THE RELATIONSHIP BETWEEN INTERNSHIP EXPERIENCE AND LIBERAL ARTS STUDENTS’ CAREER COMPETENCIES

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by

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The purpose of this study was to examine the relation between internship experience and liberal arts students’ career competencies, as compared with liberal arts students who have not had any internship experience. In addition, this study was also aimed to identify the components of an effective internship. The results showed that internship experience, whether alone or in combination with previous work experience, is associated with higher levels of career competencies on the following dimensions: self-knowledge, goal setting and career planning, career related skills, career guidance and networking, knowledge of office politics, and feedback seeking and self-presentation. In addition, intern initiative, mode of learning, relationship with supervisors and monetary compensation are positively related to changes in the seven dimensions of career competencies: self-knowledge, goal setting and career planning, career related skills, career guidance and networking, knowledge of office politics, job-related performance effectiveness, and feedback seeking and self-presentation.
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CHAPTER 1
INTRODUCTION

This dissertation includes five chapters. In chapter One, the statement of the problem, the purpose of the study, research questions and the significance of the study are presented. In chapter Two, a review of the literature on career management models, career competencies and internship outcome and predictors are offered as background information for the study. Chapter Three is used to illustrate the methodology of this study, including the research design, participants, instruments, variables, procedures, and data analyses. The findings of this study are presented in Chapter Four, including the procedures of handling missing data the univariate analysis, birariate analysis, and the results of the one-way ANOVA and the multiple linear regression for the two research questions. A discussion on the findings is presented in Chapter Five, followed by implications for professionals, limitations, strengths of the study, recommendations for future research, and a conclusion.

Statement of the Problem

By the end of 2009, the national unemployment rate in the U.S. had reached 10.1%, which broke the historical record (Bureau of Labor Statistics, 2013). Though the unemployment rates of the following years slowly dropped, it still stayed closed to 8% by the end of 2012, compared to the average of 5% before the recession. With the competition from the enlarged pool of experienced yet unemployed people in the job market, the employment opportunities for recent college graduates are decreasing. Now, more than ever, a meaningful career with financial compensation to pay back their tuition investment and improve their quality of life is among the most important reasons for a college education. In the most recent student survey of UCLA’s Higher Education Research Institute (HERI), almost 71% of the
respondents reported the ability to get a better job as a “very important” factor in their decision to pursue a college education (Astin et al., 2003).

A recent study from the Georgetown University Center on Education and the Workforce (2013) reveals that the overall unemployment rate for recent college graduate is about 7.9%. Among the 92.1% who are employed, half of them are working at jobs that don’t require a degree. When looking closer to the differences in unemployment based on majors, the graduates with non-technical degrees or traditionally called liberal arts degrees have higher rate of unemployment at the beginning of their job search (Adamuti-Trache, 2006; Unseem, 1989). The study from the Georgetown University Center on Education and the Workforce (2013) also reveals that Science, Technology, Engineering, and Mathematics majors typically offer the best opportunities for employment and earnings, while unemployment is higher for graduates with non-technical degrees. The average rate of unemployment for technical graduates is around 6.8%, and it is 9.8% for graduates from arts degrees. History major is among the top of the unemployment list, with as high as a rate of 10%. Corresponding with this employment trend the number of student enrollment in liberal arts majors has experienced a significant decline since 1970’s (Geiger, 1980).

The dynamics that affect liberal arts students’ career outcome are complex and difficult to ascertain at times (Useem, 1989). With the increasingly frequent changes in the modern workplace, an ability to continually refine one’s expertise is critical to that individual’s career success (DiConti, 2004). In that sense, liberal arts education provides those habits of mind which are conductive to relearning one’s job as it changes (Keohane, 1988; Logan & Mannino, 1988; Olson, 1977). Research also shows that over the long-term, liberal arts graduates in selected companies performed as well as if not better than their counterparts from other
undergraduate disciplines in terms of both compensation and promotion (Beck, 1981; Calvert 1973). The greatest challenges for liberal arts students are at the entry-level, where jobs are not as well defined for or connected with their liberal arts majors (Shullman, 1983). Furthermore, as business and technical schools continue to graduate students with refined job search skills (Unseem, 1989), liberal arts students tend to postpone career exploring and planning process till senior year (Thoni & Olsson, 1975), which makes job searching process even more challenging for them.

Under the pressure of low job placement rate and declining enrollment rate, liberal arts education starts to integrate experiential components into their curriculum (Berberet & Wong, 1995; Higginbottom, 1994) to provide graduates with real world experience and equip them with instrumental knowledge and skills in delivering desired career-related outcomes, career competencies (Haase, 2007). More and more students, including those from liberal arts majors are participating at least one internship during their undergraduate study according to National Association of College and Employers’ annual surveys. An overview of the literature, however, reveals that there has not been systematical study of the impact of internship in preparing liberal arts students for their desired career outcome. In addition, what makes an effective internship that contributes to the development of liberal arts students’ career competencies is not clear either. Therefore, this study focused on liberal arts students’ internship experience and its impact on their career competencies.

**Purpose of the Study and Research Questions**

This study was undertaken to understand the impact of internship experience on liberal arts students’ career competencies, as compared with other type of work experience. In addition, to identify the components of an effective internship was another goal of the study.
Many studies confirm that a well-done internship could expose liberal arts students to the world of work and test their career aspirations (Callanan & Benzing, 2004; Pedro, 1984; Taylor, 1998); it can also complement their broad-based education with training in specific areas that they want to enter into (Dougherty, 2000); nevertheless, it brings their capacities and competencies to the awareness of the employers (Lin, 2003). If liberal arts students, however, aim to increase their employability through participating in internships, they have to acquire a broader skillset in career management than what have been looked at in previous studies.

Bridgstock (2009) presented a model of career management for maximum employability (Fig. 1). In this model, Bridgstock depicts employability skills as composed with generic and discipline-specific skills required for performance in a work situation; and career management skills, divided into two categories of competencies: self-management and career building. Discipline-specific skills are those skills trained through university curricula to prepare for a specific occupation. Generic skills are those transferable skills including information literacy, working with technology, written and verbal communication, working in teams and numeracy. Self-management skills relate to the individual’s perception and appraisal of their values, abilities, interests and goals. Career building skills are the skills help individual find and use information about careers, labor market and the world of work and locate, secure and maintain work, as well as identify and choose the best opportunity for advancement and other desired career outcomes. As suggested in previous studies, in addition to the discipline-specific skills acquired through college curricula, generic, self-management and career building skills are all very important in enhancing college graduates’ employability. Based on Arthur’s (1995) Intelligent Career Model, Hasse (2007) defined these instrumental knowledge and skills in delivering desired career-related outcomes as career competencies, which includes seven
dimensions: self-knowledge, goal setting and career planning, job-related performance effectiveness, career related skills, knowledge of (office) politics, career guidance and networking, feedback seeking and self-presentation. The researcher investigated the impact of internship on liberal arts students’ career competencies as defined by Hasse (2007). More was discussed in the literature review section.

Figure 1 Bridgstock’s (2009) career management model

Internships, though generally agreed to have positive impact on students’ career development, varied greatly in their quality. Kelly (2012) stated that internship provides benefits for students in employment advantages, career development, personal growth and knowledge.
transfer. To attain these benefits, there are learning components that need to be present in the internship.

Among the limited studies conducted on this topic, six important predictors of a successful internship experience were suggested in the literature: (a) academic preparedness, (b) intern initiation, (c) intern participation, (d) quality of supervision, and (e) compensation (Beard & Morton, 1999; Knouse, Tanner, & Harris, 1999). In most of the existing research though, these components of the internship learning process were studied in an isolated and discrete fashion (Clark Vaisman, 2012), with the social context of internship and the role of co-workers in learning being frequently ignored (Lave & Wenger, 1991). Learning strategies in workplace, an important deciding factor of the effectiveness of training programs (Holman, Epitropaki, & Fernie, 2001), were also rarely studied in internship literature. In addition to the predictors of effective internships on which previous studies have focused (academic preparedness, intern initiation, intern participation, quality supervision and compensation), this study was used to investigate the internship learning process as a whole by including two other important factors: co-worker relationship and interns’ modes of learning (learning strategies).

Specific research questions of the study included:

**Research Question 1**

What are the mean differences on career competencies of liberal arts seniors on the seven dimensions of career competencies (GSCP, SELF, JPER, CRS, POL, GNET, FSSP) among the following four groups: seniors with only internship experience, seniors with only part-time work experience, seniors with both internship and part-time work experience and seniors with neither internship nor part-time work experience?
Research Question 2

Do the five aspects of learning process in internships (mode of learning, intern initiative, intern participation, co-worker relationship, supervisor relationship) have a relationship with the career competencies of liberal arts seniors on the seven dimensions (GSCP, SELF, JPER, CRS, POL, GNET, FSSP)?

Significance of the Study

Many studies of internship focus on students’ fulltime employment outcome (Malcolm, 2000; Knemeyer & Murphy, 2002; Rothman & Lampe, 2010; Taylor, 1988), which involves complex and less controllable factors like chances and opportunities. In response to students’ need for a successful career after college (Astin et al., 2003), we educators aim to facilitate the learning and acquisition of instrumental knowledge and skills in delivering desired career-related outcomes, career competencies instead of simply handing them employment opportunities. Therefore, understanding internship’s impact on liberal arts students’ career competencies will offer evidence for the benefits of internship on liberal arts students’ career development and provide concrete support for promoting internship programs to the students. Shatzer (2008) additionally found in her study that students’ expectation and engagement were the most significant predictors of their internship learning. With clear goals as laid out in the seven dimensions of career competencies, students can be more intentional about their internship learning and have higher level of engagement, which in turn will increase the quality of their learning and their satisfaction about the internship experience.

With regard to the internship learning process, there are challenges in designing effective internship programs due to the lack in empirical research in this area (Clark Vaisman, 2012; Holman, Epitropaki, & Fernie; 2001; Lave & Wenger, 1991). Deepening our understanding of the
effective learning components in internship experience will provide useful guidelines in internship design for internship coordinators in the companies or university career services. In addition, the results will also help liberal arts students distinguish good internships from those that exploit them as cheap labor.

**Limitations**

This study had several limitations. First, this study targeted liberal arts seniors, and therefore, the results may not translate to students from other colleges or at a different stage of their liberal arts programs. Second, this study used self-reported instruments. Thus, participants’ self-reported responses might be different from their actual career competencies or their actual behaviors at their internship because the responses are based on perception. Also, it is possible that they might have provided answers that were based on what is acceptable to majority of the society rather that their true beliefs and feelings. Third, even though both instruments (i.e., Career Competency Indicator, Scale of Internship Learning) used in this study have acceptable reliability and validity, CCI was created by a British Scholar and some wordings and statements may not be clear to the participants in this study. This might impact on how respondents interpreted the questions and how they responded to them.

**Definition of Terms**

**Liberal Arts Education**

“...provides a wider knowledge base from which to draw upon and thereby enables one to view matters from a larger perspective than can someone whose focus had been primarily groomed in one specific field of study” (Useem, 1989, p.73). As this type of education is offered both at small liberal arts colleges and big universities. To distinguish from those students who attend the small liberal arts colleges, the target population of this study is from the college of liberal arts within a big university.
**University**

There is no nationally standardized definition for university in the US. Traditionally this term has been reserved for research institutions which grant doctorate degrees. For example, Massachusetts only grants "university status" to schools which grants at least two doctoral degrees (Massachusetts Board of Education: Degree-granting regulations for independent institutions of higher education). This study will adopt this definition to operationally define university as used in this study.

**Internship**

“An internship is a form of experiential learning that integrates knowledge and theory learned in the classroom with practical application and skills development in a professional setting. Internships give students the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths; and give employers the opportunity to guide and evaluate talent” (National Association of College and Employers, 2014, p.2). To give the participants a more operational definition of internship, the working definition for this study states as follow, “An internship is a supervised preprofessional career related experience, paid or unpaid, part or full-time, with measurable learning objectives and formal evaluations” (Brooks, 1995, p.334).

**Competency**

Bartram (2002) defines competencies as “sets of behaviors that are instrumental in the delivery of desired results or outcomes” (p. 7), suggesting that competency is behavioral based. “A competency is not the behavior or performance itself but the repertoire of capabilities, activities, processes and responses available that enable a range of work demands to be met more
effectively by some people than by others” (Bartram et al., 2002, p. 230). This study will use the term competency according to this definition.
CHAPTER 2
LITERATURE REVIEW

In this literature review chapter, the theoretical foundation of current study is introduced, followed by the review of previous studies conducted on career competencies and college students’ internship experience, and the critique of the existent research. How the results from this study would bridge those gaps in understanding the role that internships play in the development of liberal arts students’ career competencies is presented at the end.

Theoretical Foundations

Kolb's Experiential Learning Theory

Envisioning the workplace to be an educational laboratory where theories learned in the classroom could be applied to solving real-world problems, Dewey (1938) advocated that the concept of “learning by doing” should be incorporated into the educational model (Heinemann & DeFalco, 1990). Based on this concept, David Kolb presented a model of experiential learning in the 1980’s (Cates & Jones, 1999). In Kolb’s model the learning process is described as a four-stage ongoing cycle (see Figure 2), including concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 1998; Tener, 2004).

Kolb's theory is often applied to the understanding of the cycle of internship learning. As students engage in concrete experiences in their internship assignment, they will observe and reflect on their experiences. Followed by their reflections and observations, the learners form abstract concepts and generalizations, which they will then apply to subsequent experiences. This learning cycle continues after the students return to school from their internships (Cates & Jones, 1999; Tener, 2004).
Although Kolb’s experiential learning model is the most widely cited in the current experiential internship literature (Miller, Kovacs, Wright, Corcoran, & Rosenblum, 2005), it is criticized to be overly simplistic (Jarvis, 1987), not considering other important attributes such as level of engagement, learning strategies and the social context of the internship (supervisor/coworker’ roles) (Clark Vaisman, 2012). In this study, the researcher expanded on Kolb’s theory and examined other important factors of internship learning as suggested in literature.

**Super’s Career Lifespan Theory**

Taking into consideration factors that influence an individual's career development throughout one's life, Donald Super stated that career development is a continuous lifelong process in which individuals adapt to changing, multiple life roles that interact with their work
(Linn & Ferguson, 1999). Among these influencing factors, Super (1984) noted the importance of self-concept and suggested that the process of career development is composed of developing and implementing self-concepts. Super also articulated the concept of career maturity, an individual's readiness to complete certain tasks and to develop the attributes and skills related to career growth (Zunker, 2006).

Emphasizing the importance of self-concept, Super (1984) proposed that individuals may cycle and recycle through a series of developmental stages and tasks throughout their lifespan – growth, exploratory, establishment, maintenance and decline. Among these stages, Super noted that reality testing and the opportunity to play various roles influence the development of self-concept. Both reality testing and playing various roles are hallmarks of internship experiences. Therefore, several studies were devoted to examining how internships contribute to the formation of crystallization of one’s vocational self-concept (Brooks, 1995; Callanan & Benzing, 2004; Taylor, 1988).

In addition to contributing to the formation of crystallization of one’s vocational self-concept, internships may also contribute to career maturity (Sawyer, 2008). At the early stage of his work, Super (1974) described career maturity as readiness to make educational and vocational decisions during adolescence. Later in his career as the workplace experienced increasingly frequent changes, Super (1984) advocated for career adaptability and a broader readiness by adults to cope with the new career reality. In both cases, internships offer experiences that increase students’ awareness and understanding of how to work with others in the “real world” and offer a maturing experience (Cook et al., 2004; Hurst & Good, 2010).

Super’s (1984) lifespan perspective provides a framework of understanding internship’s impact on the crystallization of students’ self-concept and their career readiness and adaptability.
To increase students’ employability in the face of global recession, Bridgstock (2007) suggested that students need to be equipped with skills of four categories: generic skills, discipline-specific skills, self-management skills and career building skills. Hasse (2007) described these instrumental skills that will lead to desired career outcomes as career competencies. To understand the formation of career competencies, the intelligent career model is the most cited theory in literature (Kuijpers, Schyns, & Scheerens, 2006; Hasse, 2007).

**The Intelligent Career Model**

Quinn (1992) introduced the paradigm of the “intelligent enterprise,” a concept that heavily emphasizes the importance of the development and deployment of intellectual resources, i.e. the talents of the organization’s people. Quinn contends that three core competencies decide the success of a company: (a) a reflection of its internal culture (shared values and beliefs), (b) its overall know-how (accumulation of performance capabilities embodied in employees’ skills, knowledge and expertise) (c) its business networks (relationships with customers, suppliers etc.).

When investigating how individuals can contribute to the competencies of their organization, Arthur and colleagues concluded that each arena of organizational competency suggests a matching arena of individual competency (DeFillippi & Arthur, 1994). Thus, the idea of the ‘intelligent career’ was introduced as a complement to Quinn’s intelligent enterprise, building on the concept of the boundaryless career and the protean career (Arthur, Claman & DeFillipi, 1995). In her later work, intelligent career is defined as “any sequence of work roles undertaken at the worker’s own discretion, and with personal goals in mind” (Arthur, Amundson & Parker, 2002, p. 2).

Based on the three core competencies of the intelligent enterprise, the intelligent career framework also consists of three career competencies as areas of knowing: knowing-why,
knowing-how and knowing-whom. Knowing-why refers to how one identify with the culture of the employing organization (Arthur et al., 1995) and originates from one’s values, interests and beliefs (DeFillippi & Arthur, 1994). It embodies the factors like career motivation, personal meaning, and sense of purpose and inevitably influences a person’s overall commitment and adaptability to the employment situation. Knowing-how refers to “the expertise and abilities that a person brings to an organization’s know-how” (Haase, 2007, p. 56). It includes job-related skills and knowledge and is obtained through occupational learning and the accumulation of experience. Knowing-whom refers to how individual contribute to organizational communication (Norhia, 1992, in DeFilippi & Arthur, 1994). It reflects the social contacts, relationships, reputation and attachments that are established within as well as outside of the organization in the individual’s pursuit of a career (Inkson & Arthur, 2001).

New Career Reality and Career Competencies

Career is a “construct that has been used for different purposes in different contexts” (Collin, 2006, p. 299). In different disciplines at different times, the definition of career is differed both in content and focus. In the following section, the researcher is going to discuss the traditional perspectives of career, new conceptualizations under the new reality of work place and the emergence of career competencies.

Traditional Perspectives on Career

The traditional view of careers formed during the decades after World War II, an era of unprecedented prosperity. As the economy was experiencing a skyrocketing growth, the demands for human capitals were vastly increased and there were abundant job opportunities. There was an ideal version of traditional career: An individual took a job with an expectation to
stay in the company for his life, and he would enjoy regular promotions and stable upward advancement till his retirement (Greenhaus, Callanan, & Godshalk, 2010). Under this impression, career was defined as “a succession of related jobs, arranged in a hierarchy of prestige, through which persons move in an ordered (more-or-less predictable) sequence” (Wilensky, 1961, p. 523) or “occupations that are characterized by interrelated training and work experience, in which a person moves upward through a series of positions that require greater mastery and responsibility and that provide increasing financial return” (Perlmutter & Hall, 1992 in Bryant & Yarnold, 1995, p. 2).

