

INTERNSHIP PARTICIPATION: IMPACTS ON CAREER OUTCOMES AND STARTING
SALARIES

A Thesis
Submitted to the Graduate Faculty
of the
North Dakota State University
of Agriculture and Applied Science

By
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In Partial Fulfillment of the Requirements
for the Degree of
MASTER OF SCIENCE

Major Program:
Educational Leadership

September 2018

Fargo, North Dakota

North Dakota State University
Graduate School

Title

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AND STARTING SALARIES

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State University's regulations and meets the accepted standards for the degree of

MASTER OF SCIENCE

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ABSTRACT

Internships are a great way for college students to gain real-world work experience. Students who participate in an internship should learn valuable skills, build a network and gain professional confidence. Employers want to see prior, relevant work experience when deciding who to hire and an internship can provide that.

This quantitative research study examined the impacts on career outcomes and starting salaries for college graduates who participated in a paid internship, unpaid internship or no internship and in a structured internship program for which they receive college credit, a non-credit internship and no internship.

The results clearly showed that students who completed any type of internship were employed at a higher rate than those who did not complete an internship. There was also a substantial impact on higher starting salaries for those who completed a paid internship.

ACKNOWLEDGEMENTS

As a high school student, I never would have thought I would complete a Master's degree. I was happy to just be completing high school. Eventually earning an associate and bachelor degree gave me the confidence to continue my education. There are many individuals who have helped support me in finishing this thesis.

Thank you to my advisor Dr. Tom Hall. If it was not for a conversation with him early in this program, I would have completed a practicum and never attempted writing this paper. He asked me thoughtful questions about my academic interests and helped me realize I could do this. All of your encouragement and advice along the way was invaluable.

To my committee members, Dr. Rhonda Kitch and Dr. Brent Hill, thank you for your feedback on my thesis proposal and encouragement along the way.

Finally, to my friends, colleagues and especially my husband and children, thank you for all the words of encouragement when I was feeling like writing this paper was going to be impossible.

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CHAPTER 1. INTRODUCTION

Background of the Study

It seems plausible that an undergraduate student who completes an internship or experiential learning opportunity (ELO) during their college or university career would have an advantage in the job search compared to a peer who did not have this type of experience. This study examined a structured internship program (a type of ELO) offered through a Midwestern, public university career center. It compared career outcome data and starting salaries of graduating seniors who have completed at least one semester of the center's structured internship program with graduates who completed an internship outside of their program, as well as, with those who did not complete an internship.

The objective of this research was to present data on whether or not completing an internship (structured or not) during college contributes to positive career outcomes (employment, volunteer experience and continuing education) and higher starting salaries. This information is vital for institutions because as education costs continue to rise and chronic decreases in government funding continue, parents and prospective students are shopping around and wanting to see the potential return on investment (ROI) of a college education. To determine ROI, families are calculating tuition and living expenses and comparing them with potential job prospects and starting salaries in their chosen major or career field. This information is critical for assisting students in choosing a school that has a proven record in positive career outcomes which is important information for students wanting to figure out potential lifetime earnings and their potential ability to pay back student loans.

Statement of the Problem

Institutions of higher education are always looking for ways to elevate the employability of their graduates and if not, they should be. More than ever before, students and their families are looking for proof that their financial investment will pay off when a degree is earned (Rose, 2013). Supporting internships is one possible way institutions can help their students attain positive career outcomes upon graduation. The problem to be explored in this study was if a student completes an internship (structured or not) during their undergraduate experience, are they more likely to have a positive career outcome within six months of graduation compared to students who did not complete an internship? The study also examined the impact on starting salaries between students who completed an internship compared to those who did not.

Purpose of the Study

The purpose of this study was to determine if students who completed an internship (structured or not) have higher rates of positive career outcomes and starting salaries within six months of graduation compared with students who did not complete an internship. As stated earlier, ROI in higher education is important to students and families, but the federal government has a large stake as well. The federal government has a vested interest in the ROI of higher education for the following reasons. First, billions of taxpayer dollars are appropriated to the U.S. Department of Higher Education each year and the majority of this money is distributed to students in the form of grants and loans (Edwards & McCluskey, 2015). The government wants accountability from institutions receiving this money. This includes proof that students will be able to pay back their loans and not default. Second, the federal government would like to see students that are awarded grant money are actually graduating and not dropping out.

In 2013, President Obama said that his administration would formulate metrics to rate colleges and that the college's rating would be tied to its ability to enroll students who receive federal student aid. This is critical because federal aid is a major funding source for practically all institutions (Edwards & McCluskey, 2015). One of the rating factors used was related to career outcome data and although the administration stepped back from that plan, they moved forward with having schools publish a "scorecard" that lists average annual cost, graduation rates and starting salary information of graduates (U.S. Department of Education, 2018).

Another rating factor was gainful employment upon graduation. Gainful employment addressed the ability of graduates to pay back loans and targeted for-profit schools (Federal Student Aid, n.d.). The initial rules were overturned by a federal court, however, in July 2015, new rules which penalize a school if a typical graduate's earnings are not enough to cover annual loan repayments have been upheld. Therefore, it is more important than ever for schools to offer students programs (such as internships) that could make positive impacts on their career outcomes and potential ability to pay back student loans.

Significance of the Study

According to the National Association of Colleges and Employers (NACE) 2017 Internship & Co-op Survey Report, the average job offer rate for interns was 67.1% and the acceptance rate of those offers was 76.4% (National Association of Colleges and Employers, 2017). That data suggests students who complete an internship are finding success in the job market and demonstrates the potential impact of having students participate in an internship as it relates to positive career outcomes. This study will go further than the NACE report by looking at impacts on career outcomes and starting salaries for students who participate in a paid or unpaid internship and in a structured internship program that grants academic credit.

Research Questions

The following research questions guided this study and were analyzed using data collected from a survey of graduating seniors between August 2015 and May 2017.

1. What is the impact on career outcomes between college graduates who do not complete an internship, completed an unpaid internship, and completed a paid internship?
2. What is the impact on starting salaries between college graduates who do not complete an internship, completed an unpaid internship, and completed a paid internship?
3. What is the impact on career outcomes between college graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program?
4. What is the impact on starting salaries between college graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program?

The data used for this quantitative research study came from a Midwestern, public university career center and was collected through an online survey and telephone calls of graduating seniors between August 2015 and May 2017. Data also came from the career center's content management system where they record internship program placement information on students participating in their program.

Definition of Terms

The following definitions are provided to ensure uniformity and understanding of these terms throughout the study. The researcher developed all definitions not accompanied by a citation.

Career Outcome: A replacement for the term placement, a career outcome is the primary employment status of a recent graduate and may include employed, military, voluntary service programs, continuing education, seeking employment, and others.

Cooperative Education: Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a “co-op”, provides academic credit for structured job experience. Co-op experiences are either full-time (40 hours per week) alternating periods (semester, quarter) of work and school or part-time (20 hours per week) combining work and school during the same time period. Co-op experiences are paid, supervised by a professional who has followed the same career path of the student and students complete more than one assignment (2 or more) with progressive levels of responsibility (Cooperative Education & Internship Association, n.d.).

Experiential Education: In its simplest form, experiential education can be defined as challenge and experience followed by reflection leading to learning and growth (Association for Experiential Education, n.d.).

Experiential Learning: The application of academic knowledge in a real world setting. Experiential learning can happen in a variety of settings including; volunteer work, internships, jobs, research, study abroad, and more. The experience can be either paid or unpaid and is the "hands on" part of learning.

Internship: An experience involving student’s working in their expected career field, either during a semester or over the summer. Internships may be paid or unpaid and may or may not carry academic credit. Internships are typically one time experiences and are typically connected to an academic program with course requirements designed and monitored by

faculty. Internships generally have related learning outcomes and required academic assignments (Cooperative Education & Internship Association, n.d.).

Limitations

The results from this study are derived from one institution and as such may not be generalizable beyond a comparable university or a university with similar programs. Also, the results may not be applicable for non-traditional aged college students who may have prior professional work experience.

