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Seventh Grade Student Career Aspirations and Academic Achievement

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Abstract

The study examined the proposition that a direct relationship exists between the career aspirations of seventh grade students and their academic achievement. A career aspirations survey was completed by and collected from 39 students from a suburban middle school of a northeastern United States city. In the analysis, career aspirations were categorized by the level of preparation needed to perform the stated career. The survey responses were subsequently compared to the GPA's of each respective student. Results indicated that most students, regardless of GPA, aspired to careers that required considerable to extensive preparation. The students holding the top 5 highest GPA's out of the sample aspired to careers in these two categories giving evidence to the validity of the proposition.

Seventh Grade Student Career Aspirations and Academic Achievement

The role of a school counselor differs from district to district, school to school and many times are not even clearly defined. One basic, universal role however, is the responsibility of the counselor to advocate for the students. Since this advocacy takes place in a school setting it is most times related to the students' academic success. Having a better understanding of student motivation as it relates to academic achievement in school, could greatly assist counselors in this role.

Identifying and using motivators to assist students in their academic achievement is generally a process to be dealt with on an individual student-by-student basis. However, counselor awareness of general developmental trends concerning student motivation is likely to lead to more effective and efficient individualized academic plans for student success as well as age-appropriate instructional programs based upon the specific developmental needs of the students.

The researcher has concentrated the research on aspired careers, as one such possible motivator of academic achievement. In this study, 7th grade student career aspirations were drawn upon due to the seeming lack of research on this topic related to middle school students. Because a correlational study was used, the possibility to conclude a cause and effect relationship between career aspirations and academic achievement does not exist. In other words, this research was not intended to determine whether or not career aspirations are a motivator for academic achievement but the purpose was rather to identify the relationship between career aspirations and academic success of seventh grade students.

Review of the Literature

In order to develop a basis for the possibility of a correlation between seventh grade student career aspirations and academic achievement, the first point of interest reviewed was the developmental level of the 7th grade student as related to career aspirations. Past research on educational and career aspirations are then discussed and related to the academic achievement of middle to high school students. This population, from middle to high school was researched due to the scarcity of studies on career aspirations and academic achievement involving 7th grade or even middle school students. Finally, sex differences among career choice were reviewed as well as limited research relating this to academic achievement.

Some of the studies used to examine achievement in this review have used the words *intelligence* or *ability* (Byrns, 1939; Feingold, 1923; Livesay, 1942; Moser, 1949). Though achievement, intelligence and ability have distinct and individual meanings, there are close, intertwining relationships between these words. First, although it has been argued that there are many different kinds of intelligence and ways to define it, it is generally universally thought of in terms of ability (Hood & Johnson, 2002). Because of the complex nature of the term intelligence, counselors may refer to intelligence tests in terms of mental ability, cognitive ability, school ability or academic ability (Hood & Johnson, 2002). Next, ability is defined by a capacity to perform a mental or physical act while achievement could be seen as the actual completion of that act or series of actions (VandenBos, 2007). Therefore, although achievement does not necessarily define ability, it can be used as a measure to describe it. In conclusion, there are times in which achievement can be thought of in terms of intelligence or ability. For the purpose of this

review, the studies reviewed using the terms intelligence and ability have been discussed in terms of achievement.

Studies implemented in this review have used the terms *vocational aspirations*, *occupational aspirations*, and *career aspirations* to discuss a very similar concept. In the APA Dictionary of Psychology, occupations are defined as jobs or professions, and vocations are described as occupations (VandenBos, 2007). Career Aspirations are defined as long-term individual work related goals (VandenBos, 2007). From these definitions it can be concluded that vocational aspirations, occupational aspirations and career aspirations are relatively interchangeable and for the purpose of this review are all referred to as career aspirations. Gottfredson's (1981) definition of an occupational aspiration has been therefore justifiably used to define *career aspirations*. Gottfredson (1981) stated that an occupational aspiration is the single occupation named as one's best alternative based on compatibility and accessibility at any one given time.

Career Development Theory

Career theory attempts to answer such questions as "What is the best career for an individual?", "Why?", and "What factors are influential and important in making career related decisions?". Depending on which theorist is called upon there are a number of ways to answer that last question. For example, Roe's (1956) theory concentrated on the impact of early family relationships on career choice. Roe (1956) stated that a person chooses either a person oriented or non-person oriented career based upon how the individual was treated by his/her family as a child. Person oriented careers may include teacher, counselor, and nurse while non-person oriented careers may include engineer, astronomer, and computer programmer. Another example is Holland's (1985) theory

that viewed personality as the primary factor related to career choice. He reported that people choose careers that best match the needs of a person's individual personality style (Holland, 1985). Holland determined that there were 6 personality styles and matching work environments: realistic, investigative, artistic, social, enterprising and conventional. Yet another example includes Krumboltz's (1979) theory of career development, which was based on the social learning theory and behaviorism. This theory incorporated three major factors into the generation of career decisions beginning with genetic endowment, which includes sex, race, and innate talents, environmental conditions, including cultural norms and economy, and finally a person's individual learning experiences, which assists with the development of work habits and problem solving skills. Because the current research seeks understanding of the developmental characteristics of a specific age group (7th grade students) this review has focused on theories primarily based upon that process. The work of Ginzberg, Ginsburg, Axlerad, and Herma, (1951) and Linda Gottfredson (1981) will be reviewed in an attempt to better understand the developmental stage of 7th grade students as it relates to their career decision making process. Super's (1953) life span developmental theory also referred to career choice as a developmental process and outlined specific stages of career development through a person's life, but unlike Ginzberg et al. (1951) and Gottfredson (1981) he did not focus his work on early developmental stages.

Ginzberg, Ginsburg, Axlerad, & Herma. Ginzberg et al. (1951) were the first theorists to view career development as a lifelong process and also emphasize early development. A review of Ginzberg et al. (1951) described this general theory of career choice as a developmental process involving a series of decisions with largely irreversible

effects (“Review of Occupational Choice,” 2008). Ginzberg’s (1951) career development states that the irreversible effects in the individual are due to investments of time, money and ego. Following these investments, a career decision is made when an individual arrives at a compromise between interests, capacities, values and opportunities.

Ginzberg’s (1951) career development process occurs over a span of about 10 years and is broken down into three periods. The first period, *fantasy choices*, is influenced much by the child’s wish to be an adult (Ginzberg et al. 1951). Next is *tentative choices*, a period determined first by interests, then capacities, and finally values (Ginzberg et al. 1951). *Realistic choices*, the last period of career development, begins at age 17, and involves exploratory, crystallization and specification phases (Ginzberg et al. 1951).

Osipow (1968) describes this process in terms of the development of specific behaviors such as the ability to perform the reality testing task, the development of a mature time perspective, the ability to delay the gratification of desires, the ability to compromise, and the ability to identify with appropriate adult models. In order for mature career behavior to occur these abilities must be met by adolescence (Osipow, 1968). If they are not, the individual will be dissatisfied with his career choice and pursuit of a career (Osipow, 1968).