According to Greenhaus (2010), stability and linear advancement was the predominant theme of the traditional definitions of career. As described above, they focus on the upward movement of individuals through an ordered sequence of positions (Milkovich, Anderson & Greenhalgh, 1976, in Landau & Hammer, 1986). Under the same historical influence, career theorists, for instance, Super (1957) also described career as development through a normative stages across lifespan. According to Super (1957), a career is “the combination and sequence of roles played by a person during the course of a lifetime” (p.282). When people progress through different life stages, they will encountered by unique concerns, psychological needs and developmental tasks at each stage. As such, individuals should display unique features of “career maturity” concordant to the stage they are at, which can be assessed by comparing the career concerns, developmental tasks and psychological needs confronting an individual with those expected of their age.

The increased global business and an uncertain world economy, however, have profound effects on the world of work. Job stability, security, and advancement, which were the norms of
traditional careers, are no longer true for today’s job seekers. The following section focus on the changing reality of world of work and its impact on the view of career.

**New Career Reality**

There have been dramatic changes in work place over the last few decades, which greatly transformed the landscape of work and career. “New Career Realities”, as described by Kidd (1996) were brought forth by the profound change in the context of employment, for instance, organizational cost cutting and reconstruction, international competition, technology advances and revision in psychological contract (Greenhaus, Callanan, & Godshalk, 2010).

Mass layoffs and downsizing that occurred in United States over the 1980s and 1990s was well documented in history because of its number of incidents and magnitude. This trend continued the following decades in U.S. and spread to European and Asian countries as major corporations tried to cut labor costs to respond to internal competition and economic downturns (Greenhaus, Callanan, & Godshalk, 2010). As a consequence, job stability and security has profoundly declined over last few decades. Staying with one organization till retirement is not common any more. It is normal for individuals to have 7 – 12 different jobs during their lifetime (BLS, 2006).

Under the pressure of fierce competition in global market, many organizations have adopted flatter and more decentralized structure (Balogun & Johnson, 2004). “Horizontal” organizational structures with less fewer levels of management and cross-functional autonomous work teams are prevalent in organizations from manufacturing to marketing (Offermann, 2006). As a consequence, instead of relying solely on the local and permanent employees, modern organizations turn to outsourcing and temporary or contingent workers for secondary or back office activities (Greenhaus, Callanan, & Godshalk, 2010). In addition, forming partnership or
network with other organizations to provide the expertise or resources necessary to complete particular projects is another approach for labor cost cutting (Zaheer & Bell, 2005).

Rapidly changing technologies have also affected every phase of business, which creates new career paths for employees with proper set of skills. However, individuals with less adaptability are losing their places in their employers’ future plans. Besides organizational cost cutting and reconstruction, the creation of more technologically advanced jobs, combined with the elimination of lower-tech jobs has made individuals’ career paths even less predictable.

Under all the influence describes above, most organizations choose to stay in a more transactional relationship with their employees. Instead of providing job security with an expectation that employees will respond with good job performance and loyalty to the organization in return, the organizations offer jobs with shorter terms of contract and lower commitment by both parties (Ibid). The employees are expected to be flexible to accept new job assignments and be willing to develop new skills according to the needs of the organization.

Due to the changes to the landscape of the world of work, individuals who begin their career in current age are facing unprecedented challenges, compared with their forerunners. They are bearing more responsibilities in their jobs, constantly learning new skills as the job requires, and have to stay alert for abrupt changes in jobs and career direction. Instead of expecting a long term employment with any organization, staying employable and managing their own career are the keys for individuals to survive and thrive in current world of work. All these challenges revolutionize people’s perspective on the contemporary careers.

**The New Themes of Contemporary Careers**

The norm of job stability, security and advance in traditional jobs lost its vitality in the new reality of the business world. More transitional relationship with the organizations is the
predominant pattern of the employments. Individuals have to stay employable by developing new, portable skills, in order to stay employed, although not necessarily with current organization (Greenhaus, Callanan, & Godshalk, 2010). In response to the new world of work, the new perceptions of careers recognize that individuals have to be adaptable in their career development as the process becomes increasingly less predictable. The most widely recognized two theories about the new careers are the boundless and protean career concepts.

**Boundaryless Career**

Modern organizations are abandoning their boundaries in response to the global competition and technological advances. In order to stay competitive, more organizations place less focus on the internal boundaries, and form partnership or network with other organizations or individuals to expand their repertoire of expertise and resource. A boundaryless career, which is usually characterized by frequent interorganizational mobility, is a product of the modern organizations with diminishing boundaries and found in countries such as U.S., New Zealand, the United Kingdom, and Japan (Arthur, et al. 1995).

The concept of boundaryless career is based on the writing of Michael Arthur and his colleague (Arthur, Inkson & Pringle, 199). Although a consensual definition of the boundaryless career is missing in literature, Greanhaus (2010) proposes that it involves three different perspectives as contrasted with the traditional career.

1. The boundaryless career involves mobility pattern with non-traditional forms of boundary crossing within or between organizations in pursue of new opportunities or a better match of job interests.

2. The boundaryless career requires non-traditional career competencies (Arthur & Rousseeau, 1996; Arthur et al., 199; DeFillippi & Arthur, 1994):
a. Looking outside the organization for identity (knowing-why)

b. Marketability (knowing-how)

c. Establishing networks of information and influence (knowing-whom)

3. The boundaryless career requires individuals to hold responsibility for their own career choice, stay adaptable and proactive in managing their careers according to their personal values and goals, as compared to following a career path determined by the organization in the traditional careers.

**Protean Career**

In addition to boundaryless career which reflect the interorganizational mobility in the structure of contemporary career, Hall’s protean career (Hall, 1976) pointes to individuals’ searching for self-fulfillment in response to the new career reality. Named after the Greek god, Proteus, who could change his shape at will, the protean career has been characterized as “self-directed, flexible, adaptable, versatile, and initiated by the individual to achieve psychological success” (Greenhaus, Callanan, & Godshalk, 2010, p.24).

Quite similar to the boundaryless career, the protean career is thought to have two primary dimensions (Greenhaus, Callanan, & Godshalk, 2010):

1. A protean career is proactively self-directed. Individuals who pursue protean career feel responsible for their own career management, who take initiative in career exploration and decision making.

2. A protean career is value driven. Instead of achieving values and goals imposed by the organization, individuals who pursue a protean career make career decisions to meet their personal values and goals as relevant to their “whole life space”, resulting in a sense of psychological success (Briscoe & Hall, 2006).
Summary

As the boundary of careers is diminishing and the responsibility of career management back to the hands of employees themselves, more individuals are taking on a protean attitude and seeking to fulfill their own purposes in moving between different careers. To help individuals successfully navigate the turbulent world of work, scholars realized that we need a better understanding of career management (King, 2004). Efforts have been devoted to develop some theoretical models to help understand career management process in current age (King, 2004, Kuijpers, & Scheerens, 2006, Greenhaus, Callanan, & Godshalk, 2010, Haase, 2007). In the following section, the existent theoretical models for career management is discussed and the rationale for applying career competencies model in current study is provided.

Career Management Models

Before the workplace went through the dramatic change under the influence of globalization and technological advances, career management was more a responsibility of the organization to help employees develop their career according to the need of the organization. The research about career management at that time was accordingly at the organizations’ service with less focus on employees’ personal career development that might go beyond their current organizations. Because boundaryless and protean career have replaced the norm of security and stability of traditional career, scholars started to refocus their research on the individual employees who are in charge of their career management instead.

King (2001) argues that employees’ immediate social context and the political nature of decisions about careers are two important affecting factors when they manage their own career. Hence, he proposes that career management is a recursive and dynamic process, consisting four identifiable steps:
- “charting the political landscape of the organization
- identifying key decision-makers with influence over career outcomes
- selecting strategies with which to influence those decision-makers
- evaluating outcomes” (p. 66)

In King’s (2004) later work, he expanded his model through studying the career barriers that individuals most frequently encounter in their career development. Based on Crites’ model of vocational adjustment (1969), King proposed that there are three co-occurring behaviors involving in the process for career management:

“Positioning behaviors are concerned with making sure one has the contacts, skills and experience to achieve one’s desired career outcomes. Influence behaviors are concerned with actively attempting to influence the decisions of key gatekeepers to those desired outcomes. Boundary management is concerned with balancing the demands of work and non-work domains.” (p. 119)

Both of King’s models (2001, 2004) focus on the outward challenges of contemporary career development and accordant behaviors that individuals should pursue in order to successfully manage their careers. Without a clear picture of their own interests, however, skills values and career goals, individuals will have no inner direction to start their career search process with. As Hall (1976) has suggested in his protean career, people have to rely more on their inner compass – their own values and goals to make meaning of their constantly changing careers. Self – clarity, thus, is important to be included in a career management model (Niles, 2011).

Greenhaus and his colleagues (2010) proposes a career management model with a focus on career decision making and implementing process which includes aware of self and
environment at the beginning of this process. He suggests in his model that four components are important indicators of effective career management:

- “a deep knowledge of oneself and accurate picture of the environment
- the development of realistic conceptual and operational goals
- the development and implementation of appropriate career strategies
- a continued feedback process that permits adaption” (p. 58)

Niles (2011) also presents a career development model with a similar focus on the career decision making and implementing process – Hope Centered Model of Career Development. With hope being the center of the model, he proposes that an effective career development should be a dynamic and recursive process including self-reflection, self-clarity, goal setting and planning, and implementing and adapting. Both Greenhaus (2010) and Niles (2011) capture the process of career management as a process of career goal setting and implementing, with a concord on the necessity of clear self-awareness. The context of the career decision making, however, such as the typical challenges or barriers that individuals might encounter when entering or moving within an organization or transitioning to another, is not clear in either model.

To successfully navigate the increasingly unpredictable careers, Greenhaus (2010) recommends individuals to develop a new sets of career competencies as Arthur (1995) has proposed. According to Arthur’s Intelligent Career Model career competencies can be described as three areas of knowing: knowing-why (why do we do a job), knowing-how (how do we do a job) and knowing-whom (with whom do we work). Haase’s career competencies model is theoretically based on Arthur’s three knowing and a clearer understanding on competency. Compared with previously mentioned career management models, Haase’s model not only attain to self-awareness, career planning and implementing process, but also address the typical
challenges related to individual’s organizational acculturation and career mobility. Her model includes career competencies in seven dimensions: self-knowledge, goal setting and career planning, job-related performance effectiveness, Career related skills, knowledge of (office) politics, career guidance and networking, feedback seeking and self-presentation. As Haase (2007) adapted Arthur’s intelligent career model based on a clarification on the term competencies, the following section is devoted to the understanding of this term before Haase’s career competencies model is further explained.

**Career Competencies**

**Competency**

People have different views of competencies according to interest and field of study (Whiddett & Hollyforde, 2003). As a consequence, there has been considerable confusion, ambiguity and disagreement about the definition about competency (Shippmann, Ash, Battista, Carr, Eyde, Hesketh, et al., 2000).

In his first empirically-based and fully-researched book on competency model development, Boyatzis (1982) describes a job competency as "an underlying characteristic of a person which results in an effective and/or superior performance of a job [...] it may be a trait, motive, skill, aspect of one's self-image or social role, or body of knowledge that he or she uses." (p.20). His definition mainly focuses on the differentiation of job performance mixed with concepts like needs, motives and traits.

As some aspects of personality are only poorly understood, Woodruffe (1992) suggests moving away from the traits-based view of competencies. Instead, he adopts a behavioral view and conceptualizes competencies as “the set of behavior patterns that the incumbent needs to bring to a position in order to perform its tasks and functions with competence” (p. 17). Rather
than viewing competencies as personal traits that reside in the individual or focusing on the performance at work, the behavioral definition put a stronger emphasis on the requirements of the job situation and how people do their jobs. However, the “competence” included in the definition might bring another confusion.

In many scholarly works the two concepts of competency and competence are often used interchangeably. The word “competence” was first adopted by policy makers to describe the duties of a job at minimum acceptable performance levels (CIPD, 2001). Since then, competence generally refers to a description of the tasks, functions, or objectives of a particular role or job, which can be evaluated against performance (Whiddett & Hollyforde, 2003). Thus, competence focuses on job, but competencies, as described above, focus on the person. Competencies do not relate to meeting task requirements or objectives, but to behaviors observed in effective people (Whiddett & Hollyforde).

To avoid confusion, competencies should be distinguished from personality and also competence. Bartram’s (2002) definition of competencies meets these demands. He defines competencies as “sets of behaviors that are instrumental in the delivery of desired results or outcomes” (p. 7), suggesting that competency is behavioral based. “A competency is not the behavior or performance itself but the repertoire of capabilities, activities, processes and responses available that enable a range of work demands to be met more effectively by some people than by others” (Bartram et al., 2002, p. 230). This study will use the term competency according to this definition.

Career Competencies

Based on the clarification of the term “competency”, Haase (2007) defines career competencies as “behavioral repertoires and knowledge that are instrumental in delivering
desired career-related outcomes” (p. 60). Instead of focusing on personality, this definition stresses existing behavior and knowledge – how much potential the individual actually realizes.

The swift of focus in the understanding of competencies has an important impact on the three areas of career competency as described in Arthur’s intelligent career. According to Haase (2007), knowing-why career competencies refer to behaviors and knowledge that contribute to the development of accurate understanding of oneself and why one should pursue a certain career. Knowing-how competencies describe skills and knowledge that a person should obtain to perform required tasks in certain job and attain desired career outcome. Knowing-whom competencies refer to behaviors that enable a person to build networks and social contacts and develop a reputation inside and outside the organization.

Overall, career competencies provide a general framework for understanding the behaviors that lead desired career outcomes. Although it might be hard to include every single career behavior or career options within this framework, Haase (2007) contends that it covers the most important areas and can be applied to most careers.

**Career Competencies in Career Management**

The new career realities brought forth by the changes in global economy have put more responsibility on individuals for their own career development – they are expected to proactively navigate the world of work, manage their own career process and build portable skills that will lead to enhanced employability. In this context, intentionally developing career competencies will not only help individuals become more reliant but also increase their employment opportunities. Craig (1992) proposes that using competencies in career management contribute to the career-related processes in following three ways: (a) they inform individuals about the competencies required in their desired role so that they can decide if they are able to achieve the
required skill level; (b) competencies also allow individuals to evaluate their strengths and developmental needs; (c) if the individuals have accurate information from previous two steps, they could develop a realistic and timed personal development plan accordingly, which can produce positive outcomes for both the individual and the organization. Haase and her colleagues (2012) also found that high scores in career competencies lead to both subjective and objective career success (Francis-Smythe, Haase, Thomas & Steele, 2012).

Although career competencies are of great importance in career management (Haase, 2007), a very limited amount of literature is available on the subject, even less was studied on liberal arts students’ career competencies. Thus this study is going to investigate career competencies as the outcome variables of their internship experience.

**Internship as an Effective Career Learning Experience**

Internships are a valuable means of learning in higher education. Internships offer opportunities for students to apply what they learn in class to the real problems in workplace (Gardner & Motschenbacher, 1997). Through internships, students can explore occupational options, network with people in fields of their desired career, gain marketable experience on their resume, and practice their job search skills (Taylor, 1988; Zhao & Liden, 2010). Employers also benefit from hosting internship programs in many ways. Having interns brings diverse talents to the organization, enable its assess to latest innovations of the industry and prepare a pool of well-trained future employees (Malcolm, 2000; Knemeyer & Murphy, 2002). Universities hence can enhance their corporate partnership through internship programs and in turn attract more students (Cook, Parker, & Pettijohn, 2004). There has been a steady increase of students’ demand for
internships in the past decades. The percentage of students who participated in internship rose from 9% to 83% during 1992 - 2006 (Edwards & Hertel-Fernandez, 2010).

**Overview of Internship**

**Brief History**

Internships appeared as early as at 600 BC in the history of the Greeks, Romans, Chinese, and Vedic communities when interns learned a craft as an entry into skilled fields (Sides & Mrvica, 2007). For centuries’ since then internships mainly took the form of apprenticeships, in which the apprentice was taught the skills needed to create a product or perform a service. In the beginning days of United States, apprenticeships and internships played a critical role in crafts and trades learning, business expansion, and the citizenship education. When Industrial Revolution took place, citizen education favored classroom learning over the manual labor focused internship. Until early 20th century, internships were reintegrated with classroom teaching to increase student learning and performance.

**Current Trend and Terms**

The modern internship program was started in the University of Cincinnati in 1906 in the College of Engineering, which became mandatory in 1929 (Howard, 2004; Weible, 2010). Current estimates suggest that 90% of colleges and universities offer internships or other work-related experience (Divine et al., 2007), and about three out of four students complete internships before college graduation (Malcolm, 2000). Compared with 1980 when only about 1 in 36 college students completed internships before graduation, internship is increasingly valued in preparing students for the world of work (D’Abate, 2010).

Ever since the modern internship program took place in the University of Cincinnati in 1906, college student internships have been called by different names and defined in various
ways. In the United States the two labels that are most often used to describe career related field experiences are “internship” and “cooperative education” (Gault et al., 2010). As internship is a type of learning through experience, terms like experiential learning, experience-based learning, applied learning, practicum, and work integrated learning are also used in the university setting (Freudenberg et al., 2010).

Although many universities use the terms internship and cooperative education (co-op) interchangeably, in many cases they defer in fields of work that are involved. Internships usually refer to a wide variety of academic disciplines and organizational settings, whereas Co-op programs are more frequently related to manufacturing-oriented or technical fields, e.g. Engineering (Gault et al., 2010). As this study is focused on liberal arts college students’ experience, “internship” will still be most proper term to address it. To ensure an understanding of how the terms are used in current study, the following definitions are provided:

Cooperative education (co-op): "Cooperative education is a structured educational strategy integrating classroom studies with learning through productive work experiences in a field related to a student's academic or career goals. It provides progressive experiences in integrating theory and practice. Co-op is a partnership among students, educational institutions, and employers, with specified responsibilities for each party" (NCCE, 2007b, p. 1).

Internship: “An internship is a supervised preprofessional career related experience, paid or unpaid, part or full-time, with measurable learning objectives and formal evaluations” (Brooks, et al. 1995).

Research on Internships

Given the extensive use of internships in higher education in general and expected career benefits of them, there is surprisingly limited empirical research on the impact of internships on
students’ career development with clear evidences (Narayanan, Olk, & Fukami, 2010; Weible, 2010). The literature on internship experiences is mainly descriptive and anecdotal. Despite the gaps in literature, there are two main foci in the existing research in this area: the career outcomes of internships and the designs of internships.

