EFFECT OF SHORT INTERNSHIPS ON STUDENT SELF-CONCEPT

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EFFECT OF SHORT INTERNSHIP ON STUDENT SELF-CONCEPT

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Abstract

TONI S. OAKES. EFFECT OF SHORT INTERNSHIPS ON STUDENT SELF-CONCEPT. (Under the direction of Dr. Karen L. Parker) School of Education, March 2007. This study investigated the effect of short internship on college students’ self-concept. The null hypothesis of this study is that there will be no significant difference in the total self concept, as measured by a standardized self-concept instrument, with college students who complete a course requiring a short internship and students who complete a course that does not have a short internship component. The Tennessee Self-Concept Scale: Second Edition was used to assess the self-concept of the participants. Higher education institutions have increased the requirement of service learning experiences and internships in their curriculums. There has been little research to determine if these learning experiences increase the self-concept of the student. This exploratory/descriptive study used an experimental control group design with a demographic survey. There were 19 participants in the experimental group and 12 participants in the control group. Multiple single factor repeated-measures ANOVAs (one-way analysis of variance) revealed no differences between the experimental and control groups or within the groups of participants. In summary, the results of this study confirm that short internships did not result in statistically significant differences in student self-concept as measured by the TSCS: 2 of the participants used in this study.
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DEDICATION

I dedicate this dissertation to my loving husband, Marty, and my two most precious gifts from God, my sons, Smitty and Sam.
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CHAPTER 1

Introduction to the Study

Internships are required for the majority of professional degrees such as education, nursing, counseling and other health related professions. Prior to earning such degrees, students must demonstrate competencies in their discipline in authentic situations. Students report short internships, between 120 and 150 hours per course, help organize information they have studied in their prerequisite courses prior to the real life practical experience that takes place during full-time internships of longer duration. Frequently, students request more hands-on experience and request short internships, which promote active learning. However, few research studies have been written about the significance of short internships on student self-concept with college students. This study describes the groups of students who participated in this study to determine if such learning experiences resulted in statistically significant differences in their self-concept.

Background to the Study

Recently, colleges and universities have begun implementing service-learning (synonymous with short internship) experiences with their students. Service learning is defined by Hatcher and Bringle (1997) “as a type of experiential education in which students participate in service in the community and reflect on their involvement in such a way as to gain further understanding of course content and of the discipline and its relationship to social needs and an enhanced sense of civic responsibility” (p. 153). In addition, Hodge, Lewis, Kramer, and Hughes (2001) documented that the American
Association for Higher Education challenged institutions of higher education to transform into engaged campuses in order to increase students’ appreciation and involvement in our society’s communal life and democratic responsibilities. By 2000, college surveys reflected that the majority of freshman had performed community service and found giving back to society motivating. The influence of such learning experiences on a student’s self-concept is of interest, since Markus, Moreland, and Smith (1985) contend the self is a central point whose frame of reference influences all perceptions and meanings.

Although students often state that short internships and “hands-on” experiences help them acquire knowledge, competencies and increase their self-confidence in the disciplines, few studies have investigated the effects of such learning experiences on their self-concept. A review of the literature does support that short internships decrease the students’ anxiety associated with learning, and improves students’ critical reasoning skills. The intent of this study is to investigate if short internships increase students’ self-concept.

Problem Statement

Since Dewey and James introduced short internships during the 1920’s and 1930’s, educators have implemented short internship components in their classes and courses to offer students authentic learning experiences. Students, even at the college level, have reported that their self-concept is enhanced following short internships. During the past decade, college students have communicated their desire to have additional hands-on experiences provided through short internship components to help increase their self-concept in their discipline of study. The problem of this study was to
investigate if short internships resulted in changes, as measured by a standardized instrument, in students’ total self-concept. The focus of the problem was to administer a pretest and posttest of two control and two experimental groups to investigate any differences in the dependent variable – self-concept.

Purpose of the Study

The purpose of the current descriptive/exploratory study was to investigate if participation in short internships had an effect on the self-concept of college students at a small liberal arts college using a quasi-experimental research design.

Hypothesis

The null hypothesis of this study is that there will be no significant difference in the total self-concept, as measured by a standardized self-concept instrument, with college students who complete a course requiring a short internship and students who complete a course that does not have a short internship component. The independent variable in this study was the short internship (involving attendance of between 120 and 150 internship hours); the dependent variable was the student’s total self-concept determined by the administration of a standardized self-concept instrument, the TSCS: 2. In this quasi-experimental study, this null hypothesis indicates that differences will not be statistically significant, and subsequently due to chance.

Significance of the Study

The study promises to add to the literature on short internships by analyzing differences in the total self-concept of college students who did and did not participate in internships. If the self-concept of students who participated in short internships improved, this factor may influence disciplines to examine their curriculum sequence to either
increase their required internships or place internships earlier in their curriculum to reinforce student learning and foster student engagement and empowerment in the learning process.

*Overview of Methodology*

The basic design of this exploratory/descriptive study was an experimental, pretest-posttest control group design. Participants were selected using a cluster sampling. The population of this study includes college students enrolled in courses requiring a short internship component. To select a sample for this study, courses requiring an internship component for the experimental group and courses not requiring a short internship component for the control group were chosen. This sampling was composed of students enrolled in selected courses at a small liberal arts college. No students enrolled in the selected courses were excluded from the study. The finding of the sample may apply to a population representative of college students attending a small liberal arts college. Purposive sampling method was used, as the courses selected to be included in this study met the criteria of requiring a short internship component for the experimental group or not requiring a short internship component for the control group. Each group of students were administered the same pretest, posttest and demographic survey. The level of significance used for this study is 0.05 so the results can indicate with 95% confidence that the null hypothesis should not be accepted.

*Research Question*

The research question for this study is as follows:
Do students who complete courses requiring short internship components and students who complete courses without an internship component demonstrate a statistically significant difference in their measured total self-concept scores?

**Null Hypothesis**

H₀: The null hypothesis of this study is that there will be no significant difference in the total self concept, as measured by a standardized self-concept instrument, with college students who complete a course requiring a short internship and students who complete a course that does not have a short internship component.

**Assumptions**

The proposition is assumed that if short internship components enhance a student’s self-concept, the student will be more motivated to engage with tasks related to that discipline and to continue with life-long learning.

**Definitions**

**ACA** – abbreviation for Academic/Work Self-Concept; this score on the Tennessee Self-Concept Scale: Second Edition measures “how people perceive themselves in school and work settings and of how they believe they are seen by others in those settings” (Fitts & Warren, 1996, p. 24).

**BHV** – abbreviation for Behavior; this score on the TSCS: 2 “measures the individual’s perception of his or her own behavior or the way he or she functions” (Fitts & Warren, 1996, p. 26).

**CON** – abbreviation for Conflict; score on the TCSC: 2 “compares the extent to which an individual differentials his or her self-concept by assertion through agreement with
positive items, focusing on ‘Who I am,’ or by negation through disagreement with negative items, focusing on ‘Who I am not.’” (Fitts & Warren, 1996, p. 22).

**FAM** – abbreviation for Family Self-Concept; this score on the TSCS: 2 “reflects the individual’s feelings of adequacy, worth, and value as a family member” (Fitts & Warren, 1996, p. 23).

**FG** – abbreviation for Faking Good; this score on the TSCS: 2 determines if responses are consistent with trying to present a favorable impression (Fitts & Warren, 1996).

**FWI** – abbreviation for level one fieldwork for students majoring in human occupation studies and occupational therapy.

**HOS** – abbreviation for Human Occupation Studies.

**IDN** – abbreviation for Identity; this score on the TSCS: 2 measures the subject’s description of their identity (Fitts & Warren, 1996).

**INC** – abbreviation for Inconsistent Responding; this score on the TSCS: 2 monitors if subject’s answers indicate careless or haphazard responses (Fitts & Warren, 1996).

**MOR** – abbreviation for Moral Self-Concept; this score on the TSCS: 2 “describes the self from a moral-ethical perspective: examining moral worth, feelings of being a ‘good’ or ‘bad’ person, and - for adults - satisfaction with one’s religion or lack of it” (Fitts & Warren, 1996, p. 23).

**OCC** – abbreviation for Occupational Therapy.

**PER** – abbreviation for Personal Self-Concept; this score on the TSCS: 2 “reflects the individual’s sense of self-worth, feeling of adequacy as a person, and self-evaluation of the personality apart from the body or relationship to others [and is] a good reflection of overall personality integration” (Fitts & Warren, 1996, p. 23).
**PHY** – abbreviation for Physical Self-Concept; this score on the TSCS: 2 reflects the “individual’s view of his or her body, state of health, physical appearance, skills, and sexuality” (Fitts & Warren, 1996, p. 22).

**RD** – abbreviation for Response Distribution; this score on the TSCS: 2 is determined by tabulating the number of extreme responses (Fitts & Warren, 1996).

**SAT** – abbreviation for Satisfaction; this score on the TSCS: 2 measures the subject’s level of self-acceptance (Fitts & Warren, 1996).

**SC** – abbreviation for Self-Criticism; this score on the TSCS: 2 is used to assess recognition of common frailties (Fitts & Warren, 1996).

**Self-concept** - is one’s perception of him or herself.

**Self-esteem** - Shaffer (1994) theorized self-esteem as the evaluative component of one’s self-concept that reflects one’s feelings of self-worth.

**SOC** – abbreviation for Social Self-Concept; this score on the TSCS: 2 “is a measure of how the self is perceived in relation to others” (Fitts & Warren, 1996, p. 24).

**TOT** – abbreviation for Total Self-Concept; this score is obtained by using the TSCS: 2, which “reflects the individual’s overall self-concept and associated level of self-esteem” (Fitts & Warren, 1996, p. 21).


The intent of this exploratory/descriptive study is to explore the impact, or lack thereof, of short internships on the self-concept of students required to complete a short internship. Although students’ anecdotal statements reflect that “hands-on” learning helps increase their self-concept regarding their discipline, this study investigates this through
the use of a standardized self-concept instrument with an experimental and a control group.
CHAPTER 2

Review of Related Literature

This chapter will review literature on short internships and self-concept since a short internship is the independent variable and total self-concept is the dependent variable in this study. The topics including gender, ethnicity, GPA, marital status and dependents will be investigated since this information was gathered using a demographic survey during this study. Not all items listed on the demographic survey will be covered in this literature review, as they were included on the survey for identification of group (experimental versus control). The purpose of this review is to describe previous research in these two areas, self-concept and short internships, to provide a rationale for the independent and dependent variables used in this study.

Short Internships and Experiential Learning

Internships are used at more than 1,000 universities and colleges in the United States. The purpose of an internship primarily is to familiarize the student with a “hands-on” experience to foster their integration of theory and knowledge regarding a particular discipline. Emphasis is placed on improving the skills of the student and affirming and developing their vocational choice. For most disciplines, a student must complete designated courses in the curriculum prior to enrolling in an internship. In contrast to a service learning experience, an internship is focused on improving the knowledge and skills of the student as depicted in Figure 1.
The use of internships helps students crystallize their self-concept about their selected vocation. An internship fosters one’s understanding of their chosen discipline and eases the transition from classroom to workplace. The combination of career clarity, gained job-related self-confidence and decreased anxiety about the one’s career choice are reported as significant benefits for interns. Another benefit of internships is the access to informal job sources. The study by Stone and McLaren (1999) found students who had completed an internship were more apt to obtain employment than those who had not completed an internship. During internships, professionals share agency contacts for possible jobs for interns. Recruiters have also reported that students who have completed an internship are more qualified than those who have not. In Stone and McLaren’s study, one survey of students who had graduated two years earlier stated that their internship was the single most significant factor in their educational experience. Stone and McLaren reported students who had graduated without doing an internship recommended
Internships be added to their program. Internships are considered to be a significant part of the undergraduate learning experience (Stone & McLaren, 1999).

A study by Knouse, Tanner and Harris (1999) supports the benefits of college internships. The authors state “internships can help them [students] develop immediate skills that can improve course performance, such as better time management, better communication skills, better self-discipline, heightened initiative, and an overall better self-concept” (p. 35). After the completion of an internship, students find their transition into the workplace is easier, as the discrepancy between what they learned in a class is lessened by the experience they receive during their internship. As the previous study indicated, internships help students access additional resources for potential jobs, improve their self-confidence for work related skills, build professional social skills for the workplace and hone their work values. The study by Knouse, Tanner and Harris (1999) also reported that students who had completed internships secured job employment sooner after graduation than those who had not completed an internship.

One reason an increased interest in internships has increased is in response to students acquiring employment at a faster rate and with greater ease following internships. The decreasing availability of jobs in some disciplines and rising competition has pushed some curriculums to adopt internships to better equip their graduates to secure employment (Cantor, 1995). College students are becoming more aware of the competition and are shopping for curriculum that can provide them with experiences that can help them be more marketable.

Rush, Peel, and McCracken (2004) studied the benefits of an externship – a paid six-week program between the junior and senior year for nursing students. The students
reported they received positive, constructive feedback, which increased their feeling of value as learners. By allowing students to learn at their own pace, the students felt empowered and more comfortable about learning according to their individual readiness. The preceptors managed the students’ workload, which set them up to succeed, and increased their self-confidence and feelings of responsibility and ability to practice their discipline. These students reported the experience helped them see the big picture, prioritize and manage the care of their clients, improve their patient interaction skills and improve their overall performance including being able to problem solve more spontaneously. The internship is an acculturation process that allows students to witness clinicians “thinking-in-practice.” This article concluded that key factors in successful internships included “creating the environment, setting people up for success, letting go of control, and challenging thinking” (Rush, Peel, McCracken, 2004, p. 290).

Kurt Lewin, a founder of American social psychology, using his Gestalt perspective, argued that theory and practice must be connected and integrated (Hubbert, 2002). Jean Piaget purported that one’s experiences are pivotal in shaping one’s intelligence. Dewey and James introduced the use of more interactive learning involving real life learning experiences, such as short internships, in the 1920’s and 1930’s, proposing a shift from traditional learning to a student-centered approach to promote lifelong learning. Hickcox (2002) states students become active learners through “hands-on” approaches with the content specific to their discipline. After short internships, students’ anxiety about learning decreased and competencies increased. In addition to the intellectual component of learning, the social emotional component is addressed. As discussed in the article “Implementing and Assessing Internships” (2002) opportunities
for learning during internships include a variety of formal and informal contexts, which can enhance growth intellectually, personally, and ethically. The authentic learning situation provides a forum for students to connect theory with practice. The meaningful experiences allows for active learning and reflection to assist students with understanding their actions as mentors provide ongoing positive and negative feedback. The perspectives of Lewin, Piaget, Dewey, James and Hickcox support the construct that internships provide direct experiences that foster critical thinking skills.

Other researchers have investigated the effects of short internships and one’s critical reasoning skills and physiological changes in the brain. As the study by Cavallo, Sullivan, Hall, and Bennett (1999) reports direct experience is effective, as the discourse and inquiry that occurs with an experienced mentor promotes the students’ understanding of the concepts and promotes the development of critical thinking skills. Short internships incorporate various learning styles of students in contrast to the traditional lecture mode, which involves primarily auditory learning skills. Every brain, J. W. Roberts (2002) states brain is unique, complex, and constantly changing on a physiological level. Research about the principles of brain-based learning present the brain as designed for learning with complex, multi-sensory environments offering strategies for visual, auditory and kinesthetic learners as opposed to more traditional linear instruction. Valo (2000) asserts that short internships offer multi-sensory stimuli and the opportunity to engage in real-life authentic situations so students can become more personally committed and self-directed.

Several researchers contend that short internships facilitate students’ development
of their identity. Chambers (2004) addresses the need for repeated episodes of information prior to one’s ability to transfer novel information. This pertains to theoretical information and practical application. Wegner (1999) states the process of learning and social participation, both integral parts in internships, involves four components: meaning, practice, community and identity. Wegner defines these terms as follows: meaning – learning as experience; practice – learning as doing; community – learning as belonging; and identity – learning as becoming. Lobel and Winch (1988) agree identity is related to a positive self-concept and positive self-cognition.

The need for repetition (practice) is substantiated in the components of Trigwell and Shale’s (2004) model of scholarship of teaching, which include knowledge, practice and outcome as shown in Figure 2.

![Figure 2. Scholarship of teaching](image-url)
One of the most influential researchers in promoting short internships is David Kolb. Kolb theorizes that learning can begin at any point in one’s experiential learning cycle. The entry point is usually indicative of the individual’s learning style. Kolb categorizes learners in four categories – diverger, assimilator, converger or accommodator. Kolb contends reflection during learning is essential to bridging concrete information to the formation of abstract concepts (Hatcher & Bringle, 1997). Kolb’s learning style inventory looks at the needs and preferences of individuals (Hatcher & Bringle, 1997) and is comprised of four processes. Short internships, according to Kolb, first includes having a concrete experience; second, reflecting on those experiences; third, conceptualizing the experience; and, finally, testing the model or theory. Figure 3 demonstrates the stages of Kolb’s cycle of experiential learning.