According to Ginzberg et al. (1951), 7th grade students are most likely in the interest stage of the tentative choices period. Some 7th grade students will be starting to enter the capacity stage. Career choice at the interest stage is based primarily on current likes and interests and is influenced by the work and choices of the young adolescents’ parents. Most 11-year-olds reference the influence of their parents in relation to their career interests. Whiston and Keller (2004) noted that parental achievement and

socioeconomic status as well as parental support and expectations influenced the career aspirations of middle school and high school students. Trice (1995) found support for Ginzberg's observation that interest plays a major role of selection and rejection of occupations during the interest stage and after. At about age thirteen, students start considering their abilities when thinking about future career decisions. This process marks the Capacity Stage, in which students start making relationships between what subjects they are good at and future careers. Athanasou (1994) found this trend to continue well after middle school and reported that most college students preferred and excelled at the subjects related to their career choice.

Gottfredson. Linda Gottfredson (1981) proposed the developmental career theory of circumscription and compromise. *Circumscription* was used to describe career exploration as a process of maintaining and discarding career choices (Brott, 1993). Personal guidelines for making these decisions involved consideration of ones perception of sex-typed careers and acceptable level of prestige within the career (Gottfredson, 1981). These guidelines are developed through a period of 4 developmental stages including orientation to size and power, orientation to sex roles, orientation to social valuation, and orientation to the internal unique self (Gottfredson, 1981). Circumscription suggests that as individuals pass through these stages, their acceptable career alternatives diminish as careers are discarded (Brott, 1993). As circumscription deals with the development of career aspirations, compromise deals with the implementation of them. When compromise is needed the latest guidelines developed will be the first ones sacrificed in order to make a decision (Brott, 1993). Therefore

interest would be neglected first, followed by ones prestige preference and finally sex-type, which was the first guideline developed.

According to Gottfredson (1981) the four stages in the development of career preferences, begins with *orientation to size and power*, established at ages 3-5. At this stage children begin to recognize the difference between real and make believe careers, begin to prefer the company of their same sex peers, and although they do not have concrete beliefs concerning sex roles they are aware of some of the differences in the adult roles of men and women (Gottfredson, 1981). At stage 2, *orientation to sex roles*, occurring between the ages of 6-8, children agree on which sex should perform what career and express their least preferred careers to most preferred careers on this basis (Gottfredson, 1981). Children ages 9-13 have entered the 3rd stage, *orientation to social valuation*, in which their career aspirations reflect their desired level of prestige based on social class and ability level (Gottfredson, 1981). Finally, during the 4th stage, *orientation to the internal unique self*, adolescents develop a greater sense of self therefore demonstrating a greater awareness of their abilities and interests as they relate to career aspirations (Gottfredson, 1981). When progressing through each stage of this process, children's personal list of possible career aspirations becomes smaller and smaller due to the growing number of limitations they possess. For example, an adolescent at the age of 18 has established the difference between real and make believe careers, his/her idea of a sex appropriate career is, and has most likely established a level of prestige acceptable to him/her based on his/her abilities and social class. Gottfredson believes that once a child has discarded a career on the basis of these limitations they will no longer exist as possible career choices later in life (Gottfredson, 1981).

Gottfredson's career development theory places 7th grade students in the Orientation to Social Valuation Stage. By this point young adolescents have already limited their list of future career options starting with real adult occupations, (as opposed to non-human or magical states of being) by the age of 5, and what they view as sex appropriate occupations by age 8. Later studies have confirmed that the range of careers considered by teenagers is greatly limited by gender lines (Kelly, 1989; Biggart, 1999). Beginning at the age of 9, students develop an awareness of social class and reject occupations that they consider to hold an unacceptably low level of prestige (Gottfredson, 1981). Helwig (2004) demonstrated this concept, and discovered that students between the ages of 12 and 14 had higher career aspirations than younger students. Gupta (1982) also presented pertinent evidence and reported that adolescents from low income households did not want or expect a future career with high prestige. At the same time students are recognizing social class they are also becoming aware of their ability (Gottfredson, 1981). Studies have supported this notion and demonstrated that adolescent reported ability was related to their career aspirations (Durik, Vida, & Eccles, 2006; Schoon, 2001). Using their grades as a guide they begin to narrow their possible future career choices even more.

In accord with Gottfredson's theory, 7th grade students have developed a sex-type of work they prefer, and through reflection of their social class and ability, are at least in the process of establishing a general level of work that is acceptable to them. Like Ginzberg et al. (1951), Gottfredson (1981) believes that by the 7th grade, students are at least beginning to take their ability into consideration when choosing a future career.

Educational Aspirations and Academic Achievement

The following research suggests the likelihood that by the time students reach middle school they have at least decided whether or not they will be attending college in the future. Ginzberg et al. (1951) discovered that 11-year-olds repeatedly made reference to college and accepted it as part of their future plan. High school students in a study completed by Clements and Kifer (2001) said they had decided on their postsecondary education plans by middle school or earlier. These studies give evidence to support that by middle school, students have decided upon a general level of future career based upon preparation needed for that career.

Research has also shown middle school student academic achievement to be directly related to their educational aspirations (Clements and Kifer, 2001; Garg et al., 2002; Mau and Bikos, 2000). Garg et al. (2002) noted a direct relationship between academic achievement (student grades) and educational aspirations of Canadian middle and high school students. Mau and Bikos (2000) found academic achievement (based on a reading and math proficiency test) of middle school students to be a predictor of educational aspirations. More specific in their findings, Clements and Kifer (2001) found grade point averages of Kentucky juniors and seniors to be highest among those planning to attend private or out of state institutions. They were lowest for students planning to attend community college, technical school or trade school (Clements & Kifer, 2001). The finding of middle school student academic achievement as a predictor of educational aspirations gives evidence towards a finding of a direct relationship between academic achievement and career aspirations, if categorizing career aspirations on the basis of level of preparation needed to attain the career. Other studies have shown a direct link

between educational aspirations and career aspirations (Mau & Bikos, 2000; Saha, 1982). Saha, (1982) reported that career aspirations were certainly affected by the student's choice to leave school after the 10th, 11th or 12th year. Mau and Bikos (2000) offered more evidence, stating that academic achievement was a significant predictor for both educational and career aspirations.

Career Aspirations and Academic Achievement

Career Aspirations have been correlated to academic achievement since at least 1923 when it was done by the use of standardized testing with high school freshman (Feingold, 1923). This review reveals findings of research through to recent years by comparing career aspirations not only to test scores but specific subject achievement, and even reading levels of students. The majority of research found on this topic is concerning high school subjects and has been included due to the lack of research based specifically on 7th grade and middle school students.