**Outcomes of Internship**

Internship programs serve many purposes and have potentially positive outcomes for universities, employers, and the participating students. As the aim of this study is examining the relationship between internship and students career competencies, the literature review on the outcomes of internship will focus on how internships benefit students related to their career development. According to Kelly (2012), the outcomes of internships for students can be clustered into the categories of employment advantages, career development, personal growth and knowledge transfer, among which employment advantage and career development are the main career benefits.

**Employment Advantage.** In current tough job markets, students perceive internship as an important aid in searching for and securing post-graduation employment (Cannon & Arnold, 1998; Cook et al., 2004; Rothman & Lampe, 2010).

As stated as a purpose of most internship programs, internships equipped students with technical or work-related skills, which is critical in competing with those with substantial work skills in the job market (Beard, 1997). Internships also enhance students’ time management skills, communication skills and self-discipline (Bourland-Davis et al., 1997; Wesley & Bickle, 2005). In addition, internships develop students’ professional attitudes and improve their critical thinking (Gault et al., 2000; Maskooki et al, 1998). In addition to skills training, most internships provide supervisors or mentors (Basow & Byrne, 1993; Verner, 1993) who can help students
adjust to the culture and climate of the professional workplace (Campbell & Kovar, 1994). Thus, students who participated in an internship experience less reality shock and a smoother school to work transition when they enter into their first full time position (Paulson & Baker, 1999; Taylor, 1988).

In addition to providing all the skills and advantages described above, internships also increase students’ marketability through providing stronger resume, interviewing experience, networking opportunities (Divine et al., 2007; Swift & Kent, 1999). Compared with students who have no internship experience, interns tend to have quicker and more job offers with higher starting salaries (Malcolm, 2000; Knemeyer & Murphy, 2002; Rothman & Lampe, 2010; Taylor, 1988). Once employed, these students also demonstrate more job satisfaction, and greater organizational commitment with more promotion opportunities (D’Abate, 2010).

**Career development.** As described in the theory section, career exploration – implementing one’s self-concepts in career choice and developing realistic vocational identity in this process – is an important task for college students. Super (1990) suggested that career development comprised of developing and implementing one’s self-concepts. He noted that reality testing and role playing greatly influence the development of self-concepts. For students who are determining their major and career interests, internship offers them such reality testing and role playing experience that they need. As internships give students access to different organizations, they help bring various occupations to students’ awareness and allow them to test out their career interest and make career decisions (O’Neill, 2010). Thus the formation of vocational self-concepts and career decision making process are the two main focuses of the existing research on internship’s influence on career development.
A number of researchers examined how internship contributed to the crystallization of one’s vocational self-concepts. Pedro (1984) conducted a quasi-experimental study with 90 retailing students and found that they changed their self-perception, preferences, some instrumental values and work specific needs after internship experience. Taylor (1998) investigate the relationship between internships and the crystallization of students’ vocational self-concept with following factors as mediators: facilitating the identification of abilities, interests, and values, performing job tasks relevant to the chosen vocational field. Results partially suggested that internship contributed to participants’ career crystallization. Based on Taylor’s research, Brooks, Cornelius, et al. (1995) conducted a similar study with a larger sample and found that internship experience is related to higher level of self-concept crystallization. Likewise, Callanan and Benzing (2004) found that internship experience help students develop a more realistic vocational identity and test the fit between their characteristic and the demands in the real world of work.

Research also reveals the relationship between internship experience and career decision making. Knouse (1999) suggested that internship experience should help students explore their career choices, clarify their work values and decrease their anxiety related to career search. DeLorenzo (2000) suggested that co-op students scored significantly higher than non-co-op students on career decision making. Neapolitan (1992) found that internships enhance career decision-making through clarification of career choice, particularly by providing accurate career information. Another benefit of getting accurate career information is realistic job preview, which leads to realistic expectation of work world, e.g. how to work with others in the “real world” (Cook et al., 2004; Hurst & Good, 2010). Thus, by providing accurate information about
the real world of work, internship entail increased job satisfaction and decreased job turnover  
(Knouse, Tanner, & Harris, 1999; Knouse & Fontenot, 2008).

**Internship Design**

Besides understanding the career impacts of internships, the investigators in career field  
are also interested in what makes the internship experience valuable to the students, the  
organization and the intuitions (Tovey, 2001). Many believe that the determinant of successful  
internship experiences is whether students were satisfied with their internships (Clark, 2003).  
Along this line of research, six important predictors of a successful internship experience were  
suggested in the literature: (a) academic preparedness, (b) intern initiation, (c) intern  
participation, (d) quality of supervision, and (e) compensation (Beard & Morton, 1999; Knouse,  
Tanner, & Harris, 1999).

**Academic preparedness.** Several researchers note that students who are well prepared  
aacademically tend to have more positive outcome from their internship experience (Basow &  
Byrne, 1993; Beard, 1997; Campbell & Kovar, 1994). Completion of a certain level of course  
work and attainment of a minimum GPA are required for many internship programs (Clark,  
2003). Bourland-Davis, Graham and Fulmer (1997) suggest that communication interns should  
at least have “an understanding of the field, its key concepts, and basic technological skills,  
especially writing” (p. 27). Basow and Byrne (1993) emphasized that some students should be  
cautioned “against attempting some internships prematurely” (p. 52). Similarly, one of the most  
significant findings from Beard’s (1997) study of interns is “that academic preparation leads to  
more and better opportunities on most internships” (p. 8). Interestingly in his later work, Beard  
and Morton (1999) found that prior course work and GPA were less important predictors when  
compared with students’ initiation, e.g. proactivity, positive attitude toward internship experience.
**Intern initiation.** The literature indicates that internships are more satisfying if students demonstrate initiative – strategies that students apply to increase responsibilities during internship (Clark Vaisman, 2012). Basow and Byrne (1993) suggest that students be encouraged to volunteer for assignments and ask questions. Similarly, Beard (1997) notes an assumption held by both supervisors and interns that interns should demonstrate initiative by finding things to do and asking questions. Beard also found that supervisors generally respond positively to interns’ needs and questions. Additionally Beard (1997) found that interns treating almost any task as a potential learning experience was another way to increase their responsibility at work. Many internship supervisors expect interns to demonstrate the same attitudes as new, full-time employees and be ready to work when they come to the worksite. Beard suggested that students would realize greater benefits from an internship if they treat it like a real job.

**Intern participation.** The Intern Participation reflects the intern’s transition from “newcomer” to legitimate participation in the organization, where interns are valued and included into the resources of the organization (Lave & Wenger, 1991). This transition process is greatly affected by the practices and policies that organizations use to structure and manage internship. The structure might include length of the internship, proper expectation of interns’ performance, regular training and feedbacks, set activities that introduce interns to the culture and the communities of the organization (Bourland-Davis et al., 1997). According to the existing research, the following organizational practice positively affect interns’ participation and in turn their satisfaction of the internship experience: (a) providing appropriate study program for the site (Bourland – Davis et al., 1997), (b) providing interns with an experience that approximates of that of a full-time employee (Verner, 1993), (c) providing students with the opportunities to get involved in the whole process of a project, from inception to completion (Beard, 1997) with
minimum clergy works (Campbell & Kovar, 1994; Krasilovsky & Lendt, 1996), and (d) providing interns with the physical and other resources needed to accomplish work assignments (Bear, 1997).

**Quality of supervision.** Having a mentor was found to be critical even if the mentoring relationship only last brief periods of time. Anson and Forsberg (1990) suggested that the involvement of faculty or work supervisor is very important as related to the effectiveness of internship. Gabris and Mitchell (1992), in their study of public administration interns, found that effective supervision was strongly and significantly correlated with interns’ overall satisfaction. Several other studies also showed that internship experiences were more valuable if interns had mentor at the work site (Callanan & Benzing, 2004; Snyder, 1999). Beard (1997) found that good supervisors provide specific direction and examples, allow some autonomy and independence, and give positive and constructive work-related feedback. Taylor (1992) also notes that good supervisors display high work standard and competence, provide interns with individual coaching and frequent feedbacks. In addition, they also help interns to “understand how the isolated activities and encounters fit within the scope of an entire . . . program” (Bourland- Davis et al., 1997, p. 31). Such supervisors are more likely to increase the intern’s self-esteem in their working relationship. Feldman, Folks and Turnley (1999) found that mentors can facilitate better socialization into the organization, promote bigger levels of learning, and produce larger numbers of job offers in international internships.

**Compensation.** Research indicates that interns have more positive response toward their experience if they are compensated for their work. Basow and Byrne (1993) found that interns who received payment evaluated their internships higher. Even token payment seems to reduce physical and mental stress for students and in turn provide a more positive outlook of the
internship for the students (Beard, 1997). Other benefits related to monetary compensation includes (a) reminding students that they are entering the “real world” and should treat the internship like a real job (Beard, 1997; Hamilton, 1992), (b) implying the commitment of the organization to make the internship meaningful (Hamilton), (c) helping students offset the loss of income from other part-time jobs (Beard; Berger, 1992). Even when monetary compensation is not available, Basow and Byrne (1993) suggest that academic credit should at least be included.

Summary

The existing research on the internship and career development mainly focus on the career benefits of the internship and the internship designs that will maximize these career benefits and interns’ satisfaction level. The career benefits of internship experience revealed in the literature includes employment advantages (e.g. competitiveness, marketability, employment opportunity, high starting salaries) and career development (crystallization of vocational self-concept and career decision making). The new career realities have put more responsibilities on individuals for their career development besides knowing how to choose a career or make a career decision (knowing- why). In order to stay employable in the mist of frequent career changes, individuals have to build knowing-how and knowing-whom competencies as well (Haase, 2012). In this context, Haase’s (2007) career competencies model provide a more comprehensive framework to understand the career outcomes of internships. Therefore, career competencies will be the outcome variables of this study.

To attain desirable career outcomes from internship experience, the research indicates that the following elements should be present in the design of internship: academic preparedness, intern initiation, intern participation, quality supervision and compensation (monetary or academic credits awarded). In most of the existing research, however, these components of the
internship learning process were studied in an isolated and discrete fashion (Clark Vaisman, 2012), with the social context of internship and the role of co-workers in learning being frequently ignored (Lave & Wenger, 1991). Learning strategies in workplace, an important deciding factor of the effectiveness of training programs (Holman, Epitropaki, & Fernie, 2001), were also rarely studied in internship literature. Thus, in addition to the predictors of effective internships that previous studies have focused on (academic preparedness, intern initiation, intern participation, quality supervision and compensation), in this study, the internship learning process was examined as a whole by including two other important factors: co-worker relationship and interns’ modes of learning (learning strategies).
CHAPTER 3

METHODOLOGY

The methodology of the study is described in this chapter. The purpose of the study, research questions, a description of the target population, and the procedures for collecting data from the target population are addressed. Additionally the instruments used in the study are described and the proposed statistical analyses for analyzing the data are identified.

Purpose of the Study and Research Questions

The purpose of this study was to examine the relationship between internship participation and the career competencies of liberal arts seniors. Having participated in an internship was hypothesized to have a positive relationship with career competencies on the following seven dimension values (goal setting and career planning (GSCP), self-knowledge (SELF), job-related performance effectiveness (JPER), career-related skills (CRS), knowledge of (office) politics (POL), career guidance and networking (GNET), and feedback seeking and self-presentation (FSSP)). The results of this study would either support or disconfirm whether internship participation correlates with higher levels of career competencies. In addition, the researcher further explored if the internship learning process (e.g., mode of learning, intern initiative, intern participation, co-worker relationship, supervisor relationship) has a relationship with the career competencies as measured by values on the seven dimensions of career competencies.

This study was aimed to answer the following research questions:

Research Question 1

What are the mean differences on career competencies of liberal arts seniors on the seven dimensions of career competencies (GSCP, SELF, JPER, CRS, POL, GNET, FSSP) among the
following four groups: seniors with only internship experience, seniors with only part-time work experience, seniors with both internship and part-time work experience and seniors with neither internship nor part-time work experience?

**Research Question 2**

Do the five aspects of learning process in internships (mode of learning, intern initiative, intern participation, co-worker relationship, supervisor relationship) have a relation with the career competencies of liberal arts seniors on the seven dimensions (GSCP, SELF, JPER, CRS, POL, GNET, FSSP)?

**Research Design**

This study was conducted to investigate whether relationships exist among internship participation and career competencies. In order to study the phenomena – career competency self-ratings and the learning process in the internship experience - within a large group of students, a non-experimental survey research design was used in this study. Two self-report questionnaires were distributed in addition to a demographic questionnaire. The quantitative research methodology (i.e. correlations, multiple regressions) was employed for data analysis.

As one of the most frequently used research methods in the social sciences (Heppner, Wampold, & Kivlighan, 2008), survey research design, which was applied in the current study, comes with both strengths and weakness as with other methods of data collection. First, a survey is a relatively easy and cost-effective way to gather lots of information from many people (Heppner et al. 2008, Liu, Tan, & Tang 2011). Without limitation on sample size, surveys lend themselves to using probability sampling techniques, which increases the potential for generalizability of the study results. Furthermore, because the same questions, phrased in exactly the same way, are posed to participants in surveys, this format standardization makes surveys a
reliable method of inquiry. The flip side of the survey questionnaire is that it is less flexible compared to in-depth interviews. If a participant is confused by an interview question, it can be easily detected and resolved, but with survey questionnaires it is hard to redo the question after it is sent. Another drawback of the survey is that the questions tend to be more general in order to make them understandable to a large group of people, which might impact the participants’ understanding of the question the research meant to ask and in turn compromise the validity of the study.

**Participants and Sample**

The target population of this study was liberal arts students from a Midwest research university. As suggested by many researchers, an internship experience is of great importance to students’ career development (Brooks, Cornelius, Greenfield & Joseph, 1995; Callanan & Benzing, 2004; Gault, Leach & Duey, 2010; Pedro, 1984). Besides increasing students’ exposures to the world of work, internships also enable students to apply classroom learning to address real world problems or issues. Thus, to have minimum knowledge of the internship work from class is one of the predictors of a successful internship experience (Knouse & Fontenot, 2008). Since the majority of courses that students take in the first two years of college are general or foundational classes, many students start their internship experience after the sophomore year. In order to get participants who have had internship experience, the target population of this study was limited to liberal arts seniors currently attending a Midwest research university.

Potential volunteers were contacted through an online survey developed through Qualtics. For calculating an appropriate and sufficient sample size for testing multiple correlations and regressions, Tabachnick and Fidell (2007) recommended using the formula \( N \geq \)
50 + 8m, where m is equal to the number of independent variables. This formula was used, treating m as the number of independent variables in the study (i.e., self-knowledge, career related skills, goal setting and career planning, career guidance and networking, knowledge of office politics, feedback seeking and self-presentation, job related performance effectiveness, Proximal Co-worker Relationship, Proximal Supervisor Relationship, Mode of Learning, Intern Initiative, and Intern Participation), in order to obtain an appropriate sample size for the study. The minimum number of participants for the study was 146 using the formula: N ≥ 50 + 8m, where m is equal to 12 (the sum of the predictor variable, three subscales of two mediator variables, one outcome variable).

After the data was screened and missing data was treated, the final sample for analysis included 370 participants. The participants’ ages ranged from 19 to 24 years old with a mean age of 21.75 (SD = 0.84). Women represented 75% (n = 280) and men 25% (n = 90). Among all the participants, 48% (n=179) of them have completed one or more internships, 59% (n=218) of them have had other career-related work experience.

**Instrumentation**

A questionnaire entitled the Career Development Questionnaire (CDQ) was constructed to measure the perceived learning process during internship and other related work experience and the participants’ career competencies. CDQ requested demographic information, as well as measures of the constructs are described below.

**Demographic Questionnaire Items**

The demographic questionnaire was developed to gather participants’ personal background information including descriptive information such as age, gender, major, and years
of college study. This information was used to describe the study participants and to verify the individuals meet the criteria for participation in the study.

**Internship Variables**

**Experience Questions**

There are difficulties in allowing students to classify their own experience, especially when they are more likely to define their experience in different ways. Thus, the participants were asked two close-ended questions to indicate whether they had experienced an internship during college, and if so, the length of the internship experience in terms of hours/week. To give a common ground regarding the understanding of an internship, the working definition of it for this study was restated, “An internship is a supervised preprofessional career related experience, paid or unpaid, part or full-time, with measurable learning objectives and formal evaluations” (Brooks et al., 1995). Regarding an internship experience, the participants were asked to answer “yes” or “no” to the question, “Have you participated in any type of internship experience (as defined above, preprofessional/career-related experience, part or full time) while at college?”, and indicate the length by filling the blanks: “I worked __ hours/week for __ weeks at this/these internship(s).”

In addition to the length of the internship experience, several researchers note that compensation and academic preparedness also have positive relationships with the outcome of the internship (Basow & Byrne, 1993; Beard, 1997; Campbell & Kovar, 1994). Beard (1997) found in his study of interns “that academic preparation leads to more and better opportunities on most internships” (p. 8). Basow and Byrne (1993) found that interns who received payment evaluated their internships higher. Even when monetary compensation is not available, Basow and Byrne (1993) suggest that academic credit should at least be included. Hence, when
participants indicated that they have had internship experience, they were asked a multiple choice question, “What type of compensation have you received for your internship? - a. Monetary b. Token c. Academic credit d. None”. They could choose more than one option.

Regarding other work experience, participants were asked to answer “yes” or “no” to the question “Have you participated in other career-related work experience (not considered an internship) since entering college” and indicate the length of the experience by completing the following sentence: “On average I work(ed) ___ hours a week for ___ month(s).”

These questions permitted students to classify their experience as either internship, career-related work, or neither. Participants who indicated internship only were classified as the Internship only group. Those who answered “no” to internship but “yes” to work experience were placed in the Work only group. Those with both internship and work experience were in the Both group. Students with neither internship nor career-related work experience were in the No Experience group.

