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To the Graduate Council:

I am submitting herewith a thesis written by Brian Patrick Thompson entitled "The Occupational Work Ethic of University Path and Career Path Secondary School Students." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Human Resource Management.

Gregory Petty, Major Professor

We have read this thesis and recommend its acceptance:

Randal Pierce, Debbie Mackey

Accepted for the Council: <u>Dixie L. Thompson</u>

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Accepted for the Council:

Vice Chancellor Dean of Graduate Studies



The Occupational Work Ethic of University Path and Career Path Secondary School Students

A Thesis Presented for the Master of Science Degree The University of Tennessee

Brian Patrick Thompson May 2004

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Abstract

The purpose of this study was to determine, using the Occupational Work Ethic Inventory (OWEI), if there were any significant differences in the work ethic of secondary high school students enrolled in vocational program of study, university program of study, and level of grade attended.

The population of this study consisted of high school students in a rural secondary school in East Tennessee. English Teachers, licensed in the state of Tennessee administered the OWEI survey during a one-class period. The researcher collected surveys as they were completed.

Based on an ex post factor design this study will use an alpha of .05 to test for significant differences. All statistical calculations were performed using the appropriate statistical software package. Null hypothesis was tested using an analysis of variance for each independent variable to determine whether significant differences can be shown for the dependent variables.

It was found for the population of this study, there were no significant differences between the two programs of study. There were differences in females reporting stronger work ethics than males. Also, there were interactions between demographic background information and programs of study. Implications of the results are discussed.

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CHAPTER I

Introduction

As business, industry, and education face challenges to each produce workers and students who perform at optimum levels, all are faced with the issue of the work ethics (Ford & Herren, 1995). More people fail to lose their job because of personal qualities or inappropriate attitudes than from insufficient knowledge or skills (Hatcher, 1995). Competition in technology has led to new strategies requiring employers to obtain a variety of skills and the flexibility to adapt. In our changing technological society, representatives from business and industry, labor, and education play an important role in collaborating with vocational educators to assure that entry-level workers are prepared with relevant entry-level skills (Bunn & Stewart, 1998).

Overtoom (2000) defines employability skills as "transferable core skills groups that represent essential functional and enabling knowledge, skill, attitudes required by the 21st century workplace." Vocational programs must prepare students for the workplace and society, both now and in the future (Harrison & Redman, 2000). Research suggests that positive attitudes toward work and work ethic are more important to job success and employability than knowledge or skills (Commission on the Skills of the American Workforce, 1990).

Vocational education is a collective term in high schools to identify curriculum programs designed to prepare students to acquire educational and job skills, enabling them to enter employment immediately upon graduation (Lynch, 2000). Understanding the work ethic of adolescents as they progress in high school through their

vocational curriculums has become important to educators. A work ethic curriculum may be found in the competencies that are listed in the SCANS report from the United States Department of Labor (Secretary's Commission on Achieving Necessary Skills [SCANS], 1991), (see Appendix A). SCANS states that individual must have basic and interpersonal skills to be employed successfully. If students are to see a real world application of classroom learning, schools need to emphasize cooperative learning, concrete thinking, and reasoning to multi-specific situations (Berryman, 1992). According to Berryman, these real world applications can serve as a vehicle to teach work ethics in vocational education (1992).

Statement of Problem

Identification and transfer of work ethics are beneficial to the success on the job. The tasks for vocational teachers are to train young people the factors, which are employability skills that help them, prepare for the world of work. As all these factors were examined, young people need these skills to succeed both in getting a job and in keeping a job. Employability skills represent affective behaviors including work ethics.

Knowledge of any differences between work ethic skills of university path students and vocational path students can assist teachers and counselors in preparing young people for work. There was no current information determining if work ethics change as students progress through high school. Employers do, however, want educators to teach these skills in schools. The problem represents that students tend to lack work ethics. Differences found in the work ethic between career paths and grade levels can

help teachers, administrators, and policymakers develop strategies to ensure that students entering the job market are ready for the world of work.

Purpose of Study

One purpose of this study was to collect data using the *Occupational Work Ethic Instrument* (Petty, 1993) of high school students in a public high school enrolled in both the university path and a vocational path. The study examined differences in the level of occupational work ethic according to each student's path. A second purpose was to determine if there were interactions between variables and differences between years attended at the high school. A third purpose was to collect data on any interaction that might exist between the demographics of the two career paths and grade level.

Research Questions

- 1. Are there differences in occupational work ethic of students who participated in a vocational path curriculum and a university path curriculum?
- 2. Are there differences in the occupational work ethic of students by grade level?
- 3. Is there any interaction between the occupational work ethic of two career paths by grade level?

Null Hypotheses

- Ho1: There is no significant difference in the work ethic, as measured by the OWEI, between student participants in a vocational path program as compared with a university path program.
- Ho2: There is no significant difference in the work ethic, as measured by the OWEI, between student grade levels.

Ho3: There is no significant interaction in the work ethic, as measured by the OWEI, between programs or grade level.

Rationale

The majority of literature relating to work ethic suggests that employees lack values and attitudes that guide behavior in the workplace. More members of the business community are expressing concerns about the work ethic, a commitment to the value and importance of hard work among potential employees (Miller, Woehr, & Hudspeth, 2002). Identification and transfer of work ethics are essential to succeed on the job (Hatcher, 1995). The literature suggests that a formal work ethic curriculum be taught in the vocational classroom (Douthitt, 1990; McCracken, 1990). Because of the disparity between skill levels and work ethic values, the Georgia Department of Technical and Adult Education has already incorporated the concept of work ethic into their curriculum (Georgia Department of Technical and Adult Education—GDTAE, 1991).

Looking at the four years of high school, students tend to be deficient in personal management skills that are needed to graduate and go on to the world of work. This study will demonstrate that students need to see the relevance of being on time, of demonstrating team skills, of knowing how to learn, of being able to problem solve, and of having a positive attitude and how these attributes can contribute to keeping a job. This also means that vocational educators must understand the components of the affective domain if they are to teach their subjects effectively (Petty, 1995). More importantly, examining vocational education to illustrate that work ethics need to be taught in these curriculums was just as important as the academics of high school.

Definition of Terms

- Employability Skills. Transferable core skills groups that represent essential functional and enabling knowledge, skills, attitudes required by the 21st century workplace (Overtoom, 2000).
- 2. *Initiative*. The ability to use one's judgment to make decisions and do things without needing to be told what to do
- 3. *Interpersonal Skills*. The ability to use one's knowledge effectively and readily in execution or performance.
- Occupational Work Ethic Inventory (OWEI) An inventory designed to measure work ethic developed by Dr. Gregory C Petty at the University of Tennessee, Knoxville.
- 5. *Skills, abilities, and Knowledge*. Developed through learning experience, broadly defined to include work, participation in community affairs, etc (NCES).
- 6. Task. Specific component of work.
- 7. *University Path.* A program of study that is recommended by colleges and universities to prepare high school students for admission.
- 8. Vocational Education. Involves three steps. First, during the freshman or sophomore year students are introduced to basic concepts, operations, and career possibilities within their given program. Second, students in the junior year move increasingly from textbook study to practical applications and laboratory setting, trial-and-error, practice. Third, in the senior year, students move to school-towork programs which shift them into vocational careers (Brewer, Campbell, & Petty, 2000).

9. Occupational Work Ethic. The displayed behavioral characteristics (work habits, attitudes, and values) based on an individual's personal values and mores while working for income within a paid occupation (versus sports, religious activities, hobbies, and other avocations) (Dr. Gregory Petty, personal communication, February 18th, 2003).

CHAPTER II

Review of Related Literature

This chapter contains research related to the occupational work ethic and vocational education. The current theoretical perspectives and recent studies of vocational teachings are explained. Also, the essential factors needed in the workplace along with the new trends in vocational education are described.

Current Theoretical Perspectives and Relevant Studies

Boatwright & Slate (2000) studied the work ethic of vocational students in Georgia. The Georgia Department of Technical and Adult Education had integrated the concept of work ethic into their curriculum because of the differences between skill levels and work ethic. The core component of work ethic values includes: attendance and punctuality, integrity and honest, productivity, cooperativeness and teamwork, responsiveness to supervision, adherence to policies, proper use of tools and resources, and observance of safety provisions (GDTAE Work Ethics Program, 1991). The students receive grades for not only their academic progress but also for their work ethic.

Participants in this study consisted of 202 vocational students, 18 small business owners, 19 managerial and technical personnel employees in a manufacturing environment, 32 managerial and technical personnel, 32 adult and technical education educators, and 36 high school and elementary school educators. The sample consisted of 36% male and 64% female participants. A multivariate analysis of variance procedure was conducted to examine the differences present in respondent answers on the Importance and Values factors. A significant difference was present for overall effect in gender. Females reported stronger work ethic values than did males. Also, the significant difference was present among the age groups. Respondents in age group 20-24 and age group 35 and older possessed significantly higher scores on the work ethic values than did subjects age 19 or under, with age group 20-24 exhibiting the highest mean scores. Also, prior educational level gave another statistically significant effect. Participants with a high school diploma or GED scored slightly higher than participants with a Vocational Certificate on the work ethic values items. Lastly, participants with one to five years work experience possessed stronger work ethic values.

Alexandria, Hill, & Rojewski (1999) researched work ethic differences in youth at risk of school failure. The purpose of this study was to determine if work ethic differed by risk of school failure and by gender. Three research questions were used to guide the focus of this study. The first question was "Are there significant differences in work ethic among students classified as at risk, moderately at risk, and not at risk?" "Are there gender differences in work ethic for the study participants," was the second question. The third was, "Are differences in work ethic related to interpersonal skills, initiative, or being dependable?"

