumboltz (1993) suggested that many counseling clients suffer from zeteophobia, a fear of exploring future possibilities. He hoped to alleviate these fears by introducing a new theory to guide improved career counseling efforts.

When introducing the LTCC, Krumboltz provided several main points that are critical for understanding this approach. First, counselors must help their clients to expand their capabilities and interests rather than basing their career decisions on existing characteristics. Since young people have limited experience and it is likely that their interests will change over time, counselors should help them to explore their personal characteristics and interests and provide them with guidance for further growth. As mentioned previously, Krumboltz suggested that career counselors should help people prepare for changing work tasks rather than assuming that

occupations will remain stable. The companies of today demand that their workers have the flexibility needed to adapt to a changing work environment (National Center on Education and the Economy, 2006). Career counselors must help their clients to understand how they can prepare for these changing demands of the workplace.

The next key feature of the LTCC is that those who are receiving counseling need to be empowered to take action rather than simply being given a diagnosis. The trait-and-factor approach ends when the client is given an occupational match for their personal characteristics. At that point, the client is on their own to move forward. Krumboltz's theory suggests that counselors must follow up with the client to answer their questions and help them as they explore their possibilities. The final suggestion for implementing this theory is that career counselors need to deal with all career problems, not just occupational selection. Although occupational matching has been the primary goal of career counselors in the past, there are many other areas in which clients need assistance. These areas of assistance include help with the job search, maintaining good work relationships, dealing with burnout, and providing advice on occupational advancement.

One of the helpful aspects of Krumboltz's (1996) description of the LTCC is that he provided intervention methods that could help to facilitate learning in clients. From the perspective of human capital investment, this theory is useful in that it targets optimal learning activities to help prepare youth for future careers (Krumboltz & Worthington, 1999). These interventions include career education, job club programs, study materials, simulations, goal clarification, cognitive restructuring, role-playing, and many others. In terms of this study, the intervention that involves investigating assumptions to discover disconfirming evidence is especially relevant.

Krumboltz's theory has changed several times over the past 30 years. His initial theory was based on Bandura's (1977) Social Learning Theory. Krumboltz's (1979) Social Learning Theory of Career Decision-Making helped to explain how environmental influences impact the career decision-making process. At the time, Krumboltz accepted the belief that the goal of career counselors was to help clients make career decisions based on existing characteristics (Krumboltz, 2009). Krumboltz's (1996) LTCC reflected a change in his beliefs regarding the role of career counselors. Krumboltz felt that career counselors should take a more active role in helping clients expand their capabilities and interests and empowering clients to promote their own career development. More recently, Krumboltz (2009) has taken this idea a step further with the introduction of the Happenstance Learning Theory. The Happenstance Learning Theory calls for career counselors to teach clients to engage in exploratory actions that may lead to beneficial unplanned events in their lives. According to this most recent theory, success in counseling should be measured based on what a client can accomplish in the real world outside of a counseling session. While the Happenstance Learning Theory provides strategies that career counselors can use to help clients identify and take advantage of life experiences in their career development, the LTCC was more applicable to this study because it is more focused on intervention strategies that career counselors can use to promote client learning. This characteristic made the LTCC a more suitable theoretical framework for this study than Krumboltz's other theories.

When applied to this study, the Learning Theory of Career Counseling provided yet another viable theoretical framework to help understand the behaviors of the participants (Krumboltz, 1996). According to this career counseling approach, the focus of career counselors should be to promote client learning. This study also focused on assessing and promoting client

learning in preparation for their future careers. In this study, an instrument was used to measure the perceptions of students and employers regarding the level of importance of various employee attributes. This data was used to examine the relationship between employers' and students' perceptions. The resulting information gained from this study can be used as a starting point for promoting further learning. By participating in the study and being given feedback on how their perceptions relate to the perceptions of local employers, the students are forced to challenge their existing assumptions about the values of the workplace. For some students, their assumptions will be confirmed. Others will learn that their previous assumptions were incorrect and they will be given the opportunity to adjust their perceptions of the level of importance of employee attributes.

The Learning Theory of Career Counseling was an appropriate theoretical framework for this study because the features of the study correspond well with Krumboltz's criteria for improving career counseling practice. The study focused on expanding the capabilities of students by assessing and comparing their perceptions of the level of importance of employee attributes with the perceptions of employers. The results of this study can be used to prepare students for the changing work environment by providing them with information about the attributes employers are seeking. Although perceptions regarding the level of importance of employee attributes have been measured in the past, it is necessary to occasionally reassess the perceptions of employers so students are not being provided with outdated information about employer expectations. The students will be provided with feedback from the study so that they may be empowered to take action in preparation for their future careers. Follow up is critical to ensure that students learn and apply that knowledge. This process of allowing students to learn about employer expectations is a good example of what Krumboltz considered to be effective

career counseling practice because it addresses an issue beyond the most basic elements of occupational selection. While occupational selection is an important part of the career counseling program for Madison County students, they also need to be given guidance on the attributes employers are seeking.

Rationale for Theory Selection

The chosen theory had to represent the conceptual framework for the study and provide a model for how it should be conducted (Nasser, 2001). The selected theory had to help explain the behavior that was being measured in the study. Each of the described theories had positive and negative characteristics in terms of how well they relate to this study. The theory that was most suitable for the study was the one that addressed career preparation of secondary students, which was the focus of this research.

The LTCC was more relevant to this study than the Theory of Reasoned Action and the Developmental-Contextual Approach to Career Development because it addressed the issue of career preparation (Krumboltz, 1996). This theory was connected to the study because it stressed the importance of implementing interventions designed to help prepare young people for the changing world of work. The examination of the relationship of students' and employers' employee attribute importance ratings served as a career counseling intervention because it can be used to allow students to test their assumptions about values in the workplace. The presentation of the findings can be used to help them adjust their perceptions so that they will be more prepared for the workplace. This active approach to helping young people prepare for their careers is consistent with the guiding principles put forth in the LTCC.

The LTCC served as the theoretical framework for this study (Krumboltz, 1996). This theory suggests that proper career counseling activities include helping young people to better

understand the changing expectations of employers. It also suggests that students learn when they are given the opportunity to challenge their assumptions about the workplace. These principles were in direct alignment with the goal of this study, which was to help students prepare for their careers by providing them with up-to-date information about employer expectations and by testing their assumptions about what employers are looking for in the real world.

CHAPTER 3

METHOD

This chapter explains the research methodology used to measure and analyze perceptions of employers and students regarding the level of importance of employee attributes for entry-level workplace success. The chapter consists of eight sections: purpose statement, research questions, design, participants, instrumentation, procedure, and data analysis.

Purpose Statement

The purpose of this correlational study was to identify employee attributes most important for entry-level workplace success and to examine the relationship between employers' and students' perceptions of the level of importance of employee attributes. Employers in Madison County, Georgia and Madison County High School students were asked to rate the level of importance of a list of employee attributes. Ratings were used to determine which skills are most important for entry-level workplace success according to employers and students. This study also examined students' and employers' ratings of the level of importance of each attribute to explore the nature of the relationship between perceptions of these two groups.

Research Questions

The following research questions were addressed in the study:

1. What are students' perceptions of employee attributes?
2. What are employers' perceptions of employee attributes?
3. Is there a relationship between employers' and students' perceptions of employee attributes?

4. Is there a relationship between underclassmen and upperclassmen students' perceptions of employee attributes?
5. Is there a relationship between students with and without work experience in regard to their perceptions of employee attributes?

Design

Research questions for this study were developed to measure and examine the relationship between employers' and students' perceptions of the level of importance of employee attributes. Research designs were considered and methods were chosen based on their appropriateness for addressing these research questions. The first two research questions called for descriptions of students' and employers' perceptions of the level of importance of employee attributes. The three final research questions called for analyses of the relationships between the perceptions of the level of importance of employee attributes of students and employers, upperclassmen and underclassmen students, and students with and without work experience.

Since this study was focused on investigating the relationships between these various groups, a correlational research design was chosen (Ary, Jacobs, & Razavieh, 2002; Drew, Hardman, & Hosp, 2008). Correlational research is helpful in gaining a better understanding of human behavior because it allows for an analysis of the simple relationships between the factors that impact phenomena in question (Cohen, Manion, & Morrison, 2000). An advantage of correlational designs is that they provide information about the strength of the relationships between the variables being studied (Gall et al., 2007).

To answer the research questions for this study, data measuring perceptions of secondary students and employers regarding the level of importance of employee attributes needed for entry-level employment were collected and analyzed. A survey instrument was chosen to collect

the data. Surveys involve asking questions of a sample of individuals who represent the group or groups being studied (Drew, Hardman, & Hosp, 2008). There are typically three main reasons individuals or organizations utilize surveys: to influence or persuade an audience, to create or modify a product or service, or to understand or predict human behavior or conditions for academic or professional purposes (Alreck & Settle, 1995). Since this study was focused on gaining a better understanding of human behavior in terms of career preparation, a survey method was chosen as the means of gathering data.

Gall, Gall, and Borg (2007) defined a survey as a form of data collection that uses questionnaires or interviews to collect information from a sample that will allow the researcher to make generalizations about a larger population. This study utilized questionnaires to collect data. Questionnaires are used extensively in educational research to collect data about non-observable phenomena such as opinions and values, and, in printed forms, ask the same questions of all individuals in the sample and allow respondents to record their answers (Gall et al., 2007). In the case of this study, the non-observable phenomena included students' and employers' perceptions of the level of employee attribute importance.

There are both advantages and disadvantages to using questionnaires as a method of data collection. Compared to interviews, questionnaires cost less to administer to respondents over a wide geographic area and take less time to collect data (Blackstone, 2012; Gall et al., 2007). This makes questionnaires well-suited for studies that involve a large number of respondents. Survey research is also a reliable method of inquiry because questions are standardized in the way they are presented to participants (Blackstone, 2012; Drew, Hardman, & Hosp, 2008). Disadvantages of questionnaires include that they do not allow researchers to probe deeply into the beliefs of the respondents and items cannot be modified if they are unclear to the respondents (Blackstone,

2012). Additionally, the development and administration of questionnaires can present challenges. Questionnaires must be developed carefully and piloted tested for clarity and objectivity.

The two primary methods of questionnaire delivery include written and web-based forms. There are advantages and disadvantages to each of these methods (Ayiro, 2012; Drew, Hardman, & Hosp, 2008). Web-based questionnaires are inexpensive, allow for an easy response, and tend to result in a reduced response time. A disadvantage of web-based questionnaires is the sample is limited to those who have access to computers. Written questionnaires provide the advantage of convenience for respondents because they can be completed at the time and place of their choosing (Ayiro, 2012). When mailed, written questionnaires tend to have low response rates and could involve high costs to ensure a good response rate (Drew, Hardman, & Hosp, 2008). In preparation for this study, the advantages and disadvantages of several survey methods were taken into consideration. Since this study examined the perceptions of hundreds of Madison County students and employers, a paper questionnaire was selected as the most appropriate method of data collection due to the efficiency of data collection and the availability of mailing addresses for a large quantity of Madison County employers.

Several data analysis techniques were combined to address the research questions. First, simple descriptive statistics were used to present respondents' answers to the survey items. Descriptive statistics, such as measures of central tendency and measure of variability, were used to describe the data (Howell, 2007). The purpose of descriptive statistics is to describe information collected as accurately and as succinctly as possible (Howitt & Cramer, 2005). In this study, descriptive statistics helped to present an overview of the various perceptions of the level of employee attribute importance. After examining characteristics of the data, additional

statistical methods were needed to examine the relationship between students' and employers' perceptions of the level of the importance of employee attributes. Correlational statistics provide information about the relationship between two sets of scores (Ary, Jacobs, & Razavieh, 2002). They indicate if a positive or negative relationship exists between the scores as well as the strength of any association. The use of correlational statistics made it possible to determine if relationships existed between employers and students, between upperclassmen and underclassmen students, and between students with and without work experience in terms of their perceptions of the level of importance of employee attributes while also determining the strength and direction of these relationships.

Participants

This study was conducted in Madison County, Georgia, a rural county northeast of Athens, Georgia with a population of 28,441 residents (U. S. Census Bureau, 2015). This study included two populations within Madison County. A population is considered to be any group that shares a set of common traits (Black, 1999). Using this definition, the two populations included in this study were the students of Madison County High School and employers of Madison County.

A sample survey studies only a portion of the target population (Ary, Jacobs, & Razavieh, 2002). Sampling is defined as the process of selecting some elements from a population to represent that population (Ayiro, 2012). In contrast, census surveys attempt to cover the entire population of interest (Ary, Jacobs, & Razavieh, 2002). Since the sizes of the populations for this study were rather small and accessible, this study attempted to include as many members of the student and employer populations as possible by taking a census approach.