(Kiser, 2004)
Figure 3. Kolb’s model of experiential learning

As Ferrari (2006) states:

“Experiential learning theory helps to clarify how academic education links theory and practice….Knowledge is continuously produced by experience….Learning is the product of active and open exploration of one’s own experiences through reflection. Theory needs to be tested in practice and experience needs to be reflected on and generalized to inform future experiences.

(p. 39)

The application of Kolb’s theory when combined with the cognitive development outcomes exposed by Mosser in 1989 produces the following list of objectives for internships:

- To learn to consider various perspectives in problem solving;
- To learn alternative perspectives to decisionmaking [sic] processes;
- To reduce apprehension for dealing with complexity;
- To develop and use higher-order thinking skills in analyzing, synthesizing and integrating information;
- To integrate prior knowledge from the classroom with new information gained in the real world;
- To think and operate at higher levels of complexity (Cantor, 1995, p. 34).
Mosser (1989) stated internships provided benefits to students including “career development outcomes, personal development outcomes, and learning outcomes” (p. 7). Personal development outcomes, Mosser continued, includes building self-esteem, identity development, and increasing self-confidence.

Learning is a continuous process influenced by (a) the student’s particular learning style, and (b) the environment. The environment, Acosta (1991) states:

… is responsive to learners if it: 1) permits them to explore freely and provides opportunities for discovery; 2) renders appropriate feedback about the consequences of their actions; 3) allows them to learn at a rate that is comfortable for them; 4) permits them to make full use of their capacity for exploration and discovery of various kinds of relations; and 5) is structured so that they are likely to make interconnections and relationships about the physical, cultural and social worlds. (p. 9)

As Bringle and Kremer (2001) contend, short internships promote self-directed learning, raise self-awareness, and expand one’s awareness and appreciation of diversity. The developmental approach used with short internships helps instructors to accommodate to the different needs of their students (Bringle & Kremer, 2001). It also raises the consciousness of the students about other populations. For example, Bringle and Kremer (2001) contend that didactic instruction combined with short internships has improved college students’ perceptions and attitudes towards the geriatric population and their feelings about their own aging process. In summary, past research has addressed the
benefits of short internships including the development of one’s critical thinking skills, one’s social emotional perception, one’s identity, and one’s awareness of self and others.

Short internships and their relationship to employment have been addressed. Lizzio and Wilson (2004) contend that job-related stress and burnout can occur when the novice employee has false assumptions about what occurs in the workplace as compared to the culture most college students experience on campus. They elaborate on Hager’s major theoretical accounts of workplace learning from which two themes arise: (a) individual development requires learning from experience, and (b) one must develop broad generic skills to develop adaptive competence. Adaptive competence is a skill necessary for working with others (Lizzio & Wilson, 2004). As Harkavy and Romer (1999) explain, performing services in the community linked to their academics is a practical way to “expose students to the problems of their communities and to encourage their involvement in finding solutions” (p. 14). By incorporating internships, students can actively be involved with structural community improvement. Thus, short internships can promote personal commitment, self-directed, life-long learning, and active community involvement (Harkavy & Romer, 1999).

Internships interspersed throughout a four-year curriculum were shown to increase the number of students applying for graduate school (O’Neill, 1992). Cantor (1995) states internships help make learning more relevant thereby increasing students’ motivation for more intense academic endeavors. O’Neill’s report reflects goals of increasing the students’ problem-solving, decision-making, personal responsibility and interpersonal skills during internships, which empowered the students to attend graduate school.
The work of Cross and Markus (1994) addresses with the transition from novice to expert in their statement:

Studies demonstrate that a self-schema, which gives form, direction, and self-relevant meaning to one’s logical reasoning ability, is an important element in individuals’ beliefs about and reactions to their performance in that domain. The self-schema provides a base of knowledge about one’s ability, making the person with a ‘logical problem-solver’ self-schema sensitive and responsive to relevant situations and stimuli. This expertise allows him or her to quickly appraise a situation and prepare to use the appropriate skills and strategies effectively. (p. 434)

Acosta (1991) researched internships at Auburn University and found the importance of this instructional process for undergraduate students pursuing degrees in the health fields to be explained as follows:

The experiential learning model provides a framework which helps health educators understand the various ways through which individuals learn, develop and acquire knowledge that is not only cognitively retained but also behaviorally apparent. The role of the health educator is to guide the individual in reaching a solution to a problem. Using the experiential learning [internship] and critical inquiry framework, the health educator does not solve the problem for the individual; instead, s/he acts as a facilitator in the exploration of alternative ways to solve the problem. As facilitator, the health educator poses questions, provides options, presents all possible information needed so that the individual can look at the problem from different perspectives. (p. 8)
Dore, Epstein, and Herrerios (1992) agree that internships help students develop a professional attitude, which places the client at the center of attention so the student can automatically begin the patient-client interaction without prejudice. Thus, various studies describe the shift from a student-centered perspective to a client-centered perspective following internships.

Within a liberal arts curriculum, Cantor (1995) states that internships develop critical reflection, motivation to learn, ethic responsibility, cultural diversity, collaborative learning, and a realization of their importance. Adult learners link theory to practice by becoming involved in the learning experience and assuming ownership for their own learning. Validation is more available during internships as the learning is personalized allowing for more immediate clarification and further practice. For learning to be active and complete, application, generalization, and experimentation must take place (Cantor, 1995).

Internships incorporate affective learning involved in people-oriented disciplines such as occupational therapy and human community services. David Kolb’s model of experiential learning depicts the variability in how people learn. By engagement in an internship, one can learn using a variety of learning styles. An implicit goal inherent in internships is fostering students to become more self-initiating and self-directed. During internships, the authentic learning experience allows students to focus on the needs of their clients and their own learning simultaneously (Hickcox, 2002).

Short Internships in Occupational Therapy

The accreditation agency for the discipline of occupational therapy, the Accreditation Council for Occupational Therapy Education (ACOTE), requires students
Internships and Self-Concept

to complete supervised fieldwork experience with those experiences being an integral part of the occupational therapy program. Clinical experiences in the discipline of occupational therapy as conceptualized by Fidler (1964) are an opportunity to integrate experiences to facilitate growth in various areas. These ten areas include the following:

1. Self-concept and personal identity
2. Self-awareness and self-understanding
3. Receptivity to learning and growth
4. Flexibility, objectivity and judgment
5. Interpersonal relationships
6. Communication skills
7. Problem solving and decision-making skills
8. Observational and evaluative skills
9. Treatment planning and implementation skills
10. Group process skills. (p. 240-241)

Fidler (1964) recommends clinical supervisors use a Likert-type scale of one (minimal) to seven (maximum) to evaluate student performance. In the area of self-concept and integrity, Fidler (1964) recommends assessment of the following:

Tolerance for error and/or failure.
Capacity to constructively integrate criticism.
Ability to make decisions.
Ability to act upon decisions--to implement.
Capacity to act on own perceptions.
Capacity for compromise.
Consistency between words and actions.

Appropriate self--expectations.

Self-determining--self-directed.


Right of self to be different.

Appreciation of common factors between self and others.

Courage of convictions -- values own judgment and perceptions.

Integrative capacities -- ability to withstand frustration, anxiety, disagreement. (p. 242)

Fidler’s report indicates that self-concept of occupational therapy students and the influence of their clinical experiences on their self-concept has been a concern in the discipline for over 50 years.

Internships require students to combine observations and practice in their discipline of study. A meta-theoretical assumption by Skinner (1995) states “perceived control reflects the fundamental human need for competence” (p. 8). This is reflected in the different stages from novice to expert in the field of occupation therapy as described in the Self-Paced Instruction for Clinical Education and Supervision (1991). In the discipline of occupational therapy, a novice would be expected to recognize facts and features that would promote new skills and the establishment of rules to guide their actions. The advanced beginner would consider additional cues thus expanding their patient view. The importance of situational components in skill acquisition would be added to context-free components. The competent practitioner identifies relevant information quickly and balances multiple patient care demands successfully. The
proficient practitioner views the evaluation of the treatment session as a whole versus isolated parts. They are able to handle unfamiliar situations adeptly and creatively. Finally, an expert practitioner appears to intuitively assess the situation and focus on the salient issues.

Short internships in occupational therapy allow students to demonstrate their understanding of principles and techniques learned in the didactic setting in an authentic setting under the supervision of an occupational therapist. Studies have investigated the correlation between students’ academic performance and performance in clinical settings. However, as Kramer and Stern (1995) report, no correlation between these two variables, academics and clinical performance, has proven to be significant. To gain an understanding of the factors that are prevalent when a student does experience difficulties during a short internship, reports have used case studies to discover a primary theme. Kramer and Stern (1995) found that “students who had difficulty engaging in the supervisory process encountered problems more frequently than other students during their fieldwork experiences. These students generally did not accept responsibility for their behaviors and did not respond well to feedback” (p. 156). The faculty and fieldwork coordinators design their curriculum and select fieldwork sites to maximize a student’s ability to apply his or her theoretical information in a competent manner in a supervised setting. If a student has not developed a sense of responsibility for his or her own actions (Internal locus of control), and is receptive to constructive criticism, it is probable the student will encounter problems during their internships. Shifting the development of personal responsibility and empowering the student to be aware of their ability to develop
an internal locus of control and responsibility for changing their behaviors can lead to changes in their performance outcomes.

During internships, students encounter a variety of different learning experiences. The premise that the internships are merely an opportunity to apply theory is quite insufficient. Students are placed with supervisors and clients who represent various backgrounds, races, ages, faiths, cultures, and sexual orientations. Principle four of the occupational therapy code of justice requires that practitioners treat all individuals with mutual respect and strive for the development of moral autonomy. Without mutual respect, a dilemma between the student and their supervisor or their client can develop. By maintaining principle four, the student will be better equipped to work towards resolutions in various situations should they occur (Kyler-Hutchison, 1994). The study in 1993 by Mitchell and Kampke indicates that most occupational therapy students use healthy coping methods during their internships. In this study, female and male students agreed that the internship was important. Students who agreed they had control during the transition period from campus to clinic were 46% for female students and 38% for male students. Students who agreed they had control over the present circumstances of their internship were 48% for female students and 53% for male students. Students who agreed that the internship was stressful were 64% for females and 38% for males. The study found that the majority of students used healthy strategies including problem-focusing strategies for resolving problems affiliated with their internship experiences (Mitchell & Kampke, 1993).

In reviewing Fidler’s characteristics to observe and evaluate students during their internships, it becomes evident that the dialogue between the student and supervisor
promotes professional socialization. The exchange regarding beliefs, values and observations fosters the students’ examination of their underlying assumptions about their experiences and facilitates their critical reflection and reasoning skills (Tompson & Ryan, 1996).

**Self-Concept**

Self-concept, the dependent variable in this study, is one’s perception of the self (Dell, 1987). Self-concept has been used intermittently throughout the years as self-esteem, self-actualization, self-worth, self-confidence, and self-acceptance. Since self-concept reflects how one perceives or views himself or herself, it requires an assessment of self-report. The perceptions one has must be perceptions of which they are aware (Dell, 1987). In reviewing the literature, the most common terms used to describe and measure one’s self-awareness are self-concept and self-esteem. The definition of self-esteem differs from self-concept as it measures one’s self-worth in relation to what is socially desirable. However, in reviewing the articles on self-concept, it is frequently used intermittently with self-esteem. In the early 1970s, Fitts and other psychologists agreed that the evaluating part of the self-concept is self-esteem (Dell, 1987). Self-concept is a construct that continuously develops during one’s life to help provide direction for one’s behavior.

Various definitions of self-concept exist. Cohen and Swerdik (2002) state “self-concept may be defined as one’s attitudes, beliefs, opinions, and related thoughts about oneself” (p. 329). Self-concept is “the description an individual attaches to himself or herself…in terms of role and attributes…. [and] is not referred to as positive or negative since it is only a description of the perceived self and does not involve a value judgment
of that description by the individual” (Beane & Lipka, 1986, p. 5). Self-esteem involves a sense of self-regard and evaluation of one’s self-concept and satisfaction with this judgment. Beane and Lipka (1986) add “while self-perceptions develop largely in a social context, their nature and content also depend partly on the developmental characteristic of particular stages of growth” (p. 17). A child is dependent on his or her environment, whereas adolescents, being more independent, rely on their peers and personal introspection as opposed to the influence of adults. Self-perceptions occur on three levels: situation specific, categorical, and general. First includes physical abilities and dialogue with others. Second involves development of ideas as a result of specific situations regarding one’s roles and attributes. Third, general sense of self, is a product of the first two. To change one’s general self-perception, changes must occur with the specific situations and/or categorical levels (Beane & Lipka, 1986) as demonstrated in Figure 4.

(Beane & Lipka, 1986, p. 17).

Figure 4. The Process of Self-Perceiving
William James, in 1890, proposed individuals are born without a self-concept (Beane & Lipka, 1986). Fitts and his colleagues, eighty years later, proposed that self-concept developed over time in response to three factors. These three factors include the Identity, Self-Satisfaction and Behavior facets of the Tennessee Self-Concept Scale. The Identity facet includes “the private, internal self-concept…the ‘what I am’ aspect of the self” (Byrne, 1996, p. 161). The Self-Satisfaction facet reflects “the extent to which the individual feels satisfied with his or her self-image…the ‘how acceptable I am’ aspect” (Byrne, 1996, p. 161). The Behavior facet represents “‘what I do’ and ‘how I act’… the manifestation of self that is observable to others” (Byrne, 1996, p. 162).

Bandura agreed with the research previously cited that one’s thinking and emotional responses were influenced by their self-concept. Self-efficacy influences tasks undertaken and the continued duration of the task in the face of adversities. High self perceptions of efficacy can either sustain one’s efforts for optimal performance or decrease the preparatory effort for the targeted behavior (Bandura, 1982). As Bandura (1982) states:

People’s judgments of their capabilities additionally influence their thought patterns and emotional reactions during anticipatory and actual transactions with the environment. Those who judge themselves ineffectual in coping with environmental demands dwell on their personal deficiencies and imagine potential difficulties as more formidable than they really are (Beck, 1976; Lazarus & Launier, 1978; Meichenbaum, 1977; Sarason, 1975). (p. 123)

One’s self-efficacy is evidenced by one’s coping efforts, which include choices, effort exerted and persistence. Bandura and Adams (1977) outline that personal efficacy
Internships and Self-Concept

expectations come from four types of information (a) mastery of skills or
accomplishments, (b) observations made during vicarious experiences, (c) verbal
persuasion, and (d) states of physiological arousal. These different types of information
influence one’s personal efficacy. In turn, one’s self-concept influences one’s persistence
in their overall performance.

Self-concept, Markus, Moreland, and Smith (1985) state, includes a “set of self-
schemas that organize past experiences and are used to recognize and interpret relevant
stimuli in the social environment” (p. 1495). Self-schemas influence the organization and
use of information. Individuals with self-schemas make quick, confident and consistent
judgments about themselves. As one’s self-knowledge increases about their disposition
and behaviors, a self-schema influences an individual’s ability to perceive and respond in
ways similar to an expert as opposed to a novice. The development of systematic
cognitive consequences is essential in transitioning from a novice to an expert. An expert
is able to do the following better than a novice: (a) recognize relevant information, (b)
organize and integrate information with prior knowledge, (c) retrieve information, and (d)
 vary the information-processing strategy. In social situations, which occur with increased
frequency during internships as compared to traditional classroom situations, these
authors found that students relied on their self-concept in several situations. These
situations included when the individual had a strong self-structure, when other sources of
information were lacking, and when quick judgments were warranted. Markus, Moreland,
and Smith (1985) state “self-concept can influence the entire person …including the
perception and organization of the behavior of others, the memory for and inferences
about the behavior, and the evaluation of it” (p. 1510). Self-concept, they allege, plays a pivotal part in transitioning from a novice to an expert.

One’s self-concept resists change. Self-concept, assert Markus and Kunda (1986), has a stable component that can limit one’s responses in social situations. Individuals reject information that challenges their primary view of who they think they are. One seeks to maintain consistency and stability regarding their self-concept. Markus and Kunda (1986) address the preservation of one’s self-concept in the following statement:

The working self-concept consists, then, of one’s core self-conceptions embedded in a context of more tentative self-conceptions that are tied to the immediate social circumstances. Self-conceptions become active in working memory when they are triggered by significant self-relevant events, or they can be tuned in by the individual in responses to an event or situation. (p. 859)

One’s self-concept can change following embarrassing actions. Markus and Kunda (1986) explain one’s self-concept may recruit positive self-conceptions following embarrassment to counteract the initial negative feelings about the self. This can result in significant changes in one’s mood, self-esteem, thoughts and actions. Kunda and Sanitioso (1989) propose that changes in one’s self-concept develop from within to form a self-concept considered acceptable by that individual. The study by Kunda and Sanitioso (1989) found that “people attempt to recruit evidence that they possess these attributes, and change their self-concept only to the extent permitted by their prior self-knowledge” (p. 282). Thus, individuals are prone to alter their self-concept, as they want to see themselves as positive and successful. This promotes the development of success-promoting attributes.
Skaalvic and Skaalvic (2002) report five antecedents to the development of self-concept including (a) frame of reference, (b) causal attributions, (c) reflected appraisals from others considered significant, (d) mastery experiences, and (e) psychological centrality - “self-assessments of qualities that individuals perceived as important or psychologically central” (p. 234).