Organization of the Study

Chapter one has presented the introduction, statement of the problem, research questions, significance of the study, definition of terms, and limitations of the study. The remaining chapters are organized as follows. Chapter two contains origins and historical overview of experiential education, exploration of different types of ELOs in higher education, an in depth look at internships in relation to this study, and controversies related to ELOs. Chapter three presents the methodology and procedures used to gather data for this study. Chapter four presents the results of the quantitative analyses from the study. Chapter five contains a summary of the study's findings, conclusions, discussion, and recommendations for further study.

CHAPTER 2. REVIEW OF LITERATURE

To understand experiential education (EE) and experiential learning opportunities (ELOs) for the context of this study, the literature review will be structured as follows. Origins and historical overview of EE, exploration of different types of ELOs in higher education, an in depth look at internships in relation to this study, and controversies related to ELOs.

Experiential Education – Origins and Historical Overview

The philosophy of educating students by means of EE has been around for a very long time. “I hear and I forget. I see and I remember. I do and I understand.” is an ancient Chinese proverb that is core to the philosophy of EE which is rooted in creating experiences for students which allows them to learn by doing.

McCarthy (2010) noted the historical roots of EE began with educational theorist pioneers, John Dewey, Kurt Lewin and Jean Piaget. In 1938, Dewey wrote that “there is an intimate and necessary relation between the processes of actual experience and education” (Dewey, 1938, p. 7). He contended that EE is a process of combining classroom learning with an experiential component such as hands-on experience from real-life tasks and challenges.

Similarly, Lewin’s development of the action research stages of diagnosing problems, finding solutions, exercising solutions, and carefully planning next actions complements Dewey’s work by reinforcing the idea of applying knowledge in real situations which deepens learning and develops tangible, transferable skills (Miettinen, 2000).

According to Peterson (2011), Piaget’s theory of cognitive development encourages learners to pose and test new hypotheses in response to new situations. Sometimes called problem-based learning, this process provides an opportunity for students to participate in

problem solving where they take previous knowledge and combine it with new discoveries to develop deeper understanding and concepts.

The essence of all three theorists as it relates to experiential education and learning, is that learning is best accomplished by living, experimenting and doing. Any opportunity for hands on experiences and meaningful reflection will lead to deeper learning and understanding which allows students to develop context specific knowledge and collaborative social skills.

While Dewey, Lewin, and Piaget laid the foundation for EE, some argue the most influential experiential education researcher is David Kolb. He developed the experiential learning theory (ELT) and learning styles inventory (LSI). Kolb's ELT defines learning as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb, 1984, p. 41). He also advanced the learning cycle (which Robert Karplus developed) while at Berkeley to improve pedagogy in science (Sowell, 1991). The learning cycle is a circular cycle that includes concrete experience, reflective observation, abstract conceptualization, and active experimentation which is depicted in Figure 1. Kolb believed that for substantial learning to take place all four stages of the cycle must be completed. He also noted that learners can enter and cycle through at any stage (Kolb, 1984).

Originally, Kolb's theory included four distinct learning styles which included diverging, assimilating, converging and accommodating. In 2011, he updated this to include nine learning styles in the Kolb Learning Styles Inventory 4.0 as depicted in Figure 2 (Peterson, DeCato, & Kolb, 2015). Each of these styles corresponds to preferences for the four modes of the Learning Cycle as shown in Figure 1. The tool was intended to increase an individual's self-awareness of

their preferred learning style and to become flexible by expanding their preferred learning style and adapting to situational needs (Peterson et al., 2015).

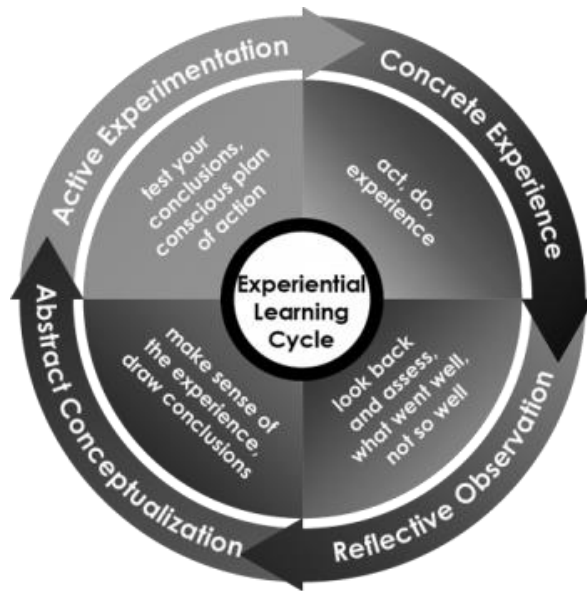


Figure 1. Illustration of Kolb's Experiential Learning Cycle
Note: Reprinted from eLearning wiki (2018, April 23). Retrieved from http://elearningwiki.com/index.php?title=Course_structure

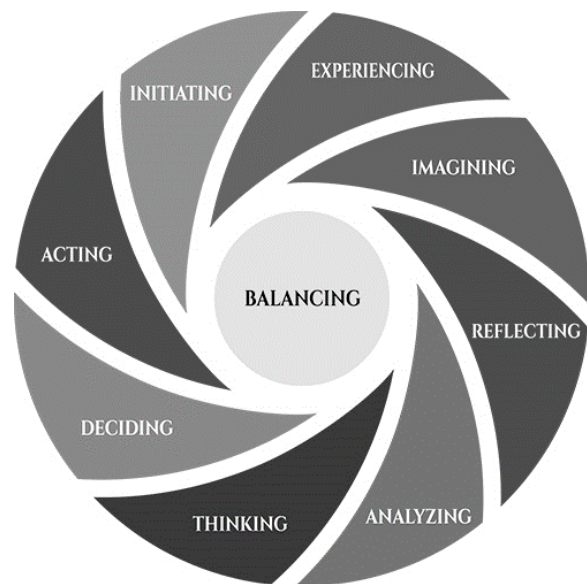


Figure 2. Illustration of Kolb's Learning Style Inventory
Note: Reprinted from Institute for Experiential Learning (2018, April 23). Retrieved from <http://www.experientiallearninginstitute.org/>

Kolb's research paved the way for the development of pedagogy in higher education that incorporates aspects of EE. One of the most prominent ways a student can engage in EE in college is through experiences such as cooperative education, internships, service learning, externships, research, study abroad and fieldwork. These are all types of ELOs.

Exploration of Types of Experiential Education in Higher Education

This literature review has examined the origins and historical overview of Experiential Education (EE). The focus now shifts to explaining Experiential Learning Opportunities (ELOs) in which students can participate while in college. As stated above, ELOs include cooperative education, internships, service learning, externships, research, study abroad, fieldwork and other educational and professional experiences. Some of these opportunities are paid experiences, while others are unpaid and the structure of the experience is often dependent on the student's discipline and the type of opportunity. What they all have in common is the desire to provide students with experiences that will allow them to cycle through Kolb's experiential learning cycle and ultimately deepen their learning and provide a connection between what is being taught in the classroom and what will be expected on the job. Of particular importance for this study are the development of employability skills which may lead to a positive career outcome upon graduation (Chan, 2012).

Here are some abbreviated explanations of the most common ELOs in higher education. The researcher developed all explanations not accompanied by a citation.

Cooperative Education. Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op", provides academic credit for structured job experience. Co-op experiences are either full-time (40 hours per week) alternating periods (semester,

quarter) of work and school or part-time (20 hours per week) combining work and school during the same time period. Co-op experiences are paid, supervised by a professional who has followed the same career path of the student and students complete more than one assignment (2 or more) with progressive levels of responsibility (Cooperative Education & Internship Association, n.d.).

Externship. A form of experiential education in which students engage in a short (often weeks long), practical experience which is often related to their field of study. The main difference between an externship and an internship is the duration of the experience.

Fieldwork. A form of experiential education that provides for the integration of theory (learned in the classroom) and practice (performed in the field) often under the supervision of a faculty member.

Internship. An experience involving student's working in their expected career field, either during a semester or over the summer. Internships may be paid or unpaid and may or may not carry academic credit. Internships are typically one time experiences and are typically connected to an academic program with course requirements designed and monitored by faculty. Internships generally have related learning outcomes and required academic assignments (Cooperative Education & Internship Association, n.d.).

Research. A form of experiential education where a student participates in research studies under the supervision of a faculty member.