Student participants were drawn from the student population of Madison County High School during the 2012-2013 school year. Madison County High School enrollment during the 2012-2013 school year was 1,456 students. Students enrolled in ninth through twelfth grades were asked to participate in the study during an enrichment session during the regular school day. All students were given parental permission forms to be completed and returned the following day. All students who returned the forms with parental permission were asked to participate in the study. Only students who were enrolled in classes on the Madison County High School campus were asked to participate. This excluded 11 students enrolled in alternative school and seven students who were being served through at-home placement.

Employer participants were drawn from the population of all Madison County employers. An effort was made to include all known employers within the county. According to the Area Labor Profile from the Georgia Department of Labor (2012), there were 411 employers within Madison County at the time the survey was mailed. This data was provided by the Georgia Department of Labor and is based on employers who are covered by unemployment insurance laws. However, the most extensive listing of Madison County employers was provided by the Georgia LaborMarket Explorer (2011) website, which listed 626 employers in Madison County at the time of the survey. In order to include as many employers as possible, the LaborMarket Explorer list was utilized when mailing questionnaires to the population of employers. Private sector and government employers were included in the study to ensure views of all types of employers were considered.

A sufficient number of respondents is necessary to achieve good population validity by reducing the probability that respondents are different from the population they represent (Gall et al., 2007). According to the LaborMarket Explorer's (2011) list of employers, there were 626

employers in Madison County when the list of employers was compiled. During data collection, seven of the questionnaires were returned by employers who claimed to be out of business. This reduced the employer population to 619 employers. The total number of completed employer questionnaires was 157, which resulted in an employer response rate of 25%. The population of Madison County High School included 1,456 students enrolled during the 2012-2013 school year. The total number of completed student questionnaires was 306, which resulted in a student response rate of 21%.

Demographic statistics for Madison County High School revealed that the student population was similar to the county as a whole in terms of race/ethnic background (Georgia Department of Education, 2012). The student body's race/ethnicity statistics showed that the students were 82% white, 11% black or African American, 3% Hispanic or Latino, 3% multiracial, and 1% Asian. In comparison, the race/ethnicity statistics for the population of the state of Georgia were 63% white, 31% black or African American, 9% Hispanic or Latino, 2% multiracial, and 4% Asian (U. S. Census Bureau, 2012). When comparing the racial/ethnic makeup of Madison County High School with students across the state of Georgia, the school population had a less diverse population. In terms of gender, the Madison County High School student population was 51% male and 49% female. The student population consisted of Students with disabilities made up 13% of the student population while 1% was categorized as having limited English proficiency. The percentage of students who were eligible for free/reduced lunch was 57%, which was slightly lower than the state average of 60% (Georgia Department of Education, 2015b).

During 2012, 58% of Madison County residents were considered to be part of the labor force because they were either employed or actively seeking employment (Georgia Department

of Labor, 2012). This amounts to a labor force of 16,365 workers. The unemployment rate for these members of the labor force was 6.8%, which is lower than the state average of 9.0% at that time. Goods-producing firms accounted for 17.7% of the jobs within the county. The manufacturing field was the largest of the goods-producing categories representing 8.4% of total employment. Service-providing employers made up 39.9% of the total employment. Retail trade contributed 13.7% of these jobs while health care and social assistance accounted for 7.5%. By far, the largest employer in the county was the local government, which accounted for 38.5% of the employment in the county. Commuting patterns showed that 43.7% of employed Madison County residents worked in Athens-Clarke County compared to only 32.1% who worked within the county.

Madison County is located in the northeast Georgia Workforce Investment Area, which includes 12 counties in northeast Georgia in and around the city of Athens. Employment projections for this geographic area predicted occupational trends to the year 2020 (Georgia Department of Labor, n.d.). This information is helpful when considering viable job and career opportunities for Madison County students. According to these employment projections, northeast Georgia's list of fastest growing occupations has a large number of positions that are considered to have fast job growth, high wages, and a large number of job openings. Six of the fastest growing occupations are in the construction and extraction services field. Industries with the most job growth include educational services, health care services, and the food service industry. Occupations that have the most annual openings include cashiers, retail salespersons, food service workers, freight and material movers, registered nurses, and truck drivers (Georgia Department of Labor, n.d.). Most of these occupations pay less than average wages. Three

occupations that have fast job growth, high wages, and plentiful job openings include registered nurses, elementary school teachers, and supervisors of office and administrative support workers.

Instrumentation

A paper questionnaire was chosen as the instrument for data collection. There were several reasons why this type of instrument was chosen. Questionnaires are appropriate for studies with multiple items that are too much to be read over the phone or in an interview, they allow for investigation of constructs that are not observable, and they can be used with a large population (Nardi, 2006). The chosen instrument for this study was based on a survey developed by Hafer and Hoth (1981) to measure perceptions of employers and postsecondary business students regarding the importance of employee attributes. The original instrument, which is no longer available, asked respondents to rate the importance of 26 job selection attributes using a 5-point Likert scale. The new instrument used for this study modified the original items so that they were more suitable for secondary students, changed the response scale to improve measurement of the criterion variable, and added demographic data questions.

Attributes chosen for the instrument in the Hafer and Hoth (1981) study originated from the work of Schneider (1978), who created a list of 34 potential hiring criteria for a survey of marketing and sales managers. Hafer and Hoth (1981) modified the list so it would be applicable to other areas of business. From Schneider's original list of 34 criteria, Hafer and Hoth decided to include the following 13 attributes: appearance, disposition, mannerisms, maturity, school reputation, hobbies, punctuality, oral communication, written communication, extroversion, social activities, sports participation and fraternal organizations. To this list of attributes, Hafer and Hoth added age, assertiveness, community involvement, enthusiasm, grades, initiative, knowledge of company, leadership, loyalty, motivation, work experience, willingness to relocate,

and marital status to create a total of 26 items. In 1982, Holland and Herron replicated the Hafer and Hoth (1981) study with MBA students, but made slight modifications to the list of attributes. Social activities, sports participation, and fraternal organizations were replaced with school-age children, self-confidence, and sex.

When creating the new instrument, changes were made to the list of attributes to ensure they were appropriate for this study and took into consideration the age of the student participants. Gender was used to replace sex because it refers to the cultural identity of an individual as male or female rather than biological differences (American Psychological Association, 2010). Willingness to relocate and marital status were removed from the list of attributes and computer skills and technical skills were added. To help ensure respondents understood the meaning of the employee attributes listed, two items were modified to simplify the terminology. Disposition was replaced with mood and extroversion was replaced with outgoing personality. In addition, each attribute included a description to clarify its meaning. After making these modifications, the final list of 26 attributes included the following items: oral communication, motivation, initiative, assertiveness, loyalty, leadership, maturity, enthusiasm, punctuality, appearance, written communication, work experience, grades, mood, outgoing personality, mannerisms, computer skills, school reputation, social activities, knowledge of company, community involvement, age, hobbies, technical skills, self-confidence, and gender.

Both the student and employer versions of the survey instrument began with a brief explanation of why the survey was being conducted (see Appendices A and B for employer questionnaire and student questionnaire). To encourage participation in a survey, the first questions on a survey should be especially interesting, easy to interpret, and clearly related to the topic under consideration (Ary, Jacobs, and Razavieh, 2002). Therefore, the introduction was

immediately followed by the rating of employee attributes. Although some surveys begin with demographic data collection, this section was placed at the end of the instrument due to concerns about fatigue and because most survey takers prefer to save these easily answered items for the end (Nardi, 2006). For the employee attribute rating section, employers were directed to rate attributes according to what they perceive to be most important for workplace success of entry-level workers. The student version of the survey asked participants to imagine they were employers of entry-level workers. They were directed to rate the attributes based on what real employers perceive is most important for workplace success of entry-level workers. The 26 employee attributes on the two versions of the instrument were identical. Respondents were asked to rate the level of importance of the items using a 6-point Likert scale ranging from "not at all important" to "extremely important." The response choices included 1 = not at all important, 2 = low importance, 3 = slightly important, 4 = moderately important, 5 = very important, and 6 = extremely important. A 6-point scale was used instead of an odd-numbered scale because of respondents' tendency to choose a neutral middle ground when given that option (Nardi, 2006). The use of an even-numbered scale requires the respondents to make a decision for each rating (Cohen, Manion, and Morrison, 2000). While a neutral middle ground should be offered if that option has meaning and value for the construct being measured, this was not the case for the measure of the level of importance of employee attributes (Black, 1999).

Following the ranking of employee attributes, respondents answered a series of demographic questions which differed between the employers and the students. Employers were asked about their gender, business size, industry, employment status, hiring experience, and their perceptions of recent high school graduates in the workforce. The final item on the employer questionnaire offered respondents an opportunity to share their thoughts on the skills or qualities

that are most lacking in recent high school graduates who attempt to enter the workforce. The demographic section of the student questionnaire asked respondents to indicate their grade level, gender, race/ethnicity, and amount of work experience.

Validity and Reliability

This study combined a variety of survey items from previous studies while also adding new employee attribute items and demographic questions. The resulting survey instrument was a new questionnaire that had yet to be tested for validity and reliability. The validity and reliability of an instrument must be established and taken into consideration in a research study. If research data is collected with an instrument that is not valid or reliable, one can have little faith in the results obtained or the conclusions that are made (Ary, Jacobs, & Razavieh, 2002).

Validity is defined as the degree to which a procedure produces genuine and credible information (Sommer & Sommer, 2002). Validity can be divided into internal and external validity. Internal validity is the degree to which a procedure measures what it is supposed to measure while external validity refers to the generalizability of the findings. Within these two broad categories, there are several types of validity to be considered. First, an instrument is said to have face validity if the content appears to be appropriate for the purpose of the instrument (Gloeckner, Gliner, Tochterman, & Morgan, 2001). In the case of the Hafer and Hoth (1981) survey, a brief review of the attributes and the fact that this instrument has been used in multiple studies of employee attribute importance suggests that the instrument has face validity (Donnangelo & Farley, 1993; Peppas, 2002; Peppas, Peppas, & Jin, 2001).

A closely related concept, content validity, is determined by the degree to which an instrument measures what it is intended to measure. While statistical measures can be used to calculate content validity for tests that have right and wrong answers, this did not apply to the

instrument used for this study. Content validity in this case had to be determined through human judgment (Gloeckner, Gliner, Tochterman, & Morgan, 2001). Peppas, Peppas, and Jin (2001) found Hafer and Hoth's (1981) list of employee attributes to be one of the most comprehensive lists of employee attributes available. To evaluate the validity of the new instrument, the questionnaire was reviewed by a panel of three CTE instructors prior to pilot testing to ensure that they were appropriate for this study. The CTE instructors who participated represented a variety of career-related subject areas including construction, business, and early childhood education. This group took into consideration the appropriateness of the items that were included and the clarity of the instructions. There was some discussion about items that were perceived to be similar in nature. These items included enthusiasm, outgoing personality, and leadership. The panel ultimately decided that all three of the items were distinct, appropriate, and should be included on the instrument. A slight modification to the wording of the instructions on the student version of the questionnaire was suggested and this change was made.

Pilot Test

After items on the instrument underwent an initial review, a pilot test was conducted with a small group of Madison County High School students and Madison County employers. This process allowed for an initial observed administration in a controlled setting while also providing a realistic simulation of the main study (Gillham, 2000). Students enrolled in four CTE classes were asked to participate in the pilot study. Those who returned parental permission forms were allowed to take the survey in a small group setting (see Appendix C for parental permission form). The recruitment of students for the pilot test continued until 30 students took the survey. Before taking the survey, students were asked to identify any concerns or questions they had regarding the content or format of the survey. Following the administration of the survey, student

feedback indicated that the survey content and directions were clear and easy to understand. The students did not provide any suggestions for improvement. The pilot test of the employer survey was identical to the format of the main administration with the exception of a note enclosed in the mailing (see Appendices D and E for employer pilot test note and employers' cover letter). The note explained to employer participants that they were participating in a pilot test and requested that they include comments and concerns regarding the format and content of the survey. Thirty Madison County employers were chosen to participate in the pilot test. Eight of the surveys were returned after the first mailing. An additional eight surveys were returned after the second mailing for a pilot study response rate of 53%. None of the survey respondents indicated questions or concerns about the format or content of the instrument.

In addition to the consideration of the validity of the survey instrument used in this study, the reliability of the instrument was also evaluated. The reliability of an instrument refers to the degree to which measurement error is absent from the scores yielded by the instrument (Gall et al., 2007). Reliability is also an important contributor to validity (Sommer & Sommer, 2002). It is possible to have a reliable instrument that is not valid, but it is not possible to have a valid instrument that is not reliable (Black, 1999).