Participants in this study consisted of ninth-grade students in a midwestern metropolitan high school. A total of 152 students participated in this study, which represented 100% of the students in attendance in the classes participating in the study at the time of the OWEI administration. A 7-Risk Behavior Scale included as part of a

student characteristic data form was used to collect information about academic risk for each participant. Students were asked during the past school year they had been disciplined by a teacher, suspended from school, cut classes, been in trouble with the law, thought about dropping out of school, been disinterested in school or disliked doing schoolwork that requires some effort. The responses consisted of yes (1) or no (0) for each item, and at-risk scores were tabulated for each student in the study (range 0-7). Classifications were based on the total number tallied for each category.

Significant differences were found for the grouping variables of at risk and gender. OWEI mean scores for at-risk students were lower than those for students who were moderately at risk, and mean scores for students not at risk were higher than scores for all others. Much of the research points out that females show higher work ethics than males. In a study from Petty & Hill (1994) gender mean scores on OWEI were higher for girls than for boys, which was consistent with previous research conducted using the OWEI (Petty & Hill, 1994).

Schmidt (1998) compared two delivery mechanisms of dual vocational training in Germany for implications for vocational training in the United States. This study consisted of an examination of the German vocational training system. Two types of programs were investigated: (a) traditional vocational training programs (TVPs), in which apprentices spend three to four days in a company and the remainder of the week in a vocation school, and (b) non-company based vocational training programs (NCPs), in which the role of the company was replaced by either a simulation company or a private training company.

This study was designed to address the following questions:

- Do responses to indicators of training satisfaction differ between students who participated in traditional dual vocational programs and those who participated in non-company-based dual vocational programs?
- 2. Do responses on indicators of economic outcomes differ between students who graduated from traditional vs. non-company-based dual vocational programs?
- 3. Do responses on indicators of job satisfaction differ between students who graduated from traditional vs. non-company-based dual vocational programs.

The most distinct difference between the two types of training programs occurred with the economic outcome indicators. Graduates from the TVPs fared better economically in the workplace than did their NCP counterparts.

Work Ethic Factors

Wells (1998) completed an ethnographic study of a health occupations program to assess students' achievements in the performance outcomes that define vocational work ethics at the Tompkins-Seneca-Tioga Board of Cooperative Educational Services (TST BOCES) in Ithaca, New York. Fifteen weeks of researched focused on the following questions:

- 1. Which teaching methods most effectively introduce health occupation students to vocational work ethics behavior?
- 2. To what extent do health occupation students know the behaviors that employers expect form entry-level employees?

- 3. To what extent are health occupation students' self-evaluations congruent with their work behaviors?
- 4. As students adopt new workplace behaviors, do health occupation students follow developmental stages similar to those reported by Miller and Coady (1986)?
- 5. Which teaching methods most effectively enable health occupation students to change undesirable workplace behaviors to desirable ones?

TST BPCES operates secondary school and adult vocational programs for eight school districts. To define their role in preparing students for work, the vocational staff identified 34 work ethic skills they expected students to achieve. The 34 skills, named "performance outcomes," were categorized into the following five areas: adaptable worker, skilled worker, effective communicator, self-directed worker, and responsible worker.

Three methods were used to apply the standards of the Performance Outcomes in the vocational program. These were: (1) direct methods involving specific lessons that introduced performance outcomes and taught the rubrics by which students were evaluated, (2) indirect methods using classroom teachable moments and (3) students evaluating their own work behavior and receiving feedback on the evaluations from the teacher.

The following conclusions were drawn from this study:

- Direct methods included technical material so students connected vocational work ethics with the technical skills of their trade.
- 2. Awareness of workplace expectations is the first step toward appropriate workplace behavior.

- When students' self-evaluations were compared with teacher evaluations, ratings were more congruent in the Responsible Worker category that in the Self-Directed Worker category.
- 4. Students at entry-level responded to routine work situations with expected behavior. Above entry-level students accepted new work situations as learning experiences and career opportunities. Students performing below entry-level often did not recognize routine work situations and did not respond appropriately. Students at the unacceptable level actively resisted and did not want to comply with established rules and social norms.
- 5. TST BOCES staff recognized the importance of including direct teaching methods in its preparation of entry-level workers. Fifteen weeks after the completion of the study, 90% of the students felt they had become more effective workers because they had learned the performance outcomes.

Work ethic factors in this study offer reasoning for other researchers to see that work ethic and technical skills connect in the real world application. Students that were taught employability skills become aware of acceptable behaviors that were consistent with their trade or occupation. Since vocational education teaches skills and knowledge, employability skill need to be another key component in the learning process. Many factors impact on both entry into and subsequent movement within the labor market for groups and individual, not the least of which is how a person views the world of work and how he/she fits into it (Conroy, 1998).

Hill & Petty (1995) studied themes, which characterized the occupational work ethic. The purpose of this study was to reduce the collective meanings of the 50 OWEI descriptors into a manageable list of the key themes, which explained the occupational work ethic, using data derived from the modern-day workplace. The population consisted of the workforce in public and private businesses and industries in geographic area in the Southeastern United States.

The instrument developed by Petty (1993) used was the Occupational Work Ethic Inventory (OWEI). The 50 items contained on the OWEI represented the work ethic and work attitude concepts identified from previous research. The instrument used a stem of *at work I can describe myself as*: followed by the following Likert scale for rating their standards for each item.

A four-factor solution was used after thorough analysis of the data. Three of the factors: interpersonal skills, initiative, and dependability were the work ethic areas that were examined. The fourth factor contained items on the instrument, which had been reversed. These reversed items were to avoid participants from developing a response pattern based on quickly marking a rating without reading to the item.

The work ethic factors in this study present a research-base guide for instructors who are trying to prepare students to the world-of-work. School curriculum should be examined to distinguish if and how these issues are being observed. This study also recognized that there was a need of further research in the field of work ethic and how schools can integrate employability skills into their curriculums.

In a later study, Petty (1995) found that work ethic differed by occupation. Participants identified their occupation as defined by the Standard Occupational Classification (SOA). Dependent variables for the study were identified as (a) working well with others; (b) striving for advancement/success; (c) being dependable; and (d) acceptance of duty (Petty, 1995). This data should be used in the educational system for students to evaluate their affective behaviors and traits for suitability to their chosen occupational field (Petty, 1995).

New Trends in Work Ethic

In the view of educators, policy makers, employers, and others who think that the diploma doesn't adequately communicate what a high school graduate knows and is able to do, there was a movement in Kentucky toward certifying the employability of young people and adults who complete certain educational programs (Partnership for Kentucky Schools, 2001). The initiatives include:

- State participation in the American Diploma Project, a recently launched effort to develop standards that will ensure the proficiency of high school graduates in mathematics and language arts.
- A collaborative effort of the state Department of Education and the Economic Development and Workforce Development cabinets to establish skill standards in certain occupational areas such as manufacturing.
- The creation of an employability certificate, another collaboration involving the Workforce Development cabinet and the Kentucky Community and Technical College System.

Kentucky adopted a standards-based education system with the enactment of the school reforms in 1990. It was one of five states participating in a national effort to strengthen those standards in areas of math and language arts instruction.

Although just getting under way, project planners say they hope to compare state standards for graduation with the performance expectations of businesses and higher education institutions. Kentucky, Indiana, Massachusetts, Nevada and Texas were participating in the project.

The Work Ethic Diploma, available to successful graduates in 17 public school districts and one parochial district grew from the interest of the Northern Kentucky Chamber of Commerce in working with schools to address what students need to succeed after high school, according to Gene Kirschner, assistant superintendent of Walton-Verona Independent Schools and chair of the chamber's project committee.

During its first year of availability, 400 graduating seniors received the diploma. The next year, recipients exceeded 800. More than 1,000 students were expected to qualify for the diploma at the end of that school year.

Students must score 16 out of 20 possible points on 10 standards that were established by a committee made up of business and industry representative, school personnel, parents and student. The program was based on student performance during the senior year.

The standards include:

- Discipline
- Attendance
- Absenteeism

- Tardiness
- Community service
- Grade point average
- Work ethic
- Punctuality
- Respectfulness
- Group cooperation

The final four areas, which involve more subjective measurements, required students to obtain references from three teachers who will confirm that they perform appropriately "often or always." Looking at these descriptors relate closely to the work ethics and the instrument that has been developed by Petty (1995) and used in many research studies.

This program gives an opportunity for schools to show how these skills can help students and encourage them to develop a work ethic. Also, these were vital elements that businesses and industries were looking for in potential employees.

Essential Workplace Skills

The major role for education is to prepare students for the world of work. Employers complain that students were not prepared with the necessary skills when they graduate. A three-year study by the American Society of Training and Development and the U.S. Department of Labor, *Workplace Basics* (1990), identified the following as essential workplace skills.

- The Foundations: Learning to learn
- Basic Competency Skills: Reading for the new workplace; writing for impact; computation in a technological workplace
- Communication Skills: Oral communication; principles of good listening
- Adaptability Skills: resourcefulness; creative thinking
- Developmental Skills: Self-esteem; motivation and goal setting; career development
- Group Effectiveness Skills: Interpersonal skills; teamwork; negotiations
- Influencing Skills: Understanding organizational culture; sharing leadership

"To those of us in business, it is obvious that large segments of our education system are failing today," Norman R. Augustine, the chairman of The Business Roundtable's Education Task Force, wrote in *A Business Leader's Guide to Setting Academic Standards*, (1996). "We are the one, after all, who get the first real-world view of the young people emerging from the American education 'pipeline'. Unfortunately, many of them arrive at our doors unable to write a proper paragraph, fill out simple forms, read instruction manuals, do essential mathematical calculations, understand basic scientific concepts, or work as a team."