Career aspirations and test achievement. Gustave Feingold (1923) completed the earliest study found that examined the relationship between test achievement and career aspirations. In this study, the intelligence of 1200 incoming high school freshman was tested and compared to the vocational choice of each respective student (Feingold, 1923). It was determined that 46% of the students tested made a vocational choice that was consistent with their test score, while 47% made choices that were considered beyond their mental reach (Feingold, 1923). Only 7% of the students seemed to underrate their intelligence by choosing a career that was considered significantly below their tested potential (Feingold, 1923). From this data one could conclude that because almost half of the students overestimated their own ability (according to their test achievement) when

choosing a career, this study did not find a significant relationship between academic achievement and career aspirations.

Byrns (1939) conducted a similar study, this time with high school seniors. She discovered that there was some relationship between the career choice of students and their tested intelligence. More specifically, certain career groups attracted students with the highest test scores and certain other career groups attracted students with the lowest test scores (Byrns, 1939). Byrns (1939) also found it important to note that there was a wide range of ability within these groups. Two years later, Livesay, (1941) established a relationship parallel to Byrns (1939) with high school seniors but like Feingold (1923), acknowledged that a significant number of students held aspirations that were likely beyond their abilities. Moser (1949) also used high school students' achievement on an intelligence test to compare to their career aspirations. He reported that students aspiring to careers requiring a greater degree of training were generally selected by students that exhibited a higher level of achievement while careers requiring a lesser degree of training were selected by students that exhibited a lower level of achievement (Moser, 1949).

Jumping ahead to 1989, Kelly found that the academic ability of British teens (again determined by achievement on an IQ test) was only slightly related to their career aspirations including the range of career choices that they considered. Mau (2003) reported that high academic achievement was a common factor among 8th grade science and engineering career aspirations. Much more recently, in Australia, Creed, Conlon and Zimmer-Gembeck (2007) completed the only study found that used seventh grade students for subjects when comparing test achievement to career aspirations. Ability, as decided by achievement on standardized testing, was not related to the career aspirations

of 7th grade students (Creed et al., 2007). Most of the students surveyed aspired to high status careers regardless of test achievement (Creed et al., 2007).

Instead of using IQ tests, Benbow, Arjmand, and Walberg (1991) were the first researchers found to use academic based testing as a basis of comparison to students' career aspirations. Eighth-grade test achievement was revealed to be directly related to career aspirations (Benbow, 1991). Rojewski and Yang (1997) also used an academic based test to measure achievement but their results were similar to most researchers that used intelligence based testing. They reported that academic achievement had a minimal affect on the career aspirations of teenage students (Rojewski & Yang, 1997).

A summary of the previous findings shows that regardless of achievement level, a large number of students, grades 7-12, held higher level career aspirations. Most studies found a correlation between academic achievement and career aspirations but this relationship was generally weak.

Career aspirations and other achievement measures. Studies found using factors related to student academic performance in school, such as grades, as a determinant of academic achievement were rare. The only study found comparing student GPAs to career aspirations utilized data from 930 eighth-grade female students (Mau, Domnick, and Ellsworth, 1995). It stated that students who aspired to careers in science and engineering reported higher GPAs than did students who aspired to homemaking careers (Mau et al., 1995). The remaining studies found tended to reveal data based primarily upon academically at-risk students.

Rojewski and Hill (1998) found that adolescents who were at risk of failing were more likely to hold lower career aspirations. Silverman and Silverman (1973) discovered

that 7th grade students reading below grade level had lower career aspirations and expected to make less money than 7th grade students reading at or above grade level. Shapka, Domene, and Keating (2006) reported that 9th grade students who were low achievers in math also had lower career aspirations.

Career aspirations and related academic subjects. Thus far, the relationship of academic achievement and career aspirations has been examined by looking specifically at test achievement and at risk students. Some researchers have taken a step further and investigated the relationship between achievement in a specific academic subject as it relates to student career aspirations.

Livesay (1942) established a relationship between high school student career aspirations and preferred academic subject. He also found that the students planning to attend college tended to choose a core academic subject (Math, Science, Language, or Social Studies) as their favorite (Livesay, 1942). Athanasou (1994) not only found that most college students excelled at their preferred subject but also discovered a direct relationship between this subject and their vocational choice. Another study examined math related achievement of 130 high school students and revealed that high achieving students aspired to full time careers in math, science and engineering (Franklin & Wong, 1987).

Sex Differences

Career aspirations. Silverman and Silverman (1973) reported that in general, 7th grade girls have higher career aspirations than seventh grade boys. Rojewski and Yang (1997) backed up this finding and further stated that while adolescent females aspired to high and low prestige careers, adolescent males more often aspired to careers with

moderate prestige. Saha (1982) found evidence to the contrary and stated that male high school students had higher career plans than female high school students. Danziger (1983) agreed and noted that high school males' occupational aspirations were higher and covered a greater spectrum than high school females' occupational aspirations. Watson, Quatman, and Edler (2002) noted that there were no sex differences in career aspirations at any level of academic achievement among adolescents. Other recent studies as well did not find any lines drawn by sex in the career aspirations of early adolescents (Rojewski & Hill, 1998; Creed, Conlon & Zimmer-Gembeck, 2007).

Upon examination of research related to Sex differences among career aspiration it was found that results greatly varied. There was a trend however, in relation to the timeline of this research. In the 1970's research stated that girls had higher career aspirations than boys, in the 80's boys were found to have higher aspirations than girls, and research in the past decade has all found that sex did not play a role in the career aspirations of middle and high school students.

Career aspirations and academic achievement. Two contrasting studies have taken sex into consideration and commented on academic achievement as a predictor of career aspirations. Holms and Esses (1988) found academic achievement to be the strongest predictor of career aspirations among high school girls. Danziger (1983) disagreed and reported that although academic achievement had a significant positive effect on high school girls' career aspirations, their social background was the strongest predictor of career aspirations. Academic ability and achievement were not only determined to have a stronger effect on high school boys' career aspirations but was also the strongest predictor of them (Danziger, 1983).

As explained, the first objective of this research was to determine the developmental characteristics of 7th grade students as it relates to their career aspirations. Next was to consider these characteristics in a relationship between them (mainly capacity to consider achievement) in order to establish a base for the presumption that 7th grade students consider their GPA while formulating career aspirations. The next objective was to analyze this relationship by categorizing careers by levels of preparation necessary to perform them. The final objective of this research is to further establish a base of work that will assist counselors in the understanding of 7th grade student academic motivators to further assist youth with their school related achievements.

Method

Sample and Setting

All 7th grade students in one public middle school in an ethnically diverse suburb of a northeastern United States city were solicited to participate in the current study. This middle school serves a total of 494 students in grades 6-8, of which 72% are White, 18% are Black, 7% are Asian, 3% are Hispanic and 1% are Native American. 17% of the students are eligible for free lunch and 11% are eligible for reduced-price lunch. The population of this school district includes 45,000 people in 16,432 households. 22% of the households earn a total annual income of less than \$30,000, 34% earn \$75,000 or more, and 44% earn between \$30,000 and \$74,999 per year.