One form of reliability testing is checking for consistency between two administrations of the same instrument with the same subject. This is referred to as a measure of stability, or test-retest reliability (Black, 1999). A reliable instrument should produce a similar result if it is administered to the same person twice. A commonly used method for calculating test-retest reliability is the Pearson product moment correlation, which is used when both sets of scores to be correlated are continuous (Black, 1999). This method measures the correlation between the initial survey administration and the second survey administration. A high correlation would

suggest the data is stable over time. Since high correlations between scores tend to be more meaningful if the time between administrations is longer, the first and second administrations should take place at least two weeks apart (Huck & Cormier, 1996). After the pilot test was conducted, a separate test-retest reliability trial took place with the final instrument. The student participants included 18 high school students enrolled in a family and consumer science class who were present for both of the test-retest survey administrations. The employer participants included 14 members of the business community who agreed to participate in test-retest sessions held during Madison County Rotary Club meetings. The student and employer test-retest sessions were held two weeks apart. Using Pearson's *r*, the test-retest administrations of the survey instrument resulted in a reliability coefficient of .81. In general, tests that yield scores of .80 or higher are considered sufficiently reliable for most research studies (Gall et al., 2007).

Internal consistency is another measure of reliability and reflects the degree to which the parts of an instrument measure the same thing (Huck & Cormier, 1996). The most basic way to check for internal consistency is to calculate a coefficient that takes into account the average correlation among all the items and the number of total items. Cronbach's alpha coefficient is considered to be a reasonable indicator of internal consistency for instruments that do not have right or wrong answers, such as a Likert scale (Oppenheim, 1992). During the pilot testing phase, a Cronbach's alpha coefficient was calculated based on the student and employer pilot survey data. A Cronbach's alpha coefficient that is equal to or greater than 0.70 indicates an instrument with an acceptable level of internal consistency (de Vaus, 2002). The Cronbach's alpha coefficient of the pilot survey data was 0.90, which indicated a high level of internal consistency. Once all data was collected, a second Cronbach's alpha measurement was calculated using all

responses. The resulting Cronbach's alpha coefficient was .89, again showing a high level of internal consistency.

Procedure

Procedures for this study involved obtaining permission to conduct the study, preparing and pilot testing the survey instrument, selecting a sample, conducting the survey, and analyzing the results. The first step was to gain permission to conduct the study. Permission to utilize and modify the original survey instrument from the Hafer and Hoth (1981) study was obtained from Dr. John Hafer (see Appendix F for instrument permission email). Once permission was granted to conduct this study by the advisory committee of University of Georgia faculty members, written permission to conduct the survey from the principal of Madison County High School was also obtained (see Appendix G for MCHS permission letter). This authorization was submitted to the University of Georgia Institutional Review Board (IRB) along with an application to obtain permission to conduct a study using human subjects (see Appendix H for IRB approval). After gaining IRB approval, the Madison County School District implemented a new approval process for conducting research studies within the system. All study materials were submitted to the central office and permission was granted (see Appendix I for Madison County School District permission letter).

Once necessary permissions were granted, the survey instrument, employers' cover letter, and parents' permission letter were produced and reviewed by a panel of three CTE instructors. This panel reviewed the survey items, the clarity of the directions, and the content of the letters to ensure they were appropriate for this study. The cover letter and parental permission letter explained the project and attempted to win the cooperation of the recipients (Alreck & Settle, 1995). In order to show appreciation to the participants for their involvement in the study, free

admission passes to a Madison County High School home football game were produced. Research has shown that token incentives consistently increase response rate of surveys (Ary, Jacobs, & Razavieh, 2002). This inducement was included with the survey instrument in the initial mailing for employers and given to all students who returned permission letters and reported to the survey site. To ensure alignment with IRB guidelines for the use of incentives, the football passes were given to all potential participants rather than being given based on completion of the survey instrument (University of Georgia Institutional Review Board, 2015).

The survey instrument was then pilot tested to help identify any concerns that needed to be addressed before the main administration. The pilot test included 30 students and 30 employers. Student participation required parental permission. Permission forms were sent home with students enrolled in three CTE courses. The first 30 students who returned the permission forms participated in the pilot study. Thirty active employers were chosen from the employer mailing list to participate in the pilot study. An initial mailing including an explanation of the pilot study was mailed to these employers. Eight surveys were returned after the first mailing. A second mailing was sent three weeks after the initial mailing and an additional eight surveys were returned. The pilot study data was analyzed using Microsoft Excel to calculate descriptive statistics and to run point-biserial correlations comparing the student and employer responses. The pilot test data analysis showed statistically significant differences between the responses of students and employers for two of the 26 employee attributes. The employer respondents reported higher importance ratings for appearance and enthusiasm than the students.

Using employer data from the LaborMarket Explorer (2011) website, the employer questionnaires were prepared for mailing. All employers were assigned codes so non-responders could be identified and mailed a second questionnaire. Each employer questionnaire and return

envelope was coded accordingly. These codes were destroyed after the study was complete to protect the confidentiality of respondents. Once they were prepared, the first mailing of employer questionnaires was sent out in September 2012. The first mailing resulted in 103 completed surveys and 60 returned envelopes due to incorrect addresses. Eight respondents declined to participate because they were out of business or not an employer and one indicated he chose not to participate. Since follow-up mailings are helpful in achieving response rates similar to those obtained by telephone or personal questionnaires, an additional mailing was planned (de Vaus, 2002). After attempting to correct addresses on returned envelopes, the second mailing occurred two months after the first mailing in November 2012. The second mailing resulted in an additional 45 completed surveys and 15 returned envelopes. After two mailings, 148 employer surveys were collected. Since this number was less than the required sample size of 238, a third mailing was attempted in June 2013 to improve the response rate. The third mailing of employer questionnaires again included the MCHS football pass incentive to encourage participation. The final mailing resulted in nine completed surveys and 21 returned envelopes. The total number of completed employer questionnaires was 157, which resulted in a response rate of 25%.

Madison County High School students were invited to participate in the study by the researcher via a school-wide announcement. A script was read over the school intercom at the beginning of a 2nd period class (see Appendix J for intercom script). The script explained the purpose of the study, the incentive for participation, and directions for obtaining parental permission to participate. The announcement directed teachers to give each student two permission forms. The students were asked to keep one copy of the permission form for their records and to return the other completed form to their 2nd period teacher if they wished to

participate. Forms were collected from the 2nd period teachers over several days by the researcher. Completed permission forms were collected for 346 students.

All students who returned permission forms were asked to participate in the survey administration in the school cafeteria during two enrichment periods in consecutive weeks. The students who submitted permission forms were divided into two groups based on last name. Each group received a typed notification of their assigned survey administration date and time. During each administration, students reported to the school cafeteria to participate in the survey. Students under the age of 18 received two copies of the minor assent form (see Appendix K for Minor Assent Form). Students over the age of 18 received two copies of the consent form (see Appendix L for Consent Form). They were instructed to sign both copies of the form they received and to turn in one copy if they chose to participate in the study. After submitting the assent or consent form, each student received a copy of the survey instrument. The researcher read the survey instructions aloud to each group before the survey began. After each administration, the questionnaires were collected and all students who reported to the survey site were given a pass to a MCHS home football game.

After the first two administrations of the student questionnaire, 282 completed questionnaires were collected. Since this total was less than the required minimum sample size of 306, a third administration was planned. Invitations were sent out to all students who submitted permission forms, but failed to report to the survey administration site for the first two administrations. The final administration of the student questionnaire yielded 24 additional completed questionnaires, bringing the total number of student respondents up to the minimum sample size required.

Data Analysis

The purpose of this correlational study was to identify employee attributes most important for entry-level workplace success and to examine the relationship between employers' and students' perceptions of the level of importance of employee attributes. Employee attribute ratings were used to determine the relative importance of the attributes according to perceptions of students and employers. Ratings of the attributes underwent correlational analysis to examine the relationship between perceptions of Madison County employers and Madison County High School students for each attribute.

Five research questions guided data collection and analysis for this study. Table 1 describes each research question, predictor variables, criterion variables, and statistical tests that were used. The criterion variable for this study was perceptions of the level of importance of employee attributes for entry-level workplace success. Predictor variables for this study included the 26 employee attributes, the respondents' status as a student or employer, the students' grade levels, and the students' work experience.

Data analysis for the first two research questions involved the use of descriptive statistics to report frequencies, means, and standard deviations based on the students' and employers' responses. Although less complex than some other statistical methods, the use of descriptive statistics to offer more explicit information can be beneficial in enhancing the outcomes of quantitative research (Black, 1999). Descriptive statistics help convey the respondents' perceptions of the level of importance of each employee attribute.

The first research question examined student respondents' perceptions of the level of employee attribute importance as measured using a continuous 6-point Likert scale ranging from 1 = not at all important to 6 = extremely important. To address this research question, the

Table 1

Data Analysis Matrix

Research Question	Predictor Variables	Criterion Variables	Statistical Analysis
1. What are students' perceptions of employee attributes?	26 employee attributes Categorical	Perceptions of the level of importance of employee attributes for entry-level workplace success (1 = not at all important to 6 = extremely important) Continuous	Frequencies Means St. deviations
2. What are employers' perceptions of employee attributes?	26 employee attributes Categorical	Perceptions of the level of importance of employee attributes for entry-level workplace success (1 = not at all important to 6 = extremely important) Continuous	Frequencies Means St. deviations
3. Is there a relationship between employers' and students' perceptions of employee attributes?	Status (employer or student) Categorical	Perceptions of the level of importance of employee attributes for entry-level workplace success (1 = not at all important to 6 = extremely important) Continuous	Point-biserial correlations
4. Is there a relationship between underclassmen and upperclassmen students' perceptions of employee attributes?	Grade level (9-10 = underclassmen, 11-12 = upperclassmen) Categorical	Perceptions of the level of importance of employee attributes for entry-level workplace success (1 = not at all important to 6 = extremely important) Continuous	Point-biserial correlations
5. Is there a relationship between students with and without work experience in regard to their perceptions of employee attributes?	Work experience (No experience, some work experience) Categorical	Perceptions of the level of importance of employee attributes for entry-level workplace success (1 = not at all important to 6 = extremely important) Continuous	Point-biserial correlations

frequency, mean, and standard deviation for each attribute's ratings from the student surveys were calculated. The second research question examined employer respondents' perceptions of the level of employee attribute importance using the same 6-point Likert scale. Once again, the frequency, mean, and standard deviation for each attribute's ratings were calculated based on the employer's responses.

The remaining three research questions examined relationships between various groups' perceptions of the level of importance of employee attributes. A correlational design was chosen to examine these relationships because correlational research is used to clarify our understanding of phenomena by identifying relationships among variables (Fraenkel, Wallen, & Hyun, 2012). Correlational procedures are statistical techniques used for determining if there is a relationship between pairs of scores (Ary, Jacobs, & Razavieh, 2002). This is accomplished by calculating a correlation coefficient for the sets of scores that can range between 1 and -1 (Mertens, 2010). The closer this coefficient is to +/- 1.00, the stronger the relationship between variables. A positive correlation coefficient indicates that the two variables fluctuate in the same direction while a negative correlation coefficient indicates the variables fluctuate in opposite directions (Cohen, Manion, & Morrison, 2000). The Pearson product moment coefficient of correlation, or Pearson's *r,* is one of the most commonly used measures of association (Cohen, Manion, & Morrison, 2000). A variation of Pearson's *r* was used in this study because the correlations involved a continuous criterion variable and categorical dichotomous predictor variables. The point-biserial correlation, r_{pb}, is a mathematical simplification of Pearson's *r* (Ary, Jacobs, & Razavieh, 2002). The point-biserial correlation technique was developed for examining the relationship between a continuous variable and a dichotomous nominal variable. The values of the dichotomous variable are assigned numerical values of 1 or 0 and these values are correlated

with the values of the continuous variable using the Pearson's *r* formula (Ary, Jacobs, & Razavieh, 2002). This technique was applied to the remaining research questions.

The third research question explored the possibility that a relationship may exist between students' and employers' perceptions of the level of employee attribute importance. The predictor variable was the respondent's status as an employer or a student. The criterion variable was the respondent's perception of the level of importance of the attribute for entry-level workplace success on a 6-point Likert scale. A point-biserial correlation was run for each attribute to identify the relationship between perceptions of the students and employers.