Practicum. A type of fieldwork which allows students to observe and practice in real world situations where they are supervised by professionals in the field.

Service Learning. A form of experiential education in which students engage in activities that address human and community needs together with structured opportunities for reflection designed to achieve desired learning outcomes (Jacoby, 1996, p. 5).

Study Abroad. An opportunity to live and study in an international location. Students learn about different cultures and how to communicate in a global market.

These opportunities benefit students by giving them real-world experiences outside of the classroom, letting them test drive their career choice and an opportunity to increase their network of professional contacts before they graduate. The next section provides a closer look at each of these benefits.

Experiential Education Student Benefits

Real-World Work Experience. Students completing ELOs get a chance to work in the “real-world” and develop employability skills that employers look for. Typically called soft skills, employers find students who complete an ELO benefit from becoming more self-aware, being better able to manage their time and being better at prioritizing their daily tasks (Ghannadian, 2013). These skills can be difficult to teach in a classroom setting. This is where a student who completes an ELO should have an advantage in the job search over a student who has not.

Test Drive Career Choice. ELOs allow students to “test-drive” not only their career choice, but the company they go to work for while still in school. These on-the-job training opportunities allow a student who is majoring in accounting, for example, to see what it is like to do that work day in and day out. Sometimes, after completing an ELO, a student changes their mind about their career path and either makes a shift in focus within their current major, going from tax accounting to auditing for example, or changes their major altogether.

Another advantage for students completing an ELO is the ability to observe multiple positions within a company and be able to talk to current employees about what they did to get where they are (Fussell Policastro, 2006).

A student could also take part in an internship that is unrelated to their major but may be in an area where they have a personal passion. This could lead the student down an unintended, but fulfilling path such as entrepreneurship.

Networking Opportunities. Anyone a student has an interaction with while involved in an ELO becomes a potential contact once the student is job searching or in need of a professional reference. Depending on the size of the organization, the student could be working directly with a CEO or other high ranking employees and should capitalize on these meetings when they are presented.

According to Stoddard (2014), some effective methods of using an ELO to network include establishing relationships and connections with supervisors and others on the team, looking beyond the department to see if there is anyone that sparks a personal interest based on what they do in the company, attending special events and conferences when applicable and setting specific network building goals.

Internships

As discussed above, there are many different types of ELOs a student can participate in. This section focuses on internships because whether or not a student completed an internship during college is at the core of the research questions for this study. Below are two definitions and characteristics of internship used by the National Association of Colleges and Employers (NACE) and the career center used in this study.

The word internship means different things in different contexts and can be completely different experiences depending on the industry and the way it is structured. The NACE recommended definition and characteristics for internship are as follows:

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 (NACE, 2011, para. 5).

Beyond this definition, NACE has laid out specific characteristics to ensure an experience is educational and thus able to be considered an “internship” (NACE, 2011, Criteria for an Experience to be defined as an Internship section). The criteria are:

1. The experience must be an extension of the classroom: a learning experience that provides for applying the knowledge gained in the classroom. It must not be simply to advance the operations of the employer or be the work that a regular employee would routinely perform.
2. The skills or knowledge learned must be transferable to other employment settings.
3. The experience has a defined beginning and end, and a job description with desired qualifications.
4. There are clearly defined learning objectives/goals related to the professional goals of the student’s academic coursework.
5. There is supervision by a professional with expertise and educational and/or professional background in the field of the experience.

6. There is routine feedback by the experienced supervisor.
7. There are resources, equipment, and facilities provided by the host employer that support learning objectives/goals.

It is important to recognize the NACE definition and characteristics of internships because it is the premier professional association for career centers and employers and their resources are used extensively and quoted often by career services professionals. After extensive research, NACE publishes standards and best practice protocols on many employment related topics that are often adopted by career centers and employers of new college graduates.

The career center used in this study has adapted and modified the NACE definition for internship as follows: Internship is a paid work experience related to students' academic major or career goals and taken for academic credit. Employers hire internship students to achieve company goals by providing work opportunities to students whose skill sets are relevant to the position offered (What is an Internship?, n.d.). Their internship program criteria cover most of NACE's characteristics. Missing are clearly defined learning objectives/goals related to the professional goals of the student's academic coursework and resources, equipment, and facilities provided by the host employer that support learning objectives/goals. It should be noted that some faculty advisors at this university do assign coursework for students completing an internship through the career center's program which can include either a weekly reflection or a final reflection paper at the end of the experience.

The goal of this section was to provide an explanation for the internship program being used in this study in relation to the published data on internships by NACE. The career center closely followed NACE's guidelines and as such internships taken for credit using this program are considered structured, academic internships.

Controversy

During the course of research for this literature review, it was difficult to find controversy or arguments over the positive impacts that an ELO can have on students. Two worth mentioning in the context of this study are unpaid internships and lost academic possibilities for students who complete an ELO instead of a potentially useful course.

Unpaid internships have been a source of debate and legal action for some time. Much of the debate surrounding unpaid internships are if they are ethical and follow federal employment guidelines. According to the United States Labor Department's Fact Sheet #71, there are six criteria that must be met in order for an unpaid internship to be legal (United States Department of Labor, 2010). Over the past several years, lawsuits have been filed by interns claiming their employer did not follow the Fair Labor Standards Act (FLSA) by not compensating them for work they completed that fell within the six criteria. This study addresses unpaid internships in the context of how they relate to career outcomes and starting salaries.

There are assumptions that unpaid internships do not provide the same learning opportunities as a paid internship. It is not uncommon to have visions of a "glorified gopher" when hearing of a student who has done an unpaid internship in the entertainment industry such as at a magazine or television show. While this may be true for some unpaid experiences, there are potential benefits such as building a network and having a positive learning experience. If the experience is well designed the student may also develop transferable skills with incorporated objectives, outcomes and deliverables (Tepper & Holt, 2015).

Unfortunately, there are several negative consequences of unpaid internships that may be overlooked. According to research conducted by Held (2016), unpaid internships may create a "confidence gap" and be a "prescreen" for future full-time employees. Held described the

confidence gap by stating that “a student with an unpaid experience may not have the confidence to negotiate for a higher salary because they will consider themselves lucky to have a paying job” (Held, 2016, p. 43). The prescreen factor can play a role if an employer sees that a graduate completed an unpaid experience and assumes they could not find a paid position and therefore must be a mediocre candidate. This could influence the recruiter to not make an offer for employment.

Another unintended consequence of unpaid internships according to Ed Koc, director of strategic and foundation research at NACE, is that they can perpetuate economic inequality (Mihelich, 2014). Research NACE conducted in 2014 found that white and Asian students were most likely to have paid internships and that there were more paid internships for males than females.

A final consequence Mihelich stated was that there are only a select group of students that can financially afford to participate in an unpaid internship (Mihelich, 2014). Often, students coming from families able to financially support them during an unpaid internship offer little in the way of diversity. This could ultimately lead to a less diverse workforce because historically unrepresented populations in higher education cannot afford to participate in an unpaid internship.

The second controversy surrounding ELO's is the potential loss of academic knowledge for students choosing to complete an ELO. Kijinski (2018) argues that the “real-life” experiences that come from an ELO often come at the expense of important academic work. He believed that in the short term, completing an ELO could give a student an advantage in the job search. However, he contended there are long term benefits of completing a course of difficult subject

matter that cannot be easily learned experientially. He strongly felt that what is offered and learned in a classroom can be even more important than what can be learned on the job.

Conclusions can be drawn from this part of the literature review that not all ELOs are created equal and that students will have varying experiences depending on the type of program they take part in. The review also demonstrated there are tangible skills students will receive if they take part in an internship that takes the NACE criteria into account. These attained skills may lead to positive career outcomes and higher starting salaries.

Summary

This literature review provided a look at the origins and historical overview of experiential education, exploration of different types of ELOs in higher education, an in depth look at internships in relation to this study, and controversies related to ELOs.

CHAPTER 3. METHODOLOGY

Introduction

Chapter 3 outlines the procedures used to execute this study. The chapter looks at the research problem, purpose of the study, research questions, population, instrumentation, and data collection procedures.