One hundred sixty three 7th grade students were asked to complete a 4-question survey (see appendix A), one time, during their designated homeroom on one day.

Thirty-nine of the 163 students returned the surveys with signed student and parental consent forms (see appendices B and C) and were therefore eligible participants in the study. Out of the sample of 39 participants 22 (56%) were male and 17 (44%) were female. Twenty-seven (69%) of the participants were White, 8 (21%) were Black and 4 (10%) were Asian.

Procedure

The researcher distributed the 4 question “7th Grade Career Aspirations Survey” to 163 7th grade students on one day during their homerooms. Stapled to the survey was a consent form for minors and a consent form for parents. The surveys and consent forms were folded and placed in an unsealed envelope with the words “return to counseling office” written on the outside. Students were given a brief overview of the study and were invited to participate. Included in the overview the researcher told the students it would take approximately 10 minutes to complete the survey, that participation in the study was voluntary and that any information gathered from and recorded concerning the students would be protected and remain confidential. Students were also informed by the researcher that the consent forms needed to be read and signed by them and their parents in order to participate in the study. Instructions were given to place the completed surveys and consent forms in the envelope, seal it and return it to the researcher in the counseling office as soon as possible.

Throughout the course of the following 3 weeks, 39 envelopes containing completed surveys and consent forms were returned to the counseling office and kept under lock and key. At the end of the three week period in which surveys were collected, names from the consent forms attached to the surveys were used to look up 2nd quarter

GPA's, sex and race of the participants using an online school database. Following the completion of this task, for the purpose of recording and analyzing data in a manner to maintain student anonymity, each student was assigned a number at random from 1 through 39. Therefore no names or identifying traits and characteristics were included in any portion of this research following the assignment of numbers to the students.

Immediately following the recording of all data, the surveys and consent forms were destroyed.

Instrumentation and Analysis

The four question "7th Grade Career Aspirations Survey" was designed and administered by the researcher with the sole purpose of clearly defining the aspired career of each participant. Due to this being the initial time the survey was implemented and that it is only 4 questions in length, little is known about its validity and reliability.

Detail on the process of how the questions were created is as follows.

The first question, "What future career are you most interested in pursuing for yourself? (What do you want to do when you grow up?)" was the primary question sought to be answered from this tool. Question number 2, "What are some daily activities of a person with this career?" was not intended to test the student's knowledge of his/her aspired career but rather more clearly define it. For example, some students may not know the name of the career that they aspire to but may know some daily activities, duties or responsibilities of a person engaged in the career in mind.

Questions number 3 and 4, "What preparation, such as education, training and experience are necessary before you can begin working in your chosen career?" and "How much preparation is necessary to begin working in your chosen career? (circle

answer)” were intended to not only further clarify for the researcher the specific career being aspired to. The 1-5 scale (1-little or none, 2-some, 3-medium, 4-much, 5-very much) used to answer question number 4 was adapted from O*NET OnLine Job Zones (retrieved 2008), a 1-5 scale used to rank careers on the basis of the level of preparation necessary to perform the career. The scale was adapted in order to be easily read and understood by 7th grade students while concurrently maintaining the general meaning of each number on the scale.

Once the aspired careers of the students were determined, they were ranked by preparation necessary to perform the career, through the use of an online list of Job Zones (retrieved 2008) beginning with Job Zone 1; Little or No Preparation, through Job Zone 5; Extensive Preparation Needed. Each aspired career was therefore assigned a number 1 through 5 which was then used to correlate to the students’ academic achievement.

Student academic achievement was established by the GPAs of the most recently completed academic quarter in relation to the collection of the survey. Hence each student’s final GPA (100 point scale rounded to the nearest whole number) was determined by the combined average of all of his/her classes for the second academic quarter of the 2007/2008 school year.

It was hypothesized that the highest academic achieving 7th grade students would aspire to careers that required a higher level of preparation and the lowest achieving 7th grade students would aspire to careers that required a lesser degree of preparation. In order to determine if this was found, academic achievement (as determined by 2nd quarter final averages), was compared to career aspirations. Career aspirations were ranked by the level of preparation needed to perform the career (Job Zones 1-5).

A single career aspiration was taken from the survey of each of the 39 participants. This was done primarily by looking at the answer to question number 1. Question numbers 2, 3, and 4 helped to specify the career choice in the case that the answer to question 1 was incomplete or vague. By this method one specific career aspiration was retrieved from the survey. The career aspiration was then found in one of a series of lists titled Job Zone 1,2,3,4 or 5 provided by Onet OnLine. The series of lists described the preparation needed to perform the career from Job Zone 1: little or no preparation needed through Job Zone 5: extensive preparation needed. Frequency of careers found in each Job Zone and sex differences among career aspirations were then determined and recorded.

Once the Job Zone was determined for each aspired career, the GPA of each respective student was also determined and recorded by retrieving them from each students second quarter report card from the current school year. It was then established for example, that student #1 aspired to a career in Job Zone 2 and had a GPA of 92. This data was recorded for all 39 7th grade student participants. After finding out how many students had GPAs in each Job Zone as well as the actual GPAs of those students, the mean, median and mode GPAs for each Job Zone was determined. These averages were subsequently used to determine the relationship between students' academic achievement (GPA) and their career aspirations (Job Zone).

Results

The following data is offered in a format that initially presents the raw data including student demographics. Next, data involving career aspirations and academic

achievement are each presented and analyzed individually. Finally, career aspirations and academic achievement are presented together in a relative manner. Tables and figures are pertinent to the text preceding them.

Table I depicts the student participants as numbers 1-39, and exhibits basic demographics (sex and race/ethnicity) as discussed in the Methods section. Furthermore, it lists each student's specified aspired career, the job zone that identifies that career, and the student's percentage based GPA for the 2nd quarter of the 2007-2008 school year. The data in this table is the basis for all other tables and figures provided.

Table I

Student Demographics, Aspired Career and Academic Achievement

| STUDENT # | SEX | RACE/ETHNICITY | CAREER | JOB ZONE | GPA |
|-----------|--------|----------------|-------------------------------|----------|-----|
| 1 | male | White | pro baseball player | 2 | 92 |
| 2 | male | White | veterinarian | 5 | 77 |
| 3 | female | Asian | pediatrician | 5 | 98 |
| 4 | female | White | medical scientist | 5 | 93 |
| 5 | female | White | cosmetologist | 3 | 77 |
| 6 | male | White | engineer | 4 | 90 |
| 7 | male | Asian | mechanical engineer | 4 | 95 |
| 8 | female | White | plastic surgeon | 5 | 92 |
| 9 | female | White | medical doctor | 5 | 96 |
| 10 | male | White | performance musician | 3 | 87 |
| 11 | male | White | paleontologist | 5 | 90 |
| 12 | male | White | carpenter | 3 | 74 |
| 13 | female | White | 7 th grade teacher | 4 | 92 |