The fourth research question examined the relationship between underclassmen's and upperclassmen's perceptions of the level of importance of employee attributes. Underclassmen were defined as students in 9th or 10th grades. Upperclassmen were defined as students in 11th or 12th grades. The predictor variable was student grade level and the criterion variable was the students' perceptions of the level of importance of employee attributes. A point-biserial correlation was run for each of the 26 employee attributes to identify the relationship between upperclassmen and underclassmen perceptions of the level of employee attribute importance.

The fifth and final research question analyzed the relationship between students with work experience and students without work experience in regard to the importance of employee attributes for entry-level workplace success. The predictor variable was the level of work experience of the student respondents. The students were divided into those with work experience and those without work experience. This data was gathered by asking students to share their amount of work experience in the demographic section of the student questionnaire. The answer choices included no work experience, less than 6 months, 6 to 12 months, and over one year. The responses from students who indicated no work experience were correlated with

the responses from students who indicated one of the other three choices. The criterion variable was the students' perceptions of the level of employee attribute importance. Point-biserial correlations for each attribute were calculated to determine if there was a relationship between students with work experience and without work experience in terms of their perceptions of the level of importance of employee attributes.

The alpha level (α) for all correlations in this study was set equal to .05. This alpha level is most often used because it represents a middle ground when trying to avoid the possibilities of a Type I or a Type II error (Huck & Cormier, 1996). A higher alpha level would help to avoid a Type II error while a lower alpha level would decrease the chances of a Type I error. For purposes of this study, the conventional alpha level of .05 was used. Probability values, or *p* values, indicate the level of significance actually obtained after data is collected and analyzed (Gall et al., 2007). For the final three research questions, *p* values were calculated for each point-biserial correlation. All correlations with *p* values less than the established alpha level of .05 were identified as statistically significant.

Effect size is the degree to which the phenomenon being studied is manifested (Cohen, 1988). Effect size is an important statistic in research because it refers to the strength or impact of a finding (Abbott, 2011). Several options exist for measuring effect size when the predictor variable is dichotomous and the criterion variable is continuous. Cohen's *d* was selected as the measure of effect size for this study. Cohen's *d* is often used to explain the strength of the association between predictor and criterion variables in research studies (Breaugh, 2003). There are two primary advantages to using Cohen's *d* to express effect size (Thalheimer & Cook, 2002). Due to its popularity, Cohen's *d* has become a standard measure of effect size that allows for comparisons with a large number of published studies. Secondly, Cohen's (1988) suggestion

that effect sizes of .20 are small, .50 are medium, and .80 are large provides researchers with benchmarks for interpreting study results. In addition to Cohen's *d*, correlation coefficients are also commonly used to express effect size because they explain the strength of relationships between variables. Point-biserial correlations were used as the primary data analysis technique in this study. The use of correlation coefficients makes it relatively easy to see the strength of the relationships between variables (Howitt & Cramer, 2005). Analysis of the point-biserial correlations serves as an additional method for evaluating effect size. Cohen (1992) also provided guidelines for interpreting *r* as effect size. When using correlation as an effect size, $r = .10$ is considered a small effect size, $r = .30$ is considered a medium effect size, and $r = .50$ is considered a large effect size.

CHAPTER 4

RESULTS

The purpose of this correlational study was to identify employee attributes most important for entry-level workplace success and to examine the relationship between employers' and students' perceptions of the level of importance of employee attributes. Employers in Madison County, Georgia and Madison County High School students were asked to rate the level of importance of a list of employee attributes. Ratings were used to determine which skills are most important for entry-level workplace success according to employers and students. This study also examined students' and employers' ratings of the level of importance of each attribute to explore the nature of the relationship between perceptions of these two groups. The following research questions guided data analyses:

1. What are students' perceptions of employee attributes?
2. What are employers' perceptions of employee attributes?
3. Is there a relationship between employers' and students' perceptions of employee attributes?
4. Is there a relationship between underclassmen and upperclassmen students' perceptions of employee attributes?
5. Is there a relationship between students with and without work experience in regard to their perceptions of employee attributes?

The study utilized two versions of a questionnaire to collect data from student and employer respondents regarding the level of importance of 26 employee attributes for entry-level

Table 2

Demographic Characteristics of Student Respondents

Characteristic	Complete sample (*n* = 306)	
	n	%
Grade (*n* = 306)		
9	88	28.8
10	83	27.1
11	78	25.5
12	57	18.6
Gender (*n* = 306)		
Male	116	37.9
Female	190	62.1
Race/Ethnicity (*n* = 306)		
American Indian / Native American	6	2.0
Asian	5	1.6
Black / African American	28	9.2
Hispanic / Latino	17	5.6
White / Caucasian	234	76.5
Pacific Islander	0	0.0
Other	16	5.2
Work Experience (*n* = 304)		
No work experience	125	41.1
Less than 6 months	84	27.6
6 to 12 months	32	10.5
Over 1 year	63	20.7

employment success. Questionnaires were completed by 306 Madison County High School students and 157 Madison County employers. Table 2 provides the demographic characteristics of the student sample. The student sample included representation from all grade levels with slightly more underclassmen (55.9%) than upperclassmen (44.1%) students participating. Female students (62.1%) were somewhat overrepresented in the sample. The percentage of female

students in the student population was 49.2%. In general, the student sample reflected the Madison County High School student population as a whole in terms of race/ethnicity. The majority of the student respondents indicated they did have some amount of work experience (58.9%), while 41.1% of the students did not have work experience.

Table 3

Demographic Characteristics of Employer Respondents

Characteristic	Complete sample (n = 157)	
	n	%
Gender (n = 154)		
Male	80	51.9
Female	74	48.1
Number of Employees (n = 151)		
1 – 19	120	79.5
20 – 49	15	10.0
50 – 99	11	7.3
100 – 499	4	2.6
500 or over	1	0.7
Industry (n = 149)		
Agriculture, Mining	5	3.4
Construction	14	9.4
Education	11	7.4
Finance, Insurance, Real Estate	10	6.7
Government	20	13.4
Health Care	9	6.0
Internet	0	0.0

(continued)

Characteristic	Complete sample (n = 157)	
	n	%
Manufacturing	7	4.7
Retail, Wholesale	22	14.8
Accommodations/Food Services	4	2.7
Transportation	1	0.7
Communications, Utilities	3	2.0
Nonprofit	12	8.1
Other	31	20.8
Work Classification (n = 145)		
Employee of a for-profit business	33	22.8
Employee of a not-for-profit organization	17	11.7
Local government employee	18	12.4
State government employee	10	6.9
Federal government employee	3	2.1
Self-employed in own not-incorporated business	25	17.2
Self-employed in own incorporated business	38	26.2
Working without pay in family business or farm	1	0.7
Hiring Experience (n = 153)		
Yes	143	93.5
No	10	6.5
Experience Hiring Recent High School Graduates (n = 155)		
Yes	103	66.5
No	52	33.5

A total of 157 Madison County employers participated in this study. Table 3 presents the demographic characteristics of the employer respondents. Unlike the student respondents, the employers were almost equally divided between males and females. The vast majority of respondents represented small firms, with 79.5% having less than 20 employees. In terms of the types of industry represented, the category most frequently chosen was Other (20.8%), followed by Retail/Wholesale (14.8%), Government (13.4%), and Construction (9.4%). Many of the respondents classified themselves as self-employed (43.4%). Employees of for-profit or not-for-profit organizations accounted for 34.5% of the respondents while local, state, and federal government employees made up 21.4% of the sample. The demographic data showed that many of the employer respondents had experience with hiring (93.5%) and hiring recent high school graduates (66.5%).

Research Question 1

What are students' perceptions of employee attributes?

The first research question focused on measuring students' perceptions of the level of importance of employee attributes for entry-level workplace success. Students were asked to rate the level of importance of 26 employee attributes based on their perceptions of what employers value most in the workplace. The questionnaire utilized a 6-point Likert scale with responses that ranged from not at all important to extremely important. The response choices included 1 = not at all important, 2 = low importance, 3 = slightly important, 4 = moderately important, 5 = very important, and 6 = extremely important. The frequencies, means, and standard deviations reported in Table 4 depict students' perceptions of the level of importance of the 26 employee attributes. There were some missing values in the data set from items on the questionnaire that were left blank by the respondents. The highest number of missing values from a single attribute

Table 4

Ranking of Student Perceptions of the Importance of Employee Attributes

Attribute	Rating Frequency						*M*	*SD*
	1	2	3	4	5	6		
Maturity	1	3	6	22	86	187*	5.459	0.835
Punctuality	0	2	8	28	81	183*	5.440	0.820
Motivation	0	1	17	38	127*	122	5.154	0.869
Loyalty	1	4	13	57	119*	112	5.042	0.945
Mood	0	4	16	53	127*	105	5.026	0.921
Appearance	4	3	18	50	121*	110	4.997	1.029
Oral communication	4	6	19	52	111	114*	4.967	1.086
Outgoing personality	0	6	21	65	98	113*	4.960	1.022
Leadership	0	4	20	60	127*	94	4.941	0.941
Initiative	0	5	29	57	119*	95	4.885	1.008
Mannerisms	3	10	23	61	98	111*	4.876	1.141
Grades	5	6	28	56	101	107*	4.858	1.155
Self-confidence	0	5	20	76	116*	81	4.832	0.960
Enthusiasm	3	11	20	72	104*	95	4.797	1.120
Assertiveness	0	4	29	73	121*	77	4.783	0.974
Written communication	6	5	39	70	108*	78	4.644	1.154
Knowledge of company	6	5	37	81	94*	81	4.628	1.162
School reputation	14	22	32	75	97*	66	4.363	1.363
Technical skills	5	14	47	95	100*	42	4.310	1.132
Work experience	6	21	54	82	96*	46	4.243	1.222
Age	3	11	54	139*	70	29	4.141	1.000
Computer skills	10	29	61	100*	78	36	4.069	1.215
Community involvement	10	27	70	109*	64	23	3.855	1.176
Hobbies	18	50	93*	74	56	15	3.474	1.263
Social activities	19	45	102*	79	42	18	3.439	1.245
Gender	150*	50	30	27	22	26	2.341	1.688

* denotes the most frequently chosen rating for each attribute

was eight. Considering the sample size of 306, the missing values represented only a small percentage of the available data.

The attributes are ordered from most important to least important based on mean scores. According to student respondents, maturity, punctuality, motivation, loyalty, and mood were the most important attributes, with mean scores that fell in the very important to extremely important range. An examination of the modes for each attribute showed that students rated almost all of the attributes as very important or extremely important. The only attributes that did not have a mode in this range were gender, hobbies, social activities, age, community involvement, and computer skills. Standard deviation indicates the amount of variation in the scores. A lower standard deviation shows that the scores were closer to the mean, while a high standard deviation reveals that the scores were more dispersed. Maturity, punctuality, and motivation, the three attributes with the highest mean scores, also had the lowest standard deviations, indicating a high level of agreement among student respondents. Attributes with the highest standard deviations were gender, school reputation, hobbies, and social activities.

Research Question 2

What are employers' perceptions of employee attributes?

The second research question focused on the perceptions of employers regarding the level of importance of employee attributes for entry-level workplace success. The employer version of the questionnaire asked employers to rate the level of importance of 26 employee attributes on a 6-point Likert scale from not at all important to extremely important. The response choices included 1 = not at all important, 2 = low importance, 3 = slightly important, 4 = moderately important, 5 = very important, and 6 = extremely important. Frequencies, means, and standard deviations for the employer ratings are displayed in Table 5. Missing values for individual

Table 5

Ranking of Employer Perceptions of the Importance of Employee Attributes

Attribute	Rating Frequency						*M*	*SD*
	1	2	3	4	5	6		
Punctuality	0	0	1	8	54	90*	5.523	0.629
Maturity	0	0	3	11	60	80*	5.409	0.710
Motivation	0	0	1	13	64	76*	5.396	0.671
Initiative	0	0	2	16	65	72*	5.335	0.714
Loyalty	0	0	4	18	58	74*	5.312	0.780
Mood	0	0	2	15	78*	59	5.260	0.684
Enthusiasm	0	0	4	19	69*	65	5.242	0.763
Oral communication	0	0	5	25	70*	54	5.123	0.795
Appearance	0	3	7	29	74*	44	4.949	0.904
Self-confidence	0	0	5	39	76*	34	4.903	0.773
Outgoing personality	0	2	13	37	60*	43	4.832	0.972
Written communication	3	8	14	36	53*	39	4.601	1.221
Technical skills	2	5	19	37	57*	34	4.584	1.136
Knowledge of company	4	10	21	34	48*	40	4.478	1.314
Mannerisms	2	7	20	38	57*	26	4.460	1.145
Leadership	1	4	24	52*	52*	24	4.414	1.044
Assertiveness	1	3	19	64*	58	11	4.333	0.897
Computer skills	8	15	20	31	40*	40*	4.299	1.487
Grades	8	14	24	53*	43	14	3.968	1.272
Work experience	6	23	39	41*	33	12	3.701	1.284
School reputation	18	23	31	31	34*	14	3.543	1.513
Age	16	24	44*	44*	22	5	3.303	1.276
Community involvement	25	26	47*	35	18	6	3.083	1.354
Social activities	35	35	40*	27	14	2	2.712	1.316
Hobbies	33	42*	37	35	8	1	2.654	1.222
Gender	89*	24	12	14	9	5	1.987	1.446

* denotes the most frequently chosen rating for each attribute

attributes represented a small amount of the data set. There were less than eight missing values for each attribute.