The seminal national report on workplace skills was *What Work Requires of Schools: A SCANS Report for America 2000*, published in 1991. SCANS, the Secretary's Commission on Achieving Necessary Skills, was created by the U.S. Department of Labor to identify those skills, characteristics, and proficiencies that are essential for the modern workplace.

Reforming Vocational Education

In the demand for reforming vocational education, economists were pointing out that it is no longer a post-agricultural or post-industrial world. Rather, it is a world of fast communications and information, rapid decision-making, and intelligent social skills that were needed to deal with economic, technical, ecological, and ethical issues associated with problems facing every economic, social, or political system (Nijhof, 1998).

The new directions for high school career and technical education for the first decade of the 21st Century was researched by Lynch (2000). The purpose of this work was to describe appropriate education along with the experiences needed by high school students to prepare them to enter employment upon graduation. This study found that there were four controlling factors in which there was a need for reform in high school vocational education. The four factors were the (a) new economy, (b) public expectation for students, (c) new research on learning and motivation and effective teaching, and (d) a loud and vocal call for reform of the American high school.

Increasingly, economists and scholars talk about the ascendancy of knowledge as a primary product and competitive edge for many businesses; the increased reliance on team problem solving-often from remote locations; the incredible need to manage information and technology; the ability to analyze, synthesize, and evaluate information and use that information to solve problems; the new versions and forms of prerequisite technical skills; flexible jobs; and the new connections of related skill requirements (Bernhardt, Morris, Handcock, & Scott, 1998; Brown, 1999; Carnevale 1991; Marshall & Tucker, 1992; Wirth, 1992).

Secondly, public expectations lead to two conclusions related to career and technical education. The public does want career education and work skills included as components of the public school, K-12, curriculum, and parents expect their children to succeed in these areas and possibly go on to attend college. Marzano, Kendall, and Cicchinelli (1999) concluded that five subject areas have majority acceptance by the American adult public as definitely necessary in school curriculum: health, work skills, language arts, technology, and mathematics. The specific skills were drawn from general employability skills, and included standards about working with others, working with tools and technology, work ethics, and managing money (Nijhof, 1998).

Thirdly, student learning, motivation, and achievement were other demand areas for reform in the vocational high school curriculum. Student learning not only needs to be academic but also integrated with vocational education. There need to be initiatives that enable these two areas to come together to teach students new levels of higher-order thinking. Any definition of higher-order critical thinking skills include the ability to think creatively, make decisions, solve problems, visualize a solution, reason, analyze, interpret, and continue to learn (Lynch, 2000).

Fourthly, school reform was the number one concern of the American Public after thousands of pieces of education legislation from the 50 states and cumulative analysis of writings of scores of educational journalist from the nation's top news magazines and newspapers were investigated (Lynch, 2000). Reforming vocational education without making changes in the high school would not be fair for the students.

Summary

The review of relevant literature has shown a need for programs that focus on student's employability skills. Hatcher (1995) stated that more people fail at or lose their jobs because of personal qualities or inappropriate attitudes than because of insufficient knowledge or skill. Most entry-level employees lack the needs of their employers in regards to work ethic. The importance of work ethic in the workplace and the mention of related characteristics (individual responsibility, self-esteem, sociability, self-management, and integrity) in educational reform literature (SCANS, 1992) suggest that it was a topic of importance to gain and retain employment. Employers and businesses alike want educators to teach these skills in the school. Vocational education needs to take that direction as stated in the SCANS report. Also, vocational instructors that teach these young people need to be taught themselves how to teach work ethics in their classrooms. "Vocational programs must prepare students for the workplace and society, both now and in the future" (Harrison & Redmann, 2000).

CHAPTER III

Methodology

The intent of this study was to compare the differences in work ethic that might exist between vocational path students and university path students with regards to using the Occupational Work Ethic Inventory (OWEI). The sample for this study consisted of students who were enrolled in a rural East Tennessee high school. The Occupational Work Ethic Instrument (OWEI), developed by Petty (1993) was the instrument used to gather information in this study.

The independent variables for this study included gender, ethnicity, current grade level, enrollment in a university path and taking a vocational course, involvement in extra curricular activities, and employment status. Also, another independent variable was the path or direction that the students were currently taking which was either the university path or vocational path. The dependant variables in this study included were measured by the OWEI. Participants completed the demographic background information sheet after completing the OWEI (see Appendix B).

All students will pursue a focused program of study preparing them for work in either a university path or vocational path prior to entering high school. Students whose career goal requires a four-year degree should follow the university program graduation requirements while in high school. Students following this path will complete the core curriculum courses and additional courses required for entrance into Tennessee's public colleges and universities. Students whose career goal requires some education or training beyond high school, but less than a four-year college degree, should follow the vocational path. Students following this path will complete core courses and additional technical or vocational training after high school.

Population

Participants in this study consisted of ninth through twelfth-grade students at Sweetwater High School, Monroe County, Tennessee. The populations of students that turned in there consent and assent form enrolled in English classes for the year of 2003-04 were surveyed. The population was chosen based on the accessibility to the researcher. Human Subjects Form B, Certification for exemption from IRB Review for Research Involving Human Subjects was submitted and permission was obtained from the University of Tennessee's office of Research (see Appendix C). A total of 457 students participated in the study, which represented all of the students in attendance in the classes participating in the study at the time of the OWEI administration. The entire population was did not take the OWEI due to the students absent for that day in which it was administered. The sample was not random but was determined by school wide scheduling practices. The sample included 224 (49.2%) girls and 231 (50.2%) boys. Most of the participants (64.1%) were not employed, but 35.4% worked 5 hours or more each week. The majority of the participants were White (83.2%) and the others were Black (7.7%), Hispanic (4.6%), Oriental (4.0%), and other (.4%). Of the 457 students enrolled, 149 (32.6%) were on the vocational path, 271(59.3%) were on the university path, and 122 (33.4%) were taking vocational classes as an elective.

Instrumentation

The research instrument used in the study was the Occupational Work Ethic Inventory (OWEI), developed by Dr. Gregory C. Petty in 1991. A letter of permission was granted to use the OWEI for this study with the necessary information for proper interpretation as well as for instrument reliability and validity (see Appendix D). The OWEI was used to provide a succinct but accurate measure of work ethic endorsement for participating students. The OWEI was launched by the work of Dr. H. C. Kazanas (1978), as he related affective work competencies, work values and described how to measure them. The Affective Work Competency Inventory (AWCI) was published in 1978. Petty (1979) used this instrument in a study that showed how the attitudes towards work differed between workers, supervisors, and vocational educators. Using the affective work competencies from a population of workers, supervisors, and vocational educators (Petty & Morgan), Petty then set out in 1990 to develop a new instrument which could use these terms to measure work ethic characteristics directly related to a person's work.

The new instrument included a set of four descriptors, which were labeled Dependable, Ambitious, Considerate, and Cooperative. A 1995 study by Petty gave four groups, which were interpersonal skills, initiative, dependability, and reversed items. A stem was then added to direct the participant's responses. Also, a Likert-type scale was provided for rating participant standards for each item. A coefficient alpha estimate of internal consistency was computed to be .95 (Petty, 1991b) in a pilot study.

Numerous studies had been investigated to measure work ethic attitudes using the OWEI related to the instrument's validity. The OWEI has been used in previous studies

by Hatcher (1994, 1995), Hill (1992, 1996, 1997), Petty and Hill (1994), Petty (1994), and Hill and Petty (1995). In a research conducted by Hill (1992), the OWEI was found to be internally consistent and highly reliable. A correlation Coefficient Alpha of .95 was reported (Hill, 1992). Hatcher (1995) reported a coefficient alpha of .90 for a study involving occupational work ethic of apprentices and instructors in a trade union apprenticeship program. Allender (1993) reported a correlation alpha of .95 indicating that the instrument was highly consistent internally.

The researcher evaluated the appropriateness of OWEI and using it with students because many of them were not employed, which many studies that used the OWEI, the participants were employed. The researcher conducted a literature review on this aspect. Hill (1996), found the OWEI to be an effective measure for use with adolescents. The uniqueness of the instrument was such that it was fairly simple to understand and complete. A majority of the participants in Hills study (64.6%) were not employed, so their responses were somewhat indeterminate. Alexandria (1999) states that an underlying assumption of using the OWEI was that students could provide self-report data regarding their role as workers based on non-paid work, schoolwork, and other activities that might be interpreted as work.

Assumptions

The following assumptions will be made during this study:

- 1. Surveys will be answered as accurately and honestly as possible by the students.
- 2. This study assumed that all respondents were currently enrolled in an English class.

Limitations

- 1. This study was limited to students enrolled in Sweetwater High School, Monroe County who has returned the consent form.
- 2. Truthfulness was not certain.
- 3. Some students were not currently employed

Dependent Variables

The dependent variables for this study will consist of the four dimensions of the work ethic as represented by the subscales of the OWEI. These variables were working well with others (interpersonal skills), striving for advancement/success, being dependable (initiative), and acceptance of duties (dependable). The last subscale, acceptance of duties, consists of reversed items.