**Career Competencies Indicator** (Francis-Smythe, Haase, Thomas, & Steele, 2013)

Participants’ career competencies were measured by responses to items on the Career Competencies Indicator (CCI). CCI was developed under the theoretical assumption of a threefold structure regarding career competencies (Arthur et al., 1995): knowing-why (why do we do a job), knowing-how (how do we do a job), and knowing-whom (with whom do we work). The development process of this instrument involved an extensive literature review, a comprehensive item generation process involving consultation with subject matter experts, a pilot study (n=31) and factor analytic study on a large sample (N=632), which yielded a seven-factor structure: (1) goal setting and career planning (GSCP, 5 items), (2) self-knowledge (SELF, 5 items), (3) job-related performance effectiveness (JPER, 5 items), (4) career-related skills
(CRS, 7 items), (5) knowledge of (office) politics (POL, 5 items), (6) career guidance and networking (GNET, 8 items), and (7) feedback seeking and self-presentation (FSSP, 8 items). Participants will be asked to rank the extent to which they agreed with the respective statements on a 5-point, Likert-type scale, ranging from 1 = strongly agree to 5 = strongly disagree. Cronbach’s alpha levels were used to evaluate the internal consistency the summated scores generated for each of the seven dimensions. Coefficient alpha reliabilities of the seven dimensions ranged from .81 to .93. The alpha reliability coefficients for the final dimensions are summarized in Table 1, which provided initial evidence for the internal consistency of the CCI. In this table, the sample (n=632) is split into Group 1 (G1, n = 316) and Group 2 (G2, n=316). Sample G1 is used as the primary development sample (to conduct factor analysis, compute alphas, evaluate items and arrive at a final version of the scale that appears optimal), and G2 to cross-validate the findings (DeVellis, 1991). A second study (N=406) was conducted to further confirm the evidence of reliability of the CCI dimensions. The results showed that the alpha values ranged from .69 to .87 (see Table 2), with the competency dimension of knowledge of (office) politics falling just below the .70 α level. According to Kline (1993) alpha values below 0.7 can realistically be expected due to the diversity of the psychological constructs. Lowenthal (1996) also argues that a reliability of 0.6 is acceptable for scales with ten or fewer items. The internal consistency of the CCI subscales can be viewed as meeting minimum reliability standards.

Table 1.

Cronbach’s α Reliabilities of Final Subscales
Table 2
Percentage Replication of Factor Structure and Internal Consistencies of Career Competency Subscales

<table>
<thead>
<tr>
<th>Factor</th>
<th>Scale</th>
<th>No. of items</th>
<th>G1 α</th>
<th>G2 α</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Goal setting and career planning</td>
<td>5</td>
<td>.91</td>
<td>.89</td>
</tr>
<tr>
<td>2</td>
<td>Self-knowledge</td>
<td>5</td>
<td>.81</td>
<td>.86</td>
</tr>
<tr>
<td>3</td>
<td>Job-related performance effectiveness</td>
<td>5</td>
<td>.89</td>
<td>.90</td>
</tr>
<tr>
<td>4</td>
<td>Career related skills</td>
<td>7</td>
<td>.86</td>
<td>.86</td>
</tr>
<tr>
<td>5</td>
<td>Knowledge of (office) politics</td>
<td>5</td>
<td>.83</td>
<td>.77</td>
</tr>
<tr>
<td>6</td>
<td>Networking and mentoring</td>
<td>8</td>
<td>.89</td>
<td>.89</td>
</tr>
<tr>
<td>7</td>
<td>Feedback seeking and self-presentation</td>
<td>8</td>
<td>.92</td>
<td>.91</td>
</tr>
</tbody>
</table>

Francis-Smythe and her colleagues (2013) first used exploratory factor analysis with oblique rotation to evaluate construct validity and identify dimensions. Parallel analysis was used to determine the number of factors to retain. Based on comparisons by component, seven factors were retained as described above. These seven retained factors explained 48% of the total variance. Through conducting a second-order factor analysis, all 7-CCs were shown to be loaded substantially onto a single second-order factor representing the general CC construct. Thus, convergent validity was established. Personality has also been shown to be related to career success (Haase, 2007), and it is generally agreed that personality can be described in the terms of the Big Five (Goldberg, 1990). When compared with the Big Five personality scales (Saucier, 1994) the cross-construct correlations between the 7-CC subscales and the Big Five showed less
than chance similarity ($r = .41$), providing evidence of their discriminant validity. To test the criterion-related validity, standard multiple regressions were performed to study the relationships between CCs and subjective and objective career success. The results showed that CCs jointly predict objective and subjective career success, which suggested criterion-related validity of the CCI.

**Scale of Internship Learning** (Vaisman, 2012)

Participants’ learning process during internship was measured using the Scale of Internship Learning (SIL). This instrument was developed using exploratory mixed method design, which consists of a two-phase approach - qualitative exploration and a quantitative phase. Three data sources were used in the development process: phenomenological interviews, expert review, and field test data. This 56-item instrument measures an individual’s perceptions of the internship learning process on five dimensions: Proximal Co-worker Relationship, Proximal Supervisor Relationship, Intern Initiative, Intern Participation, and Mode of Learning. Two dimensions pertain to the relationship between intern and colleagues: Proximal Co-worker Relationship and Proximal Supervisor Relationship. The first four dimensions pertain to the behavior of the intern and participation level of the intern, Intern Initiative and Intern Participation. One last dimension pertains to the themes of learning in the workplace, Mode of Learning. Participants will be asked to rank the extent to which they agree with the respective statements on a 5-point, Likert-type scale, ranging from 1 = strongly agree to 5 = strongly disagree.

The dimension of Proximal Co-worker Relationship includes 16 items, asking about co-worker communication and accessibility, such as seeking intern opinion, giving regular feedback, accessibility, freely sharing information, collaboration on projects with co-workers,
encouragement, facilitation of day-to-day professional development needed to complete job responsibilities, facilitation of skills needed longer-term, motivation, team building, and encouragement of work-study balance.

The second dimension, Proximal Supervisor Relationship, loaded 15 items related to the impact of the supervisor (motivation, encouragement, facilitation of day-to-day professional development needed to complete job responsibilities, facilitation of developing skills needed longer-term, accessibility in helping interns at work, contribution to team building), and communication and collaboration (sharing information, feedback, clear expectations, collaboration on projects, explicit reporting relationship, and supervisor seeking intern’s opinion).

The third dimension, Mode of Learning loaded 8 items based on the method of learning themes found in Coetzer (2007) and Tannenbaum(1997): observation and listening, everyday work activities, informal training, and trial and error.

The fourth dimension, Intern Initiative, loaded 7 items pertaining to student strategies to learn; specifically items tied to student behavior to increase involvement and responsibilities. This dimension mainly asks questions about ambition of the intern, intern’s strategies for managing self, and the intern’s initiation in conflict resolution.

The fifth dimension, Intern Participation, describes the intern’s perceived increasing participation and engagement of the intern over time: increased authority, participation in tasks and activities, and an inclusion in work.

Assessing the reliability of SIL, Cronbach’s alpha values were used to evaluate the summated dimension scores’ internal consistency (Clark Vaisman, 2012). The alpha reliability value for the initial entire scale was .969. Alpha reliability values for each subscale ranged from .826 to .951: Proximal Co-worker Relationship (.947), Proximal Supervisor Relationship
(.951), Mode of Learning (.826), Intern Initiative (.839), and Intern Participation (.878). These values indicate that the constructs are likely to yield consistent outcomes (summed dimension scores) in future implementations. After removing the weakest items, subsequent the Cronbach alpha reliability coefficient for the entire scale was .967. The alpha reliability coefficients for optimized subscales are described in table 3.

Table 3

Optimized Scale Cronbach’s Alpha Reliability Coefficients of Factor Subscales

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of items</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximal Co-worker Relationship</td>
<td>16</td>
<td>.952</td>
</tr>
<tr>
<td>Proximal Supervisor Relationship</td>
<td>15</td>
<td>.953</td>
</tr>
<tr>
<td>Mode of Learning</td>
<td>8</td>
<td>.837</td>
</tr>
<tr>
<td>Intern Initiative</td>
<td>7</td>
<td>.815</td>
</tr>
<tr>
<td>Intern Participation</td>
<td>10</td>
<td>.867</td>
</tr>
</tbody>
</table>

Clark Vaisman (2012) used exploratory factor analysis with oblique rotation to evaluate the construct validity and identify dimensions. Parallel analysis was used to determine the number of factors to retain. Based on comparisons by component, five factors were retained as described above. These five retained factors explained 53.5% of the total variance. The Chi Square Goodness of Fit test \( (X^2 =235, \text{ sig.} \leq .001, \text{ df}=2140) \) indicated the significance of the five factor model. As SIL was developed with the graduate student population of one institution, no claims of external validity are made. The current study will help to explore claims of external validity and generalizability to undergraduate student population in other institutions.
**Procedures for Data Collection**

This research was conducted to investigate the relation existing between internship experience and career competencies of liberal arts seniors in a Midwest research university. After receiving the Institutional Review Board approval from the Office of the Vice President for Research at the researcher’s university, the researcher conducted a small pilot test to make sure the electronic survey works properly and participants understand all instructions. Then the researcher contacted the director of the Career Services from the target institution and informed him of the purpose of this study. The researcher asked the director to send out the web link of the research project, describing the purpose of the study, confidentiality, anonymity, and the procedures of the study, in the recruiting email to senior students in the College of Liberal Arts. In addition, the researcher contacted the instructors of internship related courses within the College of Liberal Arts in the target institution. The students in those classes were encouraged to participate in the study.

When participants, who were willing to take part in the survey, visit the study’s website, information about the purpose and procedures of the study, the approximate time required to complete the survey were provided. Additionally, the informed consent form which included information regarding confidentiality, anonymity, and the right to discontinue participation at any time were available to them on the screen. Instructions for the study indicated that participants could participate in the survey voluntarily and that they could ask for an interpretation of their assessment or register for a free giveaway after the survey was completed as compensation for their participation. The informed consent form had a “continue” button at the end of the form; by clicking the button, participants were indicating that they been informed
about the nature of the study and agree to participate. As soon as the participants click the “continue” button, they could begin to complete the first questionnaire.

There were three questionnaires in this study: demographic questionnaire, Scale of Internship (SIL), and Career Competencies Indicator (CCI). Permission for using the instruments has been secured from the researchers who developed the scales beforehand. The demographic questionnaire was the first questionnaire for participants to complete. After that, those participants who haven’t had any internship experience would be only asked to complete the CCI. The rest of the participants who have had internship experience were asked to complete both the CCI and SIL. When these participants complete CCI, they would click the “continue” button and immediately had access to SIL. When they complete the last questionnaire in the series, they could finish the survey by clicking the “finish” button. Once finished, the screen would show a message that thanks participants for their participation and informs them that they could contact the researcher if they have any questions regarding the study. They could also provide their email address to register for the interpretation of CCI results or a free giveaway as compensation for their participation in the study. When the data collection was finished, the researcher closed the survey website and began to input the data into the SPSS dataset in order to analyze the data.

Data Analysis

Descriptive and inferential statistics were employed for data analysis, including one-way ANOVA and multiple linear regression. The Statistical Package for Social Science (SPSS) 20.0 was used as the data analysis program.

Research Question 1

What are the mean differences on career competencies of liberal arts seniors on the seven dimensions of career competencies (GSCP, SELF, JPER, CRS, POL, GNET, FSSP) among the
following four groups: seniors with only internship experience, seniors with only part-time work experience, seniors with both internship and part-time work experience and seniors with neither internship nor part-time work experience?

For research question 1, the independent variable was internship experience. Work experience other than internship can also contribute to the participants’ career competencies, which can obscure the relationship between internship and participant’s career competencies. Therefore, participants’ internship experience (Internship/No Internship) and career-related work experience (Work/No Work) were classified according to their response to the demographic questionnaire. This created four groups of participants – those with both internship and work experience, those with only internship experience, those with only work experience, and those with neither internship nor career-related experience. A one-way ANOVA (four groups: Internship, Work, Both, None) with seven dependent variables (GSCP, SELF, JPER, CRS, POL, GNET, FSSP), were conducted to determine the separate and combined effects of work and internship experiences on the seven dimensions of career competencies. The interaction was examined to test any significant differences between those participants with any type of career-related experience and/or internship experience.

**Research Question 2**

Do the five aspects of learning process in internships (mode of learning, intern initiative, intern participation, co-worker relationship, supervisor relationship) have a relationship with the career competencies of liberal arts juniors and seniors on the seven dimensions (GSCP, SELF, JPER, CRS, POL, GNET, FSSP)?

For research question 2, the independent variables were five dimensions of the internship learning process: Proximal Co-worker Relationship, Proximal Supervisor Relationship, Intern
Initiative, Intern Participation, and Mode of Learning. The dependent variables were the seven dimensions of career competencies: GSCP, SELF, JPER, CRS, POL, GNET, FSSP, the hours of the internship and the compensation of the internship. This research question was aimed to investigate whether the learning process of the internship (as measured by SIL) is related to the seven dimensions of career competencies (as measured by CCI). To determine the influences of internship learning process on students’ career competencies, seven separate simultaneous multiple regression analyses was conducted. In each regression the five subscales of the SIL (Proximal Co-worker Relationship, Proximal Supervisor Relationship, Intern Initiative, Intern Participation, and Mode of Learning), the length and compensation of the internship experience were the predictor variables. The seven subscales of career competencies (GSCP, SELF, JPER, CRS, POL, GNET, FSSP) were the dependent variables, and they were examined one at a time.

Summary

To briefly summarize the methodology chapter, Table 4 is proposed. Research questions, variables, type of data, and data analysis used for each research question were included in this table.

Table 4

Research Questions and Data Analysis Used for each Research Question

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Independent &amp; Dependent Variables</th>
<th>Type of Data</th>
<th>Analytic technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does internship experience have relationship with the career competencies of liberal arts juniors and seniors on its seven</td>
<td><strong>Independent</strong> Internship experience (Both, Work, Internship, None)</td>
<td>Nominal</td>
<td></td>
</tr>
</tbody>
</table>
2. Do the five aspects of learning process in internship and career related work experience (mode of learning, intern initiative, intern participation, co-worker relationship, supervisor relationship) have a relationship with the career competencies of liberal arts juniors and seniors who have internship experience on its seven dimensions (GSCP, SELF, JPER, CRS, POL, GNET, FSSP)?

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSCP</td>
<td>Proximal Co-worker Relationship</td>
</tr>
<tr>
<td>SELF</td>
<td>Proximal Supervisor Relationship</td>
</tr>
<tr>
<td>JPER</td>
<td>Intern Initiative</td>
</tr>
<tr>
<td>CRS</td>
<td>Intern Participation</td>
</tr>
<tr>
<td>POL</td>
<td>Mode of Learning</td>
</tr>
<tr>
<td>GNET</td>
<td>Hours of the internship</td>
</tr>
<tr>
<td>FSSP</td>
<td>Compensation</td>
</tr>
<tr>
<td>Interval</td>
<td>Interval</td>
</tr>
<tr>
<td>Interval</td>
<td>Interval</td>
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<td>Interval</td>
<td>Interval</td>
</tr>
<tr>
<td>Interval</td>
<td>Nominal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Descriptive Statistics (mean, SD)</th>
</tr>
</thead>
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<td></td>
<td>Descriptive Statistics (mean, SD)</td>
</tr>
<tr>
<td>Dependent</td>
<td>Interval Type</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>GSCP</td>
<td>Interval</td>
</tr>
<tr>
<td>SELF</td>
<td>Interval</td>
</tr>
<tr>
<td>JPER</td>
<td>Interval</td>
</tr>
<tr>
<td>CRS</td>
<td>Interval</td>
</tr>
<tr>
<td>POL</td>
<td>Interval</td>
</tr>
<tr>
<td>GNET</td>
<td>Interval</td>
</tr>
<tr>
<td>FSSP</td>
<td>Interval</td>
</tr>
</tbody>
</table>
CHAPTER 4

RESULTS

The content of this chapter includes the results of the preliminary data analyses and cleaning, a summary of univariate analysis procedures, and the bivariate analyses. In addition, the results of one way ANOVA and simultaneous multiple regression analyses for the study’s two research questions are presented.

Preliminary Analysis

Data Cleaning

The study survey was created and administered in qualitrics.com. There were 556 responses gathered from administering the survey, and 62 of respondents did not meet the criterion for inclusion in the study. Two of the respondents were sophomores and 60 respondents were juniors. After these 62 responses were removed, another 94 respondent surveys were removed from the actual data analysis because less than 70% of the questionnaire were completed by these 94 respondents. As a result, there were 370 surveys actually used for preliminary analysis.

Missing Data

In this study SPSS missing-data procedures were applied to provide information to decide how to precisely handle the missing data. Among 370 responses, 104 of them reported either one or two missing values, 17 reported three or four, 6 reported five, six or seven, and 2 reported 9 or 11 missing values for variables. Determining missing data patterns was recommended by both Graham (2012) and Sterner (2011) before determining how to handle missing data. There are three categories or patterns: missing completely at random (MCAR); missing at random (MAR); or missing not at random (MNAR) (Graham, 2012; Sterner, 2011). Sterner (2011) stated that the
SPSS Missing Value Analysis (MVA) Expectation Maximization (EM; Little’s MCAR test) can be used for confirming MCAR missing data patterns. The SPSS MVA menu option of SPSS was used to describe the pattern of missing values for the 370 responses and to check whether the dataset’s “missingness pattern” was MCAR. The data are considered MCAR when the significance value of the chi-square test is greater than .05. The result of Little’s MCAR test ($\chi^2$ (df = 7552) = 7289.269, $p = .958 > .05$) confirmed that the data were MCAR. Therefore, the multiple imputation procedure in SPSS was used to replace the missing values.

**Univariate Analysis**

As two different parametric, inferential statistical methods (one-way ANOVA and multiple linear regression) were used in the analysis of data for the two research questions it was important to especially for interval scale of measurement variables to examine the normality of the data for those variables. Additionally research question 2 focused on CLA seniors with internship experience only, the data file was split into two subsets: all participants’ CCI responses with internship and other work experience resulting in two levels of the independent variable and the CCI, SIL responses and demographic information of CLA seniors with internship experience. One-way ANOVA was applied on the first data set and multiple linear regression was applied on the second subset. Therefore the assumptions of both inferential statistical methods were tested.

**Testing Assumptions for One-way ANOVA**

To use one-way ANOVA the data should not have extreme outliers in the groups of independent variable in terms of the dependent variable, the dependent variable should be approximately normally distributed and there should be homogeneity of variances (Kirk, 2013).
Boxplots were produced to check the outliers in each of the four groups or levels of the variable work experience (Internship, Work, Both and None) in terms of the seven dependent variable scores (GSCP, SELF, JPER, CRS, POL, GNET, FSSP). There were only three extreme outliers in the data, as assessed by inspection of a boxplot for values greater than 1.5 box-lengths from the edge of the box. The original survey responses were checked to rule out any data entry errors. A possible disingenuous response was found with one of the three outliers. The majority of the responses from the participant were “strongly disagree” and the rest of the responses were contradictory to some other responses.

Two one-way ANOVA analyses were conducted as suggested by Weisberg (2014) and significant differences were found in results with and without this outlier. Therefore this outlier was deleted from the sample for further analysis. The other two outliers were found to represent genuine unusual responses. As suggested by Sundram (2003), a violation of the sample occurs when the researcher fails to maintain adequately the participants’ responses. These two outlier samples were found to contain, at the minimum, sufficient information to support this study’s results. Additionally, CCI consists of a maximum of a five-point, Likert response scale, and outlier samples measured by these Likert scales were not extreme enough to warrant elimination. Therefore, these two outliers were kept for further analysis.