| | | | | | |
|----|--------|-------|---------------------|---|----|
| 14 | female | Asian | cosmetologist | 3 | 88 |
| 15 | female | White | makeup artist | 3 | 87 |
| 16 | male | Asian | engineer | 4 | 95 |
| 17 | male | Black | pro soccer player | 2 | 81 |
| 18 | male | White | engineer | 4 | 94 |
| 19 | male | White | mechanical engineer | 4 | 92 |
| 20 | male | White | air force pilot | 4 | 88 |
| 21 | female | Black | lawyer | 5 | 86 |
| 22 | male | White | pro football player | 2 | 81 |
| 23 | male | White | heart surgeon | 5 | 80 |
| 24 | male | White | architect | 5 | 79 |
| 25 | female | White | lawyer | 5 | 88 |
| 26 | female | White | lawyer | 5 | 89 |
| 27 | male | White | marine biologist | 5 | 85 |
| 28 | male | White | scientist | 5 | 96 |
| 29 | female | Black | lawyer | 5 | 89 |
| 30 | male | Black | lawyer | 5 | 88 |
| 31 | female | White | veterinarian | 5 | 84 |
| 32 | male | Black | pro football player | 2 | 77 |
| 33 | male | White | police officer | 3 | 80 |
| 34 | female | White | actress | 2 | 88 |
| 35 | female | Black | dancer | 3 | 78 |
| 36 | male | White | architect | 5 | 94 |
| 37 | male | White | science teacher | 4 | 91 |
| 38 | female | Black | fashion designer | 3 | 90 |
| 39 | female | Black | engineer | 4 | 89 |

Career Aspirations

As seen in Table II, engineer, chosen by six students, was the most popular aspired career of the 7th grade student participants. Lawyer, selected by 5 students, closely followed engineer. Medical doctor, professional athlete, and scientist all ranked third with 4 students opting for each. The top 4 most popular careers, not including

professional sports player are all Job Zone 4 (considerable preparation needed), or Job Zone 5 (extensive preparation needed) careers. The students choosing these careers made up 49% of the total sample.

Looking further at aspired careers of students, it was discovered that 17 students (44%) in all, aspired to careers within Job Zone 5. 67% of the entire sample aspired to careers categorized by Job Zones 4 and 5. At the other end of the spectrum, 0 students aspired to careers in Job Zone 1 (little or no preparation needed), 5 students aspired to careers in Job Zone 2 (some preparation needed), and 8 students aspired to careers in Job Zone 3 (medium preparation needed). Students aspiring to careers in Job Zones 1-3 made up 33% of the sample. Figure 1 helps to illustrate this data and the direct relationship between Job Zone and the frequency of aspired careers of students

Table II

Popularity of Aspired Careers and Correlating Job Zones

| CAREER | # OF STUDENTS | JOB ZONE |
|----------------------|----------------------|-----------------|
| Engineer | 6 | 4 |
| Lawyer | 5 | 5 |
| Medical Doctor | 4 | 5 |
| Professional Athlete | 4 | 2 |
| Scientist | 4 | 5 |
| Cosmetologist | 3 | 3 |
| Architect | 2 | 5 |
| Teacher | 2 | 4 |
| Veterinarian | 2 | 5 |
| Actress | 1 | 2 |
| Carpenter | 1 | 3 |
| Dancer | 1 | 3 |
| Fashion Designer | 1 | 3 |
| Musician | 1 | 3 |
| Pilot | 1 | 3 |
| Police Officer | 1 | 4 |

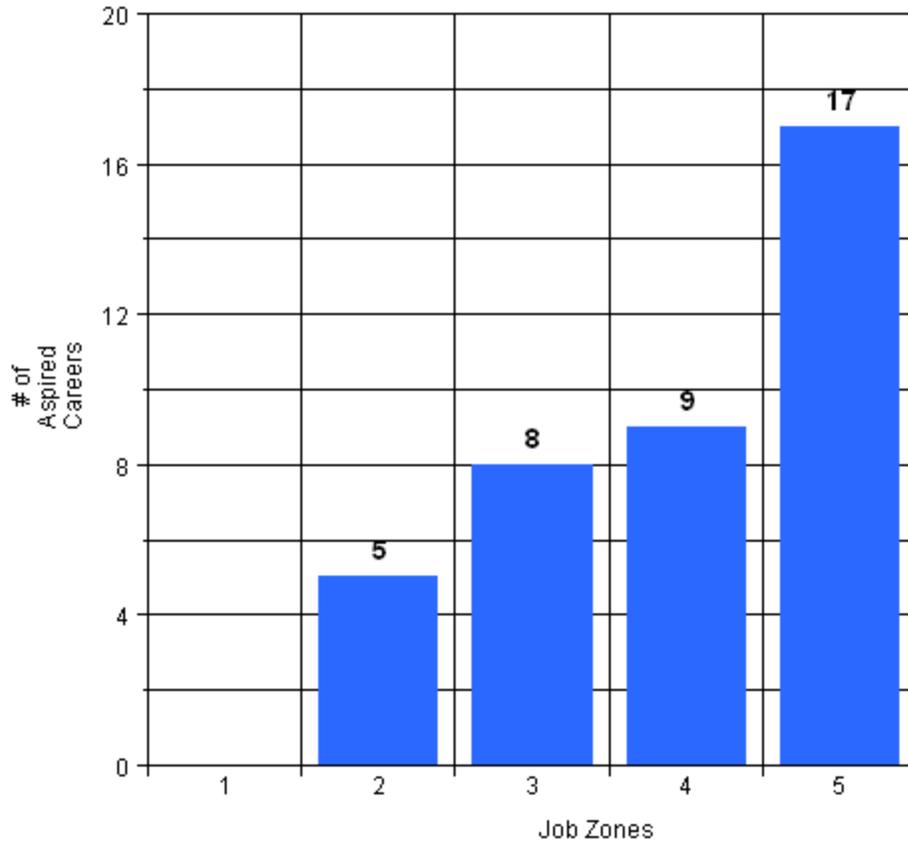


Figure 1. Frequency of 7th grade student aspired careers as categorized by each of the Job Zones.

Table III illustrates this data on the basis of sex. Job Zone 5 is more frequently chosen by both males (36%) and females (53%) than any other Job Zone. Together Job Zones 4 and 5 make up 68% of the male career aspirations and 65% of the female career aspirations. Besides Job Zone 1 (containing 0 career aspirations) Job Zone 2 was the least popular with females and contained 1 out of 17 career aspirations. For males, Job

Zone 2 contained the third lowest career aspirations after Job Zone 1 and 3. All four male career aspirations in Job Zone 2 were professional athletes.