**Historical Perspective of Self-Concept**

Psychology became an official discipline in 1860 and William James in 1890 “considered ego the individual’s sense of identity” (LaBenne & Greene, 1969, p. 2). The development of self-concept as introduced by James advocated the absence of self at birth with the development of one’s experiences expressed as “I” and the self that is experiences as “me” (Reynolds, 1996, p. 26). James proposed a global concept of self composed of spiritual, material, and social aspects. Self was dynamic with self-preservation and seeking qualities. James suggested that one’s perception of self involved both personal introspection and observation of other’s behaviors. One’s self, he proposed, included both one as a knower and object of knowledge. He theorized that one’s self was comprised of three components – material, social and spiritual. All of these components act to preserve and enhance one’s self-concept (Beane & Lipka, 1986). In 1902, Cooley speculated that the self was actually a “looking-glass self” with self-perceptions being a function of feedback from others. Thus, one perceives how others view them and this, in turn, influences their behavior (Beane & Lipka, 1986). Mead in 1934 supported both the multidimensional and hierarchical perspective of self-concept due to the various roles individuals have and their relative importance. Mead advocated that individuals are significantly influenced by the perceptions of them as exposed by those considered to be
significant and then change their actions accordingly. Mead introduced this facet of social interaction, one’s perception of others’ responses, as being integral to one’s self-concept (Beane & Lipka, 1986). G.W. Allport introduced his term “proprium” to indicate self-awareness. This included “bodily sense, self-image, self-esteem, and identity as well as thinking and knowing” (LaBenne & Greene, 1969, p. 3). Less than a decade later, Sigmund Freud presented the ego as a central component of his personality theory. Unlike James and Allport, Freud did not emphasize the self-image. According to Freud, the ego was a system of processes. During that same time, Mead introduced his concept of self as an object aware of responses from others in different contexts. Lewin, a contemporary of Freud and Mead, proposed that one’s behavior was directed by multiple factors inclusive of perceptions, future plans and goals (LaBenne & Greene, 1969).

In the 1940s, Lundholm’s theory separated the subjective from the objective self. Sherif and Cantril theorized the self as an object with attitudes such as personal identity and feelings of worth contributing to one’s ego. In the 1950s, Symonds incorporated Freud’s and Mead’s theories. Cattell asserted that self-concept had a selective perception while Murphy introduced defensive-enhancing functions of the self. Rogers theorized that conscious information about one’s self and their environment influenced their behavior. Snygg and Combs, phenomenologists, believed behavior was congruent with one’s perception of a situation and themselves (LaBenne & Greene, 1969, p. 7). Combs believed that one of the primary purposes of teaching was to foster the development of a positive self-image with their students (Dell, 1987). Rogers, Combs and Snygg espoused one’s self-perception is related to one’s attitudes and beliefs about others (Richmond, Mason & Padgett, 1972). The study by Richmond and his colleagues, which involved 150
undergraduate students, supported that “those who view themselves in a more positive fashion tend to have a higher regard for others” (p. 104). Their dynamic representation of self as an object and process is a foundational construct for the understanding of self-concept (Richmond, Mason & Padgett, 1972). Beane and Lipka (1986) report theorists agree feedback from others vary in their significance. In conclusion, many psychoanalytical theories have evolved regarding self-concept during the past 150 years.

The formation of one’s self-concept is not only related to significant interpersonal relationships but also is influenced by one’s socio-cultural context. In addition to psychoanalytical theories, anthropologists and social psychologists have contributed to the understanding of cultural influences and social influences in one’s self-concept. Theorists such as Adler, Fromm, Horney, and Sullivan emphasize the motivating force from socio-cultural context and significant interpersonal relationships (LaBenne & Greene, 1969).

In the past few decades, philosophers, psychologists and educators have combined disciplines to understand how the brain works and how certain learning experiences can help foster long-term learning with students. James, Bruner, and Gardner have been pioneers for making these connections in education (Cantor, 1995). Parnell (1996) states the following:

The need for connectedness in education goes even deeper than the pressures of contemporary society or the demands of the workplace. The process of brain-based learning calls for making connections. Unless connections are made between subject content and the context of application, little long-lasting learning occurs for the majority of students. (p. 3)
Thousands of studies had taken place over the past 40 years regarding self-concept. The humanistic base as provided by the works of Maslow, Rogers, and Combs and Snygg laid the foundation for Fitts’ development of the TSCS which has been used in research studies involving the variable of self-concept reportedly perhaps more than any other test (Byrne, 1996). In the 1960s, Fitts and his colleagues designed a test to measure the multidimensional description of self-concept. Even before its revision in 1988, hundreds of studies had used the Tennessee Self-Concept Scale. Fitts’ and Warren’s definition of self-concept addressed “who I am” as opposed to their definition of self-esteem which addressed “How do I feel about myself” (Impara & Plake, 1998, p. 1010).

The process of self-perception was studied in the 1970s by Gergen, Hamachek and Rosenberg (Beane & Lipka, 1986). Individuals use various processes that result in changes of self-concept. These include the organization of new information or experiences, the scanning of past events to determine differences and similarities with new stimuli, the screening of information to determine its negative or positive influence and the altering of new information to help it fit with that individual’s perceived self (Beane & Lipka, 1986). The self may chose to avoid or engage in a new experience and reflection may take place to determine consequences of new experiences. The self can both motivate one to seek new experiences or judge the situation in relation to one’s self-worth or self-esteem (Beane & Lipka, 1986). The development of the self-concept is multidimensional. Beane and Lipka (1986) state “…the individual with a self-concept structure interacts with the environment, and as new experiences or information are encountered, they are processed by devices in such a way that the self-concept structure is strengthened, refined, or unchanged” (p. 17). As adults, the construction, evaluation
and changes in one’s self-perception occurs primarily as a result of progression through social roles and social states and the accumulation of experiences as one attempts to seek stability of their self-perception (Beane & Lipka, 1986).

Fitts and his colleagues developed the measurement used in this study, the TSCS: 2 after reviewing the theories and early descriptions of self-concept. Reynolds (1996) summarized this as follows:

Freud would have included a detailed life history and cultural background; Murphy and Murray would have included present needs and motivations; Allport and Cattell would have included personality traits and characteristics; Noyes and Kolb would have included a thorough evaluation of psychiatric status; Mowrer would have included dependability, honesty and integrity; Maslow would have included goals, value systems and degree of self-actualization; and Fitts and his colleagues would have included interpersonal skills. (p. 27)

Fitts and his colleagues combined a wide variety of theories during the development of the TSCS and the TSCS: 2. As Cohen and Swerdlik (2002) state:

Although inferences about an assessee’s self-concept may be derived from other tools of assessment, the test of choice is typically a self-concept measure, an instrument designed to yield information relevant to how an individual sees himself or herself with regard to selected psychological variables. Data from such an instrument are usually interpreted in the context of how others may see themselves on the same or similar variables. (p. 329)
Theoretical Models of Self-Concept

Multiple theoretical models of self-concept exist – some unidimensional, others multidimensional. A nomothetic model of self-concept has overlapping facets of information represented as one construct. Areas including academic, social, physical, and emotional components are combined to form one’s general self-concept. The longevity of the nomothetic model may be related to its conceptual simplicity, which presents the theory in a straightforward manner. Rosenberg supported a true unidimensional model in his Self-Esteem Scale that measured an individual’s global self-concept without measuring specific self-perceptions (Byrne, 1996). Proponents of this theory included Coopersmith, Marx, Winne, Piers, and Harris.

Various multidimensional perspectives exist. Marsh, Smith, and Barnes report (1985) “stronger support for the multidimensionality of self-concept” (p. 581). Multidimensional models include the independent-factor model, the correlated-factor model, the compensatory model, the hierarchical model, and the taxonomic model. The independent-factor model theorized that self-concept is composed of multiple independent facets. The correlated-factor model correlates the multiple, domain-specific self-concepts with various age groups. Marx and Winne’s compensatory model proposed that multiple bipolar facets affected global self-concept; the relationship between these facets included both positive and negative correlations. Low status in one domain would be compensated by a high status in another domain in an attempt to preserve one’s sense of well-being (Byrne, 1996). The hierarchical model, which theorizes general self-concept as comprised of multiple domain-specific self-concepts, supports that each of these concepts can be interpreted as separate constructs even though they correlate
systematically. The taxonomic model, stemmed from Guilford’s model of intelligence, reflects a factorial design inclusive of a minimum of two self-concept facets with a minimum of two levels (Byrne, 1996). The Tennessee Self-Concept Scale is a taxonomic model.

The TSCS follows a multidimensional design reflecting the belief that self-concept has three components that influence its development (Byrne, 1996). These include one’s interpersonal feeling; one’s competence in areas considered to be of value, and one’s awareness of their potential. Fitts’ taxonomic model includes three internal dimensions and six external dimensions. The three internal dimensions, called supplementary scores on Fitts’ and Warren’s (1996) Tennessee Self-Concept Scale: Second Edition (TSCS: 2) include Identity, Satisfaction and Behavior. The six self-concept scales include Physical Self, Moral Self, Personal Self, Family Self, Social Self, and Academic/Work Self-Concept. In addition to these components, the TSCS: 2 have items to monitor the validity of responses in four areas: inconsistency, self-criticism, faking good, and response distribution. The TSCS: 2 has two summary scores, the total self-concept score and the conflict score. Figure five illustrates the components of the TSCS: 2.
(Fitts & Warren, 1996)

Figure 5: Components of the TSCS: 2
The development of the TSCS, and later the TSCS: 2, was to provide an overall assessment of one’s self-concept to determine if (a) their self-concept was realistic, (b) if it reflected feelings of worth or (c) if it indicated a deviant self-concept. Fitts and Warren (1996) contend high scores indicate confident secure individuals while low scores are associated with those who exhibit low self-confidence. In this study, the total self-concept score was used as the dependent variable. Subscales were not compared in this study as Gauthier and Yarworth (1980) indicate “there may be some conceptual justification but very little empirical support [for the use of TSCS subscales individually] when one considers the correlations that exist among these variables” (p. 169). Although Fitts and Warren did produce factor analysis for these variables when they revised the TSCS, the intent of this study was to investigate the overall total self-concept. The total self-concept score is reported to be the most representative of self-concept by Fitts and Warren (1996) who conclude that this total score accounts for the majority of variance observed within the subscales as it represents the overall self-concept.

Self-Concept and Demographic Variables

Topics including gender, ethnicity, GPA, marital status and dependents were explored since this information was gathered using a demographic survey during this study. Since the development of the TSCS, hundreds of studies have used the instrument to investigate the relationship of self-concept with different variables. The demographic survey, designed for this study, investigated variables found to be significant in past research studies. The norms established during the development of the TSCS “indicate that the effects of sex, age, race, education, and intelligence on the scores of the self-
concept scale are negligible” (Brooks, 1990, p. 3). Brooks’ study revealed “Persons with high scores tend to like themselves, feel they are persons of value and worth, and have confidence in themselves. People with low scores are doubtful about their worth, see themselves as undesirable, feel anxious, depressed and unhappy” (p. 11).

Regarding gender, Tolor, Kelly and Stebbins (1976) found female undergraduate college students to be significantly more assertive and have significantly more positive self-concept than the males in their study. A positive correlation existed with both genders between being highly assertive and having a favorable self-concept. Fitts and Warren (1996) contend that gender and self-concept are not significantly correlated. Nystul (1974) reported higher self-concepts (measured by the TSCS) in females. Roothman, Kirsten and Wissing (2003) found no gender differences in family and social self scores of the TSCS and only small statistical differences with personal self total scores (p≤0.05) and physical self total scores (p≤0.01). Marsh, Smith and Barnes (1985) state “although there appears to be little evidence of sex differences in total self-concept, there do appear to be systematic sex differences in particular dimensions [physical ability] of self-concept that are consistent with sex stereotypes” (p. 583).

Regarding self-concept and ethnicity, Sicherer (1996) investigated “the relationships between global self-concept, academic self-concept, and college academic achievement for multicultural college women receiving the Educational Opportunity Fund (EOF) grant” (p. 3). Her study revealed no significant differences in global or academic self-concept for multicultural college women who received Educational Opportunity Fund grants.
Regarding ethnicity, the reports have varying results. Demo and Parker (1987) reported a negative correlation exists between global self-concept and college academic achievement of white female college students. When their data was analyzed by race and gender, the white females had a significant result (p<.05) and showed both high academic achievement and low self-esteem. However, Sicherer (1996) notes, a conflicting report, which indicated a positive correlation between total self-concept and GPA with African-American female college students. In essence, the higher the self-concept of the African-American female, the more they worked and improved their performance. Demo and Parker (1987) discovered a negative correlation between these two variables with Caucasian women. So, in contrast to the African-American females, the Caucasian females worked harder and did better if they had a low self-concept to compensate for their low self-concept. When studies combined the races into one group, no significant difference was found between GPA and total self-concept. One possible reason for the conflict in findings regarding self-concept and GPA and race and gender may be the use of different statistical analysis techniques as some performed correlations and regression equations and others examined the differences between the means of the groups depending on the investigator’s research question and the control of their variables.

Sicherer’s report (1996) found the following:

There were no racial and ethnic differences in the relationship between the TSCS and GPA: African-American, Asian-American, Latin-American, and white students did not show a significant relationship between the TSCS and GPA. Pearson Product Moment Correlations were not statistically significant for any of the racial/ethnic groups. (p. 66)
Richmond, Mason and Padgett (1972) discuss the relationship between self-esteem and respect for others between different ethnic groups. Both Fromm and Kierkegaard insisted that one’s ability to love and respect others was intimately related to one’s love and respect for self (Richmond, Mason, & Padgett 1972).

Sicherer’s study (1996) which controlled the socioeconomic status of participants, found no significant differences in self-concept and GPA between racial ethnic subgroups. As Sicherer (1996) states, “global self-concept has a positive, but not necessarily significant correlation with GPA, because other highly valued aspects of self are not necessarily related to academic performance” (p. 77).

Regarding GPA, the relationship between cumulative GPA and global self-concept was positive but insignificant although it was positive and significant with the academic self-concept (Sicherer, 1996). Dell (1987) found a statistically significant correlation (p<.01) between cognitive measures, the GPA, and SAT/ACT. Dell’s study also found a statistically significant correlation (p<.05) between the score on the nurses certification exam (NCLEX-N) and the age of the student, but not the self-concept.

Gadzella, Williamson, and Ginther (1985) reported no correlation between GPA and self-concept with females yet a correlation was found with male’s GPA and “the subscales of self-satisfaction, moral-ethical self and personal self” (p. 644). These researchers contend no correlation exists between GPA and locus of control for men and women. However, they did state “Men’s attributions concerning powerful others and chance are particularly sensitive to self-concept….The women’s self-concept appears to be more resilient to evaluations of significant others and attributions concerning luck or chance.” This contradicts the belief that men are not influenced by evaluations by others.
Self-concept, one’s perception of him or herself, is multifaceted, organized and hierarchical. It can be general or situation specific, descriptive, evaluative, and differentiated from other constructs. Shavelson and Bolus (1982) discuss the reciprocal relationship between the influence of achievement on self-concept and the influence of self-concept on achievement. Purkey, Coopersmith, Combs and Patterson agree when one’s self-esteem is threatened, one uses energy to defend themselves, thus distracting one from accomplishing tasks, such as academic assignments (Dell, 1987). Purkey (1978) stated that the self-concept of a student actually affected their academic success or failure more than their mental ability. Consistent with the behaviorist learning theory, Shavelson and Bolus (1982) believe that reinforcers influence motivation for learning and is reflected in a change in one’s self-concept being distinct, yet correlated with other facets of self-concept inclusive of academic and specific subject-matter self-concept. As Marsh, Smith, and Barnes (1985) state, “socialization produces self-concept differences that produce achievement differences” (p. 593).