Tabachnick and Fidell (2007) suggested examining skewness, kurtosis, frequency histograms, and/or expected normal probability plots to test the assumption of normality statistically and/or graphically. Therefore, the descriptive statistical analysis was applied to explore the central tendency and the distribution of each variable including calculating means, skewness values, and kurtosis values. The values of skewness and kurtosis of all variables in this study remained between negative one and positive one.
According to Weinberg and Abramowits (2002), the normality assumption is met when the skewness statistic divided by the standard error of skewness is less than or equal to the absolute value of two. The dependent variables Feedback seeking and self-presentation, Self-knowledge, Career guidance and networking, and Career related skills were normally distributed. The remaining three, Job-related performance effectiveness, Goal setting and career planning and Knowledge of (office) politics, were moderately, negatively skewed as assessed by both descriptive analysis and the visual inspection of Normal Q-Q Plots. Tabachnick and Fidell (2007) indicated that using a second power transformation for variables with a negatively skewed distribution could generate a normal distribution. Based on the descriptive analyses, a second power transformation was conducted for the Job-related performance effectiveness, Goal setting and career planning and Knowledge of (office) politics. However, transformation for the variable of Job-related performance effectiveness did not succeed. The researcher further examined the ANOVA results before and after transformation and no significant difference (p > .05) was detected. In addition, the skewness was moderate as assessed by the visual inspection of Normal Q-Q Plots.

Maxwell & Delaney (2004) suggested that if the researcher is satisfied that the conclusions reached on both data sets are the same, the one-way ANOVA on the untransformed, original data for analysis could be an option. Likewise, the one-way ANOVA on the untransformed, original data was chosen for this study. Table 5 indicates means, standard deviations, skewness, kurtosis, and ranges for all dependent variables.

Table 5

*Descriptive Statistics for dependent Variables (N = 369).*

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Whether there is homogeneity of variance will determine which part of the output is appropriate to use (i.e., which ANOVA and post hoc test to report). There was statistical homogeneity of variance for the variables except for Job-related performance effectiveness and Career related skills, as assessed by Levene's test for equality of variances (the significance of Levene’s test is shown in table 6). Therefore, for these two variables the Welch ANOVA is appropriate. If this test is statistically significant, the results of the Games-Howell post hoc test are appropriate to understand where any statistical difference(s) lie.

Table 6

**Test of Homogeneity of Variances (N = 369).**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback seeking and self-presentation</td>
<td>2.041</td>
<td>3</td>
<td>365</td>
<td>.108</td>
</tr>
<tr>
<td>Job-related performance effectiveness</td>
<td>4.731</td>
<td>3</td>
<td>365</td>
<td>.003</td>
</tr>
<tr>
<td>Goal setting and career planning</td>
<td>1.290</td>
<td>3</td>
<td>365</td>
<td>.278</td>
</tr>
<tr>
<td>Self-knowledge</td>
<td>1.392</td>
<td>3</td>
<td>365</td>
<td>.245</td>
</tr>
<tr>
<td>Career guidance and networking</td>
<td>1.244</td>
<td>3</td>
<td>365</td>
<td>.294</td>
</tr>
<tr>
<td>Knowledge of (office) politics</td>
<td>1.909</td>
<td>3</td>
<td>365</td>
<td>.128</td>
</tr>
<tr>
<td>Career related skills</td>
<td>4.507</td>
<td>3</td>
<td>365</td>
<td>.004</td>
</tr>
</tbody>
</table>
Testing Assumptions for Multiple Linear Regression

For research question 2, the data set was tested to make sure that the three assumptions for multivariate procedures: normality, linearity, and homoscedasticity, were met.

Burdenski (2000) suggested using skewness, kurtosis, frequency histograms, and/or expected normal probability plots to verify the assumption of normality statistically and/or graphically. Weinberg and Abramowits (2002) also suggest that normality assumption was met when the skewness statistic divided by the standard error of skewness was less than or equal to the absolute value of two. For the dependent variables in this study, the values of skewness and kurtosis were between negative one and positive one. Among seven dependent variables, four of them (Feedback seeking and self-presentation, Career guidance and networking, Knowledge of (office) politics, Career related skills) were normally distributed. The rest three variables (Job-related performance effectiveness, Goal setting and career planning, Self-knowledge) were negatively skewed.

As suggested by Tabachnick and Fidell (2007), a second powered transformation was applied to generate a normal distribution on these three variables. This transformation was successful for these variables except for the Job-related performance effectiveness. Because the skewness of this variable was moderate both based on the statistics and the normal Q-Q plot, it was kept in the original form.

Residuals plots and bivariate scatterplots can be used to test linearity assumptions (Tabachnick & Fidell, 2007). Both the residuals plots and bivariate scatterplots were checked and no variable with curvilinear relationships was found. Calculating bivariate correlations can also be applied to examine multicollinearity. Tabachnick and Fidell (2007) have suggested that if variables are highly related with a correlation equal to or greater than the value of .90, one of the
two variables should be eliminated. As no such highly correlated variables were found in the data, all variables were kept for the investigation.

Tabachnick and Fidell (2007) have stated that variables are homoscedastic when they meet normal assumption. Therefore variables in this study met three assumptions for multivariate procedures, normality, linearity, and homoscedasticity. Table 7 indicates means, standard deviations, skewness, kurtosis, and ranges for the dependent variables.

Table 7

Descriptive Statistics for dependent Variables (N = 170).

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback seeking and self-presentation</td>
<td>31.09</td>
<td>4.410</td>
<td>18</td>
<td>40</td>
<td>-.276</td>
<td>.525</td>
</tr>
<tr>
<td>Job-related performance effectiveness</td>
<td>22.27</td>
<td>2.570</td>
<td>15</td>
<td>25</td>
<td>-.382</td>
<td>-.868</td>
</tr>
<tr>
<td>a Goal setting and career planning</td>
<td>350.33</td>
<td>144.669</td>
<td>49</td>
<td>625</td>
<td>-.038</td>
<td>-.566</td>
</tr>
<tr>
<td>a Self-knowledge</td>
<td>436.12</td>
<td>105.09</td>
<td>144</td>
<td>625</td>
<td>-.034</td>
<td>.028</td>
</tr>
<tr>
<td>Career guidance and networking</td>
<td>30.55</td>
<td>5.393</td>
<td>16</td>
<td>40</td>
<td>-.021</td>
<td>.272</td>
</tr>
<tr>
<td>Knowledge of (office) politics</td>
<td>20.00</td>
<td>2.827</td>
<td>12</td>
<td>25</td>
<td>-.337</td>
<td>.310</td>
</tr>
<tr>
<td>Career related skills</td>
<td>28.23</td>
<td>3.822</td>
<td>19</td>
<td>35</td>
<td>-.014</td>
<td>-.644</td>
</tr>
</tbody>
</table>

Standard error of skewness = .186, Standard error of kurtosis = .369 for all variables

*Note.* a: Second Power Transformed.

**Bivariate Analysis**

Bivariate correlations were calculated for demographic variables, the independent variable and its five subscales, and the dependent variable with its seven subscales. Table 8 summarizes the correlation matrix for the variables in the study, including demographic variables,
the independent variable, and the dependent variable. In addition, Table 9 shows the correlation matrix for five subscales of the independent variable and seven subscales of the dependent variable.

Table 8

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Required (1=yes)</td>
<td>.149*</td>
<td>.021</td>
<td>-.071</td>
<td>.216**</td>
<td>.266**</td>
<td>.043</td>
<td>.053</td>
<td>.118</td>
<td>.036</td>
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</tr>
<tr>
<td>Field Related</td>
<td>.043</td>
<td>-.052</td>
<td>.134</td>
<td>.259**</td>
<td>-.073</td>
<td>.156*</td>
<td>.239**</td>
<td>.154</td>
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<td></td>
</tr>
<tr>
<td>Monetary compensation (1=yes)</td>
<td>-.053</td>
<td>-.088</td>
<td>-.029</td>
<td>.144</td>
<td>.379**</td>
<td>.219*</td>
<td>.056</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Token (1=yes)</td>
<td>-.060</td>
<td>-.187*</td>
<td>-.034</td>
<td>-.048</td>
<td>.044</td>
<td>.070</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic credit (1=yes)</td>
<td>.569**</td>
<td>-.122</td>
<td>.059</td>
<td>.129</td>
<td>-.026</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Internship Course (1=yes)</td>
<td>.033</td>
<td>-.012</td>
<td>.207*</td>
<td>.138</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>other work experience (1=yes)</td>
<td>.054</td>
<td>-.070</td>
<td>.064</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>Internship Length</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.233**</td>
<td>.181*</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>CCI Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.627**</td>
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<tr>
<td>SIL Total</td>
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</tr>
</tbody>
</table>

* p < 0.05, ** p < 0.01.

The correlation coefficients between the demographic variables (i.e., degree required internship, field related internship, compensation – monetary, token, academic credit, internship course, other work experience and internship length) and the independent variable and the dependent variable were examined. Besides monetary compensation and internship length, which are included according to the literature review, no other demographic variables had strong correlations (i.e., Pearson’s correlation coefficient was greater than the absolute value of .15) with the dependent variable. Therefore, only these two demographic variables were entered into the multiple regression analyses for research question 2.
Table 9

*Correlation Matrix for All Variables (N = 170).*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>6</th>
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<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor relationship</td>
<td>.600**</td>
<td>.570**</td>
<td>.518**</td>
<td>.541**</td>
<td>.445**</td>
<td>.329**</td>
<td>.317**</td>
<td>.391**</td>
<td>.369**</td>
<td>.367**</td>
<td>.466**</td>
<td></td>
</tr>
<tr>
<td>Coworker Relationship</td>
<td>.593**</td>
<td>.549**</td>
<td>.554**</td>
<td>.465**</td>
<td>.355**</td>
<td>.360**</td>
<td>.357**</td>
<td>.439**</td>
<td>.405**</td>
<td>.405**</td>
<td>.459**</td>
<td></td>
</tr>
<tr>
<td>Intern Participation</td>
<td>.606**</td>
<td>.558**</td>
<td>.308**</td>
<td>.344**</td>
<td>.266**</td>
<td>.360**</td>
<td>.312**</td>
<td>.328**</td>
<td>.370**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mode of learning</td>
<td>.638**</td>
<td>.456**</td>
<td>.540**</td>
<td>.372**</td>
<td>.467**</td>
<td>.453**</td>
<td>.491**</td>
<td>.579**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intern Initiation</td>
<td>.594**</td>
<td>.328**</td>
<td>.404**</td>
<td>.355**</td>
<td>.551**</td>
<td>.342**</td>
<td>.575**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Feedback Seeking and Self-presentation</td>
<td>.396**</td>
<td>.438**</td>
<td>.449**</td>
<td>.670**</td>
<td>.422**</td>
<td>.499**</td>
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<td></td>
</tr>
<tr>
<td>Job-related performance effectiveness</td>
<td>.343**</td>
<td>.480**</td>
<td>.396**</td>
<td>.533**</td>
<td>.465**</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>^a Goal setting and Career Planning</td>
<td>.490**</td>
<td>.455**</td>
<td>.346**</td>
<td>.447**</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>^a Self-knowledge</td>
<td>.363**</td>
<td>.530**</td>
<td>.472**</td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Career guidance and networking</td>
<td>.503**</td>
<td>.621**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of Office Politics</td>
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<tr>
<td>Career Related Skills</td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**p < 0.01. Note. ^a: Second Power Transformed.**
Correlations between Independent and Dependent Variables

In examining correlations between independent and dependent variables, the five subscales of independent variable (i.e., supervisor relationship, coworker relationship, intern participation, mode of learning, intern initiation) were all significantly positively correlated with the seven subscales of the dependent variable (i.e., feedback seeking and self-presentation, job-related performance effectiveness, goal setting and career planning, self-knowledge, career guidance and networking, knowledge of office politics, and career related skills). The correlation between the independent variable and the dependent variable was .627 (p < .01), which indicated a strong relationship according to Fink (1995). Also, coworker relationship (r=.52), mode of learning (r=.62) and intern initiation (r=.59) also had strong, significant (p < .01) relationships with the dependent variable. Additionally, correlations between intern participation, supervision relationship and the dependent variable were .41 and .48 (p < .01), which indicated a moderate to good relationship. Fink (1995) indicated that within some social sciences the absolute value of a correlation between .26 and .50 is considered fairly high.

One-way ANOVA

Research Question 1

What are the mean differences on career competencies of liberal arts seniors on the seven dimensions of career competencies (GSCP, SELF, JPER, CRS, POL, GNET, FSSP) among the following four groups: seniors with only internship experience, seniors with only part-time work experience, seniors with both internship and part-time work experience and seniors with neither internship nor part-time work experience?
A one-way ANOVA was conducted to determine if the career competencies self-reported ratings were different for the CLA seniors in the following four groups: Intern (n = 68), Work (n = 118), Both (n = 112) and None (n = 71) on the seven dimensions (GSCP, SELF, JPER, CRS, POL, GNET, FSSP, please see Table 10 for the means and standard deviations for each dimension in the four groups). The mean differences are presented for each of the seven dimensions as follow.

Table 10

Means and Standard Deviations for the seven dimensions of career competency in groups

<table>
<thead>
<tr>
<th></th>
<th>All (n=369)</th>
<th>None (n=71)</th>
<th>Work (n=118)</th>
<th>Both (n=112)</th>
<th>Internship (n=68)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback seeking and self-presentation</td>
<td>50.00 (10.000)</td>
<td>47.20 (11.106)</td>
<td>48.99 (8.536)</td>
<td>51.38 (9.914)</td>
<td>52.55 (10.321)</td>
</tr>
<tr>
<td>Job-related performance effectiveness</td>
<td>50.00 (10.000)</td>
<td>48.91 (10.080)</td>
<td>51.26 (9.032)</td>
<td>49.42 (10.489)</td>
<td>50.00 (10.638)</td>
</tr>
<tr>
<td>Goal setting and career planning</td>
<td>50.00 (10.000)</td>
<td>46.36 (9.765)</td>
<td>50.27 (9.335)</td>
<td>50.94 (10.507)</td>
<td>52.05 (9.721)</td>
</tr>
<tr>
<td>Self-knowledge</td>
<td>50.00 (10.000)</td>
<td>46.33 (10.315)</td>
<td>50.19 (9.367)</td>
<td>50.69 (10.720)</td>
<td>52.60 (8.532)</td>
</tr>
<tr>
<td>Career guidance and networking</td>
<td>50.00 (10.000)</td>
<td>45.76 (10.549)</td>
<td>49.02 (9.409)</td>
<td>52.74 (9.476)</td>
<td>52.02 (9.469)</td>
</tr>
<tr>
<td>Knowledge of (office) politics</td>
<td>50.00 (10.000)</td>
<td>47.93 (10.526)</td>
<td>50.50 (9.570)</td>
<td>50.27 (10.638)</td>
<td>51.01 (8.965)</td>
</tr>
<tr>
<td>Career related skills</td>
<td>50.00 (10.000)</td>
<td>45.18 (11.353)</td>
<td>50.01 (8.355)</td>
<td>52.45 (9.336)</td>
<td>51.47 (10.270)</td>
</tr>
</tbody>
</table>

Note. Transformed to T Score

(): standard deviations.

On the dimension of feedback seeking and self-presentation, there were no extreme outliers, as assessed by boxplot; dependent variable data were normally distributed for each of the 4 subgroups, as assessed by skewness Z score (|Z| < 2); and there was homogeneity of variance, as assessed by Levene's test of homogeneity of variance (p = .191). The FSSP score increased from the None group (M = 47.20, SD = 11.106), to Work (M = 48.99, SD = 8.536), to
Both (M = 51.38, SD = 9.914) to Internship (M = 52.55, SD = 10.321), in that order (as shown in Fig. 3 the mean plot), and the differences between these groups was statistically significant, F (3, 365) = 4.604, p = .004, η² = .037. Tukey post hoc analysis revealed that the mean increase from None to Intern (5.351, 95% CI [1.09, 9.06]) was statistically significant (p = .007), as well as the increase from None to Both (4.179, 95% CI [.31, 8.05], p = .028), but no other group differences were statistically significantly.

On the dimension of job-related performance effectiveness, there were no extreme outliers, as assessed by boxplot; data for the variable JRPE were normally distributed for each subgroup, as assessed by skewness Z score (|Z| < 2); and the assumption of homogeneity of variance was not met, as assessed by Levene's test for equality of variance (p = .012). Therefore the Welch ANOVA was conducted in SPSS for this dimension. JRPE scores increased from the None group (M = 48.91, SD = 10.081), to Both (M = 49.42, SD = 10.489), to Internship (M = 50.00, SD = 10.638) to Work (M = 51.26, SD = 9.032), in that order (as shown in Fig. 4, the mean
However the differences in JRPE scores between these groups was not statistically significant, $F(3, 365) = 1.099$, $p = .351$.