Table III

Frequency of Career Aspirations of Students in each Job Zone

| JOB ZONE | CAREER ASPIRATIONS OF | | |
|----------|-----------------------|---------|------|
| | MALES | FEMALES | BOTH |
| 1 | ---- | ---- | ---- |
| 2 | 4 | 1 | 5 |
| 3 | 3 | 5 | 8 |
| 4 | 7 | 2 | 9 |
| 5 | 8 | 9 | 17 |

Academic Achievement

The mean percentage based GPA of the 39-student sample was 87, and the median and mode were both 88. Student GPAs varied from 74 to 98 with a range of 24. Six out of 39 GPAs (15%) were 70-79, 17 (44%) were 80-89 and 16 (41%) were 90-99. The mean male GPA was 87 and the mean female GPA was one point higher at 88.

Career Aspirations and Academic Achievement

Job Zone 4 contained the highest GPA mean, median and mode of all 5 job zones. All GPAs in Job Zone 4 were 88 or above with 7 out of 9 GPAs at 90 or greater. The second highest GPA averages were found in Job Zone 5 which contained the highest number and range of GPAs. Job Zone 2 contained the lowest overall GPA averages and the lowest number of GPAs besides Job Zone 1 which contained 0 GPAs. When looking at Job Zones 4 and 5 together the resulting mean of the GPAs equals 90. The resulting

mean of the combined GPAs of Job Zones 2 and 3 is 7 points lower than that Job Zones 4 and 5 at 83.

Table IV

Student Academic Achievement Averages as correlates of Job Zone

| JOB ZONE | STUDENT GPAs | MEAN | MEDIAN | MODE | RANGE |
|-----------------|--|-------------|---------------|-------------|--------------|
| 1 | ---- | ---- | ---- | ---- | ---- |
| 2 | 77, 81, 81, 88, 92 | 84 | 81 | 81 | 15 |
| 3 | 74, 77, 78, 80, 87, 87, 88, 90 | 83 | 84 | 87 | 16 |
| 4 | 88, 89, 90, 91, 92, 92, 94, 95, 95 | 92 | 92 | 92, 95 | 7 |
| 5 | 77, 79, 80, 84, 85, 86, 88, 88, 89, 89, 90, 92, 93, 94, 96, 96, 98 | 88 | 89 | 88, 89, 96 | 21 |

Discussion

This study was conducted on the basis that counselor awareness of general developmental trends concerning student motivation is likely to lead to more effective and efficient individualized academic planning for student success as well as age-appropriate instructional programs based upon the specific developmental needs of the students. The researcher has concentrated the research on aspired careers, as one such possible motivator of academic achievement. Phalet, Andriessen, and Lens (2004) offer supporting evidence of the importance of future career goals. “Future goals may help students to overcome momentary failures by focusing instead on the path toward future success” (Phalet et al., 2004, p.82). More specifically, 7th grade student career aspirations were drawn upon due to the seeming lack of research on this topic related to middle school students.

The study examined the proposition that a direct relationship exists between the career aspirations of 7th grade students and their academic achievement. A career aspirations survey was completed by and collected from 39 students from a suburban middle school of a northeastern United States city. In the analysis, career aspirations were categorized by the level of preparation needed to perform the career aspiration. The survey responses were subsequently compared to the GPA's of each respective student. Results indicated that most students, regardless of GPA, aspired to careers that required considerable to extensive preparation. The students holding the top 5 highest GPA's out of the sample aspired to careers in these two categories giving evidence to the validity of the proposition.

Career Aspirations of the Student Sample

The top four most popular aspired careers of the 7th grade participants, excluding professional athletes were engineers, lawyers, medical doctors, and scientists. These career aspirations all required a high level of preparation to perform and comprised of almost half of all the student choices. In all, almost $\frac{3}{4}$ of the student career aspirations fit into this high level of required preparation (Job Zones 4 and 5). This left about $\frac{1}{4}$ of the participants career aspirations to be distributed among the lower three Job Zones which required less preparation. This statement is not entirely true due to the fact that 0 students aspired to careers in Job Zone 1, which required little to no preparation. One factor that may have influenced this could be the use of a small sample size of 39 students. Creed et al. (2007) revealed similar findings and stated that most of the students in their research aspired to high status careers. From this data it can be concluded that most students aspired to careers requiring considerable to extensive

preparation. In fact, a direct relationship was discovered to exist between the Job Zones and frequency of aspired careers.

When the data involving career aspirations was simplified on the basis of sex, it was discovered that a similar relationship existed when grouping Job Zones 2 and 3 together and Job Zones 4 and 5 together. It can therefore be concluded that sex was not a factor in the career aspirations of students on the basis of level of preparation needed to perform the career. As well, other recent studies did not find any lines drawn by sex in the career aspirations of adolescents (Creed, Conlon & Zimmer-Gembeck, 2007; Rojewski & Hill, 1998; Watson, Quatman Edler, 2002). Contrary to studies in the past decade, there was no consistency among research previous to this, concerning sex and career aspirations (Danziger, 1983; Saha, 1982; Silverman & Silverman, 1973).

Using level of necessary preparation is only one of many possible ways in which to categorize the career aspirations and could be seen as a limitation to the research. For example, categorizing careers by possible earnings or even the level of power associated with the career could result in completely different data and outcomes.

Academic Achievement of the Student Sample

The mean GPA of all the students and of the male students was 87. The mean for the females was one point higher at 87. Eighty-five percent of the total sample had GPAs of 80 or better. The concentration of relatively high GPAs in the sample may reflect a characteristic of students that would complete and hand in a voluntary survey and get consent forms signed by a parent or guardian. For example, this characteristic may comment on the students' accountability, dependability, or even the level of parental involvement in his/her child's education. The high GPAs could also be a reflection of

somewhat inflated GPAs due to academic services that were not accounted for in this study.

Regardless of reason for the high level of GPAs among the sample, it could be a noted limitation when GPAs are to be used as one factor in a correlational study such as this or in some cases could also help support the thesis. For example, if the statement that 0 students aspired to careers in Job Zone 1, and $\frac{3}{4}$ of the sample had relatively high career aspirations was due to concentration of high GPAs then it may give evidence towards a direct relationship between academic achievement career aspirations. Another consideration to explore concerning GPA, especially the GPA of one marking period, is that it is only one of many ways in which to measure academic achievement. For example the final GPA of 2, 3, or 4 quarters of the school year could have been used, as well as an academic based exam or series of exams and data and outcomes could change as a result.

Career Aspirations and Academic Achievement of the Student Sample

Although a direct relationship was not found between Job Zone and student GPA evidence was found to suggest that a relationship may still exist. One finding that supports this relationship is the discovery that the combined mean of both Job Zone 4 and 5 GPAs were calculated to be 7 points higher than that of the combined mean of Job Zone 2 and 3. Another finding that gives evidence to this correlation is that the top 5 highest GPAs resided in Job Zones 4 and 5 and 4 out of the 5 lowest GPAs resided in Job Zones 2 and 3. This finding coincides with Byrns (1939) and Livesay's (1941) findings that certain career groups attracted students with the highest test scores and certain other career groups attracted students with the lowest test scores. The current research again

coincided with Byrns (1939) study and found that there was a wide range of achievement within the proposed career groups. For example, in Job Zone 2, GPAs ranged from 77-92 and in Job Zone 5, GPAs had a considerable range as well, from 77-98. It was also noted that 67% of the career aspirations were found in Job Zones 4 and 5 leading to the conclusion that most of the students surveyed aspired to higher level careers regardless of academic achievement (Creed et al. 2007). By review of this data it could be concluded that there was a relationship found between career aspirations and academic achievement but the strength of that relationship may not be defined as significant.