A study by Crump, Hickson, and Laman (1985) found that college students with an internal locus of control exhibited significantly more positive self-concepts than those students who had an external locus of control. Although the self-concept scores for these two groups differed significantly, they did not differ regarding their GPA so there was no correlation between GPA and self-concept. Rotter and Mulry (1965) found:

…an individual who felt that what happened to him depended on his own skills [internal locus of control] would place higher value on demonstration of skill (since it indicated a promise for future rewards) than would a person who felt that
reinforcements were arbitrarily dispensed independently of his own actions [external locus of control]. (p. 599)

Two factors that give environmental feedback more power includes external locus of control and learned helplessness (Beane & Lipka, 1986). One’s self-concept is more stable in response to environmental changes if one has an internal locus of control and is autonomous. The stability of the self-concept construct is further explained by Beane and Lipka (1986) “…self, in seeking stability, consistency, and enhancement, is in constant interaction with the environment and is subject to change modification or refinement” (p. 15). One’s self-concept may be only momentary with constant changes being continuously received. Rotter (1966) defined of locus of control:

When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then in our culture, it is typically perceived as the result, of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of forces surrounding him. When an individual interprets the event in this way, we have labeled this a belief in external control. If the person perceives that the event is contingent upon his own behavior or relatively permanent characteristics, we have termed this a belief in internal control (p. 1).

Another study that examined similar variables by Gadzella, Williamson, and Ginther (1985) reported the self-concept scores of the female undergraduate students did not correlate significantly with GPA. A related study by Hudesman, Loveday and Woods (1984) with college students at a community college found those who reduced their anxiety levels increased their GPA during that semester. One must have an adequate level
of self-esteem to be focused on one’s academics. If self-esteem is low, one is more self-focused which reduces one’s ability to focus on the academic tasks (Dell, 1987).

Dell (1987) reports several studies that indicate the cumulative collegiate GPA is the best predictor for success on the test for nursing licensure. Sicherer (1996) contends that race and gender may influence the relationship between global self-concept and GPA as findings in studies varied when the demographics of the participants were different regarding these two independent variables.

Regarding marital status and dependents, Purkey’s (1978) research supports the idea that authoritative figures may affect one’s self-concept more significantly than others. The development of one’s self-concept is, according to Purkey, a result of inviting and disinviting interactions with individuals considered significant. As one organizes a theory of personal existence, they identify themselves according to categories (gender, ethnicity) and attributes (responsible, able). It is this complex hierarchy of attributes and categories that culminate in an individual’s self-concept. One seeks to understand themselves by analyzing others responses to themselves. How significant people perceive and relate to an individual is important in forming one’s self-evaluation. Teachers play a significant role in how students perceive themselves. Purkey (1978) asserted student learning was contingent on how the students perceived themselves and contended that a positive self-concept made the probability of learning more likely to occur.

LaBenne and Greene (1969) agree one’s self-concept is susceptible to change as a result of interactions with significant others. Clinical instructors for students provide feedback to the student and the student’s instructor and are placed in a position to be considered a significant other. The development of one’s self-concept depends on (a) the
perception of how that person sees him or herself judged by persons of significance, and (b) the comparison of such judgments to his or her accepted external standards or criterion.

The environment, important in the development of one’s self-perception, is a significant factor during short internships. Both Kelley and Mead state that the development of self is a direct result of interaction with others. The environmental theory states that feedback from others is used repeatedly to modify our self-perception with the feedback from “significant others” having a larger effect (Beane & Lipka, 1986). Although the environment typically can have a larger effect on a person’s self-perception, individual reflections can sometimes transcend the feedback received from others. Burgess (1980) reported the influence of marital status and being responsible for a dependent. The study found “a positive correlation between marital status and self-esteem as well as higher scores for those students having children” (p. 37). Hall and Valine (1977) reported a positive correlation between self-concept and marital adjustment. They stated “self-concept and marriage adjustment do have a bearing on one another…feeling [neglected] in marriage responsibilities, and other tension-producing experiences for the couple in college indicate a need for recognizing a relationship between self-concept and marriage adjustment” (p. 299).

Rogers and Gottlieb (1999) explored the self-concept of allied health students. They studied the self-concept of physical therapy assistant students using the TSCS. Their non-traditional students had an overall increase in their self-concept after completion of their course of study. Increases in mean scores were found for total self-concept, physical self-concept, moral-ethical self-concept, personal self-concept and
social self-concept. Increases were also seen with identity, self-satisfaction and behavior. The mean scores for family self-concept and self-criticism were decreased. The results of this study indicated completion of the course of study with nontraditional students had a positive impact on their self-concept. Increases in physical self-concept could be a result of their increased knowledge of physical disabilities resulting in a more positive physical self. Increases in the moral-ethical self-concept mean score reflected an increase in awareness and ability to handle these issues, due to didactic instruction and clinical experience, with self-assuredness. The increase in the personal self-concept mean scores in this study could reflect an increased feeling of self-worth due to completion of choosing a “helping” profession. The increase in social self-concept mean scores in this study could be due to increased interactions with students, professionals and clients. The increase in the mean scores for identity could relate to students having earned a new title at the conclusion of the program of study while increases in the self-satisfaction mean scores may be due to their feelings of achievement. The increase in the behavior mean scores could be attributed to increased adaptability and flexibility that occur in didactic and clinical situations. The self-criticism mean scores decreased as students learned what they knew and did not know. The decrease in family self-concept mean scores is likely due to the increased time spent preparing for and attending classes, necessary for completing their degree, resulting in reduced time for family. In summary, Rogers and Gottlieb (1999) found that the overall total self-concept score of students enrolled in a physical therapy assistant program increased by the completion of their study.

Other professional programs have investigated changes in self-concept with
students. A decrease in nursing students’ self-confidence and self-concept during the senior year of clinical experiences was found by Ellis (1980). The senior nursing students had a lower number of students with high scores on the TSCS than the sophomore students possibly indicating that the nursing school experience was a factor in this lower self-esteem. This may reflect that self-concept is affected by life experiences especially by those persons of authority or those most respected.

Randle (2003) reported decreases in self-esteem as a result of a nursing program in the UK. The TSCS was used in this 3-year study to measure the total self-concept scores and other domains as measured by the TSCS. Although the report indicated that the nursing students started their nursing program with their total self-concept near the mean, by the time they had completed the 3-year program, their total self-concept had decreased significantly. In addition, decreases were observed in the self-concept scores including family, personal, social and satisfaction. In response to these changes, the students were observed to be more rigid, defensive, anxious, sad and depressed. In Randle’s sample, “their self-esteem was fragmented and, although they acquired and retained a positive professional self-esteem, their global self-esteem bore the brunt of assimilating a nursing identity” (Randle, 2003, p. 143). In Randle’s study, the students were knowledgeable regarding the type of practitioner they aspired to be, but were in situations that prevented them from instigating positive change. Randle’s recommendations included the requirement in the nursing curricula to promote students to be change agents and use strategies to build a positive professional identity (Randle, 2003).
Reynolds’s study (1996) provided evidence that self-concept is inversely related to stress. This study found nurses with more positive self-concept more able to cope with everyday stressors than nurses with lower self-concept. Reynolds’s study is similar to this study as the participants in the experimental group were studying disciplines that were people oriented. Reynolds suggests “that interventions to increase self-esteem in nurses and prospective nurses may have a protective quality, insulating nurses against job stress. Efforts to bolster self-esteem in nursing students and practicing nurses may lower levels and enhance productivity and retention” (p. v).

Olson, Gresley and Heater (1984) found no significant differences in the self-concept of undergraduate nursing students as measured by the TSCS following a summer clinical internship. Reasons for this insignificance, they proposed, include small changes in self-concept and self-concept scores, small number of participants, strong conceptual and practice base present in the nursing program of the sample, and “the benefits of an internship may not be as readily present and identifiable as current thoughts suggest” (p. 108).

Several studies revealed information pertinent, although not directly investigated, to this study. Resnick, Fauble and Osipow (1970) found male and female college students with high self-esteem, as measured by the TSCS, expressed greater certainty about their career choices than their peers with low self-esteem. Resnick, Fauble and Osipow acknowledged congruence between one’s self-concept and vocation. Korman (1967) found the following:

….individuals high in self-esteem would be more likely to choose those occupations which they perceived to be likely to satisfy their specific needs and to
be in keeping with their self-perceived characteristics than those individuals with low self-esteem. Such choice patterns were predicted to be consistent with the high-self-esteem individual’s cognition of himself as an adequate, need-satisfying individual and the lack of such cognitions in the low-self-esteem person. (p. 65)

Self-concept, either high or low, impacts the nature and progression of an individual through the various developmental tasks. Neapolitan (1992) stated the following:

…career choice does not become more certain over the period of the internship without the internship experience….Interns are no more certain of their career choices than other, similar students before the internship but are more certain after the internship. Therefore it appears that the internship experience contributes significantly to clarification of career choice, particularly by providing useful career information. (pp. 225-226)

Finkenberg’s study (1990) found a significant (p<.05) increase in the total self-concept of female college students after they completed an eight-week course in Taekwondo as compared to a group enrolled in general education classes. The enhancement of self-concept as a result of the acquisition or mastery of a new skill has been reported in other studies (Cantor, 1995).

Rogers and Alexander (1990) studied two groups of undergraduate students. The experimental group was enrolled in a running program and the control group was not. The results of their study provided evidence that the following was true:

a significant correlation between the perceived level of physical fitness and general self-concept for the running group and a non-significant correlation for
the control group suggests that the application as therapy may be relevant only when a subjective concern for physical fitness is already present. (pp. 13-14)

This report agrees with Finkenberg’s study that suggests physical activity can increase self-concept.

For investigators researching the relationship of self-concept and short educational experiences, Stevick and Addleman (1995) found no significant change in self-concept with college students after they completed an 8-week 21-hour community service project. In addition, this study found no significant change in self-perceived altruism or locus of control with the participants.

Class participation has been studied using the TSCS. A study by Williams (1971) demonstrated that college students who participated in class had significantly higher scores on their physical self-concept, personal self-concept and social self-concept as compared to the students who did not participate in class. This study divided students enrolled in a college psychology course into three groups defined by their “talkativeness.” By the researcher’s definition, active participants spontaneously commented in class each class session; intermediate participants commented during every 3rd to 5th class session; and the nonparticipants did not comment unless specifically asked a question. Individuals classified as active had scores significantly higher than the other two groups in total originality and course achievement. The intermediate group had a higher mean for their total self-concept score although it was not at a significant level.

Employment as it related to self-concept was investigated. Taylor’s report (1988) found strong support that the completion of an internship improved employment opportunities, employment evaluations (job qualifications) and probability of hire (after
review of résumé). A study conducted by Dixon, Cunningham, Sagas, Turner and Kent (2005) examined the factors that influenced the affective organizational commitment of undergraduate interns. One significant factor was the interns’ perception of the challenge of their job opportunity for growth and support. Interns, who did not perceive these factors as present, did not develop an attachment to the organization and did not reinforce their decision regarding the long-term commitment to their selected profession. Job challenge included (a) the stimulation associated with specific tasks that requires one to work with some independence, (b) allowing the development of new skills, and (c) the connection of theoretical concepts, previously learned in their curriculum, with real life experiences. The requirement of further training is one avenue for increasing job challenges and empowerment. Job satisfaction and commitment to the organization can increase as “employees view their being valued by the organization as a reward, which leads them to demonstrate greater commitment to the organization” (Dixon, Cunningham, Sagas, Turner and Kent, 2005, p. 175). Interns perceive how the organization communicates their value of that employee and this influences their decision for possible employment with that organization. Role stress with supervisors of interns results from a combination of role conflict and role ambiguity both of which are inversely proportional to organizational commitment. This suggests “when an individual perceives the work environment to be unfavorable, he or she is likely to react not with behavioral responses such as turnover or absenteeism, but with affective responses such as reduced satisfaction and decreased commitment” (Dixon, Cunningham, Sagas, Turner and Kent, 2005, p. 176). Job challenge was the most significant characteristic the interns sought when determining their commitment to the organization (Dixon, Cunningham, Sagas, Turner
This provides an opportunity for self-concept crystallization and self-efficacy for their chosen vocation.

The term crystallization “refers to the formulation of tentative ideas regarding the level and field of future work, along with a tentative commitment, and should be complete by age 18, thus making way for specification where the general choice becomes specific” (Resnick, Fauble, & Osipow, 1970, p. 465). The structuring of tasks to decrease role conflict and ambiguity would help interns, although this may require some restructuring of supervision, as many interns do not have the same amount of supervision as required of employees. In summary, this study found that during internships, the most significant reward interns report is job challenge as it fosters their belief that they are valued by the organization. In addition, Barrett and Tinsley (1977) define crystallization as the “relative degree of clarity and certainty of various vocationally related perceptions” (p. 302). They found a significant difference “for both sexes in the degree of crystallization across self-esteem levels” (p. 310). They continue “Low self-esteem subjects [had] less well crystallized vocational self-concepts than high self-esteem individuals” (p. 305).

For this study, the interactional view of self-concept espoused by Fitts and Warren states one’s self-concept is influenced and reflected by other’s interactions, is upheld (Dell, 1987). As one examines their phenomenological world, one’s self-concept is a prominent and stable aspect that can provide important insights into one’s behaviors.

**Summary**

Many research studies have used the TSCS and TSCS: 2 to investigate relationships between different variables and self-concept. Variables “such as age, sex,
ethnic background, education, and intelligence on test performance…were small (e.g.,
correlations of .20 or less), and thus accounted for little variance in TSCS scores” (Fitts

Statement of the Hypothesis

Internships are more prevalent among college students who state their interest in
short internships and “hands-on” experiences. This study investigated if there was a
statistical difference in the total self concept, as measured by a standardized self-concept
instrument, with college students who completed a course requiring a short internship and
students who completed a course that did not have a short internship component. The
independent variable in this study was the short internship component; the dependent
variable was the student’s self-concept determined by the administration of a
standardized self-concept instrument.
CHAPTER 3

Methodology

This chapter describes the research methodology, methods, and instruments for this quasi-experimental study. The comparison of the experimental and control groups is provided as is the rationale for this selection. In this chapter, the participants, procedures, instruments, hypotheses and research design will be described.

Research Perspective

This exploratory/descriptive study investigated differences between total self-concept of students enrolled in a college course requiring an internship and students enrolled in courses not requiring an internship. The independent variable (short internship components) was manipulated by its absence with the control group and its presence with the experimental group. A quasi-experimental design was selected based on the constructs of self-concept and short internships, the type of research question asked and the limitations of the research environment (DePoy & Gitlin, 1998). In this descriptive study, the forming of comparison groups was determined by the nature of the subjects’ characteristics – enrollment in a course with or without an internship component. For this study, 31 participants (7 males, 24 females) were categorized into two groups: (a) students enrolled in courses with a short internship component (4 males, 15 females) and (b) students enrolled in courses without a short internship component (3 males and 9 females). Levene’s Test of Equality of Error Variances was used to compare the distribution of the data to determine whether homogeneity was present; if so, the two courses in each group would be combined to form one large experimental group and one
large control group. The experimental group consisted of 14 students enrolled in the course OCC 470, Occupational Therapy Practicum and 5 students enrolled in PSY 457, Internship in Psychology. The control group consisted of 8 students enrolled in PSY 500, Quantitative Methods for the Social and Behavioral Sciences, and 4 students enrolled in PSY 220, Research Methods I. The statistical procedure used was a repeated-measures analysis of variance (ANOVA) test. The repeated-measures ANOVA was conducted on the dependent variable (the total self-concept as measured by the TSCS: 2). As a quantitative study, the research involved gathering self-concept scores using the TSCS: 2. In addition, a survey was administered to gather demographic data to help explore any differences discovered between or within the groups. The TSCS: 2 was selected for this study because, as Impara and Plake (1998) stated:

As a measure of self-concept the TSCS: 2 probably has no equal. It is a well-developed scale with much data to support its use. As with all measures of constructs that are ambiguous in definition, it should be recognized that the measurement of self-concept is tenuous at best. However, a researcher using the TSCS will maximize chances to find relationships between self-concept and other constructs of interest (p. 1011).

**Research Site**

The study took place at a small four-year liberal arts college in the northwestern region of North Carolina. An experimental and control group design was used in this study. The experimental group consisted of students enrolled in a course requiring a short internship component. Students enrolled in OCC 470 (OT Practicum) and PSY 457 (Internship in Psychology) comprised the experimental group. Both groups were assumed
to be similar; students enrolled in these courses were rising seniors at the same liberal arts college. The first course, OCC 470, is required for students in the human occupation studies (HOS) undergraduate major. The second course, PSY 457, is required for students in the human and community service (HCS) undergraduate major. Both courses included in the experimental group required completion of 120 to 150 hours of internship.