![Figure 4 Mean Plot for Job-related Performance Effectiveness](image)

**Figure 4 Mean Plot for Job-related Performance Effectiveness**

On the dimension of goal setting and career planning, there were no extreme outliers, as assessed by boxplot; GSCP data were normally distributed for each subgroup, as assessed by skewness Z score ($|Z| < 2$); and there was homogeneity of variance, as assessed by Levene's test of homogeneity of variance ($p = .432$). GSCP scores increased from the None group ($M = 46.36, SD = 9.765$), to Work ($M = 50.27, SD = 9.335$), to Both ($M = 50.94, SD = 10.507$) to Internship ($M = 52.05, SD = 9.721$), in that order (as shown in Fig. 5 the mean plot), and the differences between these groups was statistically significant, $F(3, 365) = 4.709$, $p = .003$, $\eta^2 = .039$. Tukey post hoc analysis revealed that the mean increase from None to Work ($4.397, 95\% \text{ CI } [4.1, 7.72]$) was statistically significant ($p = .042$), as well as the increase from None to Both ($4.577, 95\% \text{ CI } [.71, 8.44]$; $p = .013$) and from None to Internship ($5.691, 95\% \text{ CI } [1.44, 9.95]$; $p = .003$), but no other group differences were statistically significant.
On the dimension of self-knowledge, there were no extreme outliers, as assessed by boxplot; SELF data were normally distributed for each group, as assessed by skewness Z score (|Z| < 2); and there was homogeneity of variance, as assessed by Levene's test of homogeneity of variance (p = .734). SELF score increased from the None group (M = 46.33, SD = 10.315), to Work (M = 50.19, SD = 9.367) to Both (M = 50.69, SD = 10.720), to Internship (M = 52.60, SD = 8.532), in that order (as shown in Fig. 6 the mean plot), and the differences between these groups was statistically significant, F(3, 365) = 5.239, p = .002, η² = .045. Tukey post hoc analysis revealed that the mean increase from None to Work (3.859, 95% CI [.06, 7.66]) was statistically significant (p = .045), as well as the increase from None to Both (4.364, 95% CI [.51, 8.22], p = .019) and from None to Internship (6.271, 95% CI [2.03, 210.52], p = .001), but no other group differences were statistically significant.
On the dimension of career guidance and networking, there were no extreme outliers, as assessed by boxplot; GNET data were normally distributed for each subgroup, as assessed by skewness Z score (|Z| < 2); and there was homogeneity of variance, as assessed by Levene's test of homogeneity of variance (p = .791). GNET scores increased from the None group (M = 45.76, SD = 10.549), to Work (M = 49.02, SD = 9.409), to Internship (M = 52.02, SD = 9.469), to Both (M = 52.74, SD = 9.476), in that order (as shown in Fig. 7 the mean plot), and the differences between these groups was statistically significant, F (3, 365) = 8.896, p = .000, η² = .073. Tukey post hoc analysis revealed that the mean increase from Work to Both (3.723, 95% CI [.32, 7.13]) was statistically significant (p = .026), as well as the increase from None to Internship (6.264, 95% CI [2.08, 10.45], p = .001) and from None to Both (6.983, 95% CI [3.18, 10.79], p = .000), but no other group differences were statistically significant.
Figure 7 Mean Plot for Career Guidance and Networking

On the dimension of knowledge of (office) politics, there were no extreme outliers, as assessed by boxplot; POL data were normally distributed for each group, as assessed by skewness Z score (|Z| < 2); and there was homogeneity of variance, as assessed by Levene's test of homogeneity of variance (p = .152). POL scores increased from the None group (M = 47.93, SD = 10.526), to Both (M = 50.27, SD = 10.638), to Work (M = 50.50, SD = 9.570) to Internship (M = 51.01, SD = 8.965), in that order (as shown in Fig. 8 the mean plot), but the differences between these groups was not statistically significant, F (3, 365) = 1.352, p = .259.
On the dimension of career related skills, there were no extreme outliers, as assessed by boxplot; CRS data were normally distributed for each group, as assessed by skewness Z score (|Z| < 2); and there was homogeneity of variance, as assessed by Levene's test of homogeneity of variance (p = .791). CRS scores increased from the None group (M = 45.18, SD = 11.353), to Work (M = 50.01, SD = 8.355), to Internship (M = 51.47, SD = 10.270), to Both (M = 52.45, SD = 9.336), in that order (as shown in Fig. 9), and the differences between these groups was statistically significant, F (3, 365) = 8.859, p < .001, η² = .077. Tukey post hoc analysis revealed that the mean increase from None to Work (4.830, 95% CI [1.08, 8.58]) was statistically significant (p = .005), as well as the increase from None to Internship (2.406, 95% CI [.74, 4.07], p = .001) and from None to Both (6.298, 95% CI [2.11, 10.48], p = .001), but no other group differences were statistically significant.
Multiple Linear Regression

Research Question 2

Do the five aspects of the learning process in internships (mode of learning, intern initiative, intern participation, co-worker relationship, supervisor relationship) have a relationship with the career competencies of liberal arts seniors on the seven dimensions (GSCP, SELF, JPER, CRS, POL, GNET, FSSP)?

As shown in the bivariate analysis, there was a strong relationship between the independent variable and the dependent variable (r = .627, p < .01). The relationships between subscales of the independent and dependent variables were also between moderate and strong (.41 < r < .59, p < .01). In order to examine whether there is any predictive relationship between the internship learning and career competencies, a multiple linear regression analysis was conducted.

Analysis of Residuals

Residuals are the differences between observed and predicted values (Cohen et al., 2003). Examining residual scatterplots from three regression analyses enables one to assess the assumptions of normality, linearity, and homoscedasticity of residuals (Tabachnick & Fidell, 2007). If all these three assumptions are met, the residuals would graphically be distributed in nearly a rectangular shape with a concentration of scores at the center.

Standardized residuals from the regression analyses were plotted against the standardized predicted values. A review of the histograms supported the approximate normal distribution for all variables and only a small portion of residuals were shown near the center of the distribution. The probability plot displayed the observed probabilities closely following a straight line, which supported the assumptions of linearity. A residual scatterplot only presented
a slight deviation from normality, thus confirming the normal distribution. Therefore, the assumptions of normality and linearity were met for the residuals, as well as the assumption of homoscedasticity according to Tabachnick & Fidell (2007).

**Regression Analyses**

The application of regression analyses served to answer research question 2 in this study. As no significant mediating or moderating effect was found among the variables, the enter method of linear regression was applied in SPSS for this analysis. The five subscales of the Scale of Internship Learning instrument, monetary compensation and internship length were entered as independent variables and the seven subscales of the Career Competency Indicator instrument were entered one at a time as the independent variables. The results from these seven models are presented as follow.

Table 11 summarizes the results of the regression analyses for examining the predictive relationships between internship learning and the first dimension of career competency – feedback seeking and self-presentation. The independent variables statistically significantly predicted FSSP, F (7, 144) = 10.514, p < .001, adj. R² = .355. Supervision relationship and intern initiation added statistically significantly to the prediction, p < .05. Regression coefficients and standard errors can be found in the table below.

Table 11

*Results of Multiple Regression Analyses for Internship Learning and Feedback Seeking and Self presentation (N=127)*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.224</td>
<td>.387</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>Monetary Compensation(1=yes)</td>
<td>-.109</td>
<td>.089</td>
<td>-.097</td>
<td>.221</td>
</tr>
<tr>
<td>Internship Length(wk)</td>
<td>.000</td>
<td>.004</td>
<td>-.009</td>
<td>.912</td>
</tr>
</tbody>
</table>
Table 12 summarizes the results of the regression analyses for examining the predictive relationships between internship learning and the second dimension of career competency – job-related performance effectiveness. The independent variables statistically significantly predicted JPER, $F (7, 118) = 7.260, p < .001$, adj. $R^2 = .260$. Only mode of learning added statistically significantly to the prediction, $p < .001$. Regression coefficients and standard errors can be found in the table below.

Table 12

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>$B$</th>
<th>SE</th>
<th>$\beta$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.879</td>
<td>.382</td>
<td></td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Monetary Compensation (1=yes)</td>
<td>-0.091</td>
<td>.087</td>
<td>-0.087</td>
<td>.300</td>
</tr>
<tr>
<td>Internship Length (wk)</td>
<td>-0.001</td>
<td>.004</td>
<td>-0.024</td>
<td>.778</td>
</tr>
<tr>
<td>Supervisor Relationship</td>
<td>0.078</td>
<td>.100</td>
<td>0.087</td>
<td>.433</td>
</tr>
<tr>
<td>Coworker Relationship</td>
<td>0.032</td>
<td>.093</td>
<td>0.037</td>
<td>.734</td>
</tr>
<tr>
<td>Intern Participation</td>
<td>0.027</td>
<td>.102</td>
<td>0.032</td>
<td>.789</td>
</tr>
<tr>
<td>Mode of learning</td>
<td>0.600</td>
<td>.125</td>
<td>0.536</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Intern Initiation</td>
<td>-0.104</td>
<td>.102</td>
<td>-0.115</td>
<td>.308</td>
</tr>
</tbody>
</table>

Table 13 summarizes the results of the regression analyses for examining the predictive relationships between internship learning and the third dimension of career competency – goal setting and career planning. The independent variables statistically significantly predicted GSCP,
F (7, 119) = 4.423, p < .001, adj. R² = .160. None of the variables added statistically significantly to the prediction by itself. Regression coefficients and standard errors can be found in the table below.

Table 13

*Results of Multiple Regression Analyses for Internship Learning and Goal Setting and Career Planning (N=127)*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.476</td>
<td>.630</td>
<td>.452</td>
<td></td>
</tr>
<tr>
<td>Monetary Compensation (1=yes)</td>
<td>-.071</td>
<td>.144</td>
<td>-.043</td>
<td>.624</td>
</tr>
<tr>
<td>Internship Length (wk)</td>
<td>-.001</td>
<td>.006</td>
<td>-.021</td>
<td>.815</td>
</tr>
<tr>
<td>Supervisor Relationship</td>
<td>.250</td>
<td>.165</td>
<td>.179</td>
<td>.131</td>
</tr>
<tr>
<td>Coworker Relationship</td>
<td>.040</td>
<td>.154</td>
<td>.030</td>
<td>.795</td>
</tr>
<tr>
<td>Intern Participation</td>
<td>-.030</td>
<td>.169</td>
<td>-.022</td>
<td>.859</td>
</tr>
<tr>
<td>Mode of learning</td>
<td>.234</td>
<td>.206</td>
<td>.135</td>
<td>.258</td>
</tr>
<tr>
<td>Intern Initiation</td>
<td>.320</td>
<td>.168</td>
<td>.226</td>
<td>.060</td>
</tr>
</tbody>
</table>

Table 14 summarizes the results of the regression analyses for examining the predictive relationships between internship learning and the fourth dimension of career competency – self-knowledge. The independent variables statistically significantly predicted SELF, F (7, 118) = 5.668, p < .001, adj. R² = .207. Supervisor relationship and mode of learning both added statistically significantly to the prediction, p < .05. Regression coefficients and standard errors can be found in the table below.

Table 14

*Results of Multiple Regression Analyses for Internship Learning and Self-knowledge (N=127)*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.843</td>
<td>.386</td>
<td></td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Monetary Compensation (1=yes)</td>
<td>-.075</td>
<td>.088</td>
<td>-.073</td>
<td>.396</td>
</tr>
</tbody>
</table>
Table 15 summarizes the results of the regression analyses for examining the predictive relationships between internship learning and the fifth dimension of career competency – career guidance and networking. The independent variables statistically significantly predicted GNET, \( F(7, 112) = 8.808, p < .001, \text{adj. } R^2 = .315 \). Only intern initiation added statistically significantly to the prediction, \( p < .001 \). Regression coefficients and standard errors can be found in the table below.

### Table 15

**Results of Multiple Regression Analyses for Career Guidance and Networking \((N=127)\)**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>SE</th>
<th>( \beta )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.986</td>
<td>.488</td>
<td>.046</td>
<td></td>
</tr>
<tr>
<td>Monetary Compensation ((1=\text{yes}))</td>
<td>-.129</td>
<td>.105</td>
<td>-.101</td>
<td>.222</td>
</tr>
<tr>
<td>Internship Length ((\text{wk}))</td>
<td>.007</td>
<td>.005</td>
<td>.139</td>
<td>.099</td>
</tr>
<tr>
<td>Supervisor Relationship</td>
<td>.087</td>
<td>.119</td>
<td>.078</td>
<td>.469</td>
</tr>
<tr>
<td>Coworker Relationship</td>
<td>.146</td>
<td>.118</td>
<td>.136</td>
<td>.221</td>
</tr>
<tr>
<td>Intern Participation</td>
<td>-.092</td>
<td>.125</td>
<td>-.087</td>
<td>.464</td>
</tr>
<tr>
<td>Mode of learning</td>
<td>.095</td>
<td>.157</td>
<td>.066</td>
<td>.544</td>
</tr>
<tr>
<td>Intern Initiation</td>
<td>.498</td>
<td>.123</td>
<td>.447</td>
<td>&lt;.0005</td>
</tr>
</tbody>
</table>

Table 16 summarizes the results of the regression analyses for examining the predictive relationships between internship learning and the sixth dimension of career competency – knowledge of (office) politics. The independent variables statistically significantly predicted POL, \( F(7, 117) = 8.401, p < .001, \text{adj. } R^2 = .295 \). Monetary compensation and mode of learning
added statistically significantly to the prediction, \( p < .05 \). Regression coefficients and standard errors can be found in the table below.

Table 16

*Results of Multiple Regression Analyses for Knowledge of (Office) Politics (N=127)*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>( B )</th>
<th>SE</th>
<th>( \beta )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.349</td>
<td>.391</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>Monetary Compensation (1=yes)</td>
<td>-.183</td>
<td>.089</td>
<td>-.168</td>
<td>.042</td>
</tr>
<tr>
<td>Internship Length (wk)</td>
<td>.001</td>
<td>.004</td>
<td>.014</td>
<td>.863</td>
</tr>
<tr>
<td>Supervisor Relationship</td>
<td>.041</td>
<td>.102</td>
<td>.044</td>
<td>.684</td>
</tr>
<tr>
<td>Coworker Relationship</td>
<td>.157</td>
<td>.095</td>
<td>.173</td>
<td>.101</td>
</tr>
<tr>
<td>Intern Participation</td>
<td>.161</td>
<td>.105</td>
<td>.180</td>
<td>.126</td>
</tr>
<tr>
<td>Mode of learning</td>
<td>.280</td>
<td>.129</td>
<td>.240</td>
<td>.032</td>
</tr>
<tr>
<td>Intern Initiation</td>
<td>.057</td>
<td>.105</td>
<td>.060</td>
<td>.584</td>
</tr>
</tbody>
</table>

Table 17 summarizes the results of the regression analyses for examining the predictive relationship between internship learning and the seventh dimension of career competency – career related skills. The independent variables statistically significantly predicted CRS, \( F(7, 111) = 13.837, \ p < .001, \) adj. \( R^2 = .432 \). Intern initiation and mode of learning both added statistically significantly to the prediction, \( p < .05 \). Regression coefficients and standard errors can be found in the table below.

Table 17

*Results of Multiple Regression Analyses for Career Related Skills (N=127)*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>( B )</th>
<th>SE</th>
<th>( \beta )</th>
<th>( P )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.648</td>
<td>.391</td>
<td>.100</td>
<td></td>
</tr>
<tr>
<td>Monetary Compensation (1=yes)</td>
<td>-.098</td>
<td>.085</td>
<td>-.085</td>
<td>.252</td>
</tr>
<tr>
<td>Internship Length (wk)</td>
<td>.005</td>
<td>.004</td>
<td>.103</td>
<td>.180</td>
</tr>
<tr>
<td>Supervisor Relationship</td>
<td>.159</td>
<td>.098</td>
<td>.159</td>
<td>.107</td>
</tr>
</tbody>
</table>
The summary of the seven models is presented on table 18.

### Table 18

*Regression Analyses for SIL variables predicting CCI variables*

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>R²</th>
<th>F (7, 127)</th>
<th>Significant Variables</th>
<th>β</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>feedback seeking and self-presentation</td>
<td>.355</td>
<td>10.514</td>
<td>Supervisor Relationship</td>
<td>.271</td>
<td>.012</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Intern Initiative</td>
<td>.424</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>job-related performance effectiveness</td>
<td>.260</td>
<td>7.260</td>
<td>Mode of learning</td>
<td>.563</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>goal setting and career planning</td>
<td>.160</td>
<td>4.432</td>
<td>Intern Initiative</td>
<td>.226</td>
<td>.060</td>
</tr>
<tr>
<td>self-knowledge</td>
<td>.207</td>
<td>5.668</td>
<td>Supervisor Relationship</td>
<td>.240</td>
<td>.039</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mode of learning</td>
<td>.332</td>
<td>.005</td>
</tr>
<tr>
<td>career guidance and networking</td>
<td>.315</td>
<td>8.808</td>
<td>Intern Initiative</td>
<td>.447</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>knowledge of (office) politics</td>
<td>.295</td>
<td>8.401</td>
<td>compensation - Monetary</td>
<td>.168</td>
<td>.042</td>
</tr>
<tr>
<td>career-related skills</td>
<td>.432</td>
<td>13.837</td>
<td>Mode of learning</td>
<td>.240</td>
<td>.032</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mode of learning</td>
<td>.239</td>
<td>.018</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Intern Initiative</td>
<td>.353</td>
<td>.001</td>
</tr>
</tbody>
</table>
CHAPTER 5

Discussion

A discussion on the major findings, which were provided in Chapter 4, is presented in this chapter. Two research questions, independent and demographic variables are presented with a discussion on the significant findings, and how the findings relate to previous empirical and theoretical research. In addition, implications of the results are presented, followed by limitations, strengths of the study, recommendations for future research, and a conclusion.

Discussion of the Results

The main purpose of this study was to examine the relation between internship experience and liberal arts seniors’ career competencies. Having participated in an internship is hypothesized to have a positive relationship with career competencies on the following seven dimension values (goal setting and career planning (GSCP), self-knowledge (SELF), job-related performance effectiveness (JPER), career-related skills (CRS), knowledge of (office) politics (POL), career guidance and networking (GNET), and feedback seeking and self-presentation (FSSP)). In addition, the researcher further explored if the internship learning process (e.g., mode of learning, intern initiative, intern participation, co-worker relationship, supervisor relationship) has a relationship with the career competencies as measured by values on the seven dimensions of career competencies. A one-way ANOVA and a multiple linear regression were conducted to answer the two research questions, the results of which imply the following findings.

Research Question 1

What are the mean differences on career competencies of liberal arts seniors on the seven dimensions of career competencies (GSCP, SELF, JPER, CRS, POL, GNET, FSSP) among the following four groups: seniors with only internship experience, seniors with only part-time work
experience, seniors with both internship and part-time work experience and seniors with neither internship nor part-time work experience?

The results of the current study suggest that internship experience, alone or together with other work experience, was related to moderately higher levels of career competencies on six of the seven dimensions: feedback seeking and self-presentation, goal setting and career planning, self-knowledge, career guidance and networking, knowledge of office politics, and career related skills. Although internship has gained more and more attention in the career preparation for liberal arts students (Berberet & Wong, 1995; Higginbottom, 1994), career practitioners in liberal arts colleges mainly rely on anecdotal evidence regarding their internship practice due to the lack of systematical research on liberal arts students’ internship experiences. Therefore, the current study provides some empirical evidence of the positive relationship between internship experience and liberal arts students’ career competencies. However, the eta square coefficients are not that large indicating that the differences might not be highly practically significant.

Among the existing research on the career development outcomes of internship experience, the crystallization of vocational self-concept was one of the major topics, which is a very similar construct to the dimension of self-knowledge measured in CCI. Pedro (1984) found that retailing students changed their self-perception, preferences, some instrumental values and work specific needs after internship experience. Taylor (1998) suggested that internship partially contributed to participants’ career crystallization. Brooks, Cornelius, et al. (1995) found that internship experience, either alone or in combination with work experience, is related to higher level of self-concept crystallization. As the two constructs are not exactly the same, these findings to some extent confirmed one of the results of current study that internship experience,
alone or together with other work experience, was related to moderately higher levels of self-
knowledge.

Career decision making is another focus among the existing research on the career
outcomes of internship experience. Knouse (1999) suggested that internship experience should help students explore their career choices, clarify their work values and decrease their anxiety related to career search. DeLorenzo (2000) suggested that co-op students scored significantly higher than non-co-op students on career decision making. Neapolitan (1992) found that internships enhance career decision-making through clarification of career choice, particularly by providing accurate career information. These findings confirmed another result of current study that internship experience, alone or together with other work experience, was related to moderately higher level of goal setting and career planning.