Research Problem

This study provides a quantitative analyses that shows if there is an impact on career outcomes and starting salaries for graduating seniors who completed an internship compared with those who did not.

Purpose of the Study

The purpose of this study was to determine if graduating seniors who completed an internship (as part of the career center internship program or not) have higher rates of positive career outcomes and higher starting salaries compared with graduating seniors who did not complete an internship within six months of graduation.

Research Questions

The following research questions guided this study and were analyzed using data collected from a survey of graduating seniors from August 2015 to May 2017.

1. What is the impact on career outcomes between college graduates who do not complete an internship, completed an unpaid internship, and completed a paid internship?
2. What is the impact on starting salaries between college graduates who do not complete an internship, completed an unpaid internship, and completed a paid internship?

3. What is the impact on career outcomes between college graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program?
4. What is the impact on starting salaries between college graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program?

Population

The data used for this quantitative research study was drawn from a Midwestern, land grant, Research University's Career Center. Fall 2017 enrollment at this university was nearly 14,500 students and nearly 84% were undergraduate students. Just over 95% of the undergraduate students were 24 years old or younger and males outnumbered females by just over 1,100 students.

Target Population

The target population for this study were graduating seniors who received a bachelor's degree between August 2015 and May 2017. The total number of graduating seniors in this time frame was 4,581. The career center received responses from 4,022 for an 87.8% response rate. After removing some of the results $n = 2,373$. A detailed explanation for the removed results can be found in the data collection procedures section below.

Survey Instrument

The survey was developed following the standards and protocols set forward by the National Association of College's and Employers (NACE) and was created with a web-based survey tool called Formsite. NACE is the preeminent national organization focused on the employment of the college educated and its standards and protocols are used by colleges and

universities across the United States. The goal of this NACE initiative was to establish initial minimum standards and protocols which serve to provide consistent reporting across institutions. A copy of the survey can be found in the appendix.

The researcher received IRB approval upon submitting the application for research involving existing records. Additionally, the career center had received approval for opening text for the survey by the university student affairs assessment director in 2015 and the researcher received permission to complete the study and use the data from the career center director. The permission email from the career center can be found in the appendix.

The main survey question focused on which option best described the graduate's primary status after graduation. The options for this question described the first destination employment outcome of the graduate. Choices included various categories for employment, continuing or planning to continue education, not seeking employment or continuing education at this time, and seeking employment. The survey used skip branch logic to reveal additional questions based on the answer to the first question. Employer name, job title, position location, salary and bonus information were collected if the graduate is employed. Institution name, location of the institution, program of study and degree pursuing were collected if the graduate is continuing their education.

The survey ended with a question which asks if the graduate participated in a career-based experiential education opportunity. If yes, they were asked if the opportunity was paid or unpaid. A copy of the survey can be found in the appendix. The next section explains the data collection procedures.

Data Collection Procedures

The career center at this university attempted to survey all graduating seniors up to six months after graduation to obtain career outcome information. The six months timeframe is important because it is one of the guiding principles established by the NACE Board of Directors and is followed by most institutions when reporting career outcomes (NACE First-Destination Survey Task Force, 2014, p. 5).

One month before graduation, the graduating seniors took part in an event where they speak with representatives from Registration and Records, Customer Account Services and the Career Center. The Career Center had them fill out a web-based survey containing career outcome questions including questions about any career-related experiential learning opportunities (ELOs) they took part in. The career center emailed the survey two more times before graduation and then approximately three weeks after graduation. The survey is emailed to those who did not respond at the pre-graduation event or to the other emails. This continues for three months and then the office used student employees to call the remaining graduates to obtain the data. Looking up LinkedIn profiles to obtain career outcomes was the last effort to increase the knowledge rate before closing the survey. Knowledge rate is defined by NACE as reasonable and verifiable information concerning the graduates' career activities (NACE First-Destination Survey Task Force, 2014, p. 6). The center strived to reach an 85% response rate within six months of graduation.

The data for this study was collected by the career center as part of their annual first destination employment survey process. The collected data was exported from their survey software and imported to a Microsoft Access database. Data also came from the career center's

content management system where they record internship program placement information on students participating in their program.

The archived survey results included in this study were from seniors graduating between August 2015 and May 2017. The total population for this group was 4,581 graduates.

The researcher accessed the archived career outcome data by exporting survey results from the career center's Microsoft Access database. Not exported for this analysis were 659 results from graduates who did not return a survey, who refused to participate and who were not seeking employment or continuing education at the time they responded to the survey. The researcher reviewed the exported data and some of the responses were removed. The removed responses included 43 duplicate graduates (these were graduates receiving more than one degree in the reporting period), 707 who did not answer the question regarding internship participation and 439 records where respondent did not answer if the internship was paid or unpaid. The researcher also removed 360 survey responses from education and healthcare majors because at this institution all students in these majors are required to complete an experiential learning opportunity and as a result including their data may skew the results of the analysis. After removing the noted results from the 4,581 possible respondents, $n = 2,373$.

Once the data was ready for analysis it was uploaded into the data analysis software Stata (version 15). The researcher used Stata to run descriptive statistics, chi-squared and one-factor ANOVA analyses.

CHAPTER 4. RESULTS

Introduction

This chapter covers the purpose of the study, descriptive statistics, results of the statistical analyses used for each research question and a summary.

Purpose of the Study

The purpose of this study was to determine if graduating seniors who complete an internship have higher rates of positive career outcomes and higher starting salaries within six months of graduation compared with graduates who did not complete an internship. The population for this study included graduating seniors who received a bachelor's degree between August 2015 and May 2017. Responses from graduates from the college of health professions and education majors were excluded because at this institution all students in these majors are required to complete an experiential learning opportunity (the majority are unpaid) and as a result including their data may have skewed the results of the analysis.

The following research questions were posed.

1. What is the impact on career outcomes between college graduates who do not complete an internship, completed an unpaid internship, and completed a paid internship?
2. What is the impact on starting salaries between college graduates who do not complete an internship, completed an unpaid internship, and completed a paid internship?
3. What is the impact on career outcomes between college graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program?

4. What is the impact on starting salaries between college graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program?

Descriptive Statistics

The target population for this study is graduating seniors receiving a bachelor’s degree between August 2015 and May 2017. After removing the records that are noted in the data collection procedure section in Chapter 3, the total population for this study is $n = 2,373$. Once the data was ready for analysis it was uploaded into the data analysis software Stata (version 15). The researcher used Stata to run descriptive statistics, chi-square and one-factor ANOVA analyses.

Table 1 and Table 2 show frequencies of gender and college enrolled for the total population.

Table 1

Frequencies of Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	934	39.4	39.4	41.2
Male	1,439	60.6	60.6	100.0
Total	2,373	100.0	100.0	

Table 2

Frequencies of College Enrolled

	Frequency	Percent	Valid Percent	Cumulative Percent
Agriculture, Food Systems, and Natural Resources	434	18.3	18.3	18.3
Arts, Humanities, and Social Sciences	403	17.0	17.0	35.3
Business	340	14.3	14.3	49.6
Engineering	517	21.8	21.8	71.4
Human Development and Education	280	11.8	11.8	83.2
Science and Mathematics	358	15.1	15.1	98.3
University Studies	41	1.7	1.7	100.0
Total	2,373	100.0	100.0	

The next section reports the findings for each of the study's four research questions.

Research Question 1

What is the impact on career outcomes between college graduates who do not complete an internship, completed an unpaid internship, and completed a paid internship?

Impact on Career Outcomes – No Internship, Unpaid Internship, Paid Internship

The first research question compares career outcomes between graduates who did not complete an internship, completed an unpaid internship, and completed a paid internship. Table 3 shows the employment outcomes by internship type (none, unpaid and paid).

Of the 2,373 survey responses analyzed, 1,195 respondents (50.4%) indicated they completed an internship (subtotal of unpaid and paid internship) and 1,178 respondents (49.6%) indicated they did not complete an internship. Of the 1,195 graduates who completed an internship, 881 respondents (73.7%) indicated they were paid and 314 respondents (26.3%) indicated they were unpaid.