Data Collection

A letter of permission from the school principal was granted in writing and signed to conduct this study within the Monroe County School System (see Appendix E). All the participants' legal authorized guardian signed a letter of consent. Informed consent letters and student participation letters were sent home explaining what this study entails (see Appendix F). All the consent forms are in the office of the researchers main chair committee member locked up in a cabinet.

The researcher asked the English teachers to distribute the consent forms and proceed with the survey after the consent forms were brought back and filed. The English teachers signed an agreement with the researcher to administer the OWEI in their classes throughout the day. Letters of permission from English Teachers to Distribute the OWEI was granted and signed (see Appendix G). Since all students were required to be enrolled in at least one English class per grade level, this was the best way to complete the consent forms and administer the OWEI. Administering the surveys was conducted under the supervision of the English teacher prior classroom instruction for the day. An incentive was given to all students and teachers and encouraged participation. For returning the consent form and filling out the survey, students received a choice of a full size candy bar. The teachers that received an 80% return of consent forms and completed surveys received \$50.00 check from the researcher. Once the participants completed the survey, they were returned to the researcher to be compiled and entered into an excel spreadsheet for calculation. The spreadsheet was delivered to Universities of Tennessee statistics department.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) was used to perform the statistical analysis. During the research analysis stage of the study, a statistical consultant of the University of Tennessee, Knoxville, provided advice to the researcher regarding appropriate statistical analyses of the collected data.

The background characteristics of the participants in this study were analyzed using a frequency distribution. They included path of study, students enrolled in the university path and taking a vocational course, extracurricular activities that students were involved in, grade level, gender, ethnic background, employment status. A categorical number was assigned to each of these characteristics for measurement on the statistical software. For example, university path students were assigned a number one,
and vocational path students a number two. This format was used consistently for each of the categories on the background characteristics.

Based on an ex post facto design this study used the alpha level of .05 to test for significant differences. All statistical calculations were performed using the appropriate statistical software. Raw scores were input into an Excel spreadsheet. Raw scores on the data were circled on the survey instrument. Null hypotheses were tested using an analysis of variance for each independent variable to determine whether significant difference can be shown for the dependent variables based on the student responses.

The major independent variables in this study were university path and vocational path tracks. The OWEI was used to measure these paths (see Appendix H). Each survey consisted of 50 data elements using the OWEI and 10 data elements from their background information.

Descriptive analyses were conducted from the background data and inferential statistics were used to analyze the data of the OWEI questionnaire. Multivariate analysis of variance (MANOVA) was used to answer all research questions. When significant differences were found, subscales were computed to determine which mean scores were significantly different from others.

Summary

This chapter presented the research methodology used to meet the purpose of this study. The primary objective of this research was to compare the differences in work ethic that might exist between vocational path students and university path students in a rural high school setting. The secondary objective was to examine predictive ability of subjects' background characteristics on their work ethic. This chapter described the population, instrumentation, assumptions and limitations, dependent variables, data collection, and data analysis.

CHAPTER IV

Findings

Introduction

The purpose of the study was to provide data on the occupational work ethic of university path and vocational path programs in a high school setting to determine if there were differences in the level of work ethic based on the independent variables. Additionally, this study investigated participants' background information to see if there was a relationship between their work ethic. The results of the statistical analysis were also included in this chapter. On the basis of the overall significant differences indicated by the MANOVA procedures, individual ANOVAs were run to determine how much the value of the subscales differed. Finally, this chapter presents findings of the null hypotheses of the study. The chapter ends with the summary outlining the major findings of the study.

Frequency Distribution of Programs of Study

The demographic background of the population was analyzed using a frequency distribution. From the population, there were 531 students currently enrolled in English classes. A total of 457 were surveyed. Of the 457 that took the study, 271 were enrolled in the university path of study, 149 were in the vocational path of study, 37 were enrolled in the dual path of study and 3 were missing (not completed). As shown in Table 1, the frequency students enrolled in the university path vocational paths are shown.

Path of Study

				Valid	
		Frequency	Percent	Percent	Cumulative Percent
Valid	University	271	58.9	59.3	59.3
	Vocational	149	32.4	32.6	91.9
	Dual	37	8.0	8.1	100.0
	Total	457	99.3	100.0	
Missing	0	3	.7		
Total		460	100.0		

There were five vocational programs students can chose to enroll in, prior to entering high school, if they were entering the technical path of study. As shown on Table 2, the programs were agriculture, carpentry, family & consumer science health science, and marketing & management.

Research Questions

In this study, three research questions were developed to direct the investigation. The researcher investigated other research on work ethic to understand the extent of how work ethics were taught or learned; in the school, by parents, or in the work force? Statistical analyses were applied to examine the differences in the three subscales using the OWEI. MANOVA's were run to see if there were any significant differences and if there were, individual ANOVA's were ran to reveal this specific difference in each of the subscales.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Agriculture	47	10.2	19.6	19.6
	Carpentry	61	13.3	25.4	45.0
	Family & Consumer Science	61	13.3	25.4	70.4
	Health Sciences	40	8.7	16.7	87.1
	Marketing & Management	31	6.7	12.9	100.0
	Total	240	52.2	100.0	
Missing	0	219	47.6		
-	System	1	.2		
	Total	220	47.8		
Total		460	100.0		

Vocational Programs

Research Question One

Research question one concentrated on differences in occupational work ethic of students who participated in a vocational path curriculum and a university path curriculum. The participants were to complete the OWEI, which examined the individuality of their perception of work ethic. The three subscales on the OWEI were interpersonal skills, initiative, and dependability. The mean scores for interpersonal skills were 5.496 for the university path and 5.427 for the vocational path. The mean scores for initiative were 5.118 for the university path and 4.976 for the vocational path. The mean scores for dependability were 5.514 for the university path and 5.441 for the vocational path, as shown on Table 3. These results indicate that respondents perceived work ethic about the same for both the university path and the vocational path.

Dependent Variable	Path of Study	Mean	Std. Error
Interpersonal Skills	University	5.496	.057
	Vocational	5.427	.077
Initiative	University	5.118	.052
	Vocational	4.976	.070
Dependable	University	5.514	.056
	Vocational	5.441	.076

Mean Scores for Path of Study on Dependent Variables

Research Question Two

Research question two focused on any differences in the occupational work ethic of students by grade level. Data were collected by the number of students that took the OWEI by each grade level. There were 99 freshmen, 128 sophomores, 131 juniors, and 100 seniors. Using descriptive statistics, the data were examined, and the mean scores were obtained.

Table 4 highlights the mean scores of the subscales for interpersonal skills, initiative, and dependability for each grade level. The freshman's mean for interpersonal skills was 5.412, for initiative 4.936, and for dependable 5.329. The sophomore's mean for interpersonal skills was 5.410, for initiative 5.002, and for dependability 5.463. The junior's mean for interpersonal skills was 5.417, for initiative 5.080, and for

Dependent Variable	Grade	Mean	Std. Error
Interpersonal Skills	Freshman	5.412	.093
	Sophomore	5.410	.082
	Junior	5.417	.081
	Senior	5.648	.093
Initiative	Freshman	4.936	.087
	Sophomore	5.002	.076
	Junior	5.080	.076
	Senior	5.189	.086
Dependable	Freshman	5.329	.093
	Sophomore	5.463	.081
	Junior	5.549	.080
	Senior	5.583	.092

Mean Scores on Dependent Variable by Grade Level

dependability 5.549. The senior's mean for interpersonal skills was 5.648, for initiative 5.189, and for dependable 5.583. Again, the mean scores were very close and the data suggests that there cannot be any reference to work ethic and grade level.

Research Question Three

Research question three addressed the interaction between the occupational work ethic of two career paths by grade level. Question two and three were similar in questioning. Although there were no differences between grade level and occupational work ethic, there were interactions. There were three interactions based on the demographic background. First, there was a gender interaction. Second, there was an interaction between students who were enrolled in the university path and took a vocational course. Finally, there was an interaction between students and their work ethic that were involved in extra curricular activities.

The first interaction was gender in effect. The females scored higher on the OWEI than the males. There were 224 females and 231 males that took the OWEI. There was an interaction on two of the three subscales of the OWEI. The females scored higher than males on the subscales of interpersonal skills and dependability using the OWEI.

Another interaction was between students enrolled in the university path and taking a vocational course. The university path students who were enrolled in a vocational course scored higher than those who did not take a vocational course. The university path students scored higher on one of the subscales, which was initiative. The university path students who were enrolled in a vocational class were 114 as compared to those who weren't 150.

The last interaction was between students who were involved in extra curricular activities as compared to those who weren't. There were 191 students involved in extra curricular activities and 269 that were not. Of those 191 students involved, they scored higher mean on the dependent variable of initiative, as shown on Table 5.

Hypotheses

Three null hypotheses were used to ascertain significant differences that exited when examining the OWEI by demographic variables. A multivariate analysis of variance (MANOVA) technique and univariate analyses of variance (ANOVA) were used to test each of the null hypotheses, and to determine significant differences and relationships. The information found in this section outlines the statistical procedure

Dependent Variable	Extra curricular activities	Mean	Std. Error
Interpersonal Skills	No	5.418	.057
	Yes	5.521	.067
Initiative	No	4.922	.052
	Yes	*5.230	.062
Dependable	No	5.417	.056
	Yes	5.578	.066
*(<i>p</i> ≤.05)			

Mean Scores of Extra Curricular Activities

Null Hypothesis One

Ho1 There is no significant difference in the work ethic, as measured by the OWEI, between student participants in a vocational path programs as compared with a university path program.