Human Occupation Studies majors earn a Bachelor of Science degree and are thus eligible for application for acceptance to the Master of Science degree in occupational therapy as determined by the graduate school’s criteria. Human Community Service majors earn a Bachelor of Arts degree and work in human service professions “with individual small groups (such as families), individuals needing help in other groups (work organizations, for example), and with community organizations to accomplish more structural or systemic (social, economic, political, recreational, etc.) goals” (2006-2007 LRC college catalog, p. 180). Human Occupation Studies and Human Community Service majors must complete a minimum of 128 credit hours prior to earning their degree. Students must have successfully completed the core requirements for college in addition to the prerequisite courses for their major and the courses in their major. Both of the requirements for these two majors are similar, as they require successful completion of statistics, general psychology, and multicultural perspectives. Abnormal psychology and developmental psychology are prerequisites for the HOS major and are electives for the HCS major. The HCS major requires completion of 14 credit hours of human/community courses, one psychology research methods course, three sociology courses (total of 11 credits) and two PSY/SOC electives (total of eight credits). HOS majors, in addition to the courses previously stated required of both majors, must have
completed prerequisite courses including anatomy and physiology I and II (eight credit hours), and have a cumulative GPA of 2.7 prior to taking any HOS courses. The HCS major requires the completion of 14 credit hours of HCS courses. The HOS major requires completion of 52 credit hours of HOS courses. The internship for OCC 470 requires the completion of 120 internship hours whereas the internship for PSY 457 requires the completion of 150 internship hours. The course description for OCC 470 is located in Appendix E. The course description for PSY 457 is located in Appendix F.

The control group consisted of students enrolled in PSY 220 (Research Methods) and PSY 500 (Quantitative Methods for the Social and Behavioral Sciences). Both groups were similar in that the field of study, psychology, was identical. Those enrolled in PSY 220, an undergraduate course, required prerequisites including statistics and an introductory psychology laboratory course. The course description of PSY 220 is located in Appendix G. PSY 500 requires acceptance into the counseling graduate program. This course is required for a Master of Arts degree in school counseling, agency counseling, or community counseling with school licensure. The course description for PSY 500 is located in Appendix H.

Sample and Research Participants

The participants of the experimental group included students in courses selected by the principal investigator because the course required a short internship component. The participants in the control group were students in courses selected because the course did not require a short internship component. The application of a control group was used to eliminate the Hawthorne effect (Gay & Airasian, 2003) whereby participants experience a change without the treatment (independent variable) due to the attention
received during pretesting and posttesting. Participants were not interviewed during this study – a factor that decreases the likelihood of the Hawthorne effect. This design also incorporated identical testing procedures during the administration of the instruments with the exclusion of the independent variable with the control group to control for the Hawthorne effect. Cluster sampling was used in this study as determined by the selection of the courses used for data collection, but not the specific participants.

The experimental groups for this study were college students enrolled in college courses that required a short internship. The experimental group (X₁) consisted of Human Occupation Studies majors and Human Community Service majors at a small liberal arts college enrolled in OCC 470 (OT Practicum) and PSY 457 (Internship in Psychology), respectively. The control group (X₂) included students enrolled in PSY 220 (Research Methods) and PSY 500 (Quantitative Methods for the Social and Behavioral Sciences), psychology courses that did not have a short internship component.

*Design of the Study*

This quasi-experimental study included two elements present in true-experimental studies – a control group and manipulation of the independent variable. Subjects were selected using cluster sampling; therefore, true random selection of participants was not performed. The quasi-experimental design was a nonequivalent group design. The experimental group (X₁) and the control group (X₂) were given a demographic survey, a pretest, and a posttest. The participants of the experimental group were students in courses selected because they required a short internship component, while those in the control group were students in a course chosen because it did not require a short
Internships and Self-Concept

Internship component. Non random sampling was used in this study as determined by the selection of the courses used, not the specific participants. Cluster sampling was used; the criteria for the selection of the courses was the presence or absence of the requirement of a short internship (Gay & Airisian, 2003). Prior to this study, the participants selected the course for which they enrolled. No letter of invitation was necessary with this study, as no recruitment outside these courses occurred. The students were provided a consent form with information regarding the study and an opportunity to ask questions of the test administrator. Students deciding to participate signed the consent form prior to taking part in the study (Appendix C). The participants were selected according to the course in which they enrolled. No students enrolled in the selected courses were excluded from the study. However, as described in Chapter 4, one student chose not to participate and attrition did occur, as five students did not complete both pretests and posttests as stipulated for this study.

The quasi-experimental design is depicted as follows:

\[
\begin{array}{c|c}
0 & X_1 & 0 \\
X_2 & 0
\end{array}
\]

This nonequivalent control group design differs from a true experimental design as specific courses, intact groups, not individuals were assigned to the experimental and control groups. Administration of the first pretest and demographic survey took place at the beginning of the course. The administration of the posttest took place at the end of the course.
Null Hypothesis

The null hypothesis for this study is as follows:

$H_0$: The null hypothesis of this study is that there will be no significant difference in the total self concept, as measured by a standardized self-concept instrument, with college students who complete a course requiring a short internship and students who complete a course that does not have a short internship component.

$H_{o0}$: $\mu_{\text{control}} = \mu_{\text{experimental}}$

Research Hypothesis

The research hypothesis for this study is as follows:

$H_1$: $X_{\text{control}} \neq X_{\text{experimental}}$

<table>
<thead>
<tr>
<th>Independent Variable-Short Internship</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OCC 470 and PSY 457</td>
<td>PSY 500 and PSY 220</td>
</tr>
<tr>
<td>Dependent Variable-Total Self-Concept Score</td>
<td>TSCS: 2 Pretest Internship TSCS: 2 Posttest</td>
<td>TSCS: 2 Pretest No internship TSCS: 2 Posttest</td>
</tr>
</tbody>
</table>

Figure 6: Design of the study
The research hypothesis is nondirectional as the research hypothesis does not provide a direction to the inequality.

Primary Research hypothesis: College students who complete a course requiring a short internship and those who complete a course that does not include a internship exhibit a statistically significant difference in their total self-concept as measured by the TSCS: 2.

The research hypothesis for the sample is explicit and, thus, is directly tested. The null hypothesis is implied, indirectly tested, and refers to the population. The definition of sampling error is the difference between the values of the sample statistic and the population parameter, meaning that the higher the sampling error, the less precise and more difficult it is to support that the results of the observed sample can be generalized to the population. It is therefore more important to have a representative sample and, in turn, less important to have large sample. Going from small to large (sample to population) is the process of inference (Salkind, 2007). A secondary research hypothesis (H2) was analyzed to determine if a statically significant difference existed within the groups (pretests versus posttests) although this was not the primary focus of this study.

With standard scores, “Scores are comparable because they are standardized in units of standard deviation” (Salkind, 2007, p. 159). T scores, one type of standard score, was used to compute the scores on the TSCS: 2. Fitts and Warren (1996) used standardized scores as they use a predefined mean and standard deviation and allow comparisons between scores, which use the same mean, and standard deviation.

The term “significant” means that it is assumed that the observed effect is not due to random chance, but rather is rare enough that there is a relationship between the independent and dependent measures. Significance level is “the risk associated with not
being 100% confident that what you observe in an experiment is due to the treatment or what was being tested” (Salkind, 2007, p. 177). The most commonly used level of significance or standard of probability is .05 or less (indicated by $p < .05$) which indicates that the effect has no more than 1 chance in 20 of occurring by chance not due to a treatment effect (Salkind, 2007).

**Instrumentation**

Participants were administered two different test instruments. Participants were given a demographic survey, a pretest and a posttest (TSCS: 2).

**Demographic Survey**

The demographic survey, located in Appendix D, was used to gather information regarding gender, age, ethnic origin, course selection, student status (i.e. full-time), student rank (i.e. freshman), cumulative grade point average, employment status, marital status, responsibility for dependent and prior relative work experience. This 11 item questionnaire was designed for this study to elicit pertinent information about the demographic and characteristics of the study sample that are related to short internship. The characteristics chosen for this survey are evidenced in previous studies cited in the literature review. The pretest and posttest used to gather T scores for the total self-concept, the dependent variable in this study, used the TSCS: 2.

**The Tennessee Self-Concept Scale**

William Fitts and his colleagues first developed the Tennessee Self-Concept Scale in 1964. In 1996, due to previous research using the TSCS, feedback for test users and changes in psychological assessment, the TSCS was revised producing the TSCS: 2. Published by Western Psychological Services, this multidimensional self-concept
assessment instrument measures 15 domains including validity scores, summary scores, self-concept scales, and supplementary scores. The first domain includes inconsistent responding, self-criticism, faking good, and response distribution. The second domain includes total self-concept and conflict. The third domain includes physical, moral, personal, family and academic work. The final domain includes identity, satisfaction and behavior (Fitts & Warren, 1996). These domains are illustrated in Figure 5 in Chapter 2.

The 82 statements on the TSCS: 2 are either descriptive or evaluative in nature. The participant responds by either agreeing or disagreeing with the item using a Likert-type scale of one to five, where “one” is always false, with “five” being always true. The adult version of the TSCS: 2 was standardized on a sample of 1,944 individuals ranging in age from 13 to 90 (Fitts & Warren, 1996).

**Psychometric properties of the TSCS: 2**

**Validity**

The validity of the TSCS: 2 assesses if the test actually measures the characteristics they propose to measure. Validity examines if one can make appropriate interpretations from the scores obtained from the instrument. Test validity includes construct validity; content validity, concurrent (criterion-related) validity and discriminant validity.

Construct validity is a fundamental requirement of a measurement as it “is concerned with the total relationship between the results of a particular measurement or set of measurements and the underlying construct the researcher or evaluator is attempting to maneuver” (Jaeger, 1990, p. 80). Self-concept is a construct variable as it is
not one that can be directly observed. Factorial analytical evidence (Fitts & Warren, 1996) supports the content validity of the TSCS: 2. These factor-analytic studies serve to evaluate the consistency and predictability of the test items through their factor structure to determine if they measure the constructs they purport to represent. The TSCS: 2 manual includes a principal components analysis providing evidence of construct validity. Byrne (1996) states the TSCS: 2 is the most frequently used instrument to measure self-concept. The constructs posited in the TSCS: 2 are similar to those in other multidimensional measurements of self-concept. The Thirteenth Mental Measurements Yearbook states the manual for the TSCS: 2 “provides adequate evidence of the construct validity in the form of principal components analysis” (Impara & Plake, 1998, p. 1011).

The content validity of the TSCS: 2 has been examined through two methods. First, the TSCS was devised from a massive pool of self-descriptive items written by patients and non-patients and gathered by three researchers between 1953 and 1956. The second method used to provide content validity has been through the development of a mapping sentence to clearly define the structure of the TSCS. This mapping by Levin, Karnie and Frankel defined the structure of the TSCS items into two facets (five elements): the external and the internal (three elements) (Fitts & Warren, 1996). Factorial analyses presented in the TSCS: 2 provide evidence for the adequate fit of the test with the content.

The TSCS: 2 has been compared to numerous other measures of total self-concept to test for concurrent (criterion-related) validity. Determining the concurrent validity requires the following processes. “The concurrent validity of the new measure is estimated by administering it, together with the accepted measure, to an appropriate
group of students. The correlation coefficient between scores on the new measure and scores on the accepted measure is known as a validity coefficient. The closer the validity coefficient is to 1.00, the higher the concurrent validity of the new measure” (Jaeger, 1990, p. 82). These studies provide substantial support for the concurrent validity of the TSCS:2. A correlation of .68 was determined between the TSCS Total Score and the Self-Rating Positive Affect Scale by Wehmer and Izard. A correlation of 0.75 was determined using the TSCS Total Score and Coopersmith’s Self-Esteem Inventory. The TSCS:2 total self-concept score was highly correlated, .71, for the adult form with the Piers-Harris Children’s Self-Concept Scale. Impara and Plake (1998) state the “concurrent validity information shows acceptable levels of correlations of the TSCS with other psychological measures. As would be expected with any measure of self-concept, these correlations are low to moderate” (p. 1011).

The discriminant validity of the TSCS: 2 has been studied among groups with differing behaviors. Fitts performed a study on psychiatric patients in 1988 that provided evidence of increased variance among scores of psychiatric patients versus participants in the well-functioning group (Fitts & Warren, 1996). Studies with populations including low-income mothers, college students who consumed alcohol, inmates, delinquents, academic performance with college students, children with hyperactivity and individuals with physical disabilities have been published to provide discriminant validity for this test (Fitts & Warren, 1996). Standard errors with reliability are low as T scores are 4 to 6 points on the TSCS: 2. This test is designed for multiple applications and is suitable for multiple applications to the same population. As Fitts and Warren (1996) state:
By the time the 1988 edition of the TSCS was published, the scale averaged more than 200 references annually in a wide variety of publications in the fields of education, psychology, and the social and health sciences. A high level of interest in the test and its application in a wide variety of settings has continued into the current decade. (p. 3)

Reliability

Jaeger states the “reliability of a measurement procedure is the technical term for its consistency” (Jaeger, 1990, p. 85). The observed score is the true score added to the error component. As the error component decreases, the reliability of the measurement increases (Jaeger, 1990). A reliability of zero means the score is primarily a reflection of the error component, while a score of one indicates primarily a true score. The test of reliability for the TSCS: 2, which measures the internal consistency and stability of the test results, was determined using Cronbach’s alpha. Cronbach’s alpha is an internal consistency method that is used with measurements that use a Likert scale such as the TSCS: 2. The TSCS: 2 adult form has an internal consistency of .95 for the total self-concept, the dependent variable in this study. The test-retest reliability for the total self-concept score for the adult population measured is .82 with a time span of one to two weeks. The average change in the total self-concept score for adults from test to retest was -.03 in standard deviation units, equivalent to – .3 T scores, for test-retest reliability. In this study, there was a minimum of a four-week interval between the pretest and the posttest. Both the internal consistency and test-retest reliability scores are well within acceptable psychometric limits.
The standard error of measurement is the standard deviation of the error components (Jaeger, 1990). The stability of a test measurement indicates the consistency of the measurement over time. Due to the scoring nature of the TSCS: 2, the selection of responses on a scale from one to five, the TSCS provides T scores, a standardized score “that is on a scale with a predefined mean and a predefined standard of deviation” (Jaeger, 1990, p. 93). The scores of the TSCS: 2 are T scores; they have a centered mean of 50 and a standard deviation of 10. The standard error of measurement, used to determine one’s true score given one’s obtained score has a median of 5.1 T score units with a range of standard error of measurement (SEM) points from 4.1 to 7.2 T scores (Fitts & Warren, 1996). The SEM for the adult form for the total self-concept score is 4.2 T score units.

**TSCS: 2 Components**

The TSCS: 2, a taxonomic model, is comprised of multiple facets. The external self-concepts are categorized as self-concept scales and looks at the self-view of the individual in different areas. These areas include: physical self-concept, moral self-concept, personal self-concept, family self-concept, social self-concept and academic/work self-concept. All of these areas contribute to the overall total self-concept score. The internal self-concept categories include identity, satisfaction and behavior. “[These] supplementary scores are designed to allow comparison of the way people describe themselves when they are referring to who they are, how content they are with themselves, and how they act” (Fitts & Warren, 1996, p. 110). The TSCS: 2 has three validity scores: self-criticism, faking good, and response distribution. These three scores are used to detect distorted patterns such as being overly positive. The total self-concept
and the conflict scores are the two summary scores on the TSCS: 2. The conflict scores
indicates ambivalence and opposition while the total self-concept score “gives an
indication of whether a person tends to hold a generally positive and consistent or
negative and variable self-view” (Fitts & Warren, 1996, p. 109).

Data Collection

This exploratory/descriptive study investigated differences between the total self-
concept of students enrolled in a college course requiring an internship and students
enrolled in courses not requiring an internship. A total of 31 students were tested. All
participants were tested at the beginning and end of their summer school course.
Participation was voluntary and anonymous with subjects given an identifying number
for data entry. Subjects were offered the opportunity to receive a copy of the collated
final results, but the principal investigator did not keep a list of students’ names and their
identifying codes.

The focus of this study was to analyze group data; individual scores were not
analyzed separately, other than to assess the possibility of outlying pretest or posttest
data. A demographic survey was used to gather information including age, sex, race,
marital status, student status, responsibility for dependents, current work status and past
related work experience, and enrollment in summer school course. Review of the consent
form, administration of the TSCS: 2 and demographic survey required 15 to 20 minutes.
The posttest took approximately fifteen minutes. The institution selected for this study
was selected due to its accessibility and willingness to allow access for this researcher.

The adult form of the TSCS: 2 was used as all subjects were 19 years or older.
The total self-concept score was calculated for use in this study and is the primary
outcome for the study. This score reflects the overall level of self-concept and is the single most important score provided by the TSCS: 2. Individuals with high scores have more self-confidence and value their personal worth more than those with lower scores (Brooks, 1990).