Table 3

Contingency Table for Employment Outcomes by Type of Internship

	Employed	Seeking Employment	Continuing Education	Total
No Internship	831 70.54%	132 11.21%	215 18.25%	1,178 100.00%
Unpaid Internship	233 74.20%	27 8.60%	54 17.20%	314 100.00%
Paid Internship	720 81.73%	78 8.85%	83 9.42%	881 100.00%
Total	1,784 75.18%	237 9.99%	352 14.83%	2,373 100.00%

The overall likelihood-ratio chi-square test of homogeneity for the proportions of employment-outcome categories (employed, seeking employment, and continuing education) across the three basic internship categories (none, unpaid, and paid) show statistically significant results, $G^2(4) = 41.6334, p < .001$.

Follow-up chi-square tests were conducted in order to make head-to-head comparisons between types of internships. There were no significant differences in employment proportions for the graduates with no internship versus those with an unpaid internship, $G^2(2) = 2.280, p = .320$. However, significant differences were found in both comparisons involving paid internships: No internship versus paid internship comparison, $G^2(2) = 39.553, p < .001$, and unpaid internship versus paid internship comparison, $G^2(2) = 12.895, p = .002$.

Results of the chi-square tests showed graduates who completed a paid internship were more likely to be employed than those who completed no internship or an unpaid internship. Also, graduates who completed a paid internship were more likely to be employed than to be continuing their education compared to those who did not complete an internship or who completed an unpaid internship.

Research Question 2

What is the impact on starting salaries between college graduates who did not complete an internship, completed an unpaid internship and completed a paid internship?

Impact on Starting Salaries – No Internship, Unpaid Internship, Paid Internship

The second research question explores the impact on starting salaries of graduates who did not complete an internship, completed an unpaid internship and completed a paid internship. Of the 2,373 survey responses analyzed, 889 provided actual starting salaries. Of the analyzed responses, 500 respondents (56.2%) indicated they completed an internship while in school and 389 respondents (43.8%) indicated they did not complete an internship while in school.

Table 4 shows that of the 500 graduates who completed an internship, 408 respondents (81.6%) indicated they were paid and 92 respondents (18.4%) indicated they were not paid.

Table 4

Descriptive Statistics for Salary by Type of Internship

Internship type	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
No Internship	389	46126.42	14095.07	11000	85000
Unpaid Internship	92	36587.13	8369.34	18900	60000
Paid Internship	408	50851.82	13330.99	15000	99000
Total	889	47307.92	13918.60	11000	99000

A one-factor ANOVA was conducted to determine if the mean starting salary differed between graduates who did not complete an internship, completed an unpaid internship and completed a paid internship.

Table 5 demonstrates the one-factor ANOVA is statistically significant ($F[2, 886] = 46.18, p < .001$) and suggest that there is a statistically significant impact on starting salaries between the internship type groups (none, unpaid and paid).

Table 5

ANOVA for Salary by Type of Internship

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Internship type	1.624×10^{10}	2	8.121×10^9	46.18	< .001
Residual	1.558×10^{11}	886	1.758×10^8		
Total	1.720×10^{11}	888	1.937×10^8		

Note. $R^2 = .094$.

Table 6 and Figure 3 show the post-hoc analysis for mean starting salaries comparing types of internship.

Table 6

Post-Hoc Analysis for Mean Salaries by Type of Internship

Comparison	Difference	<i>SE</i>	<i>t</i>	<i>p</i>
No Internship – Unpaid Internship	9539.29	1537.287	6.21	< .001
Paid Internship – No Internship	4725.40	939.670	5.03	< .001
Paid Internship – Unpaid Internship	14264.69	1530.425	9.32	< .001

Note. P-values adjusted for multiple comparisons using the Tukey method.

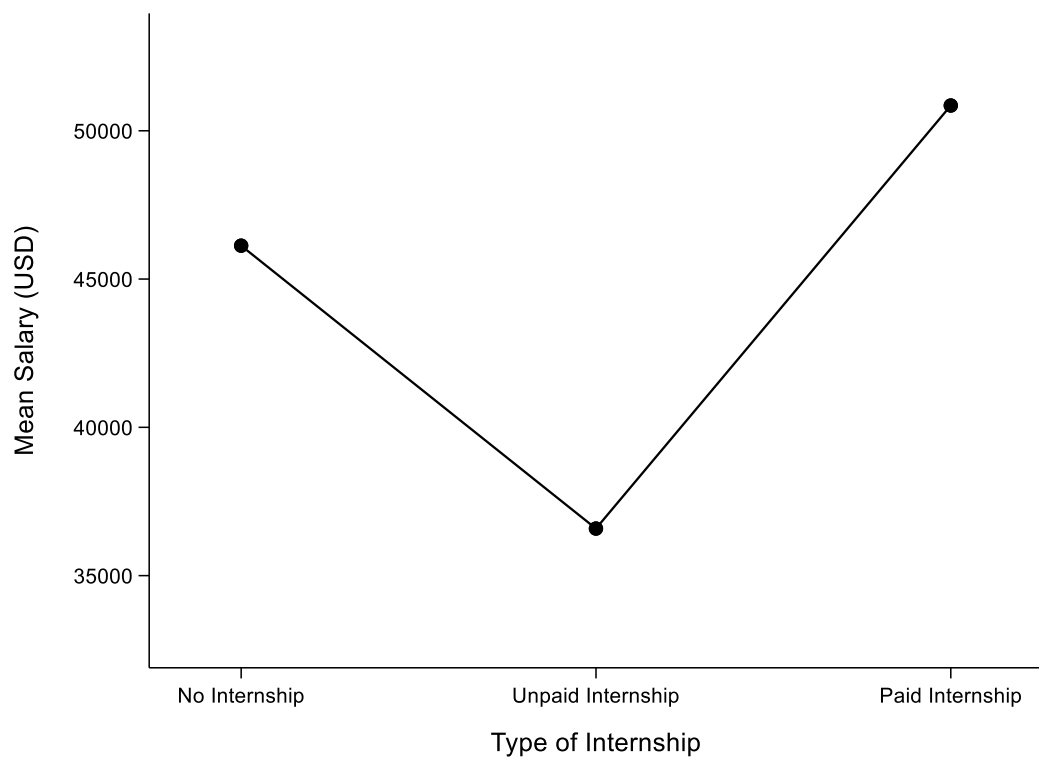


Figure 3. Profile plot for the mean reported salaries for each general type of internship.

Of particular interest in the analyses for this question is the significant difference in starting salaries between those with no internship and those with an unpaid internship. This could be interpreted to say that in regard to starting salaries, it is better to not complete an internship than to complete an unpaid internship. Further analysis could be done on the graduate's gender, ethnicity, and major to determine if those variables played a role in the results.

Research Question 3

What is the impact on career outcomes between college graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program?

Career Outcomes – No Internship, Internship, Career Center Internship Program

Research question three compares career outcomes of graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career

center internship program. Table 7 shows of the 2,373 surveys analyzed, 1,195 respondents (50.4%) indicated they completed an internship (subtotal of internship and career center internship program) and 1,178 respondents (49.6%) indicated they did not complete an internship. Of the 1,195 graduates who completed an internship, 849 respondents (71.0%) indicated they completed an internship (not part of the career center internship program) and 346 respondents (29.0%) indicated they participated in the career center internship program.

Table 7

Contingency Table for Employment Outcomes by Career Center Internship Program

	Employed	Seeking Employment	Continuing Education	Total
No Internship	831 70.54%	132 11.21%	215 18.25%	1,178 100.00%
Internship	665 78.33%	75 8.83%	109 12.84%	849 100.00%
Career Center Internship Program	288 83.24%	30 8.67%	28 8.09%	346 100.00%
Total	1,784 75.18%	237 9.99%	352 14.83%	2,373 100.00%

The overall likelihood-ratio chi-square test of homogeneity for the proportions of employment-outcome categories (employed, seeking employment, and continuing education) across the three basic internship program categories (none, internship, and career center internship program) is statistically significant, $G^2(4) = 34.6571, p < .001$.