To test null hypothesis one, (MANOVA) was conducted to determine differences with regard to the students' work ethic. In addition, follow-up univariate Fs revealed that there was no significant differences, F(3, 416) = 1.070, p = .361. Therefore, the null hypothesis was accepted.

Null Hypothesis Two

Ho2 There is no significant difference in the work ethic, as measured by the OWEI, between student grade levels.

To test null hypothesis two, A MANOVA was conducted to ascertain whether differences were present in the occupational work ethic of students by grade level. The findings were no significant difference in work ethic, F(9, 1100) = 1.49 p = .146. Therefore, the null hypothesis was accepted.

Null Hypothesis Three

Ho3 There is no significant interaction in the work ethic, as measured by the OWEI, between programs or grade level.

To test the null hypothesis three and to examine the extent to which differences were present in respondents' answers on the background demographics, there were three independent variables with significant results that were related to interaction in the work ethic as measured by the OWEI. There were two independent variables with no significant differences.

The three independent variables that had a significant difference were gender, university path students who were taking a vocational class, and students who were involved in extra curricular activities (sports, clubs, etc.). The two areas of nonsignificant results were students taking more than one vocational course and those were currently employed part-time.

The first significant difference was with the work ethic of respondents categorized by gender. Females scored higher on two of the three OWEI subscales. As shown on Table 6, the subscales were significant on interpersonal skills and dependability. Initially, a MANOVA was conducted to determine if there was a significant difference.

		Type III				
	Dependent	Sum of		Mean		
Source	Variable	Squares	df	Square	F	Sig.
Corrected Model	Interpersona 1 Skills	5.863(a)	1	5.863	7.083	.008
	Initiative	.205(b)	1	.205	.280	.597
	Dependable	8.614(c)	1	8.614	10.771	.001
Intercept	Interpersona 1 Skills	13634.985	1	13634.985	16470.383	.000
	Initiative	11633.886	1	11633.886	15881.237	.000
	Dependable	13738.888	1	13738.888	17178.315	.000
sex	Interpersona 1 Skills	5.863	1	5.863	7.083	.008 *
	Initiative	.205	1	.205	.280	.597
	Dependable	8.614	1	8.614	10.771	.001 *
Error	Interpersona 1 Skills	375.015	453	.828		
	Initiative	331.848	453	.733		
	Dependable	362.301	453	.800		
Total	Interpersona 1 Skills	14010.391	455			
	Initiative	11967.190	455			
	Dependable	14102.469	455			
Corrected Total	Interpersona 1 Skills	380.879	454			
	Initiative	332.053	454			
	Dependable	370.915	454			

Tests Between-Subjects Effects on Gender

a R Squared = .015 (Adjusted R Squared = .013)

b R Squared = .001 (Adjusted R Squared = -.002)

c R Squared = .023 (Adjusted R Squared = .021)

*(*p*≤.05)

A significant difference was present for effect of gender. In addition, follow-up univariate Fs revealed that statistically significant differences were present between gender, F(3, 451) = 672, p < .001. Individual ANOVAs were tested to look at the means to see the difference between subject effects. The subscales were significant in interpersonal skills and dependability. The subscales of interpersonal skills scored higher with a significant of .008 and dependability of .001. The subscale of initiative was not significant. These subscales states that females had a higher work ethic that males do.

As shown in Table 7, the means were used to determine how gender differs in work ethic. Of the three dependent variables, interpersonal skills and dependability shows significant difference. Females score higher in means as compared to males. In interpersonal skills, females score 5.888 and males score 5.361. In dependability, females scored 5.633 as compared to males that scored 5.358. Therefore, the null hypothesis was rejected.

The second area that revealed statistically significant differences was the work ethic of respondents categorized by the university path and taking a vocational course. The students that took vocational courses and enrolled in a university path were found to be significantly different for one of the three subscales. The subscale that was significantly different was initiative. The subscales of interpersonal skills, and dependability show no significant difference. A MANOVA was conducted to see if there were any differences. The MANOVA indicated that the subscales of initiative were significant F(3,260) = 2.77, p = .042. As shown on Table 8, students who were enrolled in a university path and took a vocational course scored a mean of 5.257 as compared to

Dependent Variable	Gender	Mean	Std. Error
Interpersonal Skills	Female	5.588*	.061
-	Male	5.361*	.060
Initiative	Female	5.078	.057
	Male	5.036	.056
Dependable	Female	5.633*	.060
-	Male	5.358*	.059

Gender Means

*****(*p*≤.05)

	Enrolled in University Path			95% Con Inter	fidence val
Dependent Variable	and taking vocational course	Mean	Std. Error	Lower Bound	Upper Bound
Interpersonal	Yes	5.557	.091	5.379	5.736
Skills	No	5.463	.079	5.307	5.618
Initiative	Yes	5.257*	.078	5.103	5.411
	No	5.008*	.068	4.874	5.142
Dependable	Yes	5.584	.088	5.410	5.758
	No	5.462	.077	5.310	5.613

Enrolled in University Path and Taking Vocational Course

*****(*p*≤.05

students who did not take a vocational course. These students had a mean of 5.008. Therefore, the null hypothesis was rejected.

The third area in this study which was examined was to determine if the work ethic was higher when students were involved in extra curricular activities or not. There was a significant difference between students who were involved than those who were not. The MANOVA indicated that there were significant F(3,465) = 6.84, p < .001.

The tests of between subjects effects show a significant difference in individual ANOVAs in the subscale of initiative. There was no significant difference in the subscales of interpersonal skills and dependability. Initiative differs p < .001, interpersonal skills p = .240, and dependable p = .0640, as shown in Table 9. Therefore, the null hypothesis was rejected.

To examine the background information on students taking more than one vocational course and any interaction with work ethic, there was no significant difference. A MANOVA was conducted and the results were F(3, 142) = 1.36, p = .257.

Finally, the last area of background demographics was to determine if there were significant differences between students who work and those who do not. A second question related to working or not, asked "If you work, how many hours do you work?" A MANOVA was conducted to determine whether differences were present or not. There was no significant differences among participants that were working and those who were not. The scores were F(3, 4531) = 1.911, p = .127.

<u>.</u>		Type III				
	Dependent	Sum of		Mean		
Source	Variable	Squares	df	Square	F	Sig.
Corrected	Interpersonal Skills	1.199(a)	1	1.199	1.387	.240
moder	Initiative	10.604(b)	1	10.604	14.593	.000
	Dependable	2.905(c)	1	2.905	3.442	.064
Intercept	Interpersonal Skills	13366.191	1	13366.191	15458.066	.000
	Initiative	11512.570	1	11512.570	15843.674	.000
	Dependable	13502.745	1	13502.745	16000.432	.000
extraactivity	Interpersonal Skills	1.199	1	1.199	1.387	.240
	Initiative	10.604	1	10.604	14.593	*.000
	Dependable	2.905	1	2.905	3.442	.064
Error	Interpersonal Skills	396.021	458	.865		
	Initiative	332.799	458	.727		
	Dependable	386.506	458	.844		
Total	Interpersonal Skills	14114.924	460			
	Initiative	12075.100	460			
	Dependable	14222.816	460			
Corrected Total	Interpersonal Skills	397.220	459			
	Initiative	343.403	459			
	Dependable	389.411	459			

1056 Detricen-Subjects Enters and Taking an Extra Currentar Mentity	Tests Between-Sub	jects Effects and	Taking an Extra	Curricular Activity
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a R Squared = .003 (Adjusted R Squared = .001) b R Squared = .031 (Adjusted R Squared = .029)

c R Squared = .007 (Adjusted R Squared = .005)

*(*p*≤.05)

Summary

This chapter reported the results of the hypothesis and research questions. Gender, students enrolled in the university path and taking a vocational class, and involvement in extracurricular activities was reported to be statistically significant. There was no significant difference between university programs and vocational programs. Finally, there was no significant difference between grade level, students taking more than one vocational course, and the participant's employment status.

CHAPTER V

Conclusion, Implications, Recommendations and Summary

The purpose of this study was to collect data using the Occupational Work Ethic Instrument of high school students in a rural public school. This study examined differences in the level of work ethic according to each students chosen program. Distributing the OWEI instrument during the first 15-20 minutes prior to class activities in all English classes accomplished this. Data was collected using the OWEI. Key work ethic components examined were interpersonal skills, initiative, and dependability. This chapter presents conclusions, implications, recommendations, and summary of the study.

Conclusions

Participants' Demographics

This study involved the population of the Monroe County high school students that were enrolled in English courses in fall semester of 2004. The students were surveyed for demographic variables of gender, ethnicity, current grade level, enrolled in a university path and taking a vocational course, involved in extra curricular activities, and if they were working or not. Also, another independent variable was the path of study students were enrolled in. The dependant variables in this study included were measured by the OWEI. Participants completed the demographic background information sheet following the completion of the OWEI

As results of this study were considered, the use of self-report data, and the limited scope of included variables must be recognized. The sample for this study was

nonrandom and used self-reported data. Specific findings of this study indicate that a higher work ethic attributes to gender, university path students enrolled in vocational courses, and students involved in extracurricular activities. This study detected no significant differences in the work ethic between university programs and vocational programs. This may be an indication that in either program or path a student chooses, they feel they will be successful.

Research Question One

Are there differences in occupational work ethic of students who participated in a vocational path curriculum and a university path curriculum?

The participants were to complete the OWEI, which examined the individuality of their perception of work ethic. The review of literature research revealed contradictory to this research, which was significant. Hill (1996) found that the mean scores of vocational students for initiative and being dependable were lower than the mean scores of employed workers. Hatcher (1995) found overall differences in work ethic of being dependable revealed the largest difference in means scores between instructors and apprentices.