*Procedures Followed*

The procedure used for collecting data for all courses used in this study (OCC 470, PSY 457, PSY 220 and PSY 500), were identical. First, all instructors, of courses selected for this study, were asked if they would allow the test administrator for this study permission to use part of their class time to administer the test. The pretest, and later, the posttest, was administered at the beginning of the class session. The pretests took place on the first day of class. The posttests took place on the session prior to the last class session so participation would not be hindered due to anxiety regarding the final. A letter of consent was provided to all students in the courses. This document provided an explanation of the intent of the study and the directions for completing the demographic survey (Appendix D) and TSCS: 2. During this initial session, it was explained that the test administrator would perform a posttest at the end of the course.

Complete anonymity was maintained during this research study. Both instruments, the TCSC: 2 and the demographics survey were coded so participants would remain anonymous. The ability to compare pretest with posttest data was possible by assigning identification numbers. Students were responsible for keeping their identification numbers to find out results of the TSCS: 2. It was clearly stated that the principal investigator would not create a record of the student names with their identifying numbers. If a student decided not to participate in the study, they turned in
their unsigned consent forms and blank demographic surveys and TSCS: 2 in at the same
time as those who did agree to participate. Neither the person administering the test nor
the other students in the class knew which students did or did not participate.

Data Analyses

The use of inferential statistics allows inferences to be made in this study from a
sample (the participants in this study) to a larger population (individuals with similar
characteristics, such as college students enrolled in small liberal arts colleges in the
southeastern United States). The application of such statistics also allows the principal
investigator to use empirical evidence (the scores obtained on posttests) to make
determinations about differences in students’ self-concept based on measured
observations rather than on beliefs or biases (Salkind, 2007).

Data Analyses Made

This study employed a single-variable experimental design as it involved one
independent variable (short internship component) that was manipulated. This single-
variable design was a quasi-experimental design as individual courses, rather than
students, were assigned to control and experimental groups. The quasi-experimental
design for this study was a non-equivalent control group design. This quasi-experimental
design involved “random assignment of intact groups to treatments, not random
assignment of individuals. Two (or more) treatment groups …[were] pretested,
administered a treatment, and posttested” (Gay & Airasian, 2003, p. 378).

The non-equivalent control group design provided validity for sources that can
affect internal validity, including history, maturation, testing, instrumentation, regression,
selection, mortality and selection interactions (Gay & Airasian, 2003). History as a source of threat to internal validity was minimized by the short period of time between the pretest and posttest of all participants (four weeks). This factor, combined with the age of the participants, decreased the chance of the effect of maturation on the results of the study. The threat of pretest sensitization was considered minimal with this study even though there was the administration of a pretest and posttest as the information gathered was not factual, but subjective. Using the same instruments for pretests and posttests reduced the threat of the effect of instrumentation on internal validity. The random assignment of courses provided control for regression and selection factors. Participants in this study were not selected based on their high or low performance on the TSCS: 2. Although differential selection of participants was present in this study, the statistical procedure used to analyze the data (repeated-measures ANOVA) compared the pretest and posttest scores both between and within the groups to minimize this factor’s effect on the internal validity of the study. Mortality in this study was not significant as only one student in the experimental group dropped out of the study. Due to the design of the study, the dependent and independent variables selected, and the demographics of the students, specifically age, the selection-maturation interaction was not considered a threat to the internal validity of this study (Gay & Airasian, 2003). The use of a control group provided internal control for maturation, history, testing and instrumentation (DePoy & Gitlin, 1998). In summary, the design of this study, coupled with the instruments used and procedures followed, minimized the effects of various sources to the internal validity of this study.
External validity includes population validity and ecological validity. Threats to population validity affect which groups the results of the study can be generalized to. Ecological validity refers to the generalization of results to specific settings, contexts, conditions and variables (Gay & Airasian, 2003). In this study, the use of a control and experimental group provided a safeguard to minimize the effects of pretest-treatment interaction. A possible external source of invalidity, pretest interaction, was controlled for by the latency between pretests and posttests and administration of pretests to all participants (DePoy & Gitlin, 1998). Multiple-treatment interference was not a threat as the participants in the experimental group only received one treatment (short internship). The threat of selection-treatment interaction was minimized as students in the classes selected to participate were all attending the same college. A repeated-measures ANOVA procedure was used to analyze the difference between the groups since random selection was not employed. One limitation of this study may be the limited generalizability of results to dissimilar populations. One possible external threat to validity of this study involves the independent variable. All internships were different, and even when structured in a similar fashion they could be interpreted differently by the students engaged in the various internships. This threat to external validity is termed “specificity of variables.” The threat of treatment diffusion was negligible, as the students enrolled in the courses used in this study were not taking any college classes together during that time period. In addition, the two groups, used in the experimental group, were enrolled in different courses of study, which met in buildings not located in close proximity. Experimenter effects and bias were controlled for by the use of a test administrator who followed the same procedure for test administration during pretests and posttests, and
who was a staff member who had limited knowledge of the study and limited interaction with the participants. The test administrator only administered the tests and surveys and did not provide any other information to the principal investigator. The use of a standardized tool such as the TSCS: 2 limited the effect of experimenter effects and bias due to its quantitative nature. The use of a pretest / posttest design with an experimental and control group was used to control for the Hawthorne effect (a reaction caused by participants’ knowledge that they are in a research experiment) and John Henry effect (compensatory rivalry by control group) (Gay & Airasian, 2003). Thus, the threat of external invalidity was minimized by the design, procedures and statistical procedures used in this study.

Summary of Methodology

Data were gathered using a demographic survey and the Tennessee Self-Concept Scale: Second Edition. The information gathered on the survey can be collated and reported collectively through descriptive statistics, including frequencies and proportions for categorical measures and means, standard deviations, and ranges for continuous data. The T score for the total self-concept score on the TSCS: 2 was analyzed using a repeated-measures ANOVA to determine differences between and within the distributions and means of the experimental and control groups.
CHAPTER 4

Results

The previous chapter described the design of this study and the methodology used to examine the research questions. The null hypothesis of this study is that there will be no significant difference in the total self-concept, as measured by a standardized self-concept instrument, with college students who complete a course requiring a short internship and students who complete a course that does not have a short internship component. The quantitative analyses presented include both descriptive and inferential statistics. Parametric statistical analyses can be used with continuous measures. There is a debate as to whether the measure of self-concept would be ordinal or continuous – but the tool used provides a level of measurement that can be analyzed using parametric inferential statistics (Grimm & Yarnold, 1995). The results of the analyses are presented responding to the research hypotheses. The primary research question investigated in this study is the following:

A. Is there a significant difference in the total self-concept score as measured by the TSCS: 2 between students who have completed a course requiring a short internship component and the total self-concept score of students who have completed a course that did not have a short internship component?

Secondary research questions investigated in this study are as follows:

B. Is there a significant difference between the pretest scores and posttest scores of the total self-concept score as measured by the TSCS: 2 of college students who have completed a course requiring a short internship component?
Methodology Summary

This study took place during the summer of 2006. The study involved the selection of four courses. Two of these courses included a short internship component and two did not. All courses were offered at the same small liberal arts college. Data collected included a demographic survey and the administration of the TSCS: 2. Data for the experimental and control group were collected from participants who elected to participate in the study.

Description of the Population, Sample, and Participants

The sample consisted of 31 students; 23 undergraduate students and 8 graduate students. Cluster sampling was used with participants of the experimental group and control group determined by their enrollment in a course that either did or did not have a short internship component. All students who elected to participate in the study completed a demographic survey, a pretest and a posttest using the TSCS: 2.

Four courses were selected for this study: OCC 470 (OT Practicum), PSY 457 (Internship in Psychology), PSY 220 (Research Methods), and PSY 500 (Quantitative Methods for the Social and Behavioral Sciences). Students enrolled in OCC 470 and PSY 457 who elected to participate comprised the experimental group, as these two courses did require a short internship component. Students enrolled in PSY 220 and PSY 500 who elected to participate became the control group, as these two courses did not have a short internship component. No students were excluded from the study. However, for data to be used in the research the participants did have to complete the pretest, posttest and demographic survey administered.
Survey Results

The descriptive data from the demographic surveys of this study is presented first. A demographic survey was administered to all the participants although the demographic information from participants who did not complete both the pretest and posttest was not used. This survey is included in Appendix D. After the purpose and procedures of the study were reviewed with the students in the courses selected, the students who were willing to participate signed an informed consent form. Prior to completing the pretest or posttest, each participant was asked to complete the demographics survey. All surveys and the tests administered were coded so results could be analyzed while protecting the anonymity of the participants. Following the calculation of the total self-concept scores on the TCSC: 2 the quantitative data was analyzed. To minimize input error, all computations were double scored and data entries reviewed by a second party.

Frequencies and proportions were analyzed using a Fisher’s Exact Test for 2X2 tables and Pearson’s Chi-Square. The number of participants and percentages for each group are shown in Table 1.
Table 1
Demographics of Participants (N = 31)

<table>
<thead>
<tr>
<th>Item</th>
<th>Experimental Group</th>
<th>Control Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N  61.3%</td>
<td>N  38.7%</td>
<td>N  100%</td>
</tr>
<tr>
<td>Age (mean)</td>
<td>23 years</td>
<td>29 years</td>
<td>25 yrs</td>
</tr>
<tr>
<td>p-value = 0.067</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>4 13</td>
<td>3 9</td>
<td>7 23</td>
</tr>
<tr>
<td>Women</td>
<td>15 48</td>
<td>9 9</td>
<td>24 77</td>
</tr>
<tr>
<td>p-value = 1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>19 61.3</td>
<td>12 38.7</td>
<td>31 100</td>
</tr>
<tr>
<td>Course enrolled</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCC 470</td>
<td>14 45</td>
<td>0 0</td>
<td>14 45</td>
</tr>
<tr>
<td>PSY 457</td>
<td>5 16</td>
<td>0 0</td>
<td>5 16</td>
</tr>
<tr>
<td>PSY 220</td>
<td>0 0</td>
<td>4 13</td>
<td>4 13</td>
</tr>
<tr>
<td>PSY 500</td>
<td>0 0</td>
<td>8 26</td>
<td>8 26</td>
</tr>
<tr>
<td>Student status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>19 61.3</td>
<td>8 25.8</td>
<td>27 87.1</td>
</tr>
<tr>
<td>Part-time</td>
<td>0 0</td>
<td>3 9.6md</td>
<td>3 9.6md</td>
</tr>
<tr>
<td>p-value = 0.041</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Class rank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh/Soph</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Junior</td>
<td>1 3</td>
<td>0 0</td>
<td>1 3</td>
</tr>
<tr>
<td>Senior</td>
<td>18 58</td>
<td>4 13</td>
<td>22 71</td>
</tr>
<tr>
<td>Graduate</td>
<td>0 0</td>
<td>8 26</td>
<td>8 26</td>
</tr>
<tr>
<td>p-value = &lt;0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
These results indicate that the control group was older, with a higher percentage being employed, and having part-time student status.

The information in Table 1 was assessed using the demographic survey completed during the pretests. The demographic survey administered during the posttest was only provided to reinforce the codes so all participants would remain anonymous. As information could have changed slightly since the administration of the pretests (i.e. age), the information on the posttests was not considered. Females outnumbered male participants by roughly a 3.5 to 1 ratio – with 24 (77.4%) women and 7 (22.6%) men participating. The majority of students were traditional students as the mean age was 25 with only nine of the participants being 25 years or older. Of the thirty-one participants, all (100%) were Caucasian in race. The experimental group was slightly larger in size with 19 students (61.3%) versus the control group with 12 students (38.7%). The majority of students (n=27) were full-time students (90%) versus three part-time students (10%). The majority of students (n=22) were classified as seniors (71%), with one junior (3.2%) as opposed to the eight graduate students (25.8%) who participated in the study. The graduate students in PSY 500 wrote in the course number on the demographic survey since it was not included as an option. The overall GPA for both the control and experimental groups was 3.35. The GPA for the experimental group was 3.28 while the GPA for the control was similar at 3.47. There were two instances (one grade point average, one student status) when information was missing from the demographic survey. For this study, the principal investigator chose to ignore this missing data and has
reported all data from the survey. Percentages and means are based on the data that were completed by the participants.

Repeated-Measures ANOVA Results

To investigate the difference between and within the groups, a repeated-measures ANOVA was performed for the total self-concept scores on the TSCS: 2. The repeated-measures ANOVA compared the means for the posttest total self-concept scores for the experimental and the control groups. In addition to the analysis performed between the groups which focused on the primary research hypothesis, a repeated-measures ANOVA also analyzed the difference within the groups to help strengthen the determination if changes found were due to the treatment effect and not due to differences within the groups. The between-subjects factors consist of two groups: the control group (N = 12) and the experimental group (N = 19). Table 2 provides the descriptive statistics including the mean, standard deviations and number of participants for each group. The within-subject factors (variables) for this study include the total self-concept score pretests and posttests, which focused on the secondary research hypothesis. Mauchly’s test of sphericity yielded a Mauchly’s W statistic of 1.00 indicating that levels of within-subject variables are equal.
Table 2

ANOVA Descriptive Statistics

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTpre</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>51.5000</td>
<td>10.23808</td>
<td>12</td>
</tr>
<tr>
<td>Experimental</td>
<td>50.1053</td>
<td>9.52712</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>50.6452</td>
<td>9.66281</td>
<td>31</td>
</tr>
<tr>
<td>TOTpost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>50.9167</td>
<td>9.73707</td>
<td>12</td>
</tr>
<tr>
<td>Experimental</td>
<td>50.0000</td>
<td>8.88194</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>50.3548</td>
<td>9.07211</td>
<td>31</td>
</tr>
</tbody>
</table>

Table 3

Repeated-Measures ANOVA: Tests of Within-Subjects Effects (H₂)

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest Vs Posttest</td>
<td>1.744</td>
<td>1</td>
<td>1.7444</td>
<td>.109</td>
<td>.744</td>
</tr>
<tr>
<td>Pretest Vs Posttest Group</td>
<td>.840</td>
<td>1</td>
<td>.840</td>
<td>.052</td>
<td>.820</td>
</tr>
<tr>
<td>Error (Pretest Vs Posttest)</td>
<td>464.353</td>
<td>29</td>
<td>16.012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Computed using alpha = .05; Differences not significant
Table 4
Levene’s Test of Equality of Error Variances

<table>
<thead>
<tr>
<th>Source</th>
<th>df1</th>
<th>df2</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest TOT</td>
<td>1</td>
<td>29</td>
<td>.428</td>
<td>.518</td>
</tr>
<tr>
<td>Posttest TOT</td>
<td>1</td>
<td>29</td>
<td>.406</td>
<td>.529</td>
</tr>
</tbody>
</table>

Computed using alpha = .05; Differences not significant

Table 5
Tests of Between-Subjects Effects (H1; Posttest Experimental Group versus Posttest Control Group)

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>150829.840</td>
<td>1</td>
<td>150829.840</td>
<td>914.053</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>19.647</td>
<td>1</td>
<td>19.647</td>
<td>.119</td>
<td>.733</td>
</tr>
<tr>
<td>Error</td>
<td>4785.353</td>
<td>29</td>
<td>165.012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Computed using alpha = .05; Differences not significant
### Table 6
Repeated-Measures ANOVA: Pairwise Comparisons

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Experimental</td>
<td>1.156</td>
<td>3.349</td>
<td>.733</td>
</tr>
<tr>
<td>Experimental Control</td>
<td>-1.156</td>
<td>3.349</td>
<td>.733</td>
</tr>
<tr>
<td>Pretest VS Posttest</td>
<td>1 2</td>
<td>.344</td>
<td>1.043</td>
</tr>
<tr>
<td></td>
<td>2 1</td>
<td>-.344</td>
<td>1.043</td>
</tr>
</tbody>
</table>

Computed using alpha = .05; Differences not significant

### Table 7
Repeated-Measures ANOVA: (H2: Group Pretest VS Posttest)

<table>
<thead>
<tr>
<th>Group</th>
<th>PreVSPost</th>
<th>Mean</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control 1</td>
<td></td>
<td>51.500</td>
<td>2.830</td>
</tr>
<tr>
<td>Control 2</td>
<td></td>
<td>50.917</td>
<td>2.660</td>
</tr>
<tr>
<td>Experimental 1</td>
<td></td>
<td>50.105</td>
<td>2.249</td>
</tr>
<tr>
<td>Experimental 2</td>
<td></td>
<td>50.000</td>
<td>2.114</td>
</tr>
</tbody>
</table>

Computed using alpha = .05
Tables 2 through 7, which compare the posttest total self-concept, score means for
the experimental and the control groups, analyzed the difference within the groups as
well as between the groups found there were no significant differences between the
groups or within the groups.

Analysis of TSCS: 2 Results

When using inferential statistics, the null hypothesis is accepted until the evidence
based on the statistical procedure used provides evidence that the null hypothesis is no
longer reasonable. The alpha level of .05 was selected. The population defined as “the
group of objects or persons about which we want to make some inference” (Jaeger, 1990,
p. 138). The sample is the part of the population actually observed or measured and used
to gather data.