In addition to helping students with the crystallization of their vocational self-concept and Career decision making, internship was also found to equip students with technical or work-related skills, which is critical in competing with those with substantial work skills in the job market (Beard, 1997). Internships enhance students’ time management skills, communication skills and self-discipline (Bourland-Davis et al., 1997; Wesley & Bickle, 2005). In addition, internships develop students’ professional attitudes and improve their critical thinking (Gault et al., 2000; Maskooki et al, 1998). In current study, these skills were studies within the dimension of career-related skills. Therefore, these studies supported the finding that internship experience, alone or together with other work experience, was related to moderately higher level of career-related skills.

Although the rest three dimensions of career competency (knowledge of (office) politics, career guidance and networking, and feedback seeking and self-presentation) are increasingly
important for students’ career success in the context of new career reality (Hasse, 2007), little research has been devoted to the understanding of them as the outcome of an internship experience. Therefore, the current study expanded the knowledge of the career outcomes of internships to these less examined dimensions.

In addition to comparing students who had internship experience with those who had no internship experience, the researcher also studied students who had other career related work experience. However, except for one significant difference was found between the both group and the work group on the dimension of career guidance and networking, no other significant differences among these groups. Likewise, Brooks, Cornelius, et al. (1995) also found no significant differences among the internship group, the work group and the group with both internship and work experience in their study.

In summary, the results suggest that internship experience, alone or together with other work experience, was related to moderately higher levels of career competencies on six of the seven dimensions: feedback seeking and self-presentation, goal setting and career planning, self-knowledge, career guidance and networking, knowledge of office politics, and career related skills. No significant differences on career competency were found among the internship group, the work group and the both group. Therefore, the results indicate that internship, alone or with other career experience, has moderate positive impact on career competencies except for the knowledge of office politics. Further research is needed to investigate the different impact that internship experience and other work experience might have on students’ career competencies, e.g. pre-post experimental design.
Research Question 2

Do the five aspects of learning process in internships (mode of learning, intern initiative, intern participation, co-worker relationship, supervisor relationship) have a relation with the career competencies of liberal arts seniors on the seven dimensions (GSCP, SELF, JPER, CRS, POL, GNET, FSSP)?

The structure and nature of internship experiences of liberal arts students vary widely in their characteristics, and many researchers (Pedro, 1984; Brooks, Cornelius, et al. 1995; Taylor, 1998; Callanan and Benzing, 2004) argued that the quality of the experience would have a direct influence on the career development of the student. In current study, the following aspects of internship learning were found to have positive relationship with the changes in career competencies.

Supervisor Relationship

In Scale of Internship Learning, the second dimension supervisor relationship measures the impact of the supervisor (motivation, encouragement, facilitation of day-to-day professional development needed to complete job responsibilities, facilitation of developing skills needed longer-term, accessibility in helping interns at work, contribution to team building), and communication and collaboration (sharing information, feedback, clear expectations, collaboration on projects, explicit reporting relationship, and supervisor seeking intern’s opinion).

According to the results in Chapter 4, supervisor relationship was found to have moderate to good degree of relationship with feedback seeking and self-presentation, self-knowledge and career related skills. Also, moderate predictive relationships were found between supervisor relationship and feedback seeking, and self-presentation (in combination with intern initiative), and self-knowledge (in combination with mode of learning). The more willing the supervisor is
to provide feedback, the more likely the intern will ask the supervisor for feedback (feedback seeking). Such positive interaction between the supervisor and the intern will also facilitate the intern to share or showcase his/her work progress with the supervisor (self-presentation). A successful supervisor could possibly be a model in these two aspects as well. More importantly, the responsibility of inquiry for feedback and communicating the achievement at work falls on the interns. A supportive supervisor allows a welcoming environment for communication about feedback or achievement, but such conversation will be less likely to happen without intern’s initiative. As the intern constantly receives feedback on his/her work from the supervisor, such information loop will gradually increase their self-knowledge. These findings are important evidences of the role of supervisor in an internship experience.

Having a mentor was found to be critical for the effectiveness of the internship program and interns’ overall satisfaction (Anson and Forsberg, 1990; Gabris and Mitchell, 1992; Callanan & Benzing, 2004; Snyder, 1999). Through further examining the influence of supervisor relationship on different dimensions of students’ career competency in the current study, it was found to have positive relationships with feedback seeking and self-presentation. Likewise, Beard (1997) found that good supervisors provide specific direction and examples, allow some autonomy and independence, and give positive and constructive work-related feedback. Taylor (1992) also notes that good supervisors display high work standard and competence, provide interns with individual coaching and frequent feedbacks. In addition, supervisor relationship was also found to have positive relationship with interns’ self-knowledge, which reflects the finding in the study of Brooks, Cornelius, et al. (1995) that perceptions of more feedback received was related to a greater degree of self-concept crystallization.
Mode of learning

The third dimension, Mode of Learning measures the method of learning or learning strategies including observation and listening, everyday work activities, informal training, and trial and error. Learning strategies in workplace, an important deciding factor of the effectiveness of training programs (Holman, Epitropaki, & Fernie, 2001), were rarely studied in internship literature. Therefore, the findings of the current study on this particular dimension expand the knowledge of this important but less studied area.

According to the results highlighted in Chapter 4, mode of learning was found to have good to strong degree of relationships with all dimensions of career competency except for goal setting and career planning. It moderately added to the prediction of knowledge of (office) politics (in combination with monetary compensation), career related skills (in combination with intern initiative), and self-knowledge (in combination with supervisor relationship). And it significantly added to the prediction of job-related performance effectiveness. Therefore, the results indicate that interns who apply effective learning strategies perform better at work (job-related performance effectiveness) than those who do not. They are also more likely to have a better understanding of the organization structure of the company (knowledge of office politics) and to pursue training opportunities for career advancement (career related skills). In addition, interns who are good at workplace learning are more likely to apply these skills in learning about themselves and therefore have better self-knowledge than those who are not.

Intern Initiative

The fourth dimension of Scale of Internship Learning, intern initiative is measuring students’ strategies to learn; especially student behavior to increase involvement and
responsibilities. This dimension mainly asks questions about ambition of the intern, intern’s strategies for managing self, and the intern’s initiative in conflict resolution.

According to the findings in Chapter 4, intern initiative was found to have a moderate degree of relationship with the dimension of goal setting and career planning, and strong degree of relationships with three other dimensions: feedback seeking and self-presentation, career guidance and networking, and career related skills. Intern initiative moderately added to the prediction of career related skills (in combination with mode of learning), and goal setting and career planning. It significantly added to the prediction of feedback seeking and self-presentation, and career guidance and networking.

In other word, internship could expose students to the real job situation and increase their self-knowledge through feedback from supervisor or co-workers (Callanan & Benzing, 2004). If there is any discrepancy between the real job and the idea they had for the job before the internship, they might feel the need to adjust their career goals and plans. However, students really need to take the initiative on their goal setting and career planning. The more responsibility a student takes for their career development, the more likely they would engage in creating or updating their career goals and plans. Likewise, these students are more likely to seek after feedback from their supervisor and share their achievement with them and seek out other training opportunities that could help them advance their career. The result of this study also indicates that for more sophisticated career management skills like seeking career guidance and networking, intern initiative plays a key factor in pursuing and succeeding this practice.

The literature indicates that internships are more satisfying if students demonstrate initiative – strategies that students apply to increase responsibilities during internship (Clark Vaisman, 2012). Interns were suggested to take initiative and treat their internship as a real job to
realize greater benefits from that experience (Basow & Byrne; 1993; Beard, 1997). However, the question about how intern initiative impact interns’ career development (i.e. career competencies) was rarely answered in these studies. Therefore, the current study helped provide some information in this aspect.

**Co-worker Relationship**

The dimension of Co-worker Relationship in SIL asks about co-worker communication and accessibility, such as seeking intern opinion, giving regular feedback, accessibility, freely sharing information, collaboration on projects with co-workers, encouragement, facilitation of day-to-day professional development needed to complete job responsibilities, facilitation of skills needed longer-term, motivation, team building, and encouragement of work-study balance.

The social context of internship and the role of co-workers in learning have been frequently ignored in most of the existing research on internship experience (Lave & Wenger, 1991). According to the results in Chapter 4, co-worker relationship was found to have a good degree of relationship with the following dimensions of career competency: feedback seeking and self-presentation, career guidance and networking, knowledge of office politics, and career related skills. However, it did not add statistically significance to the prediction of any of these dimensions. The results confirm that the social context of the internship, especially interns’ relationship with coworkers has relationship with the career outcome of the internship. A welcoming social environment including supportive co-workers is related to interns’ initiative in seeking feedback, career guidance and networking opportunities. It also has relationship with interns’ understanding of the organizational structure of the company and training opportunities for career advancement.
Intern Participation

The Intern Participation reflects the intern’s transition from “newcomer” to legitimate participation in the organization, where interns are valued and included into the resources of the organization (Lave & Wenger, 1991). This transition process is greatly affected by the practices and policies that organizations use to structure and manage internship. The structure might include length of the internship, proper expectation of interns’ performance, regular training and feedbacks, set activities that introduce interns to the culture and the communities of the organization (Bourland-Davis et al., 1997). However, how internship participation affects the career outcome of internships (i.e. career competency) was not clear in existing research.

The fifth dimension of SIL, intern participation, describes the intern’s perceived increasing participation and engagement of the intern over time: increased authority, participation in tasks and activities, and an inclusion in work. The results showed that this subscale only has moderate degree of relationship with the following three dimensions of career competency: job-related performance effectiveness, self-knowledge, and career skills. It did not add any statistical significance to the prediction of any of these three dimensions. Thus, the organizations’ practice to increase intern’ participation is moderately related to interns’ their effective job performance, their pursuing training opportunity for career advancement and the understanding of their own career preference.

Monetary Compensation

Research indicates that interns have more positive response toward their experience if they are compensated for their work. Basow and Byrne (1993) found that interns who received payment evaluated their internships higher. Even token payment seems to reduce physical and mental stress for students and in turn provide a more positive outlook of the internship for the
students (Beard, 1997). Even when monetary compensation is not available, Basow and Byrne (1993) suggest that academic credit should at least be included. Therefore, monetary compensation was included together with token and academic credit in the investigation of this study. However, the results showed that only monetary compensation was moderately related to the internship learning process and it was also the only form of compensation that add statistical significance to the prediction of one dimension of career competencies: knowledge of office politics. Therefore, the result suggests that when the company invests financially on the interns, it is more likely for the interns to have a better understanding of the organizational structure of the company.

In summary, the results of this study suggest that internship learning contributes to the development of students’ career competencies. Internship, by itself or together with other work experience, is related to higher level of career competencies on six of the seven dimensions: feedback seeking and self-presentation, goal setting and career planning, self-knowledge, career guidance and networking, knowledge of office politics, and career related skills. Among the five aspect of internship learning included in SIL, intern initiative and mode of learning have strongest effect in predicting a higher level of career competencies as measured by CCI. Intern initiative adds statistically significant to the prediction of four of the seven dimensions of career competencies: feedback seeking and self-presentation, goal setting and career planning, career guidance and networking and career related skills. Mode of learning also adds to statistically significant prediction of four of the seven dimensions of career competencies: job-related performance effectiveness, self-knowledge, knowledge of office politics and career related skills. In addition, supervisor relationship adds to the prediction of two of the seven dimensions of career competencies: self-knowledge, and feedback seeking and self-presentation. Monetary
compensation is the only one of the three formats of compensation (the other two: token, academic credit) that adds to statistically significant prediction of career competency: knowledge of office politics. These results suggest that intern initiative, mode of learning, supervisor relationship, together with monetary compensation, are the key factors in internship design in order to facilitate the development of students’ career competencies. The implication for relevant professional will be discussed in the following section.

Implications for Professionals

The findings of this study help inform the value of internship experience in the development of students’ career competencies and what internship qualities are most important in facilitating this development. Career development professionals, such as career counselors/advisors/coaches who work with liberal arts students and employers who are hosting or intend to host liberal arts students as interns would greatly benefit from the knowledge of how to create a good internship experience for liberal arts students from the perspective of career development.

Career Counseling/Administrative Professionals

Internship has been highly valued in liberal arts education for its positive impacts on students’ career outcomes (Wesley & Bickle, 2005). As found in Brooks’ (1995) study, a moderate empirical evidence for internship’s contribution to liberal arts students’ career development was also found in the current study. Therefore, career counseling professionals and administrative professionals involved in arranging internships in college of liberal arts can feel confident in internship as a potential effective means for students’ career preparation. However, the success of the internship experience in increasing liberal arts students’ career competencies partially depends on the quality of the internship in following four aspects: intern initiation,
mode of learning, supervisor relationship and monetary compensation. Therefore, the career counselors and related administrators should pay attention to following aspects in preparing their students for a successful internship experience.

**Intern Initiative:** Intern initiative in this study pertains to students’ strategies/behaviors to increase involvement and responsibilities during internship. To assert Intern Initiative at their work, students need to find and work at a desirable internship. Career professionals should help them identify their goals and teach them how to find an internship that could help them achieve their goals. Sometimes students might overlook the value of a good internship. Career staff could help them understand how internship could increase their career competencies, i.e. increasing their self-knowledge and identifying goals and plans for their career, teaching them how to perform effectively at work and how to advance their career through different skill trainings, and connecting them with mentors and helpful colleagues. When students have a good picture of what a good internship could contribute to their career success, they could set clear and appropriate goals for their internship and be more motivated to take initiative in their work.

**Mode of Learning:** Learning strategies in workplace were found to be an important deciding factor of the effectiveness of training programs (Holman, Epitropaki, & Fernie, 2001). The results in this study show that it contributes to the development in most of the dimensions of career competencies. It is important for career professionals to help students understand their preferred learning strategies, i.e. observation, trial and error and teach them to apply those skills effectively in internship learning. Sometimes, they need to teach students some new skills to help them adapt to the workplace learning, such as working in teams or conflict resolution.

**Supervisor relationship:** This dimension of internship learning describes the impact of the supervisor (motivation, encouragement, facilitation of day-to-day professional development
needed to complete job responsibilities, facilitation of developing skills needed longer-term, accessibility in helping interns at work, contribution to team building), and communication and collaboration (sharing information, feedback, clear expectations, collaboration on projects, explicit reporting relationship, and supervisor seeking intern’s opinion). The results suggest that positive supervisor relationship contributes to interns’ willingness to seek for feedback and share their work progress. It also helps students increase their knowledge. Career professionals could help students understand the importance of a good relationship with their site supervisor and teach them how to communicate and work with their supervisor in a professional manner.

**Internship hosts (employers)**

**Intern Initiative:** Since intern initiative was found to be one of the key factors for internship success in this study, the hosting organization should create an environment that supports interns assert their initiative. For example, the employers could treat interns as real employees and include them in important tasks and activities. They could also include taking initiative in their evaluation and provide incentive for that. However, sufficient support, such as skills training and regular feedback, is also important in creating such environment.

**Supervisor relationship:** To create an organizational environment that could promote interns’ initiative, providing a qualified supervisor is the key (Callanan & Benzing, 2004; Snyder, 1999). When searching for appropriate supervisors for their internship programs, the results of this study suggests that employers should keep the following qualities in mind. The supervisor should motivate interns through encouragement, facilitate their day-to-day professional development needed to complete job responsibilities and help them develop skills needed in longer-term. They should be accessible in helping interns at work and seek interns’ opinions. They should share information, communicate clear expectations and provide regular feedback
through explicit reporting relationship. In times of conflicts between interns and their supervisor, the organization should have policy and supporting staff in place to help resolve the conflicts.

**Mode of Learning:** It is helpful, but often less likely to have interns’ academic departments or their career offices to provide training in workplace learning strategies. As many employers view internship programs as pipelines for fulltime employees, it is worthwhile for them to invest time in teaching their interns effective learning strategies at workplace, especially in their particular organizations. If possible, employers could integrate this element in the whole internship program so that interns could have opportunities to try out different learning strategies and receive frequent feedback in their learning outcomes.

**Monetary Compensation:** Though monetary compensation was only found to have a moderate degree of relationship with interns’ career competencies, to some extent the study confirmed its positive influence on interns’ experience (Basow & Byne, 1993). The results also showed that monetary compensation contributed to interns’ understanding of the organizational structure (knowledge of office politics), which is an important part of adjusting to the company’s culture for new employees. If employers intend to development full-time workforce from internship program, incentives that could encourage interns’ learning about and fitting into the organizational structure or other aspect of company’s culture should be considered, including monetary compensation.

In summary, the career professionals and the employers should work together to facilitate successful internship experiences for liberal arts students. They should help students find internships that match their career inspiration and their skill level, provide appropriate supervision and training in workplace learning skills, and encourage interns to take initiative at work.
Limitations of the Study

This study had several limitations. First, it study targeted liberal arts seniors, and therefore, the results may not translate to students from other colleges or at a different stage of their liberal arts programs. Second, this study used self-reported instruments. Thus, participants’ self-reported responses might be different from their actual career competencies or their actual behaviors at their internship because the responses are based on perception. Also, it is possible that they might have provided answers that were based on what is acceptable to majority of the society rather than their true beliefs and feelings. Third, even though both instruments (i.e., Career Competency Indicator, Scale of Internship Learning) used in this study have acceptable reliability and validity, CCI was created by a British scholar and some wordings and statements may not be clear to the participants in this study. This might impact on how respondents interpret the questions and how they respond to them. Forth, the internship was defined as a “supervised professional career related experience, paid or unpaid, part or full-time, with measurable learning objectives and formal evaluations” (Brooks, 1995, p334) in this study. As other work experience could share these features as well, these two types of experience might not be effectively distinguished from each other in current study, which might cause the differences between internship, work and both group to be non-significant.

Strengths of the Study

The design of this study has several unique strengths. First, a more comprehensive career outcome of the internship learning was examined than previous studies. The existing research on the internship and career development mainly focus on the career benefits of the internship and the internship designs that will maximize these career benefits and interns’ satisfaction level. The career benefits of internship experience revealed in the literature includes employment
advantages (e.g. competitiveness, marketability, employment opportunity, high starting salaries) and career development (crystallization of vocational self-concept and career decision making).

The new career realities have put more responsibilities on individuals for their career development besides knowing how to choose a career or make a career decision (knowing-why). In order to stay employable in the mist of frequent career changes, individuals have to build knowing-how and knowing-whom competencies as well (Haase, 2012). In this context, Haase’s (2007) career competencies model provide a more comprehensive framework to understand the career outcomes of internships. Therefore, this study used Career Competency Indicator (Haase, 2007) to capture these dimensions.