The findings of the current research most closely coincides with Byrns (1939) and Livesay's (1941) research reporting no significant correlation between career aspirations and academic achievement but that certain career groups attracted students with the highest achievement and certain other career groups attracted students with the lowest achievement. In fact most of the researchers reported that there was at least some relationship between career aspirations and academic achievement including Rojewski and Yang (1997) and Kelly (1989), but there was no research reviewed that established a significant relationship. Only some studies reviewed gave no evidence at all to a relationship between career aspirations and academic achievement (Feingold, 1923; Kelly, 1989). Findings of the current study also give support to the developmental career theories of Ginzberg et al. (1951) and (Gottfredson, (1981) with respect to the notion that at least some 7th grade students consider their ability (GPA) when formulating career aspirations.

There are two major limitations to consider when comparing past research (not including career theory research) to the current study. The first is the fact that much of

the past research on this topic has neglected the inclusion of middle school students and more specifically 7th grade students as the only subjects or as subjects at all. Second, in past related research, intelligence tests have been the primary tool used to measure achievement as opposed to the current use of GPA.

In conclusion, most 7th grade students in the current study, regardless of GPA, aspired to careers that required the highest levels of preparation. In spite of this finding there was also evidence that relationships existed between students with higher GPAs and high career aspirations and students with lower GPAs and low career aspirations.

References

- Athanasou, J. A. (1994). Some effects of career interests, subject preferences and quality of teaching on the educational achievement of Australian technical and further education students. *Journal of Vocational Education Research, 19*, 23-38.
- Benbow, C. P., Arjmand, O., & Walberg, H. J. (1991). Educational productivity predictors among mathematically talented students. *Journal of Educational Research, 84*, 215-223.
- Brott, P. E. (1993). Gottfredson's theory of circumscription and compromise: Implications for career counseling. Retrieved on May 7, 2008 from ERIC.
- Byrns, R. (1939). Relation of vocational choice to mental ability and occupational opportunity. *American Journal of Family Therapy, 47*, 101-109.
- Clements, S. & Kifer, E. (2001). *Talking back: Kentucky high school students and their future education plans*. Frankfort, KY: Kentucky Long-Term Policy Research Center.
- Creed, P. A., Conlon, E. G. & Zimmer-Gembeck, M. J. (2007). Career barriers and Reading ability as correlates of career aspirations and expectations of parents And their children. *Journal of Vocational Behavior, 70*, 242-258.
- Danziger, N. (1983). Sex-related differences in the aspirations of high school students. *Sex Roles, 9*, 683-695.
- Durik, M. A., Vida, M., & Eccles, J. S. (2006). Task values and ability beliefs as Predictors of high school literacy choices: A developmental analysis. *Journal of Educational Psychology, 98*, 382-393.

- Feingold, G. A. (1923). The relation between the intelligence and vocational choices of high school pupils. *Journal of Applied Psychology*, 7, 143-153.
- Franklin, M., & Wong, E. & Nevada University, R. (1987). Reaching Math Potential. (ERIC Document Reproduction Service No. ED286709) Retrieved May 6, 2008, from ERIC database.
- Garg, R., Kauppi, C., Lewko, J. & Urajnik, D. (2002). A structural model of educational aspirations. *Journal of Career Development*, 29, 87-108.
- Ginzberg, E., Ginsburg, S. W., Axelrad, S., & Herma, J. L. (1951). *Occupational choice: an approach to a general theory*. New York: Columbia University Press.
- Gottfredson, L. S. (1981). Circumscription and compromise: a developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28, 545-579.
- Gupta, N. (1982). *The influence of sex roles on the life plans of low-SES adolescents*. Washington D. C.: National Institute of Education.
- Helwig, A. A. (2004). A ten year longitudinal study of the career development of students: summary findings. *Journal of Counseling and Development*, 82, 49-57.
- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources.
- Holms, V. L., & Esses, L. M. (1988). Factors influencing Canadian high school girls' career motivation. *Psychology of Women Quarterly*, 12, 313-328.
- Hood, A. B., & Johnson, R. W. (2002). *Assessment in Counseling* (3rd ed.). Alexandria, VA: American Counseling Association.
- Kelly, A. (1989). 'When I grow up I want to be...': a longitudinal study of the

- development of career preferences. *British Journal of Guidance and Counselling*, 17, 179-199.
- Krumboltz, J. D. (1979). A social learning theory of career decision making. In A.M. Mitchell, G. B. Jones, & J. D. Krumboltz (Eds.), *Social learning and career decision making*. Cranston: RI: Carroll Press.
- Livesay, T. M. (1941). Test intelligence and future vocation of high school seniors in Hawaii. *Journal of Applied Psychology*, 25, 679-686.
- Livesay, T. M. (1942). Subject preference as related to test intelligence, intended vocation, college expectation and race of high school seniors in Hawaii. *Journal of Educational Research*, 36, 178-184.
- Mau, W. (2003). Factors that influence persistence in science and engineering career aspirations. *The career development quarterly*, 51, 234-243.
- Mau, W., & Bikos, L. H. (2000). Educational and Vocational Aspirations of minority and female students: a longitudinal study. *Journal of Counseling and Development*, 78, 186-194.
- Mau, W., Domnick, M., & Ellsworth, R. (1995). Characteristics of female students who aspire to science and engineering or homemaking occupations. *The Career Development Quarterly*, 43, 323-337.
- Moser W. E. (1949). Vocational preference as related to mental ability. *Occupations*, 27, 460-461.
- O*NET OnLine. *Browse by Job Zone*. Retrieved February 4, 2008 from <http://online.onetcenter.org/find/zone>.
- Osipow, S. H. (1968). *Theories of occupational choice: A comparison of the Theories*.