Based on mean scores, the employer respondents rated a larger number of attributes in the very important to extremely important range than the students. The attributes that scored in this range included punctuality, maturity, motivation, initiative, loyalty, mood, enthusiasm, and oral communication. An examination of the modes reveals that employers most frequently rated the majority of attributes as very important or extremely important. There were eight attributes whose modes revealed a lower level of importance: gender, hobbies, social activities, community involvement, age, assertiveness, grades, and work experience. In a finding reflective of the student data, standard deviations for the employer ratings were smallest for the attributes which had the highest mean scores. The low standard deviations for the top ranked attributes show that there is a high level of agreement among the employer respondents in regards to the importance of these attributes. The highest rated attribute for employers, punctuality, also had the lowest standard deviation. The attributes with the highest standard deviations included school reputation, computer skills, and gender.

Research Question 3

Is there a relationship between employers' and students' perceptions of employee attributes?

The third research question addressed the relationship between students' and employers' perceptions of the level of employee attribute importance. Both the student version and employer version of the questionnaire asked respondents to rate the same 26 attributes based on their level of importance for entry-level workplace success. Point-biserial correlations and effect sizes were calculated for each attribute to analyze the nature of the relationship between students' and employers' ratings of employee attribute importance. Missing values, which represented a small

portion of the data set, were imputed with the mode for the attribute before calculations were conducted for the three final research questions.

Table 6 presents the point-biserial correlations and effect sizes for the three final research questions. The point-biserial correlation statistic, r_{pb}, for each attribute indicates the nature of the relationship between the ratings being compared. Results have a possible range from -1, which represents a perfectly negative correlation, to 1, which represents a perfectly positive correlation. The higher the absolute value of the correlation coefficient, the stronger the relationship. While a negative correlation coefficient typically indicates an inverse relationship between the variables, the point-biserial correlation is interpreted differently. Since the dichotomous nominal variables are arbitrarily assigned a value of 0 or 1, this assignment affects the positive or negative nature of the results. To calculate the point-biserial correlations, students were assigned a value of 0 and employers were assigned a value of 1. As a result, positive correlations indicate that the employers rated the attribute to be more important and negative correlations indicate that the students rated the attribute to be more important.

Statistical analysis revealed that 17 of the point-biserial correlations had statistically significant *p* values. Cohen's *d* was used to measure the effect size for all the correlations. Based on Cohen's (1988) guidelines for interpreting effect size measurements, effect sizes less than 0.2 were considered negligible, from 0.2 to 0.5 were considered small, from 0.5 to 0.8 were considered moderate, and above 0.8 were considered large. No large effect sizes were observed. There were seven moderate effect sizes. Attributes that resulted in moderate effect sizes were age, community involvement, grades, hobbies, leadership, school reputation, and social activities. In the case of all these attributes, the correlations were negative, indicating the student respondents rated the attributes as more important than the employers. The largest effect sizes

Table 6

Point-Biserial Correlations and Effect Sizes for Each Comparison

	Students vs. Employers		Underclassmen vs. Upperclassmen		No Work Experience vs. Work Experience	
Attributes	r_{pb}	Cohen's *d*	r_{pb}	Cohen's *d*	r_{pb}	Cohen's *d*
Age	-0.339**	-0.760	0.157**	0.320	0.090	0.199
Appearance	-0.023	-0.048	0.067	0.135	0.003	0.008
Assertiveness	-0.222**	-0.479	-0.005	-0.009	0.001	0.002
Community Involvement	-0.285**	-0.626	-0.093	-0.186	-0.074	-0.163
Computer Skills	0.090	0.191	0.031	0.062	0.028	0.063
Enthusiasm	0.204**	0.439	0.021	0.042	0.000	0.000
Outgoing Personality	-0.064	-0.136	0.032	0.065	-0.001	-0.002
Grades	-0.337**	-0.754	-0.161**	-0.327	-0.091	-0.202
Hobbies	-0.299**	-0.660	-0.070	-0.141	-0.054	-0.119
Initiative	0.231**	0.499	0.030	0.060	0.043	0.096
Knowledge of Company	-0.060	-0.126	-0.010	-0.020	-0.017	-0.038
Leadership	-0.248**	-0.540	-0.035	-0.070	-0.050	-0.110
Loyalty	0.148**	0.317	-0.019	-0.039	0.052	0.114
Mannerisms	-0.162**	-0.345	0.040	0.080	-0.014	-0.030
Maturity	-0.024	-0.051	0.026	0.053	0.009	0.021
Mood	0.127**	0.270	0.046	0.093	0.063	0.140
Motivation	0.148**	0.315	0.046	0.093	-0.057	-0.127
Oral Communication	0.073	0.154	0.100	0.201	0.061	0.135
Punctuality	0.055	0.115	0.033	0.067	0.071	0.156
School Reputation	-0.248**	-0.540	-0.089	-0.178	-0.052	-0.116
Self-confidence	0.036	0.076	0.078	0.157	0.049	0.109
Gender	-0.110*	-0.233	-0.042	-0.084	-0.080	-0.177
Social Activities	-0.261**	-0.569	-0.098	-0.198	-0.136*	-0.303
Technical Skills	0.115*	0.244	0.052	0.104	0.046	0.102
Work Experience	-0.202**	-0.434	-0.121*	-0.243	-0.086	-0.190
Written Communication	-0.013	-0.028	0.077	0.154	0.046	0.101

*$p < .05$. **$p < .01$.

resulted from students' perceptions of the level of importance of age and grades in relation to the lower level of importance of these attributes indicated by employers. Among the attributes with small effect sizes, there were several that were rated as more important by the employer respondents. Attributes rated as more important by employers included enthusiasm, initiative, loyalty, motivation, mood, and technical skills.

Research Question 4

Is there a relationship between underclassmen and upperclassmen students' perceptions of employee attributes?

The fourth research question focused on examining the relationship between perceptions of the level of employee attribute importance of underclassmen and upperclassmen students. Underclassmen students were defined as 9th or 10th grade students while upperclassmen were defined as 11th or 12th grade students. Grade levels were based on the number of course credits achieved in high school. Students were asked to identify their grade level in the demographic section of the questionnaire which followed the ratings of employee attributes. Demographic data revealed that 55.9% of the student respondents were underclassmen and 44.1% of the students were upperclassmen. Using the data from upperclassmen and underclassmen respondents, point-biserial correlations and effect sizes were calculated for each attribute. The resulting statistics are found in Table 6. To calculate the point-biserial correlations, underclassmen students were assigned a value of 0 and upperclassmen students were assigned a value of 1. As a result, positive correlations indicate that upperclassmen rated the attribute to be more important and negative correlations indicate that underclassmen rated the attribute to be more important.

The analysis of the relationship between underclassmen and upperclassmen students' perceptions of the level of employee attribute importance revealed a close alignment. Three of the correlations had statistically significant *p* values: age ($p = .006$), grades ($p = .005$), and work experience ($p = .035$). Based on calculations of Cohen's d for each attribute, none of the correlations resulted in a medium or large effect size. Only four of the attribute correlations showed a small effect size. Age and oral communication were rated as slightly more important by upperclassmen. Grades and work experience were rated as slightly more important by underclassmen.

Research Question 5

Is there a relationship between students with and without work experience in regard to their perceptions of employee attributes?

` The fifth and final research question examined the relationship between students with work experience and students without work experience in regards to their perceptions of the level of importance of employee attributes for entry-level workplace success. All student respondents rated the level of importance of 26 employee attributes based on their perceptions of how an employer would rate their importance for an entry-level employee. The student version of the questionnaire asked students to indicate their level of work experience. The four choices included no work experience, less than six months, six months to one year, and over one year of experience. To answer the fifth research question, ratings of students who indicated no work experience were correlated with ratings of students who indicated that they did have some level of work experience. The demographic statistics showed that 41.1% of the students had no work experience while 58.9% of the students did have work experience.

Point-biserial correlations and effect sizes were calculated for each attribute to analyze the relationship between perceptions of students with work experience and students without work experience. To calculate the point-biserial correlations, students without work experience were assigned a value of 0 and students with work experience were assigned a value of 1. As a result, positive correlations indicate that students with work experience rated the attribute to be more important and negative correlations indicate that students without work experience rated the attribute to be more important. Differences in these groups were minimal. The only statistically significant *p* value for the correlations was for social activities ($p = 0.017$). No medium or large effect sizes were observed. Two small effect sizes were found for grades and social activities. In both cases, students without work experience rated these attributes to be slightly more important than students with work experience.

Employer Perceptions of Graduates' Workplace Readiness

To gain additional insight into employer respondents' perceptions of the level of preparedness of high school graduates for entering the workforce, three questions were included on the employer version of the questionnaire to address this topic. The first question asked employer respondents to indicate how prepared recent high school graduates are when entering the workforce. The answer choices included very prepared, moderately prepared, slightly prepared, and unprepared. The responses for this question are displayed in Table 7. The bulk of the responses indicated that recent high school graduates are either moderately prepared (49.3%) or slightly prepared (35.5%). Fortunately, only 8.7% of the respondents felt that recent high school graduates are unprepared to enter the workforce. Very prepared (6.5%) was the least frequently chosen answer.

The second question asked employer respondents to rate the employability skills of recent high school graduates. Answer choices included excellent, good, fair, and poor. Responses to this question are displayed in Table 7. The rating of good was selected most often (45.3%). The next most frequently chosen rating was fair (41.7%). Similar to the previous question, the vast majority of employers chose these middle options to rate graduates' skill levels. A small percentage of the employers rated recent high school graduates' employability skills as excellent (7.2%) or poor (5.8%).

Table 7

Employer Perceptions of the Workplace Readiness of High School Graduates

	Complete sample (n = 157)	
Questionnaire Items	*n*	%
Level of preparation of high school graduates (n = 138)		
Very prepared	9	6.5
Moderately prepared	68	49.3
Slightly prepared	49	35.5
Unprepared	12	8.7
Employability skills of recent high school graduates (n = 139)		
Excellent	10	7.2
Good	63	45.3
Fair	58	41.7
Poor	8	5.8

The final question on the employer version of the questionnaire asked respondents to identify the skill or quality most lacking in recent high school graduates who try to enter the workforce. Unlike the rest of the questionnaire, this question allowed for open-ended responses.

Of the 157 submitted employer questionnaires, 113 of the respondents included answers to this question. Many of the respondents identified multiple skills or qualities that they feel are lacking in high school graduates. In some cases, the respondents provided detailed explanations of their reasoning in choosing these skills and qualities. To analyze these results, a list of all the skills and qualities found in the responses was compiled. The frequencies for each skill or quality mentioned were counted and are reported in Table 8. Results show that many of the attributes that were rated on the questionnaire were again mentioned by employers as lacking in high school graduates. Good work ethic, motivation, oral communication skills, and initiative were the most frequently identified skills and qualities. The most frequently mentioned quality was a good work ethic, which was not included as an attribute on the questionnaire. Work ethic is a broad term that can encompass a variety of attributes such as dependability, initiative, and communication skills, therefore it was not included as an attribute on the questionnaire (Rojewski & Hill, 2014). Other skills and qualities identified by employers but not listed on the questionnaire included dependability, appropriate cell phone usage, math skills, respect, responsibility, positive attitude, commitment to tasks, common sense, critical thinking, customer service skills, willingness to learn, humility, integrity, professionalism, teamwork, and listening skills.