Second, a more comprehensive investigation was conducted on the learning process of internships. To attain desirable career outcomes from internship experience, the research indicates that the following elements should be present in the design of internship: academic preparedness, intern initiation, intern participation, quality supervision and compensation (monetary or academic credits awarded). In most of the existing research, however, these components of the internship learning process were studied in an isolated and discrete fashion (Clark Vaisman, 2012), with the social context of internship and the role of co-workers in learning being frequently ignored (Lave & Wenger, 1991). Learning strategies in workplace, an important deciding factor of the effectiveness of training programs (Holman, Epitropaki, & Fernie, 2001), were also rarely studied in internship literature. Thus, besides the predictors of effective internships that previous studies have focused on (academic preparedness, intern initiation, intern participation, quality supervision and compensation), in this study, the internship learning process was investigated as a whole by including two other important factors: co-worker relationship and interns’ modes of learning (learning strategies).
Third, the results of this study provide empirical support for the value of internship experiences for liberal arts students. Under the pressure of low job placement rate and declining enrollment rate, liberal arts education starts to integrate experiential components into their curriculum (Berberet & Wong, 1995; Higginbottom, 1994) to provide graduates with real world experience and equip them with instrumental knowledge and skills in delivering desired career-related outcomes, career competencies (Haase, 2007). An overview of the literature, however, reveals that there has not been systematical study of the impact of internship in preparing liberal arts students for their desired career outcome. In addition, what makes an effective internship that contributes to the development of liberal arts students’ career competencies is not clear either. Therefore, this study offered a relatively comprehensive examination of both the outcome of the internship learning of liberal arts majors and what type of internship design contributed to the success of that experience.

**Recommendations for Future Research**

The limitations of this study may help guide and shape future research. First, liberal arts students’ experiences need to be compared with the students from STEM and social science fields to better understand liberal arts students’ unique career needs and issues. Second, future studies can use the internship learning process as the outcome variables to examine the impacts of compensation, internship length, relevance to students’ field of study and related coursework. Third, the afore demographic variables can further be examined for any mediating or moderating effects on the relationship between internship learning process and interns’ career competencies. Finally, to better understand liberal arts students’ internship learning process and their learning outcomes, a qualitative approach might be useful to examine their actual experiences. A qualitative methodology will allow researchers to explore deeper the details of the data and to
note the similarities and differences of personal learning experiences as well as perceived career outcomes.

**Conclusion**

The results of this study showed that internship experience, whether alone or in combination with previous work experience, is associated with higher levels of career competencies on the following dimensions: self-knowledge, goal setting and career planning, career related skills, career guidance and networking, knowledge of office politics, and feedback seeking and self-presentation. In addition, intern initiative, their mode of learning, their relationship with supervisors and monetary compensation are positively related to changes in several dimensions of career competencies.

If replicated by other researchers, these findings may contribute to counseling professionals, administrators involved in the arranging of internship for students and the internship hosting employers. Students can be encouraged to seek out internship experiences that provide appropriate supervision and compensation, facilitate taking initiative and effective workplace learning.


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Appendix A

Approval Letter: Penn State Office for Research Protections

EXEMPTION DETERMINATION

Date: August 4, 2014
From: Courtney Whetzel, IRB Analyst
To: Fen Chen

Type of Submission: Initial Study

Title of Study: The Impact of Internship Experience on Liberal Arts Students’ Career Competencies

Principal Investigator: Fen Chen

Study ID: STUDY00000815

Submission ID: STUDY00000815

Funding: Not Applicable

Documents Reviewed: ● HRP-591 - Protocol for Human Subject Research.pdf (0.01), Category: IRB Protocol

The Office for Research Protections determined that the proposed activity, as described in the above-referenced submission, does not require formal IRB review because the research met the criteria for exempt research according to the policies of this institution and the provisions of applicable federal regulations.

Continuing Progress Reports are not required for exempt research. Record of this research determined to be exempt will be maintained for five years from the date of this notification. If your research will continue beyond five years, please contact the Office for Research Protections closer to the determination end date.

Changes to exempt research only need to be submitted to the Office for Research Protections in limited circumstances described in the below-referenced Investigator Manual. If changes are being considered and there are questions about whether IRB review is needed, please contact the Office for Research Protections.

This correspondence should be maintained with your records.

Penn State researchers are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within CATS IRB (http://irb.psu.edu).

This correspondence should be maintained with your records.
Appendix B

Email Permission to Use Career Competency Indicator

Hi Fen,

Hope you are well.

Your research sounds interesting and it would be great to understand a bit more. What are the deadlines for your project? I have attached a research application form and wondered if you would mind completing this. It just gives us some more information about your specific project, the numbers involved and aims etc. We are happy to offer our products free of charge for student research but do ask that we can have a copy of the results and write about them – e.g., in social media, blogs, articles.

I will also send you a separate email with a link to complete a trial of the CCI so that you can see the questions for yourself. The CCI is designed for 18-24 year olds and assumes that they have some, albeit minimal, work experience – this might be a part-time job for example.

Please let me know if you have any questions in the meantime and I look forward to hearing more details about your project.

Thanks,
Ruth

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Dear Dr. Francis-Smythe,

Please allow me to introduce myself. I am an advanced doctoral student in the Counselor Education and Supervision Program at Penn State University, United States. My advisor, Dr. JoLynn Carney as well as my committee members has encouraged me to contact you regarding my dissertation research, which is focused on the relationship between internship experience and the career competencies of students from Liberal Arts Colleges.

During my entire literature search, I have found that I agree wholeheartedly with you about the importance of building career competencies for employee’s career self-management under the current career reality. I believe that it is also very important that college students shouldn’t wait until they secure their first jobs to start managing their own careers. This seems especially critical for liberal arts students whose majors are not directed connected with any career path.

However, this point hasn’t really come to the attention of researchers in higher education. Even with my extensive literature review, I haven’t found any good assessments that measure students’ career competencies like you have done with employees. I was so excited to find your work on the development and validation of the Career Competencies Indicator. In fact, it is the only validated measurement I found for career competencies. Because it was designed for employees (if I understand this correctly), there are several items that won’t make sense to college students. I wonder if you would consider allowing me to adapt those items to match with college students' experience and use revised version for my research.

Thank you very much in advance for your kind consideration of my request.
Appendix C

Permission to Use the Scale of Internship Learning

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Jan 7

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Jody Vaisman <jody.vaisman@gmail.com> to me

Hi Fen,
Certainly, you can use the ScIL. I’d love to hear more about your research. Have you already defended your proposal? Send me a summary, if you have it. Below is my work contact information.

Regards,
Jody Clark Vaisman

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Jan 6

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Fen Chen <fchen1120@gmail.com> to Jody Vaisman

Dear Dr. Vaisman,

Please allow me to introduce myself. I am an advanced doctoral student in the Counselor Education and Supervision Program at Penn State University. My advisor, Dr. Jo Lynn Carney as well as my committee members has encouraged me to contact you regarding my dissertation research, which is focused on the relationship between internship experience and the career competencies of students from Liberal Arts Colleges.

During my entire literature search, I have found that I agree wholeheartedly with you about the importance of a holistic understanding of students’ learning in their internship experience. However, this point hasn’t really come to the attention of researchers in higher education. Even with my extensive literature review, I haven’t found any good assessments that measure students’ learning in internship like you have done with NYU students. I was so excited to find your work on the development and validation of the Scale of Internship Learning. I wonder if you would consider allowing me to your scale in my research.

Thank you very much in advance for your kind consideration of my request.

Best regards,
Appendix D

Email Subject: Opportunity to Evaluate Your Career Readiness – Take CLA Senior Career Survey

Dear [student name]:

As you are approaching the end of your undergraduate study, do you feel prepared for life after graduation? Do you want to know what you could do to get ready for a successful career post college? CLA Career Services invites you to take a brief but very important survey that will help you identify strategies for career growth and will also help us improve our services for you.

This survey is a collaboration between CLA Career Services and Fen Chen, a researcher from Penn State University. It will ask you about your academic or work related experience and will take about 15 minutes. Your participation in this study is voluntary and responses will remain confidential.

To show our appreciation, you will have FREE access to a comprehensive report from Synermetric on your career readiness with suggestions for your career preparation (valued at $35) upon your request, and you will also be entered into a drawing for one of sixteen $25 Amazon gift cards. Please click on the link below to start the survey:

https://umn.qualtrics.com/SE/?SID=SV_9S0fgGvmLaZUFBb

If you have any questions or need more information about this survey, please contact Fen Chen (fxc5041@psu.edu), or Dr. Jolynn Carney (jvc15@psu.edu).

And, as you are preparing to finish your college career, please remember that the CLA Career Services staff is here to support you. If you’d like help developing your career plans, working on a resume, or connecting with potential employers, let us know. For more information, see http://www.clacareer.umn.edu

Thank you for participating in this important survey of CLA seniors.

Sincerely,

Paul Timmins

Director, CLA Career Services
Title of Project: The impact of internship experience on liberal arts students’ career competencies.

Principle Investigator: Fen Chen (chen2398@umn.edu)
Advisor: Dr. Jolynn Carney (jvc15@psu.edu)

1. Purpose of the Study: The purpose of this study is to investigate the impact of internship experience on liberal arts students’ career competencies.

2. Procedures: If you decide to participate, you will be asked to complete a demographic questionnaire and two instruments about your internship experience (one instrument if you haven’t had an internship experience).

3. Duration: It will take about 15-25 minutes to complete the survey.

4. Anonymity/Confidentiality: This study is conducted for research purposes. Your participation in this study is anonymous and responses will remain completely confidential. The collected data will be used for statistical analysis and no personally identifiable information will be revealed.

5. Voluntary Participation: Your participation in this study is voluntary, so you can decide whether you would like to take this survey or not. Also, you have the right to stop your participation and leave the study at any time without any penalties or consequences.

6. Benefits /Compensation: Your responses would help contribute to the field of counseling and liberal arts education. For those who complete the survey, the researcher will enter your email address in a random drawing for one of Amazon gift certificates. (Two $100, three $50, five $10 gift certificates).

8. Risks: There are no known risks or discomfort associated with participation in this study.

9. Right to Ask Questions: If you have any questions or need more information about this research, please contact Fen Chen at chen2398@umn.edu.

Please click the “continue” button to start to take this survey. By clicking the “continue” button indicates that you have read the informed consent, understand the informed consent, and agree to participate in this study.
Appendix F
Demographic Questionnaire

Please type in or click the appropriate answer to the following.

1. Years of age at your last birthday: _____

2. Gender: Male _____ Female _____ Other_____ (Please describe your gender)

3. What year are you?
   Freshman _____ Sophomore _____ Junior _____ Senior _____

4. College major: ________________________________ (Please specify)

5. The name of the institution where you are currently enrolled: ________________________

   “An internship is a supervised preprofessional career related experience, paid or unpaid, part or full-time, with measurable learning objectives and formal evaluations” (Brooks et al., 1995).

6. Have you participated in any type of internship experience (as defined above) while at college?”
   Yes ___   No ___

7. Please indicate the length of your internship experience by filling the blanks:
   I worked ______ hours/week for ______ weeks at this/these internship(s).

8. How much does your internship relate to your field of study?

9. What type of compensation have you received for your internship? (Choose all that apply)
   a. Monetary b. Token c. Academic credit d. None

10. Have you taken one or more internship related coursework?
    Yes ___   No ___

11. Have you participated in other career-related work experience (not considered an internship) since entering college?
    Yes ___   No _____

12. Please indicate the length of the experience by filling the blanks:
    On average I work(ed) ____ hours/week for ____ month(s).
Appendix G

Career competency indicator

This questionnaire aims to measure your career related behavior and assumes that you have some basic work experience in a specific field or occupation. We recommend the equivalent of at least 2 months full or part time which can include volunteer work or internships. Please answer the questions as if you were still employed in your most recent job role. The questionnaire is designed to aid personal development so please respond openly. There is no right or wrong answers. Please do not think too long about one question.

Agreement scale:
1 = strongly disagree, 2 = disagree, 3 = neither agree or disagree, 4 = agree 5 = strongly agree

Feedback seeking and self-presentation

1. I make others aware of the assignments I want.
2. I make others aware of my aspirations and career objectives.
3. I make my work become visible to other people.
4. I seek feedback on my training and development needs.
5. I seek feedback on opportunities I have identified for future career development.
6. I seek feedback on my career progress to date.
7. I ask for feedback on my job performance from my immediate supervisor.
8. I ask for feedback on my job performance from individuals other than my supervisor.

Job-related performance effectiveness

1. I perform the activities that are expected as part of the job.
2. I meet set deadlines.
3. I fulfil the responsibilities specified in my job description.
4. I perform all assigned duties.
5. I meet the quality standards required of my job.

Goal setting and career planning

1. I have a clear idea of what my career goals are.
2. I change or revise my career goals based on new information I receive regarding myself and my situation.

3. I know what I need to do to reach my career goals.

4. I have a strategy for achieving my career goals.

5. I have a plan for my career.

**Self-knowledge**

1. I know my own strengths.

2. I am aware of my weaknesses.

3. I know what job features are personally important to me.

4. I know what work tasks or projects interest me.

5. I recognize what I can and what I can't do well.

**Career guidance and networking**

1. I seek to become acquainted with higher-level managers.

2. I seek counselling and advice from higher-level managers.

3. I seek career guidance from my supervisor.

4. I seek career guidance from experienced people outside the organization.

5. I network with co-workers or other people to provide myself with help or advice that will assist my career progression.

6. I keep in contact with people in my work who hold important positions.

7. I network with people who are in important positions in other organizations or the community.

8. I introduce myself to people who can influence my career.

**Knowledge of (office) politics**

1. I can identify the people who are most important to getting the work done.

2. I have a good understanding of the motives behind the actions of other people at work.

3. I have a good understanding of the politics in my work.

4. I know who the most influential people are in my work.
5. I use my interpersonal skills to influence people at work.

**Career related skills**

1. I develop skills which may be needed in future positions.
2. I develop knowledge and skills that make me distinctive.
3. I develop expertise in areas that are critical to my work unit’s operation.
4. I gain experience in a variety of work assignments to increase my knowledge and skills.
5. I take job-related courses.
6. I seek out training and development opportunities.
7. I keep informed on affairs, structures and processes in my profession.
Appendix H

Scale of Internship Learning

Instructions: Thank you for participating in this short survey about your experiences during your MOST RECENT internship experience. Please choose your primary supervisor, if you report to more than one person, when thinking about your experience. CO-WORKER(S) in this survey are fellow professionals and/or co-interns with whom you work directly in your job and no other students with whom you may have taken internship-related courses.

Agreement scale:

1 = strongly disagree, 2 = disagree, 3 = neither agree or disagree, 4 = agree 5 = strongly agree

DURING MY internship,

1. My supervisor’s expectations of me were clear.
2. My co-worker(s)’ expectations of me were clear.
3. My supervisor was accessible to help me in my work.
4. My co-worker(s) were accessible to help me in my work.
5. The terms of my reporting relationship to my supervisor were explicit.
6. The terms of my working relationship to my co-worker(s) were explicit.
7. My supervisor freely shared information with me.
8. My co-worker(s) freely shared information with me.
9. My supervisor sought my opinion.
10. My co-worker(s) sought my opinion.
11. My supervisor collaborated with me on projects.
12. My co-worker(s) collaborated with me on projects.
13. My supervisor gave me regular feedback.
14. My co-worker(s) gave me regular feedback.
15. My supervisor gave me encouragement.
16. My co-worker(s) gave me encouragement.
17. My supervisor facilitated my day-to-day professional development needed to complete job responsibilities.
18. My co-worker(s) facilitated my day-to-day professional development needed to complete job responsibilities.

19. I asked my supervisor to help me write or think about goals for my learning.

20. I asked my co-worker(s) to help me write or think about goals for my learning.


22. My co-worker(s) encouraged work-study balance.

23. My supervisor was important to my motivation at work.

24. My co-worker(s) were important to my motivation at work.

25. My supervisor contributed to team-building.

26. My co-worker(s) contributed to team-building.

27. My supervisor was important to developing skills that I will need longer-term.

28. My co-worker(s) were important to developing skills that I will need longer-term.

29. My supervisor viewed me as a leader.

30. My co-worker(s) viewed me as a leader.

31. My organization facilitated my transition into the organization.

32. There was a workplace curriculum or built-in ways to ensure that I learned.

33. I had the opportunity to participate in an off-site training, workshop, conference, or professional development activity.

34. Learning opportunities were recommended.

35. My activities were unnecessarily limited in scope.

36. I could take on additional tasks or responsibilities from within my organization/department if I wanted.

37. I was encouraged to experiment.

38. I worked on a broad range of projects/activities.

39. I was micromanaged.

40. I was assigned legitimate work, as opposed to 'busy work' or observation.

41. I was included in important meetings.

42. The organization allowed for increasing level of participation over time.

43. My skills were valued.

44. I gained some authority over my own work or projects over time.

45. My level of participation was similar to or greater than an entry-level professional by the end.

46. I recognized areas where I need to learn more.
47. I sought different ways to learn about my job.
48. I identified skills I need to learn in the future.
49. I independently wrote or thought about goals for my learning.
50. I sought involvement in tasks outside of my direct day-to-day responsibilities.
51. I sought to take on additional responsibilities in order to learn.
52. I added to a list of things I want to accomplish for my next job.
53. I considered myself primarily responsible for my own learning.
54. I initiated projects, ideas, or techniques.
55. I was willing to make mistakes in order to try something new.
56. I was often able to work through barriers that arose.
57. I generally viewed problems as a challenge.
58. I negotiated conflict with others.
59. I accepted criticism.
60. I asked my supervisor questions regularly.
61. I asked my co-worker(s) questions regularly.
62. I asked my supervisor to teach me something, such as a skill, concept, technique, etc.
63. I asked my co-worker(s) to teach me something, such as a skill, concept, technique, etc.
64. I observed the behavior of others in order to imitate or avoid the same behavior.
65. I worked to transition my replacement or co-worker(s) to take over some of my responsibilities.
66. I learned from FORMAL on-the-job training.
67. I learned from INFORMAL on-the-job training, demonstrations, conversations, etc.
68. I learned from observing and listening.
69. I learned from trial and error.
70. I learned by performing everyday work activities.
71. I learned from clients/students or other people I served.
Fen Chen

**EDUCATION**

PhD in Counselor Education and Supervision  
May 2015  
Pennsylvania State University  
State College, PA

Master of Education in Community Counseling  
December 2010  
University of Missouri - St. Louis  
Saint Louis, MO

Bachelor of Art in English Literature  
July 2003  
East China Normal University  
Shanghai, China

**WORK EXPERIENCE**

**Academic & Professional Development Specialist**  
August 2014 - Present  
The Graduate School  
University of Minnesota

**Career Counselor**  
September 2013 – May 2014  
College of Liberal Arts Career Services  
University of Minnesota

**Career Counselor**  
January 2012 – November 2012  
Career Services  
Penn State University

**English Teacher and Guidance Counselor**  
August 2003 – August 2005  
Fuzhou NO. 3 Middle School  
Fuzhou, China

**SELECTED PUBLICATIONS & CONFERENCE PRESENTATION**


**RESEARCH INTERESTS**

Career development in higher education

- Liberal arts students’ career planning and the impact of internship experience
- International students’ career barriers and institutional support
- Graduate students’ career support within and beyond academia