- New York: Appleton-Century-Crofts.
- Phalet, K., Andriessen, I., & Lens, W. (2004). How future goals enhance motivation and learning in multicultural classrooms. *Educational Psychology Review, 16*, 59-89.
- Review of Occupational Choice. (1951, October). *Journal of Consulting Psychology*, Retrieved May 4, 2008, from PsycArticles.
- Roe, A. (1956). *The Psychology of Occupations*. New York: Wiley.
- Rojewski, J. W. & Hill, R. B. (1998). Influence of gender and academic risk behavior on Career decision making and occupational choice in early adolescence. *Journal of Education for Students Placed at Risk, 3*, 265-287.
- Rojewski, J. W. & Yang, B. (1997). Longitudinal analysis of select influences on adolescents' occupational aspirations. *Journal of Vocational Behavior, 51*, 375-410.
- Saha, L. J. (1982). Gender, school attainment and occupational plans: determinants of aspirations and expectations among Australian urban school leavers. *The Australian Journal of Education, 26*, 247-265.
- Shapka, J. D., Domene, J. F. & Keating, D. P. (2006). Trajectories of career aspirations through adolescence and young adulthood: early math achievement as a critical filter. *Educational Research and Evaluation, 12*, 347-358.
- Schoon, I. (2001). Teenage job aspirations and career attainment in adulthood: A 17-year follow-up study of teenagers who aspired to become scientists, health professionals, or engineers. *International Journal of Behavioral Development, 25*, 124-132.
- Silverman, H., & Silverman, S. (1973). The effects of reading ability on occupational

- choice among disadvantaged seventh grade students. *Child Study Journal*, 3, 195-202.
- Super, D. E. (1953). A theory of vocational development. *American Psychologist*, 30, 88-92.
- Trice, A. D. (1995). The origins of children's career aspirations: IV. Testing hypotheses from four theories. *Career Development Quarterly*, 43, 307-322.
- VandenBos, G. R. (Ed.). (2007). *APA Dictionary of Psychology*. Washington D.C.: American Psychological Association.
- Watson, C. M., Quatman, T., & Edler, E. (2002). Career aspirations of adolescent girls: effects of achievement level, grade, and single-sex school environment. *Sex Roles*, 46, 323-335.
- Whiston, S.C., & Keller, B.K. (2004). The Influences of the Family of Origin on Career Development: A Review and Analysis. *The Counseling Psychologist*, 32, 493-568.

Appendices

Appendix A

7th Grade Career Aspirations Survey

1. What future career are you most interested in pursuing for yourself? (What do you want to do when you grow up?)

2. What are some daily activities of a person with this career?

3. What preparations, such as education, training and experience, are necessary before you can begin working in your chosen career?

4. How much preparation is necessary to begin working in your chosen career?
(circle answer)

| | | | | |
|----------------|------|--------|------|-----------|
| 1 | 2 | 3 | 4 | 5 |
| little or none | some | medium | much | very much |

Appendix B

STATEMENT OF INFORMED CONSENT FOR MINORS

This form describes a research study being conducted with students about their future career goals. The purpose of this research is to identify the relationship between 7th grade student future career goals and their academic achievement. The person completing this research is a student pursuing a degree in Counselor Education at SUNY College at Brockport. If you agree to participate in this study, you will be asked to complete a survey about your future career plans and your understanding of the preparations necessary to obtaining these goals. You will also be asked to allow the researcher to obtain your GPA as data that will be recorded in a confidential manner. Student names will not be used as data in this research.

The possible benefit from being in this study could be that information will be learned that would allow teachers and counselors to better prepare middle school students to accomplish their future career goals.

Your participation in this study is completely voluntary. Being in it or refusing to be in it, will not affect your grades or class standing. You are free to change your mind or stop being in the study at any time.

I understand that:

1. My participation is voluntary and I have the right to refuse to answer any questions. I will have a chance to discuss any questions I have about the study with the researcher after completing the questionnaire.
2. My confidentiality is guaranteed. My name will not be written on the survey. There will be no way to connect me to the written survey. If any publication results from this research, I would not be identified by name. Results will be given anonymously and in group form only, so that neither the participants nor their schools can be identified.
3. There will be no anticipated personal risks or benefits because of participation in this project.
4. My participation involves reading a written survey of 4 questions and answering those questions in writing. It is estimated that it will take 10 minutes to complete the survey.
5. Approximately 150 people will take part in this study. The results will be used for the completion of a research project by the primary researcher.
6. Data and consent forms will be kept separately in a locked filing cabinet by the investigator and will be destroyed by shredding when the research has been completed

You are being asked whether or not you want to participate in this study. If you wish to participate, and you agree with the statement below, please

sign in the space provided. Remember, you may change your mind at any point and withdraw from the study. You can refuse to participate even if your parent/guardian gives permission for you to participate.

If you have any questions you may contact:

| | |
|---------------------------|---|
| <u>Primary researcher</u> | <u>Faculty Advisor</u> |
| Aaron Linderman | Dr. Thomas J. Hernández |
| 732-6093 | Department of Counselor Education 395-2366 |

I understand the information provided in this form and agree to participate in this project.

Signature of participant /Date

Birth date of participant

Signature of a witness 18 years of age or older /Date

Appendix C

**STATEMENT OF INFORMED CONSENT FOR
PARENTS/GUARDIANS**

This form describes a research study being conducted with students about their future career aspirations. The purpose of this research is to identify the relationship between 7th grade student career aspirations and their academic achievement. The person completing this research is a student pursuing a degree in Counselor Education at SUNY College at Brockport. If you agree to have your child participate in this study, s/he will be asked to complete a survey about her/his future career plans and her/his understanding of the preparations necessary to obtaining these goals. You will also be asked to allow the researcher to obtain your student's G.P.A. as data that will be recorded in a confidential manner. Student names will not be used as data in this research.

The possible benefit from being in this study could be that information will be learned that would allow teachers and counselors to better prepare middle school students to accomplish their future career goals.

Your child's participation in this study is completely voluntary. Being in it or refusing to be in it, will not affect your child's grades or class standing. S/he is free to change her/his mind or stop being in the study at any time.

I understand that:

1. My child's participation is voluntary and s/he has the right to refuse to answer any questions. S/he will have a chance to discuss any questions s/he has about the study with the researcher after completing the questionnaire.
2. My child's confidentiality is guaranteed. Her/his name will not be written on the survey. There will be no way to connect my child to the written survey. If any publication results from this research, s/he would not be identified by name. Results will be given anonymously and in group form only, so that neither the participants nor their schools can be identified.
3. There will be no anticipated personal risks or benefits because of participation in this project.
4. My child's participation involves reading a written survey of 4 questions and answering those questions in writing. It is estimated that it will take 10 minutes to complete the survey.

5. Approximately 150 people will take part in this study. The results will be used for the completion of a research project by the primary researcher.
6. Data and consent forms will be kept separately in a locked filing cabinet by the investigator and will be destroyed by shredding when the research has been completed.

You are being asked whether or not you will permit your child to participate in this study. If you wish to give permission to participate, and you agree with the statement below, please sign in the space provided. Remember, you may change your mind at any point and withdraw from the study. Your child can refuse to participate even if you have given permission for her/him to participate.

I understand the information provided in this form and agree to allow my child to participate as a participant in this project. I am 18 years of age or older. I have read and understand the above statements. All my questions about my child's participation in this study have been answered to my satisfaction.

If you have any questions you may contact:

| | |
|---------------------------|---|
| <u>Primary researcher</u> | <u>Faculty Advisor</u> |
| Aaron Linderman | Dr. Thomas J. Hernández |
| 732-6093 | Department of Counselor Education 395-2366 |

Signature of Parent /Date

Child's name _____