Follow-up chi-square tests were conducted in order to make head-to-head comparisons between internship program types. There were significant differences in employment proportions for the graduates with no internship versus internship, $G^2(2) = 16.0472, p < .001$. There is also significant differences in the employment proportions for the graduates with no internship versus career center internship program, $G^2(2) = 27.5047, p < .001$. Strictly speaking, the comparison between the graduates with internships versus those with career center program internships is not

statistically significant, $G^2(2) = 5.9183$, $p = .052$. However, an increasingly common (although somewhat contentious) practice (Pritschet, Powell, & Horne, 2016) would declare this particular comparison as marginally significant since the p-value ($p = .052$) was only slightly greater than the nominal significance level ($\alpha = .05$). This is done in this instance for two major reasons. First, these findings were expected—the researcher suspected that graduates completing career center internships would have an advantage over those involved in other internships. Thus, these results are noteworthy and warrant further discussion and future research. Second, the p-value for these comparisons have been adjusted using the Bonferroni method, which is known to be a very conservative approach. Hence, these p-values are likely to be overinflated.

Results of the chi-square tests shows graduates who completed any type of internship are more likely to be employed than those who completed no internship. Although marginally significant, it bears note that graduates participating in the career center internship program are employed at a slightly higher percentage (4.91%) than those who indicated taking part in an internship.

Research Question 4

What is the impact on starting salaries between college graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program?

Impact on Starting Salaries – No Internship, Internship, Career Center Internship Program

Research question four explores the impact on starting salaries between graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program. Of the 2,373 survey responses analyzed, 889

provided actual starting salaries. Of the analyzed responses, 500 respondents (56.2%) indicate they completed an internship and 389 respondents (43.8%) indicate they did not complete an internship.

Table 8 shows that of the 500 graduates who completed an internship, 337 respondents (67.4%) indicate their internship was not through the career center internship program and 163 respondents (32.6%) indicate their internship was through the career center internship program.

Table 8

Descriptive Statistics for Salary by Career Center Internship Program

Internship type	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
No Internship	389	46126.42	14095.07	11000	85000
Internship	337	46260.59	14185.47	15000	90000
Career Center Internship Program	163	52292.90	11750.99	17000	99000
Total	889	47307.912	13918.60	11000	99000

A one-factor ANOVA was conducted to determine if the mean starting salary differed between graduates who did not complete an internship, completed an internship and completed an internship through the career center internship program.

Table 9 demonstrates the one-factor ANOVA is statistically significant ($F[2, 886] = 13.16, p < .001$), and suggests there is a statistically significant impact on starting salaries between those who complete an internship through the career center internship program compared to those who did not.

Table 9

ANOVA for Salary by Career Center Internship Program Participation

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Career Center Internship Program	4.963×10^9	2	2.482×10^9	13.16	< .001
Residual	1.671×10^{11}	886	1.886×10^8		
Total	1.720×10^{11}	888	1.937×10^8		

Note. $R^2 = .029$.

Table 10 and Figure 4 show the post-hoc analysis for mean starting salaries comparing career center internship program participation.

Table 10

Post-Hoc Analysis for Mean Salaries by Career Center Internship Program Participation

Comparison	Difference	SE	t	p
Internship – No Internship	134.1659	1021.896	0.13	.991
Career Center Internship Program – No Internship	6166.474	1281.236	4.81	< .001
Career Center Internship Program – Internship	6032.308	1310.1	4.60	< .001

Note. P-values adjusted for multiple comparisons using the Tukey method.

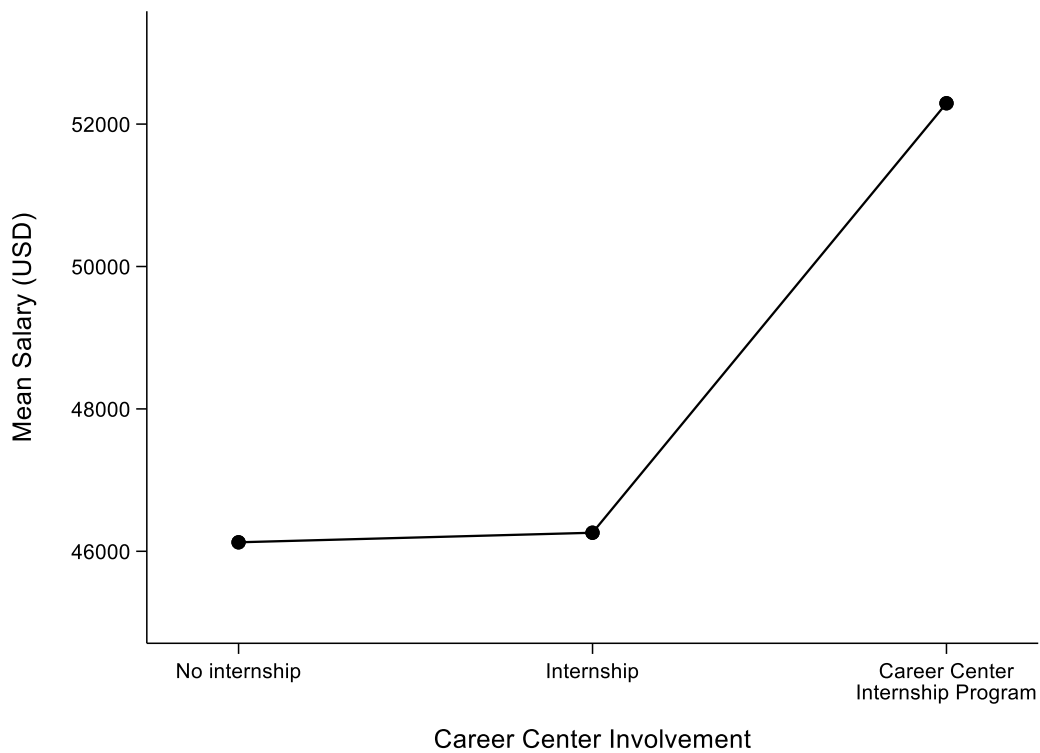


Figure 4. Profile plot for the mean reported salaries for each category of career center internship program involvement.

These results indicate that starting salaries for graduates who participated in the career center internship program are significantly higher than for those who did not complete an internship or who completed an internship that is not part of the career center internship program.

The results also indicated a slightly higher starting salary for those who completed an internship (not part of the career center internship program) compared to those who did not complete an internship.

Summary

The analyses of the survey data in regards to career outcomes shows there is a statistically significant difference in the percentage of graduates employed within six months of graduation depending on internship type. Those who completed an internship (paid or unpaid) are more likely to be employed, which underscores the importance of this type of experiential learning opportunity.

The career outcome results for graduates who participated in the career center internship program compared to graduates who completed an internship (not through the career center internship program) are marginally significant ($p = .052$). This indicates that graduates may have a slight edge in becoming employed if they participate in the career center internship program.

The starting salaries analyses show the mean starting salary for graduating seniors who completed a paid internship is \$50,852 compared to \$36,587 for those who completed an unpaid internship. That is a difference of \$14,265 or 27% which can make a huge impact on the lifetime earning potential of an individual with projected annual increases taken into account.

Finally, the results show the mean starting salary for graduating seniors who participated in the career center internship program was \$52,293 compared to \$46,261 for those who

completed an internship. That is a difference of \$6,032 or 12.5% which can also make a substantial impact on the lifetime earning potential of an individual.

CHAPTER 5. SUMMARY, CONCLUSIONS, DISCUSSION, RECOMMENDATIONS

Summary

Does internship participation impact career outcomes and starting salaries? If so, are the impacts significant? The purpose of this quantitative study was to determine if students who completed an internship prior to graduation have higher rates of positive career outcomes and higher starting salaries within six months of graduation compared with students who did not complete an internship.

To answer these questions the following research questions were analysed.

1. What is the impact on career outcomes between college graduates who do not complete an internship, completed an unpaid internship, and completed a paid internship?
2. What is the impact on starting salaries between college graduates who do not complete an internship, completed an unpaid internship, and completed a paid internship?
3. What is the impact on career outcomes between college graduates who did not complete an internship, completed an internship, and completed an internship as part of a structured, career center internship program?
4. What is the impact on starting salaries between college graduates who did not complete an internship, completed an internship, and completed an internship as part of a structured, career center internship program?

In order to analyze these questions, the researcher used archived data collected by a career center as part of its annual first destination employment survey process. The archived data was for graduating seniors between August 2015 and May 2017. The career center used a survey that was developed following the standards and protocols recommended by the National Association of Colleges and Employers (NACE).