The mean scores for interpersonal skills were 5.496 for the university path and 5.427 for the vocational path. The means scores for initiative were 5.118 for the university path and 4.976 for the vocational Path. The means scores for dependable were 5.514 for the university path and 5.441 for the vocational path. These results indicate that respondents perceived work ethic about the same for both the university path and the vocational path.

Research Question Two

Are there differences in the occupational work ethic of students by grade level?

The reviews of related literature revealed significant difference were present among the age groups. Boatwright & Slate (2000) found that age group 20-24 and age group 35 and older possessed significantly higher scores on the work ethic values than did subjects age 19 or under, with age group 20-24 exhibiting the highest mean scores. Also, prior educational level gave another statistically significant effect. Participants with a High School Diploma or GED scored slightly higher than participants with a Vocational Certificate on the work ethic values items. Lastly, participants with one to five years work experience possessed stronger work ethic values than the remaining two groups.

For this study's population, grade level or age was not found to be a factor in work ethic. This finding was inconsistent with much of the research that has been completed. There were 99 freshmen, 128 sophomores, 131 juniors, and 100 seniors. The mean scores of the subscales for interpersonal skills, initiative, and dependable for each grade level were scored. The freshman's mean for interpersonal skills were 5.412, initiative 4.936, and dependable 5.329. The sophomore's mean for interpersonal skills were 5.410, initiative 5.002, and dependable 5.463. The junior's mean for interpersonal skills were 5.417, initiative 5.080, and dependable 5.549. The senior's mean for interpersonal skills were scores were very close and the data suggests that there cannot be any reference to work ethic and grade level.

Research Question Three

Is there any interaction between the occupational work ethic of two career paths by grade level?

Although there were no relationships with the OWEI and grade level, this study found there were three interactions on the participants' work ethic and the independent variables. There were interactions between genders, students who were enrolled in the university path and took a vocational course, and students that were involved in extra curricular activities.

The first results found were in gender. The results on gender demonstrated that females had a higher work ethic means on two of the three subscales using the OWEI. Females scored higher on interpersonal skills of 5.888 and males score 5.361. Females also scored a higher mean as being dependable, which were 5.633 as compared to males that scored 5.358 using the OWEI.

Previous research reveals significant findings consistent with the results of this study. Boatwright and Slate's (2000) study which found that females reported stronger work ethic values than males. Another finding from Hill's (1996) study on work ethic in vocational education students and full-time employed workers found that gender effects were also evident with females scoring higher than males on all three measures. Petty's (1994) study on work ethic and gender also found females had significantly higher work ethic on subscales of dependability, ambitious, consideration, and cooperation.

The second finding was the population enrolled in the university path of study and took a vocational course. Results found that students enrolled in the University path and took a vocational course to be significantly higher than students who didn't take a vocational course. There were a total of 33.4% enrolled in the University path and took a vocational course and 66.6% who didn't. Students who were enrolled in a university path and took a vocational course scored a mean of 5.257 as compared to students who didn't take a vocational course had a mean of 5.008.

A review of related literature revealed that work ethics can be taught and were influenced by work experiences and socialization processes such as training and apprenticeship Cherrington (1980). Vocational education is directed more towards a hands-on approach, where there is more interaction between students as compared to students in a classroom setting. As a result, these higher scores can contribute to the population that was enrolled in a university program and taking a vocational course than those who were not.

Finally, another significant effect was students who were involved in extra curricular activities. This population reported a higher score on the work ethic instrument. Of the total population survey, 58.5% were involved in extra curricular activities, which could be anything from being a member of an organization to playing. Based on these results, this may indicate that becoming a part of a team, sport or a member of a club has an impact on the development of work ethic.

Implications

Providing data on the occupational work ethic, the findings of the study have implications for administrators, educators, vocational committee members and instructional designers who are involved in designing and help developing vocational programs. As noted in the review of related literature, there were schools in Kentucky

that were currently having students earn not only an academic diploma but also a work ethic diploma.

Additionally, this research was imperative to the requirements in Tennessee high school work based programs. Employers are required to rate each student who is currently working for them in accordance with the related vocational program. The employer's periodic rating factors correlates with the many of the descriptors on the OWEI. There are seven factors that the employer rates the student on a likert scale from one, being satisfactory to five, being excellent. The factors include: progress, initiative, reliability, work attitude, cooperation, time management, personal appearance, and attendance.

Another implication this study represents was how work ethic relates to curriculum design in our high schools, especially in the technical and industrial (T& I) programs. Students that chose the T & I programs were required to take a new course called Career Success Management (CMS). CMS was introduced into the curriculum as a prerequisite in the year of 2003. The course provides students with tools for achieving success in their academic, work and personal lives. Course content emphasizes the basic skills and knowledge needed for employment success, as identified by world context, providing concrete opportunities for developing personal and career goals, effective communication skills, teamwork's abilities and successful work attitudes.

The findings of this research had added to the understanding of the importance on work ethic in the high school setting. Both university programs and vocational programs need work ethics taught. Marzano, Kendall, and Cicchinelli (1999) concluded that employability skills such as working with others, working with tools and technology,

work ethics, and managing money had a definite impact in school curriculum. Young people need these traits in order to prepare them to be qualified workers who need these skills so they can function effectively in a rapidly changing job market.

Recommendations

Identifying the perspectives of future research in the area of using the OWEI and in a high school setting, a number of recommendations were suggested.

- The population was limited to one school in a small rural area. Further research would suggest the need to take a sample from a countywide system. Since Monroe County has four high schools, it would be suggested to take samples from all the schools.
- 2. Further research can compare high school students to those same students that graduated and had been working for at least two years. A study by Hatcher (1995) found the work ethic of respondents categorized by years of full-time work experience was significantly different using the OWEI. The post hoc test found that apprentices and instructors with more than 5 years of work experience had higher scores on initiative than those with less than 5 years of experience. Also, those with 6 to 10 years of work experience had higher scores on work commitment than those with less than 5 years of work experience, Hatcher (1995).
- 3. One area that needs to be addressed is the social economic background of the parents. As shown from this study, these students had the same

work ethic when they start ninth grade until they graduate in the twelfth grade. As compared to other studies, this was contradictory. Boatwright and Slate (2000)'s study revealed that statistically significant differences were present among the age groups. In their study, respondents in age group 20-24 and age group 35 and older scored significantly higher on the importance variable than did subjects age 19 or under, with age group 20-24 with the highest means scores.

4. Examining the results of this study, the implications need to ask, What are the roles and responsibilities of our schools? Research by Conroy (1998), states the career education and a development program has been to help individuals choose an occupation or career. Conroy (1998) states that career education will be appropriate for all students and not just those enrolled in vocational programs. Another study conducted by Iver & Legter (2002) states the schools they were studying found performance index established by the state to judge high school performance focused on three main measures. These measures were attendance rate, dropout rate, and state functional test results. This forced much time preparing students to pass test that should had been passed in the middle schools. These studies show that the roles and responsibilities of school systems vary in the area of what needs to be taught and what needs to be evaluated.

5. Teachers and counselors need to look at work ethic and examine if this is something that the schools should be teaching or instead is it the

place of the parents or even the work force to do the instruction. Literature about teaching work ethics goes back to the SCANS report of 1991, which states that individuals must have basic and interpersonal skills to be employed successfully.

Summary

The purpose of this research was to determine, using the Occupational Work Ethic Inventory, if there were any significant differences of secondary high school students enrolled in a vocational program of study compared to a university program. The research also investigated work ethics and grade level and finally interactions between paths of study. The population of this study was limited to a small rural secondary high school in East Tennessee. Null hypothesis were tested using an analysis of variance for each independent variable to determine whether significant differences can be shown for the dependent variables. The findings of this research indicate that females had a higher work ethic than males. This was congruent with many findings of ongoing research of work ethic.

Although there were no significant differences between the two programs of study, this can be significant compared to other research that has been found in work ethic. Boatwright & Slate (2000) found that age and maturity of respondents were related to work ethics. Hill (1996) found that the mean scores of vocational students for initiative and being dependable were lower than the mean scores of employed workers. Hatcher (1995) found overall differences in work ethic of being dependable revealed the largest difference in means scores between instructors and apprentices.

For gender, mean scores on the OWEI were higher for females than males. This was a common theme among the research. Statistical analysis showed that the interpersonal skills and dependability were the two independent variables that existed between the females and males. Finally, there were interactions between the demographic background information and programs of studies. As noted earlier, students that were involved in extracurricular activities scored higher on the OWEI. This was not surprising, since students that volunteer to become involved in any type of activity, whether it was being part of student council or being player on a sports team, shows initiative. This in turn would help student grow in maturity, dependability and in developing interpersonal skills. This was the same for students who were enrolled in the university path and taking a vocational class as an elective to learn something new that they might be interested in.

This research indicates another step toward the development of the information towards work ethic. Further research is still needed to better understand the need for implementing work ethic into the curriculums of our schools. For vocational education, this can help young people develop the attitudes, skills and knowledge needed in the world of work.

New directions are already being taught with the new work base programs in Tennessee. Vocational educators are trained and endorsed during their off months for each schools system to help coordinate these program. The work base programs are different from previous coop programs. There has to be a correlation between the vocational program and the place of work for the student to get credit. Also, students were evaluated on a criterion that was based almost exactly on the OWEI.

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Appendices

Appendix A

Scans Report
The Scans Five Competencies

Resources: Identifies, organizes, plans, and allocates resources.