Probability samples refer to the fact that the samples used are representative of
our populations of interest. “Parameters describe characteristics or features of
populations. Statistics describe characteristics or features of samples” (Jaeger, 1990, p.
140). The statistics, what we estimate, is a parameter of the population. Estimation
involves the defined population (college students), relevant population parameter and
cluster sampling procedure used to select a representative sample of interest (cluster
sampling). The data was collected; the estimate of the population parameter was then
calculated. Because one is using a sample, the exact measure is not known unless 100%
of the population is tested.

Sampling fluctuations can cause differences in sample averages. If large
differences exist between the sample averages, the hypothesis that the population
averages are identical is brought into question. The use of a repeated-measures ANOVA
Internships and Self-Concept

was used. This involved the repeated process (administration of the TSCS: 2) with the sample participants. The term “factor” is equivalent to the term “independent variable” when using an ANOVA. Because this study is focusing on only one independent variable, the presence or absence of a short internship component in a course, this study is a single-factor experiment. In this study, the factor, or independent variable, consists of two levels: (a) the students in the experimental group who completed a course requiring a short internship component, and (b) the students in the control group who completed a course, of equal duration, that did not require a short internship component.

Does the empirical information obtained from the samples (total self-concept scores from the TSCS: 2) indicate that the means are the same before and after a short internship component? Is the mean total score the same between the group that did take a course with a short internship component and in those who took a course that did not require a short internship component? Although populations may be similar, sampling error may produce differences with the sample means (Huck & Cormier, 1996). Sample means may be dissimilar due to differences in the population means. A repeated-measures ANOVA (also commonly referred to as a single-factor repeated-measures ANOVA) are distinguished from other types of ANOVAs in that the following are true:

1) one independent variable (known as a factor) exists

2) it focuses on one dependent variable

3) samples are independent (Huck & Cormier, 1996)

In this study, the only independent variable is the effect of the short internship component on the dependent variable. The comparison groups were based on only one factor – short internship. The only dependent variable is the total self-concept of the
participants. The comparison groups in this study are independent as the participants in each group are different from the subjects in the other groups. Each of the participants contributed a score that affected the means of only one sample. None of the samples were connected in any way (Huck & Cormier, 1996).

To use a one-way repeated-measures ANOVA, this study has one dependent variable (self-concept), which is continuous, and one independent variable (short internship), which is categorical (George & Mallery, 2003).

The scores used to perform the single-factor repeated-measures ANOVA in this study are the T scores for the total self-concept score of the TSCS: 2, which was used with participants in this study for both the pretests and posttests. The goal of the principal investigator was to measure the amount of variability between the obtained T scores. To analyze this data, the repeated-measures ANOVA procedure, first, required that the total variability of all data be calculated. After all the scores from both samples were entered, the repeated-measures ANOVA statistical procedure analyzed the between-groups variability (differences among sample means) and the within-groups variability (difference inside each treatment condition).

In this study, there were two samples that represent two different treatments (groups) – experimental and control. Any variability between the sample means can be due to one of three factors (or any combination thereof). If the treatment caused the sample means to be different, the difference was due to the treatment effect. If the subjects were different, differences between the sample means can be due to individual differences such as background, competencies, and attitudes. The third factor that can cause a difference in the sample means between treatments (groups) is experimental error.
caused by changes that may be uncontrolled or unexplained such as lack of attention. The repeated-measures ANOVA statistical procedure measured the within-treatments (groups) variability. Differences observed within a treatment (group) were due to either individual differences such as background, competencies or attitudes, or experimental error. Variance within a group most likely was not due to the treatment as all subjects within the group were treated the same. Since this study used a pretest and posttest, the possibility of individual differences being a significant factor was minimized in both the between-treatments variability and the within-treatments variability.

The repeated-measures ANOVA compares the differences of the means of between groups and within groups by dividing the former by the latter to produce the F-ratio. The only difference between these two groups is the possibility of a treatment effect in the variability between treatments. If there is no treatment effect, the between and within treatment variability will be equal and the F-ratio will equal 1.00. However, if a treatment effect is present, which would cause the rejection of the null hypothesis, the F-ratio will be greater than 1.00. Therefore, the larger the calculated F-ratio, the greater the effect of the treatment being observed (Gravetter & Wallnau, 1988). The repeated-measures ANOVA formula is a ratio that compares the variance between groups (a factor of grouping) to the variance within the groups (factor or chance). If the F-ratio is equal to 1 the difference between the groups is not significant. If the F-ratio is greater than 1, the difference becomes more significant. The null hypothesis states that there is no difference between the means for the two groups (experimental and control). The F-ratio is used to assess the overall difference between these groups.

\[ H_0: \mu_1 = \mu_2 \]
H$_1$: $X_1 \neq X_2$

Therefore, “Only if the variation among the sample averages is substantially larger than
the variation within the samples, do we conclude that the populations must have had
different averages” (Jaeger, 1990, p. 266). When analyzing differences between samples,
variation in scores and the sample size affects the sums of squares and the mean square.
F- statistics for the repeated-measures ANOVA is the MS (mean square) between the
groups divided by the mean square within the groups. The computed F statistic
determines if one accepts or rejects the null hypothesis. If the F-statistic, as demonstrated
in tables three, four, five, and six in this report, is equal to or less than 1.00, then the null
hypothesis must be accepted.

Tests of the Hypotheses

The primary research hypothesis was investigated with the results indicating that
students who completed a course requiring a short internship component did not exhibit a
significant difference in their total self-concept scores from those students who
completed a course that did not have a short internship course. The secondary research
hypotheses investigated the following:
1) Students who completed a course requiring a short internship component, as reflected
by their pretest and posttest scores on the TSCS: 2, exhibited significant differences in
their total self-concept scores.

The null hypothesis states there is no difference in the total self-concept scores as
measured by the TSCS: 2 between the two groups investigated, experimental and control.
The statistical results can assist in examining the reasonableness of the study’s null
hypothesis to determine whether the study’s outcomes support or reject the null hypothesis (Jaeger, 1990). The null hypothesis cannot be tested directly as it is impractical to test everyone in a population. In using a sample, and inferential statistics, statistical errors fall into two categories: Type I and II. Type I error occurs when you reject the null hypothesis but no difference between the groups exists. The Type II error occurs when a null hypothesis is accepted, but the null hypothesis is false; this is noted as beta. If no difference exists between the groups and the researcher accepts the null hypothesis, then the decision is correct as the null hypothesis states that the groups are equal. In this research, the results indicated no difference in the total self-concept between the students who had been enrolled in a course with a short internship component and those students who had completed a course without a short internship component. For this study, the probability of observing that outcome of a Type I error is less than .05, which was selected prior to the study to be the level of significance.

The use of pretests and posttests for the secondary research hypothesis decreases individual differences since the same participants are being used twice. This helps control the standard error in the study. By reducing the standard error, the statistic obtained was more likely to reflect the absence or presence of a treatment effect. A carry-over effect was controlled by the period of time that lapsed between the pretest and posttest. Also, both the pretests and posttests were administered at the beginning of the class session for the courses selected.

In this study, five instances occurred resulting in the inability to use data gathered during the pretest: 1) one student in the experimental group was not present for the posttest, 2) three students in the control group dropped the curse, and 3) one student in
the control group only completed the second page of the TSCS: 2 resulting in incomplete data. The participants who dropped out of the experimental and control group were not included in the analyses.

It is unlikely that instrumentation effects took place as changes in the conditions of measurements were minimized by the consistency in the test administration. To reduce bias error and random error, this research study reduced factors that could be a threat to the external validity by the selection of subjects by courses, selection of treatments (knowledge in advance of which courses used for the selection process did or did not have a short internship component), and the selection of conditions of research (in familiar classroom, provision of directions being consistently presented visually and verbally prior to the test administration). These were selected so the results from the study would be generalizable to similar populations. The small number of participants also makes it less likely that significant results could be obtained due to the effect of a low power size.

One student elected not to participate in the study and did not submit any demographic information on the demographic survey. The only data analyzed for this study were tests that had a pretest and posttest with matching codes on surveys. At the time of the posttest, a second copy of the demographic survey was given to students to gather data to be used in the event someone lost their code number for the pretest, allowing for the possibility of matching information.

The slight increases and decreases seen in the pretest and posttest means are probably due to chance and indicate the influence of uncontrolled variables. Such variables may include a student’s fatigue, attitude, level of alertness, willingness to
participate, and events prior to test administration. Uncontrolled variables are usually insignificant “because these and similar changes are random and unsystematic, …[and] will average zero for the entire population” (Gravetter & Wallhau, 1988, p. 272). No statistical regression effect was noted as no significant pretest to posttest gains was observed (Jaeger, 1990).

The generalizability of the findings of the study is limited as the participants selected all attended a small four-year liberal arts college. To increase the use of generalizability of the findings would have been optimal if the researcher had administered the test to other dissimilar groups at other types of higher educational institution. The limited degree of variation does limit the ability to generalize the findings (Jaeger, 1990). A large sample reflects a more accurate estimate of the variance in the population. Another limitation is the nature of the standardized instrument used in this study. As a tool that requires self-report by the participants, this is a limitation.

The F values obtained in this study are not in the critical region. This indicates that it is very unlikely (p<0.05) that the null hypothesis is not true. Therefore, the findings of this study support the statistical decision to fail to reject the null hypothesis (H_0). There was no significant difference in the total self-concept as measured by the TSCS: 2 with the experimental or control groups.

Summary of Results

In conclusion, various statistical analyses including a repeated-measures ANOVA and Levene’s Test of Equality of Error Variances were used to determine differences in the total self-concept posttest scores of the participants. No significant differences were
found between the groups (experimental and control) regarding their total self-concept as measured by the TSCS: 2.

Summary

In summary, the data analyses indicated no significant differences in self-concept as measured by the TSCS: 2 between college students who had completed a short internship and those who had not. The final chapter addresses information obtained during the literature review, the contributions of this study to the literature, and possible research questions for future research based on the findings.
CHAPTER 5
SUMMARY AND DISCUSSION

Discussion

This chapter will discuss this result study, the implications of the results, the relationship to the research questions or hypotheses, the influence of the results on relevant theory regarding self-concept and internships, and the strengths, weaknesses and limitations of the study. Recommendations for future research supported by this study will follow with suggestions regarding new knowledge and the potential for further studies to influence practice in higher education.

Introduction

This research study investigated if short internships with college students changed their self-concept as measured by the TSCS: 2 using an experimental and control group. This research question evolved from statements from college students who proposed that they were more self-confident about their area of discipline and themselves following a short internship. The analyses performed examined the total self-concept scores of students who had completed a course requiring a short internship with students who completed a course of similar duration without a short internship component. No significant difference in the total self-concept score of the administered posttests of the participants in the experimental or control groups was found. Therefore, students may subjectively state that the short internship component improves their self-concept,
however, analysis using a well established self-concept test does not reflect or support these subjective statements.

*Statement of the Problem*

College students state their interest in short internships and “hands-on” experiences. It was hypothesized that students would exhibit no change in their self-concept following a short internship. The independent variable in this study was the short internship component; the dependent variable was the student’s self-concept as determined by the administration of a standardized self-concept instrument, the TSCS: 2.

*Statement of the Methodology*

A combination of quasi-experimental and survey methods was used in this study that took place at a four-year liberal arts college in the northwestern region of North Carolina. The basic design of this exploratory/descriptive study was an experimental control group design. Participants were selected using a cluster sampling. The population of this study included college students enrolled in courses requiring a short internship component. To select a sample for this study, the principal investigator used cluster sampling and selected courses that required a short internship for the experimental group and courses that did not include a short internship component for the control group. This sampling was composed of students enrolled in program courses at a small liberal arts college. No students enrolled in the selected courses were excluded from participating in the study. The findings of the sample may apply to a population representative of college students attending a small liberal arts college. Data was gathered using two instruments including a demographic survey and the Tennessee Self-Concept Scale: 2.
Summary of Results

The results of this study failed to reject the null hypothesis that stated there would be no significant difference in the total self concept, as measured by a standardized self-concept instrument, with college students who completed a course requiring a short internship and students who completed a course that did not have a short internship component.

The demographic data gathered using the survey in Appendix D was analyzed. The frequencies and proportions indicate that the control group was older, with a higher percentage being employed, having part-time student status, and being responsible for dependents.

The dependent variable in this study was the total self-concept score from the Tennessee Self-Concept Scale: Second Edition. Levene’s Test of Equality of Error Variances was used to assess the differences between the scores on the pretests and posttests of the experimental group and the control group. The results indicated no significant differences in the distribution of the groups. To investigate further the difference between and within the groups, a repeated-measures ANOVA was performed for the total self-concept scores on the TSCS: 2. A repeated-measures ANOVA compared the posttest total self-concept score means for the experimental and the control groups. This test also analyzed the difference within the groups as well as between the groups to help determine if any changes found would be due to the treatment and not due to differences within the groups.

Research hypothesis 1 (primary hypothesis): College students who participate in a short internship (experimental group) and students who did not (control group) would
exhibit a difference in their self-concept following the internship as measured by the TSCS: 2. The results of this study failed to reject the null hypothesis that stated there would be no significant difference between the total self-concept of students who had completed a short internship and the total self-concept of students who had completed a course of similar duration but did not involve an internship component.

Research hypothesis 2: College students completing a short internship would exhibit a significant difference in total self-concept. The students who completed a course requiring a short internship component, as reflected by their pretest and posttest scores, did not exhibit significant differences in their total self-concept scores.

Research hypothesis 3: College students not completing a short internship would exhibit a significant difference in total self-concept. The students who completed a course that did not require a short internship component, as reflected by their pretest and posttest scores, did not exhibit significant differences in their total self-concept scores.

Analysis of TSCS: 2 Results

The present study focused on investigating differences between total self-concept of students enrolled in a college course requiring an internship and students enrolled in courses not requiring an internship. There was no significant difference in the posttests of the experimental and control groups.

The independent variable in this study was the completion of a short internship. A review of the literature has shown that internships increase self-confidence for work related skills (Knouse, Tanner, & Harris, 1999) and increased job-related self-confidence (Stone & McLaren, 1999). This experience was cited as crystallizing the self-concept
about their selected vocation (Stone & McLaren, 1999). Decreased anxiety about the
selection of one’s career choice (Stone & McLaren, 1999) and decreased student anxiety
about their learning (Hickcox, 2002) as related to internships is present in the literature.
An improvement in overall self-concept (Knouse, Tanner, & Harris, 1999) and increased
development of the student’s sense of identity (Chambers, 2004; Cantor, 1995; Wegner,
1999; Mosser, 1989; Lobel & Winch; 1998) has been noted. Rush, Peel and McCracken
(2004) found increased feelings of value as learners with students following internships.
Increased competencies (Hickcox, 2002; Cantor, 1995; Skinner, 1995; Cross & Markus,
1994) improved overall performance, (Rush, Peel & McCracken, 2004) and increased
motivation to learn (Cantor, 1995) are present in the literature review. Lizzio and Wilson
(2004) found improved adaptive competencies to work with others as a result of
internships. Several researchers found that internships help students secure job
employment faster (Knouse, Tanner, & Harris, 1999; Cantor, 1995; Taylor, 1988; Dixon,
Cunningham, Sagas, Turner, & Kent, 2005) and eased the transition from campus to
attendance to graduate school increased following internships.

Researchers inclusive of Lewin, Piaget, Dewey, James, Hickcox, Cavallo,
Sullivan, Hall, Bennett, Cantor, Tompson and Ryan, have advocated that internships
foster critical thinking skills. Internships have been found to promote professional
discussed the development of professional attitudes and its connection to internships.
Several authors have stated that internships address different learning styles (Hatcher &
Bringle, 1997; Roberts, 2002; and Valo, 2000). Kolb and Mosser (Cantor, 1995)
combined the use of a learning style inventory and cognitive outcomes as it relates to internship. Valo (2000) and Hickcox (2002) stated internships increased personal commitment and self-directed behaviors. Bringle and Kremer (2001) stated that internships increased self-directed learning. Increases in self-awareness (Bringle & Kremer, 2001) and increases in appreciation of diversity (Bringle & Kremer, 2001; Cantor, 1995) were also cited as being positive outcomes of internships.