The researcher conducted an overall likelihood-ratio chi-square test of homogeneity for research questions one and three and a one-way ANOVA with a post-hoc analysis for research questions two and four. All tests were conducted using statistical analysis software Stata (version 15).

For research question one the overall likelihood chi-square test of homogeneity was conducted to determine if there was a relationship between internship participation (none, unpaid or paid) and career outcomes (employed, seeking employment, and continuing education). For research question three the overall likelihood-ratio chi-square test of homogeneity was conducted to determine if there was a relationship between career outcomes for graduates who did not complete an internship, completed an internship or participated in the career center internship program.

For research question two, a one-way ANOVA was conducted to determine if the mean starting salary differed significantly between graduates who did not complete an internship, completed an unpaid internship and completed a paid internship. An ANOVA was also conducted for research question four to determine if the mean starting salary differed significantly between graduates who did not complete an internship, completed an internship or participated in the career center internship program.

A post-hoc analysis for research question two compared the mean starting salaries by type of internship (none, paid, unpaid) to determine if there was significant differences. The test did find statistically significant results between all categories.

Another post-hoc analysis was done for research question four which compared the mean starting salaries by career center internship program participation (no internship, internship, career center internship program) to determine if there were significant differences. The test

found no significant difference on mean starting salary when comparing internship and no internship. Significant differences were found when comparing career center internship program to no internship and career center internship program to internship.

The researcher concluded there was statistically significant differences in career outcomes for research question one. Graduates who completed a paid internship were more likely to be employed than those who completed no internship or an unpaid internship. Graduates who did not complete an internship were more likely to be seeking employment and graduates who completed a paid internship were more likely to be employed than to be continuing their education.

Conclusions

The purpose of this study was to determine if graduating seniors who completed an internship have higher rates of positive career outcomes and starting salaries within six months of graduation compared with students who did not complete an internship.

Research question one asked, “What is the impact on career outcomes between college graduates who do not complete an internship, completed an unpaid internship, and completed a paid internship?” The researcher found statistically significant results in the employed category of career outcomes that showed graduating seniors who participated in either a paid internship (81.73% employed) or unpaid (74.20% employed) internship were employed at a higher percentage compared to graduating seniors who did not complete an internship (70.54% employed). There was also a significant difference in the number of graduating seniors who continued their education if they had no internship (18.25%) or an unpaid internship (17.20%) compared to those who participated in a paid internship (9.42%).

The second research question asked, “What is the impact on starting salaries between college graduates who do not complete an internship, who completed an unpaid internship, and who completed a paid internship?” The results showed that the mean starting salary for graduating seniors who completed a paid internship is \$50,852 compared to \$36,587 for those who completed an unpaid internship. That is a difference of \$14,265 or 28% which can make a huge impact on the lifetime earning potential of an individual.

Research question three asked, “What is the impact on career outcomes between college graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program?” The researcher found statistically significant results that showed graduating seniors who participated in the career center internship program were employed at a higher rate (83.24%) compared to graduating seniors who participated in an internship (78.33%) and who did not participate in an internship (70.54%). The results also revealed that the percentage for the seeking employment outcome category was almost the same for those who participated in the career center internship program (8.09%) and for those who completed an internship (8.83%).

Question four asked, “What is the impact on starting salaries between college graduates who did not complete an internship, completed an internship and completed an internship as part of a structured, career center internship program?” The results revealed that the mean starting salary for graduating seniors who participated in the career center internship program was \$52,293 compared to \$46,261 for those who completed an internship. That is a difference of \$6,032 which can make a substantial impact on the lifetime earning potential of an individual. The post-hoc analysis revealed that there was no significant difference in the mean starting salary

between those who did not complete an internship and those who completed an internship that was not part of the career center internship program.

Based on this study's results several conclusions can be made: 1) graduating seniors who completed an internship (paid or unpaid) were more likely to be employed within six months of graduation, 2) graduating seniors who completed a paid internship or no internship were more likely to be employed at a higher mean starting salary than a graduating senior who completed an unpaid internship, and 3) graduating seniors who participated in a structured internship (such as this universities career center internship program) were more likely to be employed and to start at a higher salary than those who completed an internship or who did not complete an internship.

Discussion

According to the National Association of Colleges and Employers (NACE) 2017 Internship & Co-op Survey Report, the average job offer rate for interns was 67.1% and the acceptance rate of those offers was 76.4% (National Association of Colleges and Employers, 2017). This study found that graduating seniors who participated in either a paid or unpaid internship were employed at 81.73% and 74.20% respectively within six months of graduation which is consistent with the NACE report in reference to the acceptance rate percentage.

The difference in employment rates between paid and unpaid internships in the study's results could make an argument for guiding students to complete paid internships whenever possible. The average of the employed career outcome between completion of paid and unpaid internships was 77%, which was almost identical to the results published by NACE (76.4%). This indicated that this school is on track with the national average.

It was difficult to find research on starting salaries of graduating seniors who participated in an internship. Most of the research is available for purchase from national association's

websites which could not be accessed. However, NACE did publish some information on its website in 2016 related to this topic. According to a snippet from the Class of 2015 Student Survey, having a paid internship/co-op yielded higher median starting salaries (National Association of Colleges and Employers, 2016). Their research broke down the results by employer type including private, for-profit company, nonprofit organization, state or local government agency and federal government agency. In all employer types, the median starting salary was higher, sometimes significantly.

The findings in this study regarding mean starting salaries similarly showed that graduating seniors who participated in a paid internship had higher starting salaries than those who participated in an unpaid internship. The results showed a 27% increase in the starting salary, which is quite significant. The extra earnings could help the graduate pay off student loans, buy a house or be invested or saved for the future.

The researcher was surprised to find the large difference in mean starting salary between a graduating senior who did not complete an internship (\$46,126) compared to those who completed an unpaid internship (\$36,587). In relation to starting salary, this result indicated that it was better to not complete an internship than to complete an unpaid internship. However, it is important to note that the mean starting salary may be higher, but the employed career outcome for a graduate who did not complete in internship was lower by almost five percent.

Recommendations

Additional research on this topic could take the graduates major or college into account, which may show differences in academic areas which could draw new conclusions from the analysis. Additionally, the survey could be refined to ask the graduates employment industry

instead of using the graduates major or college to make it more comparable to other schools whose academic programs may be different.

Additional questions could be asked on the survey regarding if the graduate received a job offer as a result of their internship and if they accepted or declined the offer. This would add to the literature about the effectiveness of internship participation and its effects on career outcomes.

Results of this study could be presented to lawmakers to possibly create incentives or to give funding to local organizations to create paid internships for college students. This could be a benefit to the state because the organizations may offer employment to the intern which could keep them in their state where they would contribute to the economy and fill skilled job openings.

Career centers could also assist local employers with creating paid, structured internship programs that takes the NACE standards into account. This could be particularly valuable for graduating seniors because the results of this study find they would start at a higher salary and be employed faster. It could also help states to retain workers because companies may find themselves making offers to current interns to become full-time employees.

The results should also be communicated to faculty and advisors so they are aware of the differences in career outcomes and starting salaries for students who completed a paid versus unpaid internship. This information could assist faculty and advisors to give students relevant, helpful career advice when it comes to completing a paid versus an unpaid internship.

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APPENDIX A. SURVEY QUESTIONS

Survey used for this study.

Class of 2017 First Destination Employment Survey

INTRODUCTION

██████████ Career Center has published an annual employment report of graduates. Graduates are surveyed before and after graduation by electronic surveys and telephone calls to determine how many enter the job market, how many go on to pursue higher education degrees and salary information.

This report provides a snapshot of all students in every undergraduate major on campus who graduated in August, December and May of the past year.

We value your contribution as we aim to collect data to enhance services for students, showcase the accomplishments of the Class of 2017 and get a better understanding of graduate successes.

This survey takes approximately 3-5 minutes to complete.

INFORMED CONSENT

Survey participants may learn about how data gathered through the First Destination Survey is used and reported, by reviewing our [Informed Consent](#) information.

By clicking Next, you agree to participate in this survey and accept the informed consent.