Table 8

Skills or Qualities Most Lacking in Recent High School Graduates

Skills and Qualities	Complete sample (n = 157) Frequency of Response
Good work ethic	22
Motivation	21
Oral communication skills	21
Initiative	17
Appearance	15
Punctuality	13
Maturity	12
Dependability	11
Work experience	11
Appropriate cell phone usage	9
Self-confidence	8
Math skills	7
Respect	7
Responsibility	7
Written communication skills	7
Positive attitude	6
Commitment to tasks	5
Assertiveness	4
Common sense	4
Critical thinking	4
Customer service skills	4
Technical skills	4
Willingness to learn	4
Humility	3
Integrity	3
Loyalty	3
Mannerisms	3
Professionalism	3
Teamwork	3
Enthusiasm	2
Listening skills	2
Leadership	1

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

This correlational study explored the relationship between students' and employers' perceptions of the level of importance of employee attributes for entry-level workplace success. This research was conducted in an effort to assess high school students' understanding of the expectations of employers so educators may use this information to better prepare students for the world of work. This final chapter presents a review of the rationale, purpose, and findings of the study along with conclusions, implications of the findings, and recommendations for further research.

Rationale

America's productivity and prosperity depend on the quality of its workforce. To remain competitive in a global economy, America must grow and sustain a high-quality workforce (Deloitte & Manufacturing Institute, 2015; Harvard Business School, 2014; U.S. Chamber of Commerce Foundation, 2014). When businesses are unable to find qualified employees, they report this has a detrimental effect on their productivity and ability to compete (PayScale, 2015; Porter & Rivkin, 2014). Research into the status of the U.S. workforce has consistently shown that employers are concerned about a lack of qualified employee candidates and a mismatch between their expectations of employees and the qualities they find in the available workers (Achieve, 2012c; Buhler, 2012; Burning Glass Technologies, 2015; Deloitte & Manufacturing Institute, 2015; Hart Research Associates, 2015; Rider & Klaeysen, 2015). Clearly, workforce development is a key issue that impacts the U.S. economy. The nation's schools are a critical

component in efforts to develop and maintain a high-quality workforce. Investing in education is a proven way to increase productivity by improving the quality of the workforce (Berger & Fisher, 2013).

Secondary schools are given the task of preparing their students for life beyond high school. The focus of this preparation is to graduate students who are ready for college and careers (Georgia Department of Education, 2015a; Holzer, 2012; Symonds, Schwartz, & Ferguson, 2011). While a traditional emphasis on academic studies may be most appropriate for college preparation, ensuring students are ready for the workforce requires educational institutions to understand workforce needs and the expectations of employers. Numerous studies have been conducted to determine which skills and qualities are most important in the workplace (Burning Glass Technologies, 2015; Carl Vinson Institute of Government, 2013; Hart Research Associates, 2013; Hart Research Associates, 2015; Manyika, Lund, Auguste, & Ramaswamy, 2012; National Association of Colleges and Employers, 2014; Nation Center on Education and the Economy, 2006; Rider & Klaeysen, 2015). Some of the attributes that have been frequently identified as important for workplace success include communication skills, problem-solving skills, innovative thinking, and basic employability skills.

Purpose

The purpose of this correlational study was to explore the relationship between high school students' perceptions and employers' perceptions regarding the level of importance of 26 employee attributes for entry-level workplace success. In addition to examining the relationship between student and employer perceptions, this study also explored the relationship between responses of underclassmen versus upperclassmen students and students with work experience versus students without work experience. The primary objective of the study was to learn about

high school students' understanding of what employers will expect of them as they enter the workforce. Using Krumboltz's (1996) Learning Theory of Career Counseling as a theoretical framework, the study investigated perceptions of the level of employee attribute importance so this information may be used to address misconceptions students may have and to provide learning opportunities that will better prepare them to successfully enter the workforce.

Based on the established purpose of the study, research questions were developed to guide the processes of data collection and analysis. The following five research questions were addressed in this study:

1. What are students' perceptions of employee attributes?
2. What are employers' perceptions of employee attributes?
3. Is there a relationship between employers' and students' perceptions of employee attributes?
4. Is there a relationship between underclassmen and upperclassmen students' perceptions of employee attributes?
5. Is there a relationship between students with and without work experience in regard to their perceptions of employee attributes?

Findings

To collect the necessary data regarding students' and employers' perceptions of the level of importance of employee attributes, a student version and an employer version of a questionnaire were developed. The list of employee attributes chosen for the study originated from previous research conducted by Hafer and Hoth (1981). Respondents rated the level of importance of each attribute for entry-level workplace success using a 6-point Likert scale that ranged from not at all important to extremely important. The student version instructed

respondents to rate the level of importance of the attributes based on how an employer would rate them. In addition to the list of attributes, demographic questions and questions about workplace readiness of high school graduates were developed and added to the instruments to provide additional information about the samples as well as employers' insight into students' preparedness for work.

The samples for the study included 157 employers in Madison County, Georgia who responded to the mailed questionnaire and 306 students enrolled in Madison County High School who volunteered to participate during the school day. The data from the completed questionnaires was used to answer each of the five research questions.

Research Question 1

The first research question examined students' perceptions of the level of importance of employee attributes. Frequencies, means, and standard deviations were calculated for each of the 26 attributes. Based on the mean ratings of the attributes, students rated maturity, punctuality, motivation, loyalty, and mood as the most important employee attributes for entry-level workplace success. The mean scores for each of these five attributes was above 5, indicating an importance level in the very important to extremely important range according to students. The employee attributes rated as least important by students included gender, social activities, hobbies, community involvement, and computer skills. Student respondents felt gender was the least important of the attributes listed. Results showed that 150 (49%) of the student respondents rated gender as not at all important with a mean score of 2.341. In comparison, the attribute rated as the next least important, social activities, was rated as not at all important by only 19 (6%) of the student respondents with a mean score of 3.439. However, there was some disagreement about the level of importance of gender among the students. Gender (*SD*=1.688) was the

employee attribute with the highest level of variation in responses based on standard deviation. The attribute with the least amount of variation for students was punctuality (*SD*=0.820). In terms of the attributes students felt were extremely important, six employee attributes had a mode that fell in this range. Maturity (*n* = 187), punctuality (*n* = 183), oral communication (*n* = 114), outgoing personality (*n* = 113), mannerisms (*n* = 111), and grades (*n* = 107) were each most frequently rated as extremely important by student respondents.

Research Question 2

The second research question examined employer respondents' perceptions of the level of importance of employee attributes. Frequencies, means, and standard deviations were calculated for each of the 26 employee attributes based on the employers' ratings. The top five attributes according to employers were punctuality, maturity, motivation, initiative, and loyalty. In addition to the top five attributes, mood, enthusiasm, and oral communication also had mean scores in the very important to extremely important range. Employer respondents rated eight attributes in this range while the student perceptions only included the top five. The least important employee attributes were gender, hobbies, social activities, community involvement, and age. Using standard deviations as a measure of the amount of variation in responses, the employers indicated a high level of agreement on the top-rated attribute of punctuality (*SD*=0.629) and showed the most variation in their perceptions of the level of importance of school reputation (*SD*=1.513).

Research Question 3

The third research question examined the relationship between employers' and students' perceptions of the level of importance of employee attributes. The point-biserial correlation statistic, r_{pb}, was used to analyze these relationships. Seventeen of the point-biserial correlations

resulted in statistically significant *p* values. Using Cohen's *d* to measure effect size, seven of these employee attributes indicated moderate effect sizes. Students rated each of these attributes as more important than the employers. The attributes included age (d = -.760), community involvement (d = -.626), grades (d = -.754), hobbies (d = -.660), leadership (d = -.540), school reputation (d = -.540), and social activities (d = -.569). When placed in order from most important to least important based on mean scores, all of these attributes were in the lower half of employers' importance ratings.

An examination of the mean scores provides additional information about the relationship between students' and employers' perceptions of the level of importance of employee attributes. Interestingly, students and employers both rated punctuality, maturity, motivation, and loyalty within their top five attributes. Although not in the same order, punctuality, maturity, and motivation were the top three attributes for employers and students.

For the purposes of this study, attributes that were rated as highly important by employers but less important by students was an area of concern because this indicates that students may not fully understand the importance of these critical attributes for workplace success. Initiative (r_{pb} = .231, d = .499) is one attribute that fell into this category. It was the fourth highest-rated attribute by employers (M = 5.335), but only the tenth highest rated attribute for students (M = 4.885). In addition, enthusiasm (r_{pb} = .204, d = .439) was rated as the sixth most important attribute by employers (M = 5.242), but only the fourteenth most important attribute by students (M = 4.797).

Research Question 4

The fourth research question examined the relationship between upperclassmen students' and underclassmen students' perceptions of the level of importance of employee attributes.

Point-biserial correlations were calculated for each of the 26 employee attributes. In comparison with the previous research question, few statistically significant results were found. Three of the correlations resulted in statistically significant *p* values. Correlations for age *(*r_{pb} = .157, *d* = .320), grades (r_{pb} = -.161, *d* = -.327), and work experience (r_{pb} = -.121, *d* = -.243) produced statistically significant *p* values and small effect sizes. Upperclassmen ratings placed a higher level of importance on age. Underclassmen ratings placed a higher emphasis on the importance of grades and work experience.

Research Question 5

The final research question examined the relationship between perceptions of students with work experience and students without work experience in regards to the level of importance of employee attributes. Point-biserial correlations were again used to analyze the relationships between these perceptions. Only one correlation resulted in a statistically significant *p* value and a small effect size. Social activities (r_{pb} = -.136, *d* = -.303) was rated as more important by students without work experience.

Conclusions

This correlational study focused on the perceptions of high school students and employers regarding the level of importance of employee attributes for entry-level workplace success. The relationships between the responses of students and employers, underclassmen students and upperclassmen students, and students with and without work experience were analyzed. Employers' ratings indicated that the most important employee attributes were punctuality, maturity, motivation, initiative, and loyalty. These findings support previous research studies in which employers expressed their perceptions regarding the high importance of punctuality, maturity, and motivation (Carl Vinson Institute of Government, 2013; Crain,

1984; Donnangelo & Farley, 1993; Gaedeke & Tootelian, 1989a; Kelley & Gaedeke, 1990; National Association of Manufacturers, 2005; Sproles & Warne, 1987).

Overall, student respondents demonstrated they do have an awareness of the attributes considered to be most important to employers. Although 17 of the student-employer attribute correlations were statistically significant, all the effect sizes were moderate or small. Furthermore, all the correlations with moderate effect sizes involved less important attributes that were rated as more important by students. However, there were two employee attribute correlations with small effect sizes which present a possible area of concern. Initiative and enthusiasm were two highly rated attributes that were rated as less important by the student respondents. Initiative, the fourth highest rated attribute by employers, was also mentioned as a skill that is lacking by 17 of the employer respondents on the open-ended question. The levels of importance of initiative and enthusiasm, whose mean scores fell in the moderately important to very important range, may be underestimated by secondary students (Kelley & Gaedeke, 1990; Sproles and Warne, 1987).

When analyzing relationships between responses of upperclassmen and underclassmen students and students with and without work experience, results showed that these groups were very much in alignment. Upperclassmen indicated age was more important than underclassmen while the underclassmen ratings were higher for grades and work experience. Analysis of the responses for students with work experience and without work experience revealed only one statistically significant correlation. Students without work experience rated social activities as more important than students with work experience, perhaps showing less familiarity with employers' indifference towards this particular employee attribute.

The final three items on the questionnaire gathered information about employers' perceptions of the level of preparedness of high school graduates to enter the workforce. The vast majority (84.8%) of the employer respondents indicated that recent high school graduates are either somewhat prepared to moderately prepared to enter the workforce. Similarly, when asked to rate the employability skills of recent graduates, most respondents (87%) rated their skills as fair or good. The final question allowed the employers to share their thoughts on the skills or qualities that are most lacking in high school graduates who try to enter the workforce. The most frequently mentioned quality was a good work ethic, which is supported by previous research (Buhler, 2012; Casner-Lotto & Barrington, 2006; National Association of Manufacturers, 2005; National Center on Education and the Economy, 1990). Other skills and qualities that were frequently mentioned included motivation, oral communication skills, initiative, appearance, and punctuality.

Discussion and Implications

This purpose of this correlational study was to learn about the relationship between students' and employers' perceptions of the level of importance of employee attributes for entry-level workplace success. Results identified employee attributes that are most important to employers as well as qualities that employers feel are lacking in recent graduates. In addition, student responses provided insight into their understanding of attributes they feel are most important for the world of work. With this information, secondary schools can develop strategies to better prepare high school students to meet the expectations of the workplace.

According to Krumboltz's (1996) Learning Theory of Career Counseling (LTCC), career choice and development are impacted by learning experiences and environmental conditions along with other factors. Career counselors may utilize learning experiences as a tool to help

individuals with a variety of career-related issues. Results of this study relate to the LTCC in two ways. Statistically significant correlations were found for 17 of the 26 employee attributes when examining the relationship between students' and employers' responses. Fortunately, few of these correlations indicated potentially harmful misconceptions about the attributes that are most important to employers. Regardless, these results imply that differences in past learning experiences and environmental conditions may have contributed to the variation in the observed importance ratings between these samples. Secondly, the lessons learned from this study can be used to develop future learning experiences that can bring students' perceptions and employers' perceptions of the level of importance of employee attributes into closer alignment. For example, secondary students should be informed of the high importance of exhibiting initiative and enthusiasm in the workplace.