The dependent variable in this study was self-concept. This construct is how one perceives or views oneself and continuously develops during one’s life. To change one’s general self-concept requires specific situations and one’s perception of their roles and development of attitudes (Beane & Lipka, 1986). Fitts and his colleagues (Reynolds, 1996) in the early 1970’s stated that the development of one’s self-concept was the result of interpersonal experiences, increased competence and increased self-awareness. Bandura (1982) espoused that one’s thinking and emotional responses were influenced by one’s self-concept. This is congruent with Hickcox’s (2002) statement that the social emotional component is addressed during internships. Both mastery of skills and accomplishments and observations help develop personal efficacy (Bandura & Adams, 1977). This concept as supported by Hickcox (2002) and Cantor (1995) states internships increase competencies and facilitate the transition of a novice to an expert. The development of a self-schema and systematic cognitive consequences improve the students’ behaviors and their ability to evaluate their own behaviors during internships. This reflection affects one’s self-concept and the transition from novice to expert (Markus, Moreland & Smith, 1985; Skinner, 1995; Cross & Markus, 1984). Mead in 1934 and Kinch in 1963 agreed that the development of one’s self-concept was
contingent on interactions with others and one’s perceptions of them by others of significance (Reynolds, 1996). The interaction of one’s behavior with others and its influence on self-concept was supported by Rogers, Snygg and Combs (LaBenne & Greene, 1969). Combs proposed that a primary purpose of teaching was to promote positive self-image with students (Dell, 1987). Earlier Purkey (1978) had stated that the self-concept of a student actually affected their academic success or failure more than their mental ability.

Shavelson and Bolus (1982) state there is a reciprocal relationship between achievement and self-concept. Fitts and Warren (1996) and Brooks (1990) have reported lack of significance with self-concept with variables inclusive of gender, age, ethnicity, educational level and intelligence. Studies (Dell, 1987) related to gender and self-concept are inconsistent.

Rogers and Gottlieb (1999) found increases with self-concept with nontraditional students following the completion of a course of study. Finkenberg’s (1990) study found a significant increase in self-concept in college students following completion of a Taekwondo course. Rogers and Alexander (1990) found a significant increase in self-concept in college students following a running program. Similar to the findings in this study, Stevik and Addleman (1995) and Olson, Gresley and Heater (1984) found no significant change in self-concept following short internships.

The demographics of being married and responsible for a dependent have been shown to have a positive correlation with self-esteem (Burgess, 1980; Hall & Valine, 1977). Self-concept has been shown to significantly decrease in nursing students during their curriculum (Randle, 2003; Ellis, 1980). Dell (1987) found a significant positive
correlation between age and performance on the terminal examination for nurses (NCLEX-RN). Thus studies have shown increased self-concept with students who have been married, responsible for dependents and older than traditional students. Dell (1987) found as nursing students became older their performance on the NCLEX-RN improved. However Ellis (1980) in contrast, found nursing student’s self-concept decreased during their progression through their curriculum.

Studies investigating self-concept and ethnicity have been inconsistent with showing significant findings. Positive correlations were found between total self-concept and the internal locus of control Crump, Hickson and Laman (1985). Later studies showed no correlation between self-concept and GPA (Gadzella, Williamson, and Ginther, 1985; Sicherer, 1996; Crump, Hickson, & Laman, 1985).

The lack of support from the current study for the primary research hypothesis provides evidence that short internships do not result in significant differences in college students’ self-concept. A review of the literature focused on research regarding internships supports increased self-concept and related constructs such as motivation, self-directed learning, personal commitment to one’s vocation, and increased competencies following internships. A review of the literature focused on self-concept supports that opportunities to improve one’s mastery of skills use of a variety of learning styles, the involvement of the social emotional component leads to increased competences, self-awareness and personal efficacy. For over a hundred years, educators have argued that “hands-on” learning facilitates student learning in ways that assist the transition from novice to expert. Achievement has been noted to increase self-concept. However, despite these findings, a significant difference was not found between the total
self-concept score of students in this study who had completed an internship and those students who had not.

Summary Statement

The results of this study failed to reject the null hypothesis that stated there would be no significant difference between the total self-concept as measured by the TSCS: 2 of students who had completed a short internship and the total self-concept as measured by the TSCS: 2 of students who had completed a course of similar duration that did not involve an internship component. Although the construct of self-concept did not change significantly for students who completed a short internship in this study, the implications of this study are important when developing a curriculum for higher education. Institutions of higher education are concerned with many facets of their students including graduation rates and ultimately employment. Completion of internships may not affect self-concept scores as measured by a standardized self-concept instrument but have been shown to influence the acquisition of employment.

The literature supports that internships assist students with finding job opportunities and securing job opportunities sooner after graduation. As colleges become more competitive, this factor is scrutinized more carefully now than in the past due to workplace competition. Students are quite likely to ask about the rate of employment and time required for their graduates to secure employment. Companies seeking employees are becoming more aware that students who have completed internships may have improved professional social skills and adaptive competence. In today’s workplace where job tasks can fluctuate depending on countless variables, employers are seeking
individuals who are flexible and willing to continually learn new tasks as the requirements of the company change. Employers that require specialized training may be more apt to hire an individual who has completed an internship since several studies have shown that these students are likely to seek further competences such as graduate school or other specialized training as they engage in lifelong learning.

Limitations

This is an exploratory study and generalizations of results obtained are not recommended. The small sample size for each group determined by the number of students enrolled in the courses selected for the study was a limitation. As random sampling, important for various statistical analyses was not used, this presents a limitation. Since all samples were composed of students enrolled in a small liberal arts college, one limitation may be limited variability with the samples. One final limitation is that this study focused on the response of each group of students and did not analyze individual differences. The limitations of the present study involve the following:

1) all participants were gathered from a small, private liberal arts college in the southeast region of the US;
2) demographics of participants revealed the majority of participants were female and Caucasian;
3) small size due to low enrollment in courses selected;
4) selection of participants involved a cluster sampling which does not provide the optimal external validity as would a true-experimental design thus limiting the generalization of the findings to other populations.
Delimitations of the Study

The delimitations of this study included several factors. The use of a convenience sample of college students at one small, private liberal arts college limits the researcher’s ability to generalize findings to other groups either geographically or due to the type of educational institution. Participants may be dissimilar to students enrolled in institutions of higher education, which are distinctly different due to size, focus (technical school) or funding (public).

Assumptions

One assumption made for both the experimental and control group was that students would attend classes as outlined by the college policy. For the experimental group, no information was gathered from the instructors regarding the quality of the internship or the students’ performance. Therefore, it was assumed that the student had successfully completed their internship if they were present during the administration of the posttest. It was assumed that the students would answer the pretests, posttests and demographic survey honestly.

Implications for Further Research

Self-concept is a construct that is continually evolving. This study investigated the total self-concept of college students as measured by the TSCS: 2 with an experimental group, who completed a course requiring a short internship, and a control group, who completed a course that did not include a short internship. To further study the influence of one’s vocation on self-concept, one could construct a questionnaire using a Likert-type
scale that could be administered to students throughout their academic years. As a longitudinal study, this could continue to be included as a part of alumni surveys by the specific major or discipline at specified stages, i.e. end of year 1, 3 and 5. This information would benefit the educators and students to assess the impact of the curriculum and vocation in the development of one’s self-concept. The information could be coded and analyzed per individual, which may produce more meaningful information than comparing the means of the groups. For the information gathered from the participants, items may include their ability to cope with deadlines, time pressures, and school/job demands.

**Implications for Practice and Recommendations**

The results of this study indicate that educators should not make the assumption that completion of an internship will increase the self-concept of the intern. As discussed in the literature review, supervisors and other individuals deemed to be significant can impact the self-concept of the learner. This requires structured supervision that focuses on meeting the learning needs of the student and organizing the internship in a manner to facilitate success. A successful internship can not only assist the student in valuing their worth and improving their skills and competences but can bridge the transition from being a student to an employee who can be prepared for the experiences in employment that typical classroom teaching cannot provide. Prior to placing students in internships, educators must incorporate learning experiences in the classroom to determine if their students are individually taking responsibility of their own learning and their behaviors. The research states a student who is not receptive to criticism in the classroom may be at
risk for failure during their internship, and ultimately, at their future place of employment. As students progress through their curriculum, instructors must collaborate with intern supervisors to further assess the student’s ability to accept responsibility of their behaviors. This will prepare students to be better prepared for the challenge of working with others in their profession.

Summary and Conclusion

Although this study did not reveal significant differences in the total self-concept of students who did or did not complete a short internship, a review of the literature provided many benefits of using internships with college students. As jobs become more diverse and promote more cross training with their employees, the principal investigator asserts that students who have completed an internship will be better prepared for the continually changing multifaceted nature of real work experiences.
References


Williams, R. L. (1971). Relationship of class participation to personality, ability,
## Appendix A

**L. U. Human Subjects Approval Letter**

<table>
<thead>
<tr>
<th>From:</th>
<th>Parker, Karen (School of Education)</th>
<th>Sent:</th>
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<tr>
<td>To:</td>
<td>Oakes, Toni S</td>
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<td>Cc:</td>
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</table>

Your study should qualify for the exemption.

---

**From:** Oakes, Toni S  
**Sent:** Monday, March 13, 2006 5:46 PM  
**To:** Parker, Karen (School of Education)  
**Subject:** RE: Oakes educ 980

Dear Dr. Parker,
I have made several calls and am trying to find which majors I can use as control groups. My numbers for each group will probably be under 20. I actually have already completed the doctoral form but will wait until I change my design to send it for your review. If my subjects are all anonymous, which I think they will be, can we use the exempt IRB form? I have completed the expedited form also, so I just need guidance as to which one I should complete to send to you. Thank you also for the timeline! That helps a great deal.

Toni Oakes

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**From:** Parker, Karen (School of Education)
Appendix B

LRC Human Subjects Approval Letter

LENOR-RHYNE COLLEGE
HUMAN SUBJECTS REVIEW BOARD

OFFICE OF INSTITUTIONAL RESEARCH (OIR)

HSRB FILE # S0635        4/26/06

A COMPLETE SET OF ALL PROTOCOL INFORMATION MUST BE SUBMITTED FOR BOARD REVIEW – ORIGINAL AND 2 COPIES EXEMPT REVIEW – ORIGINAL

*****ONLY TYPEWRITTEN PROTOCOLS WILL BE ACCEPTED*****

Name of Principal Investigator: Toni S. Oakes

Title: HOS/OT Program Director

Dept.: OT

Phone: 828-328-7366

Project Title: Effect of Experiential Learning Experiences on Student Self-Concept

Proposed Dates of Study: 5/8/06 Through 9/06/06

Source of Funding: none

Name of Co-Investigator: none

Title:

Dept.:

Phone

Department Head Signature: [Signature]

Date: 4/24/06
Appendix C

Student Consent Form

Effect of Short internship on Student Self-Concept
Toni S. Oakes
Liberty University
Education Department

You are invited to be in a research study to investigate the effects of short internship on college students’ self-concept. You were selected as a possible participant because you are enrolled in a course selected for this research study. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Toni S. Oakes, doctoral student in the Education Department at Liberty University.

Background Information

The purpose of this study is to determine if a student’s self-concept is changed following short internship. The results of this study could influence decisions regarding courses and the curriculum sequence for the disciplines involved in the study. These majors include Human Occupation Studies, Human Community Service, and Psychology.

Procedures:

If you agree to be in this study, we would ask you to do the following things:

Each participant will be administered the *Tennessee Self-Concept Scale:2 (TSCS:2)*. This instrument will be administered as a pretest and as a posttest. A short demographic survey will accompany the pretest. The administration of the *Tennessee Self-Concept Scale:2* will take approximately 10 to 15 minutes. The total time involved by each participant involved in this study (including the pretest, the demographic survey and the posttest) will be approximately 35 minutes.

During the administration of the *TSCS:2*, the instructor will be responsible for reading the directions for the *TSCS:2* which are as follows:

“This scale asks you to describe how you feel about yourself. There are no right or wrong answers, so please just describe yourself as honestly as you can. When you are ready to begin, read each statement and decide how well it describes you according to the scale below. Read each statement carefully. Then circle the number that shows your answer. Circle only one number of each statement using this scale:

Answer 1 if the statement is ALWAYS FALSE.”
Answer 2 if the statement is MOSTLY FALSE.
Answer 3 if the statement is PARTLY FALSE AND PARTLY TRUE.
Answer 4 if the statement is MOSTLY TRUE.
Answer 5 if the statement is ALWAYS TRUE.

If you wish to change a response, cross it out with an X, and circle the new response you have chosen.” (Fitts & Warren, 1996)


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

The risks for this study are no more than what the participant may encounter in everyday life. No positive or negative consequences will occur based on the student’s decision to participate or not participate in this research study. If the results of the study indicate that short internships have a positive or negative effect on the self-concept of the students, the specific major (Human Occupation Studies, Human Community Service and/or Psychology) may evaluate the courses offered in their curriculum using the information obtained in this study.

**Confidentiality:**

The records of this study will be kept private. All participants will receive four identically numbered labels. These labels will be used on the pretest, posttest and demographic survey. To maintain anonymity, any student wishing to request a copy of their pretest and posttest results after the completion of the data gathering process can attach the remaining label to an envelope and give to their course instructor. Upon receiving this, the principal investigator will provide copies of the results and send them to the instructor to distribute to their students with proof of their identification number. At no point during the study will the principal investigator have a record of these identification numbers. This will allow all participants to remain anonymous during this research study. Research records will be stored securely and only the principal researcher will have access to the records. Data will be locked in a filing cabinet in the principal investigator’s office in the McCrorie Center at Lenoir-Rhyne College until December 15, 2007. After that date, the principal investigator will destroy all data.

**Voluntary Nature of the Study:**

 Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Lenoir-Rhyne College or the university of the principal investigator, Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**Contacts and Questions:**
The researcher conducting this study is: Toni S. Oakes. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at Room 310 in the McCrorie Center of Lenoir-Rhyne College, phone: 828-328-7366, or email: oakest@lrc.edu.) The dissertation chair for this study is Dr. Karen Parker. She may be reached by at the following email address: kparker@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Human Subject Office, 1971 University Blvd, Suite 2400, Lynchburg, VA 24502 or email at irb@liberty.edu.

**You will be given a copy of this information to keep for your records.**

**Statement of Consent:**

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature: _______________________________ Date: __________________

Signature of Investigator: ___________________ Date: __________________
Appendix D

Student Demographic Survey

Demographic Survey to Accompany *Tennessee Self-Concept Scale*: Place code sticker here

1. What is your gender?
   - Male
   - Female

2. What is your age?
   _____ years

3. What is your ethnic origin?
   - Native American (including Alaskan Native)
   - Asian (including Oriental, Pacific Islander and Filipino)
   - African American
   - Hispanic
   - White
   - Other Race

4. In what course are you currently enrolled?
   - OCC 470
   - Psy 457
   - Psy 220

5. During the spring semester of 2006, were you a:
   - Full-time student
   - Part-time student

6. Beginning in the fall of 2006, will you be a:
   - Freshman
   - Sophomore
   - Junior
   - Senior

7. What is your cumulative GPA to the nearest hundredth?
   ____

8. What is your employment status?
   - Not employed
   - Employed part-time
   - Employed full-time

9. What is your marital status?
   - Single
   - Married
   - Divorced

10. Do you have any dependents?
    - Yes
    - No

11. Have you ever had a relative work experience (including service learning or volunteer experience) that is directly related to your professional objectives that you feel will affect you after your college graduation?
    - Yes
    - No
Appendix E

Course Description OCC 470

Practicum Rotations (Level I Fieldwork)

Prerequisite: Satisfactory completion of all HOS (Human Occupation Studies) 300 and 400 level courses; Admission to HOS major.

Three weeks (120 hours) of integrated clinical practicum experiences in two major practice venues as assigned by the program. Rotations are assigned based on programmatic educational goals and availability of sites. Three credits. (Summer)

(Leonor-Rhyne College Catalog, 2006-2007, p. 270)
Appendix F

Course Description PSY 457

Internship in Psychology

Permission of instructor.

Fieldwork in some area of specialization in a school, business, social, mental health, or criminal justice setting. One class period per week dealing with professional and ethical concerns will also be required. Internship require daytime availability. Four credits.

(Lenoir-Rhyne College Catalog, 2006-2007, p. 281)
Research Methods I.

Prerequisite: MAT 115, PSY 101.

This course examines scientific methodology and its application to the social and behavioral sciences. Among the topics discussed are the philosophy of science, problem formation, measurement, ethics of research, and data collection as well as specific problems and issues relating to the principal research designs (i.e., specific problems and issues relating to the principal research design (i.e., experiment, survey research, observational and non-obtrusive research, and secondary analysis of data, including an introduction to statistical techniques). All students will learn to write a basic research document using APA format. Four credits. Cross-listed with Sociology 220. ) Fall, Spring) (Lenoir-Rhyne College Catalog, 2006-2007, p. 279)
Appendix H

Course Description PSY 500

Quantitative Methods for the Social and Behavioral Sciences.

A technology based study of the descriptive, correlational, and inferential statistics frequently used by counselors and consultants. The selection and application of procedure appropriate to specific types of counseling research, program evaluation, test standardization, and mental measurement will be emphasized. Three credits

(Leuoir-Rhyne College Catalog, 2006-2007, p. 328)