▲ 1 / 2 ▼

Student ID *

First Name *

Last Name *

Graduation Month *

August December May

Graduation Year *

2016 2017

Are you authorized to permanently work in the United States? *

Yes No

▲ 2 / 3 ▼

Which of the following BEST describes your PRIMARY status after graduation? Please select only ONE of the following categories: *

- Employed full-time (more than 30 hours per week)
- Employed part-time (less than 30 hours per week)
- Participating in a volunteer or service program (e.g., Peace Corps)
- Serving in the U.S. military
- Enrolled in a program of continuing education (e.g., Graduate or Professional School)
- Seeking Employment
- Planning to continue education, but not yet enrolled
- Not seeking employment or continuing education at this time

Which category BEST describes your employment: *

- Employed as an entrepreneur
- Employed in a temporary/contract work assignment
- Employed freelance (self-employed)
- Employed in a postgraduate internship or fellowship
- Employed in the farming or ranching industry
- Employed in all other work categories (most common)

Duties related to your college major/minor/option: *

- Related
- Not related

Employment was accepted/started before your graduation date: *

- Yes
- No

Are you employed within the United States? *

- Yes
- No

Employer Name: *

Employer City: *

Employer State: *

Employer Country *

State where you will be living if different from above state:

Job Title: *

Confidential, used for statistics only.

If employed full time, annual base salary amount in U.S. dollars:

Guaranteed first-year bonus amount in U.S. dollars, if you are receiving one:

Initial contact with employer was made through (select up to three): *

- | | |
|---|--|
| <input type="checkbox"/> CAREERlink Job Board | <input type="checkbox"/> Career Center |
| <input type="checkbox"/> Internship | <input type="checkbox"/> On-Campus Interview |
| <input type="checkbox"/> Career Fair/Expo | <input type="checkbox"/> Friend/Relative |
| <input type="checkbox"/> On-line Job Board | <input type="checkbox"/> Employment Agency |
| <input type="checkbox"/> Faculty/Department | <input type="checkbox"/> Previous/Continued Employer |
| <input type="checkbox"/> Academic Internship | <input type="checkbox"/> Employer Website |
| <input type="checkbox"/> Classified Ad | <input type="checkbox"/> Job Service |

Other

Are you still seeking other professional employment? *

- Yes No

If your PRIMARY status is participating in a volunteer or service program, please provide the following information about your assignment:

Organization *

City *

State:

Country

If your PRIMARY status is serving with the U.S. military, please provide the following information about your assignment:

Service Branch *

Rank *

If your PRIMARY status is enrolled in a program of continuing education, please provide the following information concerning your education:

Name of College/University/School: *

City: *

State: *

Program of study: *

Degree: *

- Bachelors
- Masters
- JD
- MD
- PhD
- PharmD

Other

▲ 3 / 4 ▼

During your time at [REDACTED], which of the following career-based experiential education programs did you participate in: *

- Academic internship/practicum/externship
- Internship Program through the Career Center
- Student Teaching
- Did not participate in a career-based experiential education program (please explain why not)

What was the result of your participation in a career-based experiential education program?: *

- I received and accepted an offer for career-related professional employment
- I received, but did not accept, an offer for career-related professional employment
- I have not received an offer for career-related professional employment through an experiential education program

Did you get paid for your career-based experiential education program? *

- Yes
- No

Did you utilize any Career Center services during your time at [REDACTED]?: *

- Yes
- No

Which of the following Career Center resources or services have you utilized? (Check all that apply) *

- Appointment (in Career Center)
- CAREERlink
- Career Fairs
- On-Campus Interviewing
- Other
- Career Center website
- Networking Events
- Mock Interviews
- Resume Critique

Why did you not utilize any Career Center resources or services? (Check all that apply): *

- I was unaware of the resources and services offered through the Career Center
- I am going to graduate school and do not need assistance
- I was able to find information I needed on the Internet
- I did not have any direction and didn't know how that would be perceived
- Other (Please specify)

APPENDIX B. IRB LETTER OF APPROVAL



July 3, 2018

Dr. Thomas Hall
School of Education

Re: IRB Determination of Exempt Human Subjects Research:
Protocol #HE18276, "INTERNSHIP PARTICIPATION: IMPACTS ON CAREER OUTCOMES AND
STARTING SALARIES – A Master's Thesis"

Co-investigator(s) and research team: Kimberly Domholt
Date of Exempt Determination: 7/3/2018 Expiration Date: 7/2/2021
Study site(s): NDSU
Sponsor: n/a

The above referenced human subjects research project has been certified as exempt (category #4) in accordance with federal regulations (Code of Federal Regulations, Title 45, Part 46, Protection of Human Subjects). This determination is based on the original protocol submission (received 6/24/2018).

Please also note the following:

- If you wish to continue the research after the expiration, submit a request for recertification several weeks prior to the expiration.
- The study must be conducted as described in the approved protocol. Changes to this protocol must be approved prior to initiating, unless the changes are necessary to eliminate an immediate hazard to subjects.
- Notify the IRB promptly of any adverse events, complaints, or unanticipated problems involving risks to subjects or others related to this project.
- Report any significant new findings that may affect the risks and benefits to the participants and the IRB.

Research records may be subject to a random or directed audit at any time to verify compliance with IRB standard operating procedures.

Thank you for your cooperation with NDSU IRB procedures. Best wishes for a successful study.
Sincerely,

A handwritten signature in purple ink that reads "Kristy Shirley".

Kristy Shirley, CIP, Research Compliance Administrator

For more information regarding IRB Office submissions and guidelines, please consult http://www.ndsu.edu/research/integrity_compliance/irb/. This Institution has an approved FederalWide Assurance with the Department of Health and Human Services: FWA00002439.

INSTITUTIONAL REVIEW BOARD

NDSU Dept 4000 | PO Box 6050 | Fargo ND 58108-6050 | 701.231.8995 | Fax 701.231.8098 | ndsu.edu/irb

Shipping address: Research 1, 1735 NDSU Research Park Drive, Fargo ND 58102

NDSU is an EOUAA university.

APPENDIX C. EMAIL APPROVAL FROM CAREER CENTER

Domholt, Kim

Subject: RE: Data for Thesis

From: Matthes, Mark
Sent: Friday, March 2, 2018 8:15 AM
To: Domholt, Kim <kim.domholt@ndscs.edu>
Cc: Garg, Smita <smita.garg@ndsu.edu>
Subject: Re: Data for Thesis

Hi Kim,

Yes, you can absolutely use the Career Center's employment report data for your thesis. I'm cc'ing Smita so that she is aware, if not already aware. I look forward to learning about your findings/analysis. Let me know if you need anything.

Thank you!

Mark

--

Mark Matthes
Director | Career Center
NORTH DAKOTA STATE UNIVERSITY

306 Ceres Hall
Dept 2802, PO Box 6050
Fargo ND 58108-6050
phone: [701.231.8466](tel:701.231.8466)
fax: [701.231.8756](tel:701.231.8756)
mark.matthes@ndsu.edu
career.ndsu.edu

On Fri, Mar 2, 2018 at 7:37 AM, Domholt, Kim <kim.domholt@ndscs.edu> wrote:

Hi Mark.

In the past you agreed that I would be able to use career center employment report data for my thesis. I am at that point of writing the proposal for my paper and just wanted to check again to make sure I can still use the data. I will also need to look at students who completed an internship through the career center for the research.

It would be in aggregate with no identifiable student information.

Here is a rough draft of my research questions.

Research Questions

This quantitative research analysis will examine career outcome employment data of undergraduate students to answer the following research questions.

1. What is the difference in career outcomes between college graduates that complete a paid internship or EEO compared to those that complete an unpaid internship or EEO?
2. What is the difference in career outcomes between college graduates that complete either a paid or unpaid internship or EEO compared to those that did not complete an internship or EEO?
3. What are the differences in starting salaries between college graduates that complete a paid internship or EEO compared to those that complete an unpaid internship or EEO?
4. What are the differences in starting salaries between college graduates that complete either a paid or unpaid internship or EEO compared to those that did not complete an internship or EEO?

The data used for this study will come from a Midwestern, public university career center and will be collected through an online survey of graduating undergraduates between August 2015 and May 2017.

If you want further explanation let me know.

Thank you!

Kim