Although the correlational analysis of the student and employer responses indicated few misconceptions of employee attribute importance that could be harmful to students' careers, the open-ended question at the end of the employer questionnaire resulted in 246 references to skills or qualities that are lacking in recent high school graduates. The most frequently mentioned skills or qualities included good work ethic, motivation, oral communication skills, initiative, appearance, punctuality, and maturity. These soft skills are frequently identified in research as critical for career success and lacking in many employees (Buhler, 2012; Dutton, 2012; Georgia Department of Economic Development, 2014; Harvard Business School, 2014; Rider & Klaeysen, 2015). In this study, students were asked to rate the level of importance of employee attributes for workplace success. They were not asked to demonstrate these attributes in an actual work setting. Results of this study reveal that the secondary students were generally aware of the employee attributes sought after by employers, but the employers' responses to the open-ended

item call into question if this knowledge is being put into practice by the students when they go to work.

Career and technical education (CTE) provides a means of delivering career-related learning experiences to secondary students. Students in CTE classes learn about the expectations of the real world and are given the opportunity to put their skills into practice in coursework connected to a variety of career fields. Whenever possible, students need to be exposed to learning experiences that allow them to practice demonstrating the most important employee attributes in a real world setting (Georgia Department of Economic Development, 2014; Schwartz, 2014). Simulated work environments or work-based learning opportunities are two opportunities offered through CTE programs that can provide this experience. To be most effective, students need specific feedback on their performance related to these attributes so the students can learn from the experiences and improve their performance.

Recommendations for Further Research

The following recommendations for further research were developed based on the findings and conclusions of this study.

1. Research should be conducted to study the relationship between students' knowledge of employee attribute importance and how this knowledge impacts performance in real world settings. Studying the correlation between the way students rate the level of importance of employee attributes and corresponding performance evaluations ratings for these attributes could provide useful information about the connection between knowledge and application of that knowledge.
2. This research study was conducted in a rural county in northeast Georgia. Similar research should be conducted in suburban and urban areas to gain a more complete

understanding of how employers and students with differing backgrounds perceive the importance of employee attributes.

3. Krumboltz's (1996) Learning Theory of Career Counseling recommends that career counselors develop and implement learning activities to address a variety of career-related issues. This study found that employers are concerned about the lack of certain employability skills in recent high school graduates and it also found a mismatch between students' and employers' perceptions of the levels of importance of initiative and enthusiasm. Future research could focus on the development and evaluation of learning activities to address these concerns.
4. Employers and students were selected as the subjects for this research study. Secondary teachers and career counselors are given the task of helping to prepare students for college and careers. Given their important role in this process, further research should be conducted to measure teachers' and career counselors' perceptions of the level of importance of employee attributes to determine how their perceptions may impact efforts to prepare students for employment. This research could also examine how teachers from different subject areas view the level of importance of employee attributes. For example, CTE teachers could be compared with teachers of various academic subjects, fine arts, and other subjects of interest.

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APPENDIX A

EMPLOYER QUESTIONNAIRE

Employer Job Attribute Survey

This is a job attribute survey that will be used to learn more about the qualities that employers look for in entry-level workers. Please rate the following attributes according to what you perceive to be most important for the workplace success of entry-level workers. For each attribute listed, circle the number to show the level of importance.

	Not at all important	Low importance	Slightly important	Moderately important	Very important	Extremely important
Age (preference for workers of a particular age)	1	2	3	4	5	6
Appearance (appropriate grooming and clothing)	1	2	3	4	5	6
Assertiveness (acting in a bold or confident manner)	1	2	3	4	5	6
Community Involvement (volunteers to help in the community)	1	2	3	4	5	6
Computer Skills (word processing, data entry, internet usage, learning to use job-specific software)	1	2	3	4	5	6
Enthusiasm (displays excitement, enjoyment, and interest in work)	1	2	3	4	5	6
Outgoing Personality (friendly and confident in social situations)	1	2	3	4	5	6
Grades (performance in school classes)	1	2	3	4	5	6
Hobbies (involvement in activities for pleasure during free time)	1	2	3	4	5	6
Initiative (carries out necessary tasks without the need to be told what to do)	1	2	3	4	5	6
Knowledge of Company (familiar with company products/services and company culture)	1	2	3	4	5	6
Leadership (ability and willingness to guide and direct the actions of others to achieve goals)	1	2	3	4	5	6

	Not at all important	Low importance	Slightly important	Moderately important	Very important	Extremely important
Loyalty (supportive of the company mission and concerned about the needs of the employer)	1	2	3	4	5	6
Mannerisms (physical behaviors that are distinctive and peculiar to an individual)	1	2	3	4	5	6
Maturity (behaves like a responsible adult)	1	2	3	4	5	6
Mood (emotional attitude or state of mind)	1	2	3	4	5	6
Motivation (desire or willingness to do something)	1	2	3	4	5	6
Oral Communication (ability to use spoken language in a clear manner)	1	2	3	4	5	6
Punctuality (arrives on time)	1	2	3	4	5	6
School Reputation (positive or negative beliefs regarding the employee's high school)	1	2	3	4	5	6
Self-confidence (belief in one's own abilities)	1	2	3	4	5	6
Gender (status as male or female)	1	2	3	4	5	6
Social Activities (participation in social events/organizations in the community)	1	2	3	4	5	6
Technical Skills (knowledge or skills specific to a particular occupation)	1	2	3	4	5	6
Work Experience (amount and quality of past employment experiences)	1	2	3	4	5	6
Written Communication (ability to use written language in a clear manner)	1	2	3	4	5	6

Please answer the following questions by marking an "X" next to your choice.

What is your gender?
[ ] Male
[ ] Female

How many employees work for your company/organization at this location?
[ ] 1 – 19
[ ] 20 – 49
[ ] 50 – 99
[ ] 100 – 499
[ ] 500 or over

What best describes your industry?
[ ] Agriculture, Mining
[ ] Construction
[ ] Education
[ ] Finance, Insurance, Real Estate
[ ] Government
[ ] Health Care
[ ] Internet
[ ] Manufacturing
[ ] Retail, Wholesale
[ ] Accommodations/Food Services
[ ] Transportation
[ ] Communications, Utilities
[ ] Nonprofit
[ ] Other

Please describe your work.
[ ] Employee of a for-profit business, for wages, salary, or commissions
[ ] Employee of a not-for-profit, tax-exempt, or charitable organization
[ ] Local government employee (city, county, etc.)
[ ] State government employee
[ ] Federal government employee
[ ] Self-employed in own not-incorporated business, professional practice, or farm
[ ] Self-employed in own incorporated business, professional practice, or farm
[ ] Working without pay in family business or farm

Do you have experience in making hiring decisions for a business or organization?
[ ] Yes
[ ] No

Have you ever hired recent high school graduates?
[ ] Yes
[ ] No

How prepared are recent high school graduates to enter the workforce?
[ ] Very prepared
[ ] Moderately prepared
[ ] Slightly prepared
[ ] Unprepared

How would you rate the employability skills of recent high school graduates?
[ ] Excellent
[ ] Good
[ ] Fair
[ ] Poor

What skill or quality is most lacking in recent high school graduates who try to enter the workforce?

_____
_____
_____
_____
_____
_____

APPENDIX B

STUDENT QUESTIONNAIRE

Student Job Attribute Survey

This is a survey of qualities that employers look for in workers. Imagine that you are an employer in a local business who employs entry-level workers. Try to rate the following attributes based on what real employers feel is most important for the workplace success of entry-level workers. For each attribute listed, circle the number to show the level of importance.

	Not at all important	Low importance	Slightly important	Moderately important	Very important	Extremely important
Age (preference for workers of a particular age)	1	2	3	4	5	6
Appearance (appropriate grooming and clothing)	1	2	3	4	5	6
Assertiveness (acting in a bold or confident manner)	1	2	3	4	5	6
Community Involvement (volunteers to help in the community)	1	2	3	4	5	6
Computer Skills (word processing, data entry, internet usage, learning to use job-specific software)	1	2	3	4	5	6
Enthusiasm (displays excitement, enjoyment, and interest in work)	1	2	3	4	5	6
Outgoing Personality (friendly and confident in social situations)	1	2	3	4	5	6
Grades (performance in school classes)	1	2	3	4	5	6
Hobbies (involvement in activities for pleasure during free time)	1	2	3	4	5	6
Initiative (carries out necessary tasks without the need to be told what to do)	1	2	3	4	5	6
Knowledge of Company (familiar with company products/services and company culture)	1	2	3	4	5	6
Leadership (ability and willingness to guide and direct the actions of others to achieve goals)	1	2	3	4	5	6

	Not at all important	Low importance	Slightly important	Moderately important	Very important	Extremely important
Loyalty (supportive of the company mission and concerned about the needs of the employer)	1	2	3	4	5	6
Mannerisms (physical behaviors that are distinctive and peculiar to an individual)	1	2	3	4	5	6
Maturity (behaves like a responsible adult)	1	2	3	4	5	6
Mood (emotional attitude or state of mind)	1	2	3	4	5	6
Motivation (desire or willingness to do something)	1	2	3	4	5	6
Oral Communication (ability to use spoken language in a clear manner)	1	2	3	4	5	6
Punctuality (arrives on time)	1	2	3	4	5	6
School Reputation (positive or negative beliefs regarding the employee's high school)	1	2	3	4	5	6
Self-confidence (belief in one's own abilities)	1	2	3	4	5	6
Gender (status as male or female)	1	2	3	4	5	6
Social Activities (participation in social events/organizations in the community)	1	2	3	4	5	6
Technical Skills (knowledge or skills specific to a particular occupation)	1	2	3	4	5	6
Work Experience (amount and quality of past employment experiences)	1	2	3	4	5	6
Written Communication (ability to use written language in a clear manner)	1	2	3	4	5	6

Please answer the following questions by marking an "X" next to your choice.

What grade are you in?
[ ] 9
[ ] 10
[ ] 11
[ ] 12

Are you male or female?
[ ] Male
[ ] Female

What is your race/ethnicity?
[ ] American Indian / Native American
[ ] Asian
[ ] Black / African American
[ ] Hispanic / Latino
[ ] White / Caucasian
[ ] Pacific Islander
[ ] Other

How much work experience do you have?
[ ] no work experience
[ ] less than 6 months
[ ] 6 to 12 months
[ ] Over 1 year

APPENDIX C

PARENTAL PERMISSION FORM

PARENTAL PERMISSION FORM

I agree to allow my child, _____, to take part in a research study titled, "The Importance of Job Attributes for Entry-Level Job Success: A Comparison of Employers and Secondary Students," which is being conducted by Mr. Paul Boykin, from the Workforce Education Department at the University of Georgia under the direction of Dr. Karen Jones. My child's participation is voluntary which means I do not have to allow my child to be in this study if I do not want to. My child can refuse to participate or stop taking part at any time without giving any reason, and without penalty or loss of benefits to which she/he is otherwise entitled. I can ask to have the information that can be identified as my child's returned to me, removed from the research records, or destroyed.

- The reason for the study is to compare the perceptions of Madison County High School students and Madison County employers regarding the skills that are most important for entry-level employment.
- The researcher hopes that this information may help Madison County educators to better prepare students to enter the workforce.
- If I allow my child to take part, my child will be asked to complete a 10-minute survey in the high school cafeteria. This activity will take place during advisement time and will not interfere with other classes. If I do not want my child to take part then she/he will be allowed to attend advisement as usual.
- All students who participate in the study will receive a free pass to gain admission to a Madison County High School home football game valid for the 2012 season.
- The research is not expected to cause any harm or discomfort. My child can quit at any time. My child's grade will not be affected if my child decides not to participate or to stop taking part.
- No individually-identifiable information will be collected about my child.
- The researcher will answer any questions about the research now, or during the course of the project, and can be reached by telephone at 706.255.3741 or email at pboykin@uga.edu. I may also contact the professor supervising the research, Dr. Karen Jones, at 706.542.4473 or khjones@uga.edu.
- I understand the study procedures described above. My questions have been answered to my satisfaction, and I agree to allow my child to take part in this study. I have been given a copy of this form to keep.

Paul Boykin	_____	_____
Name of Researcher	Signature	Date
_____	_____	_____
Name of Parent	Signature	Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your child's rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 629 Boyd Graduate Studies Research Center, Athens, Georgia 30602; Telephone (706) 542-3199; E-Mail irb@uga.edu.