- a. Time selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules.
- Money uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.
- Material and Facilities acquires, stores, allocates, and uses material or space efficiently.
- d. Human Resources assess skills and distributes work accordingly, evaluates performance and provides feedback.

Interpersonal: Works with others.

- A. Participates as Member of a Team contributes to group effort.
- B. Teaches Others New Skills.
- C. Serves Clients/Customers works to satisfy customers' expectations.
- D. Exercises Leadership communicates ideas to justify position, persuades, and convinces others.
- E. Negotiates works toward agreements involving exchange of resources and interests.
- F. Works with Diversity works well with men and women from diverse backgrounds.

Information: Acquires and uses information

- A. Acquires and Evaluates Information.
- B. Organizes and Maintains Information.
- C. Interprets and Communicates Information.
- D. Uses Computers to Process Information.

Systems: Understands complex interrelationships

- A. Understands Systems how social, organizational, and technological systems work.
- B. Monitors and Corrects Performance distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and corrects malfunctions.
- C. Improves or Design Systems suggests modifications to existing systems and develops new or alternative systems to improve performance.

Technology: Works with a variety of technologies.

- A. Selects technology chooses procedures, tools or equipment including computers and related technologies.
- B. Applies Technology to Task Understands overall intent and proper procedures for setup and operation of equipment.
- C. Maintains and Troubleshoots Equipment Prevents, identifies, or solves problems with equipment, including computers and other technologies.

The SCANS Three-Part Foundation

- Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks.
- A. Reading locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
- B. Writing communicates thoughts, ideas, information, and message in writing and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
- C. Arithmetic/Mathematics performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- D. Listening receives, attends to, interprets, and responds to verbal messages and other cues.
- E. Speaking organizes ideas and communicates orally.
- Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons.
- 4. Creative Thinking generates new ideas.
- Decision Making specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternatives.
- Problem Solving recognizes problems and devises and implements plans of action.
- Seeing Things in the Mind's Eye organizes, and processes symbols, pictures, graphs, objects and other information.

- Knowing How to Learn uses efficient learning techniques to acquire and apply new knowledge and skills.
- Reasoning discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.
- Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty.
 - A. Responsibility exerts a high level of effort and perseveres toward goal attainment.
 - B. Self-Esteem believes in own self-worth and maintains a positive view of self.
 - C. Sociability –demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings.
 - D. Self-Management assesses self-accuracy, sets personal goals, monitors progress, and exhibits self-control.
 - E. Integrity/Honesty chooses ethical courses of action.

Appendix B

Demographic Background Information

<u>x</u>

DEMOGRAPHIC BACKGROUND INFORMATION

DIRECTIONS:

Please check the appropriate response for each item. Completion of this inventory acknowledges your understanding that this data will be used for research purposes only and will be kept completely confidential.

(1) What path of study are you currently enrolled in?

____ University Path (1)

_____Vocational Path (2)

____ Dual Path (3)

(2) If you are enrolled in a vocational program, which one are you enrolled in? Agriculture (1)

- ____ Agriculture Carpentry
- Carpentry (2) Family & Consumer Science (3)
- Health Sciences (4)

Marketing & Management (5)

(3) Are you currently taking more than one vocational course?

 $\underline{\qquad} Yes \qquad (1) \\ \underline{\qquad} No \qquad (2)$

(4) If you are enrolled in the university path, are you taking a vocational class?

Yes	(1)
No	(2)

(5) Are involved in any extra curricular activities, if so, what are they and how many hours per week do you spend on these activities?

(7) Sex: female

male

(1)

(2)

What curricular activities, or sports. Total hours spent on these activities and/or sports. None.

(6) Grade level:

Freshman	(1)
Sophomore	(2)
Junior	(3)
Senior	(4)

(8) Ethnic Background

· /	U	
	Caucasian	(1)
	African American	(2)
	Hispanic	(3)
	Oriental	(4)
	Other	(5)

(9) Are you currently working?

(10) If you work, how many hours per week do you work?

hours

Appendix C

Human Subjects Form B

FORM B

IRB # _____

Date Received in OR _____

THE UNIVERSITY OF TENNESSEE

Application for Review of Research Involving Human Subjects

I. IDENTIFICATION OF PROJECT

Principal Investigator Co-Principal Investigator: Brian Thompson, Principal Investigator, College of Human Ecology Human Resource Development Department 4008 Light Pink Rd. Louisville, TN 37777 865.981.4057 Bthomps1@utk.edu Dr. Greg Petty, Co-Principal Investigator Professor and Coordinator of Undergraduate Studies College of Human Ecology Human Resource Development Department The University of Tennessee, Knoxville, TN 37996-1900 865.974.4663 gpetty@utk.edu

2. Faculty Advisor:

Dr. Greg Petty Professor and Coordinator of Undergraduate Studies College of Human Ecology Human Resource Development Department The University of Tennessee, Knoxville, TN 37996-1900 865.974.4663 gpetty@utk.edu

3. **Department:** Human Resource Development

4. **Project Classification:** Thesis

- 5. Title of Project: The Occupational Work Ethic of Secondary High School Students.
- 6. Starting Date: Upon IRB Approval"
- 8. Estimated Completion Date: May 2003
- 9. External Funding (if any): N/A

II. PROJECT OBJECTIVES:

The purpose of this study is to determine, using the Occupational Work Ethic Inventory (OWEI), if there were significant differences between university path and vocational path students in a high school setting along with comparing years attended.

III. DESCRIPTION AND SOURCE OF RESEARCH PARTICIPANTS:

The sample for this study would consist of secondary students (freshman, sophomores, juniors, and seniors) who were currently enrolled at Sweetwater High School in Monroe County in southeast Tennessee. The control group would be selected from intact classrooms (sophomores, juniors, and seniors) from equivalent grades at the same secondary school. All students were required to take an English class. The Occupational Work Ethic Instrument (OWEI) surveys will be distributed throughout the day in each English class and will take no more than 15 minutes. The researcher (Brian P. Thompson) is a vocational teacher employed at Sweetwater High School, which had the access to the availability to perform this study with cooperation of all English teachers. Approval from the Principal and Parents will be obtained prior to the study. The total number of participants is approximately 560 students.

IV. METHODS AND PROCEDURES:

The students' parents will receive an informed consent form to release the Occupational Work Ethic Instrument (OWEI) survey results. Students will receive an assent form, which will explain the study and their participation. All instruments will be completed in an anonymous fashion and will be untraceable to participant names.

Based on an ex post facto design, this study would use the alpha level of .05 to test for significant differences. All statistical calculations would be performed using the appropriate statistical software package. Raw scores would be input into an Excel spreadsheet. Raw scores would be the data circled on the OWEI survey instrument results of the student participants. Null hypotheses would be tested using an analysis of variance for each independent variable to determine whether significant differences can be shown for the dependent variables based on the student responses.

V. SPECIFIC RISKS AND PROTECTION MEASURES:

No specific potential risks had been identified. The assessments and surveys will be administered and collected during classroom time in a setting familiar to all of the students.

VI. BENEFITS:

Few studies had reported on the effectiveness of teaching programs on work ethic and the impact on employability skills. Information on employability skills, particularly the work ethic may be useful to employers, educators, and researchers in determining the value of implementing work ethic classes in a vocational setting.

VII. METHODS FOR OBTAINING "INFORMED CONSENT" FROM PARTICIPANTS:

VII. QUALIFICATIONS OF THE INVESTIGATOR(S) TO CONDUCT RESEARCH:

The Principal Investigator has completed all of the coursework for a master's degree in Human Resource Development and will utilize the data for the completion of a thesis. He is a licensed public school teacher in the vocational/technical area. He also is certified from the National Center for Construction Education and Research as a trainer. In this research, the English teachers will be administering the survey. All teachers were qualified and licensed by the state of Tennessee with appropriate endorsements.

VIII. FACILITIES AND EQUIPMENT TO BE USED IN THE RESEARCH:

The study will use the classrooms of Sweetwater High School located in Monroe County to conduct and collect the Occupational Work Ethic Inventory surveys. The raw data will be stored in the Principal Investigator's home office computer and paper files retained in file boxes.

X. RESPONSIBILITY OF THE PRINCIPAL/CO-PRINCIPAL INVESTIGATOR(S):

By compliance with the policies established by the Institutional Review Board of The University of Tennessee the principal investigator(s) subscribe to the principles stated in "The Belmont Report" and standards of professional ethics in all

stated in "The Belmont Report" and standards of professional ethics in all research,

development, and related activities involving human subjects under the auspices of

The University of Tennessee. The principal investigator(s) further agree that:

- 1. Approval will be obtained from the Institutional Review Board prior to instituting any change in this research project.
- 2. Development of any unexpected risks will be immediately reported to Research Compliance Services.
- 3. An annual review and progress report (Form R) will be completed and submitted when requested by the Institutional Review Board.
- 4. Signed informed consent documents will be kept for the duration of the project and for at least three years thereafter at a location approved by the Institutional Review Board.

XI. SIGNATURES

ALL SIGNATURES MUST BE ORIGINAL. The Principal Investigator should keep the original copy of the Form B and submit a copy with original signatures for review. Type the name of each individual above the appropriate signature line. Add signature lines for all Co-Principal Investigators, collaborating and student investigators, faculty advisor(s), department head of the Principal Investigator, and the Chair of the Departmental Review Committee. The following information should be typed verbatim, with added categories where needed:

Principal Investigator <u>Brian Thompson</u>		
Signature	Date	
Co-Principal Investigator <u>Greg Petty</u>	×	
Signature	Date	
Student Advisor (if any)Greg Petty		
Signature	Date	

XII. DEPARTMENT REVIEW AND APPROVAL

The application described above has been reviewed by the IRB departmental review committee and has been approved. The DRC further recommends that this application be reviewed as:

[] Expedited Review -- Category(s): _____

OR

[] Full IRB Review

Chair,	DRC			
,		 		

Signature	Date	_
Department Head	7	
Signature	Date	_
Protocol sent to Research Comp	oliance Services for final approval on (D	ate)

Approved: Research Compliance Services Office of Research 404 Andy Holt Tower

Signature	Date
0	

Appendix D

Letter of Permission to Use the OWEI

3 UNIVERSITY OF TENNESSEE



College of Education, Health and Human Sciences

March 27, 2003

Brian Thompson 4008 Light Pink Road Louisville, TN 37777

Dear Brian,

This letter is to authorize you to use the Occupational Work Ethic Inventory (OWEI, 1993©), for your study investigating secondary high school students in university path and vocational path programs.

I will provide you with the necessary information for proper interpretation as well as for instrument reliability and validity. I only ask that you share with me your final results.

Sincerely yours, Gregory C Pedy Professor

Educational Administration and Policy Studies / A325 Claxton Complex / Knoxville, TN 37996-3430 (Office) 865-974-2216 • (Fax) 865-974-6146

Appendix E

Letter of Permission from School Principal



Roger Aultman Principal

October 20,2003

Brenda Lawson University of Tennessee **Compliance** Officer Office of Research

Dear Ms. Lawson:

I have read Brian Thompson's Proposal and understand that he wants to conduct a study at Sweetwater High School to complete his requirements for his Master's Degree. I give him permission to conduct this study at Sweetwater High School in the Monroe County School System. If you have any questions or concerns, you can call or email me.

Sincerely,

Roger Aultman

Sweetwater High School

414 South High Street Sweetwater, Tennessee 37874 Telephone (423) 337-7881

Kathy Allen

Mickey Berrong Gildance Count

Appendix F

Informed Consent Letters and Student Participation Letters

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INFORMED CONSENT

The transition from school to work for students is a major concern of employers, educators, and parents. Sweetwater High School currently has five vocational program areas that students have the opportunity to take courses in. During their first class in a specific program, students explore careers and develop basic employability skills including teamwork and work ethic. Few studies had reported the effectiveness of these programs or their impact on employability skills. Information on employability skills, particularly the work ethic of students may be useful to employers, educators, and researchers in determining the value of these programs.

The purpose of this study is to determine, using the Occupational Work Ethic Inventory (OWEI), if there are significant differences between university path and vocational path students in a high school setting along with comparing years attended.

The Occupational Work Ethic Inventory (OWEI) does not ask for students to identify themselves in any manner, nor will the researcher identify the students. Complete confidentiality will be maintained and no specific personal information is required. The OWEI form asks students to spend less than fifteen minutes describing how they are as a worker. Responses from the survey will be used to study teamwork skills and work ethic.

Participation is voluntary and your child will in no manner be penalized if he/she does not want to participate. If you have any questions about the research at any time, please contact, Mr. Brian Thompson. 414 South High Street. Sweetwater, TN 37874 or phone at 423.337.9150. If you have questions about your rights as a participant, contact the Research Compliance Services of the Office of Research at (865) 974-3466.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at anytime without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

CONSENT	
---------	--

Date _____

I have read the above information and agree to participate in this study. I have received a copy of this form.

Student's signature _____

Parental consent for participants under age 18:

I have read the above information and agree to allow my minor child to participate in this study. I have received a copy of this form.

Student's name (print)	Date
------------------------	------

Parent / Guardian's signature _____ Date _____

Appendix G

Letters of Permission from English Teachers to Distribute the OWEI

To: Ms. She dom From: BRIAN THOMPSON

I spoke with you about helping me out, using your students to complete a survey that I'm working on to complete my thesis. Hopefully, I can finally graduate with my master's degree in the spring.

A quick overview of what I am doing is looking at the work ethic of students both in the university path and vocational path. I want to see if there are any differences and if years attended in high school has any influence on their work ethic also. I am hoping to get an 80 % return. On Monday, January <u>1</u>, I will have the consent forms ready for you to hand out to all of your students to take home and be signed with and explanation of what the study is about. They will have one week to get the consent forms signed and returned. The following Monday, I will have the survey ready for you to hand out to the students. It will take them approximately 5-20 minutes to complete. An incentive for your students to complete the consent form and return is worked into the study. For all the students that return the form will receive a candy bar. You can use the consent forms for extra credit or a homework grade if you choose to. You know how hard it is to get things signed and returned from students.

I want to give all the teachers that are helping me out an incentive also. For those who get an 85% return on the consent forms, I will be giving you \$50.00. You don't know how much you are helping me out. This is really important to me and I want to thank you.

Please sign this document and return it to my mailbox when you get a chance to read it.

Thank you,

BRIAN THOMPSON

DATE

H. de To: From: BRIAN THOMPS

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To: MS Killey From: BRIAN THOMPSON

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Thank you,

BRIAN THOMPSON

SIGN deather L. Kella DATE 1/20/04

To: MS. WLTTO-From: BRIAN THOMPSO

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BRIAN THOMPSON

ama h SIGN DATE

To: Conch Rhodes From: BRIAN THOMPSON

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Thank you,

BRIAN THOMPSON

SIGN DATE 1- 211-12

lavered love to lan \$ 50.00

Appendix H

Occupational Work Ethic Instrument

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DIRECTIONS:

For each work ethic descriptor listed below, CIRCLE THE NUMBER that most accurately describes your standards for that item. There are seven possible choices for each item:

Never Almost Never Seldom Sometimes Usually Almost Always Always

1 2 3 4 5 6 7

THERE ARE NO RIGHT OR WRONG ANSWERS. There also is no time limit, but you should work as rapidly as possible. Please respond to every item on the list.

At work or school I can describe myself as:

Alv	vays									
Des	scriptors	1	2	3	4	4	5		6	7
	-									
1.	dependable			.1	2	3	4	5	6	7
2.	stubborn			.1	2	3	4	5	6	7
3.	following regulations			.1	2	3	4	5	6	7
4.	following directions			.1	2	3	4	5	6	7
5.	independent			.1	2	3	4	5	6	7
6.	ambitious			.1	2	3	4	5	6	7
7.	effective			.1	2	3	4	5	6	7
8.	reliable			.1	2	3	4	5	6	7
9.	tardy			.1	2	3	4	5	6	7
10.	initiating			.1	2	3	4	5	6	7
11.	perceptive			.1	2	3	4	5	6	7
12.	honest			.1	2	3	4	5	6	7
13.	irresponsible			.1	2	3	4	5	6	7
14.	efficient			.1	2	3	4	5	6	7
15.	adaptable			.1	2	3	4	5	6	7
16.	careful			.1	2	3	4	5	6	7
17.	appreciative			.1	2	3	4	5	6	7
18.	accurate			.1	2	3	4	5	6	7
19.	emotionally stable			.1	2	3	4	5	6	7
20.	conscientious			.1	2	3	4	5	6	7

At work or school I can describe myself as:

Always									Λ	lev	er
Descriptors	1	2	3	4	5	6		7			
21. depressed	••••••					1	2	34	5	6	7
22. patient						1	2	34	5	6	7
23. punctual						1	2	34	5	6	7
24. devious	•••••					1	2	34	5	6	7
25. selfish						1	2	34	5	6	7
26. negligent.	• • • • • • • • • • • • •			•••••		1	2	3 4	5	6	7
27. perseverir	ıg					1	2	34	5	6	7
28. likeable	•••••					1	2	3 4	5	6	7
29. helpful						1	2	34	5	6	7
30. apathetic.					•••••	1	2	34	5	6	7
31. pleasant	•••••					1	2	34	5	6	7
32. cooperativ	/e					1	2	34	5	6	7
33. hard work	ing					1	2	3 4	5	6	7
34. rude						1	2	34	5	6	7
35. orderly	•••••				•••••	1	2	34	5	6	7
36. enthusiast	ic					1	2	3 4	5	6	7
37. cheerful						1	2	3 4	5	6	7
38. persistent	•••••				•••••	1	2	34	5	6	7
39. hostile						1	2	3 4	5	6	7
40. dedicated	•••••					1	2	34	5	6	7
41. devoted	•••••					1	2	34	5	6	7
42. courteous						1	2	3 4	5	6	7
43. considerat	te					1	2	34	5	6	7
44. careless						1	2	3 4	5	6	7
45. productive	2					1	2	3 4	5	6	7
46. well groon	med		•••••	••••••		1	2	3 4	5	6	7
47. friendly	•••••	•••••		•••••	•••••	1	2	3 4	5	6	7
48. loyal	•••••	•••••			•••••	1	2	3 4	5	6	7
49. resourcefi	ıl			•••••	•••••	1	2	3 4	5	6	7
50. modest	•••••			•••••	•••••	1	2	3 4	5	6	7

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Brian Thompson was born in Saginaw, Michigan on February 19th, 1967. After graduating from Eisenhower High School in 1985 he attended Saginaw Valley State University in Michigan. After earning a Bachelor of Arts, he moved to Louisville, Tennessee. He started teaching at Knoxville Job Corps as a vocational instructor. After two years at the Job Corps, he began teaching at Sweetwater High School, Monroe County, Tennessee. In 2000, he entered the Graduate Program in Human Resource Development, The University of Tennessee.

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