APPENDIX D

EMPLOYER PILOT TEST NOTE

Dear employer,

I am conducting a pilot test of a survey that I hope to send to most of the employers in Madison County. I would greatly appreciate your help as I test this survey. You will find an enclosed survey, an informational letter, a pass to a 2012 MCHS home football game, and a stamped return envelope. Please look over the letter, fill out the survey, and indicate if there are any changes that need to be made before I send it out to the county as a whole. You may write your notes/comments directly on the survey. Thank you for your willingness to help with my research!

Sincerely,

Bo Boykin

APPENDIX E

EMPLOYER'S COVER LETTER

Informational Letter

September 14, 2012

Dear employer:

I am a graduate student under the direction of Dr. Karen Jones in the department of Workforce Education at The University of Georgia. I invite you to participate in a research study entitled "The Importance of Job Attributes for Entry-Level Job Success: A Comparison of Employers and Secondary Students." The purpose of this study is to compare the perceptions of Madison County High School students and Madison County employers in regards to the skills that are most important for entry-level employment. You were selected to participate in this study because you are listed as a Madison County employer on the Georgia LaborMarket Explorer website.

Your participation will involve filling out a brief questionnaire and should only take about 10 minutes. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. Your individually-identifiable information will be kept confidential. The results of the research study may be published, but your name will not be used. In fact, the published results will be presented in summary form only. Your identity will not be associated with your responses in any published format. Each questionnaire has been labeled with a code. This code will be used only to identify which employers do not respond to the first survey mailing. After the second mailing of questionnaires, these records will be destroyed.

The findings from this project may provide information on ways that schools can better prepare high school students to enter the workforce. There are no known risks or discomforts associated with this research. To thank you for your involvement, I have included a pass that may be used at any regular season Madison County High School home football game during the 2012 season.

If you have any questions about this research project, please feel free to call me at (706) 255-3741 or send an e-mail to pboykin@uga.edu. You may also contact Dr. Karen Jones at (706) 542-4473 or by e-mail at khjones@uga.edu. Questions or concerns about your rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board, 629 Boyd GSRC, Athens, Georgia 30602; telephone (706) 542-3199; email address irb@uga.edu.

By completing and returning this questionnaire in the envelope provided, you are agreeing to participate in the above described research project.

Thank you for your consideration! Please keep this letter for your records.

Sincerely,

Paul E. Boykin, Jr.

APPENDIX F

INSTRUMENT PERMISSION EMAIL

Re: permission to use instrument

1 message

John Hafer <jhafer@mail.unomaha.edu> Wed, Aug 10, 2011 at 4:22 PM
To: Bo Boykin <boboykin@gmail.com>

Thanks for the email. Proves that old article never die, they just get filed away in the sediment until an academic archeologist digs them up. You can use whatever you want to...feel free. However, that research was done 31 years ago. I doubt that I even have the instrument anymore! I have moved several times, changed schools a couple of times and most likely, the only thing I have is a copy of the publication itself, and even that is doubtful. I will look around and see what I can find, but don't hold out a lot of hope!

Dr. John Hafer
Department of Marketing/Management
University of Nebraska at Omaha
Omaha, NE 68182 USA
(V) 1-402-991-6717
(F) 1-402-554-2010
jhafer15966@gmail.com

From: Bo Boykin <boboykin@gmail.com>

To: jhafer@mail.unomaha.edu

Date: 08/09/2011 04:27 PM

Subject: permission to use instrument

Hello Dr. Hafer,

I am a doctoral student in the Workforce Education department of the University of Georgia. I am currently working on my prospectus for my dissertation and I would like to use the survey instrument that you developed in your 1981 study "Job Selection Attributes: Employer Preferences vs. Student Perceptions." I will be conducting a similar study involving secondary students and I feel that this instrument would be appropriate.

First of all, could I have your permission to use this instrument for my study? If so, could you suggest how I might gain access to the survey? I have been unable to find a copy of the actual instrument.

Thank you for your time and consideration.

Bo Boykin

APPENDIX G

MCHS PERMISSION LETTER

Madison County High School
600 Madison Street
Danielsville, Georgia 30633
(706) 795-2197

March 21, 2012

Mr. Boykin:

You have my permission to conduct research using Madison County High School students as participants in your study, "The Importance of Job Attributes for Entry-Level Job Success: A Comparison of Employers and Secondary Students." During an advisement session, you may administer a brief questionnaire to those students who submit required parental permission, informed consent, and minor assent documents. I understand that the questionnaire will take approximately 10 minutes to complete and it will not interfere with regularly scheduled classes.

I understand that the research will not pose any risk to the students who choose to participate and they may choose to stop at any time without penalty. No individually-identifiable information will be collected from the students or shared in research documents.

I grant you permission to work with Madison County High School students to conduct this research study during the 2011-2012 school year.

Sincerely,

Chad Stone
Principal, MCHS

APPENDIX H

IRB APPROVAL

From: Kate Pavich
Sent: Monday, April 02, 2012 3:50 PM
To: Karen H Jones; Paul EDGERTON Boykin
Subject: IRB Approval - Jones/Boykin

PROJECT NUMBER: 2012-10678-0
TITLE OF STUDY: The Importance of Job Attitudes for Entry-Level Job Success: A Comparison of Employers and Secondary Students
PRINCIPAL INVESTIGATOR: Dr. Karen H. Jones

Dear Dr. Jones and Mr. Boykin,

The University of Georgia Institutional Review Board (IRB) has approved the above-titled human subjects proposal that was reviewed by the Expedited review procedure authorized by 45 CFR 46.110(a).

You should be receiving your approval packet and date-stamped consent forms via campus mail, or you may arrange to pick up the consent forms from our office by contacting Ms. Joy Emery at 706-542-3199 orjlmilam@uga.edu.

Please remember that any changes to this research proposal can only be initiated after review and approval by the IRB (except when necessary to eliminate apparent immediate hazards to the research participant). Any adverse events or unanticipated problems must be reported to the IRB immediately. The principal investigator is also responsible for maintaining all applicable protocol records (regardless of media type) for at least three (3) years after completion of the study (i.e., copy of approved protocol, raw data, amendments, correspondence, and other pertinent documents). Any HIPAA-related research documents must be retained for a minimum of six (6) years. You are requested to notify the Human Subjects Office if your study is completed or terminated.

Good luck with this study, and please feel free to contact us if you have any questions. Please use the IRB project number and title in all communications regarding this study

Regards,
Kate

Kate Pavich
IRB Coordinator
Human Subjects Office
627A Boyd Graduate Studies Research Center
University of Georgia
Athens, GA 30602-7411
kpavich@uga.edu
Phone: 706-542-5972
Fax: 706-542-3360
http://www.ovpr.uga.edu/hso/

APPENDIX I

MADISON COUNTY SCHOOL DISTRICT PERMISSION LETTER

MADISON COUNTY SCHOOLS

P.O. Box 37
Danielsville, Georgia 30633

DR. ALLEN McCANNON – Superintendent

706.795.2191
Fax 706.795.5029

August 15, 2012

Dear Paul Boykin:

Your proposal to conduct research, "The Importance of Job Attributes for Entry-Level Job Success: A Comparison of Employers and Secondary Students," at Madison County High School is approved, but we ask that you please agree to do the following:

1. Please provide an electronic copy of the student and employer surveys, as this research correlates strongly with our College and Career Academy Grant Application.
2. Please survey high school faculty as well in order to glean information that will be useful to the district for our College and Career Academy development.
3. Please share the findings of your study with the district by sending a summary of your findings (no more than five pages) to the attention of the district RTI-Assessment Coordinator at the conclusion of your study (January 2013).

Madison County Schools approves research proposals that align with our system goal of implementing a student-centered and data-driven decision-making process to improve achievement for all students. We believe that your research to identify attributes that lead to success in entry-level jobs has implications for the postsecondary success of our students, as well as implications for curriculum and instruction at the high school level. In particular, this research will inform the vision and mission of the proposed College and Career Academy at Madison County High School. Our hope is that you will share your findings with your colleagues, as well as stakeholders and partners in our College and Career Academy Grant Application.
Please let us know if you have any questions.

Sincerely,

Amanda Sailors, Ed.S.

RTI-Assessment Coordinator, Madison County Schools

Cc: Dr. Allen McCannon, Superintendent
Dr. Sherrie Gibney-Sherman, Assistant Superintendent for Curriculum and Instruction
Brittan Ayers, Director of Secondary Curriculum
George Bullock, Principal of Madison County High School

APPENDIX J

INTERCOM SCRIPT

To be read over the intercom by the co-principal investigator:

Good morning students and teachers. I am Mr. Boykin and I would like to ask all of our students to participate in research study. The title of the study is "The Importance of Job Attributes for Entry-Level Job Success: A Comparison of Employers and Secondary Students." I am a doctoral student in the Workforce Education Department at the University of Georgia under the direction of Dr. Karen Jones.

The purpose of this study is to compare the perceptions of Madison County High School students and Madison County employers in regards to the skills that are most important for entry-level employment. The results of the study will be used to inform and improve our instructional programs. The study will consist of a short questionnaire that will be given during an upcoming enrichment session. If you complete the questionnaire, you will receive a free pass to a MCHS home football game good for the 2012 season.

Teachers, please give each student two permission forms. Students, if you would like to participate, please have a parent or guardian complete one of these forms and return it to your second period teacher. The other one is for you to keep. I will collect the permission forms from your 2nd period teacher by the end of the week. If you have any questions or concerns about this study, you may contact me in the CTAE office. Thank you.

APPENDIX K

MINOR ASSENT FORM

September 25, 2012

Minor Assent Form

Dear Participant,

You are invited to participate in my research project titled, "The Importance of Job Attributes for Entry-Level Job Success: A Comparison of Employers and Secondary Students." Through this project I am learning about how high school students differ from employers in their views of those skills that are most important in the workplace.

If you decide to be part of this project, you will complete a brief questionnaire that will take about 10 minutes. Your participation in this project will not affect your grades in school. I will not use your name on any papers that I write about this project. I hope to learn about how schools can better prepare high school students to enter the workforce. To thank you for your participation, you will receive a free pass to a 2012 regular season MCHS home football game.

You do not have to participate in this research study if you do not want to.
If you want to stop participating in this project, you are free to do so at any time. You can also choose not to answer questions that you don't want to answer.

If you have any questions or concerns, you can always ask me or call my advisor, Dr. Karen Jones, at the following number: 706-542-4473.

Sincerely,

Paul E. Boykin
Department of Workforce Education
University of Georgia
706-255-3741
pboykin@madison.k12.ga.us

I understand the project described above. My questions have been answered and I agree to participate in this project. I have received a copy of this form.

_____
Signature of the Participant/Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 629 Boyd Graduate Studies Research Center, Athens, Georgia 30602; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

APPENDIX L

CONSENT FORM

CONSENT FORM (For students 18 or older)

I, _____, agree to participate in a research study titled "The Importance of Job Attributes for Entry-Level Job Success: A Comparison of Employers and Secondary Students" conducted by Paul Boykin from the Department of Workforce Education at the University of Georgia (706-255-3741) under the direction of Dr. Karen Jones, Department of Workforce Education, University of Georgia (706-542-4473).

I understand that my participation is voluntary. I can refuse to participate or stop taking part at anytime without giving any reason, and without penalty or loss of benefits to which I am otherwise entitled. Once I have submitted my results at the end of the survey, the researchers will not be able to return or destroy the information provided by me as the researchers will not be obtaining any information that could be used to link the results of the survey directly to me.

The purpose of this study is to compare the perceptions of Madison County High School students and Madison County employers in regards to the skills that are most important for entry-level employment. If I volunteer to take part in this study, I will be asked to complete a questionnaire which will take about 10 minutes.

The findings from this study may provide information on ways that schools can better prepare high school students to enter the workforce. There are no known risks or discomforts associated with this research. I can skip any questions I do not want to answer. My decision about whether or not to participate and the answers I provide will have no effect on my grades or class standing. I will receive a free pass to a single MCHS athletic event for participation in this research.

No individually-identifiable information about me will be collected during this study.

The investigator will answer any further questions about the research, now or during the course of the project.

I understand that I am agreeing by my signature on this form to take part in this research project and understand that I will receive a signed copy of this consent form for my records.

Paul Boykin	_____	_____
Name of Researcher	**Signature**	**Date**
Telephone: 706-255-3741		
Email: pboykin@madison.k12.ga.us		

_____	_____	_____
Name of Participant	**Signature**	**Date**

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 629 Boyd Graduate Studies Research Center, Athens, Georgia 30602; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu.