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BRIDGING THE SOFT-SKILL GAP FROM EDUCATION TO EMPLOYMENT THROUGH INTERNSHIPS

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ABSTRACT

Employers express a growing concern that recent college graduates do not possess the necessary soft-skills to transition into entry level positions seamlessly. Educators are asked by employers and policy makers to provide instruction which would develop student skills in both the "hard" (academic and technical) and "soft" (personality traits and habits) skills required to be workplace-ready. The research study was designed to understand the degree to which internships enhance student soft-skill development, specifically in the areas of communication, teamwork, initiative, and, analytical thinking. Researcher-designed pre-post retrospective surveys were administered to students and one to corresponding supervisors to measure change in soft-skill development during a 13 week semester as a direct result from participating in an internship. 278 students (88%) and 287 supervisors (91%) consented to participate in the study and completed all of the items on the survey regarding soft-skill development. Macro level statistical testing using (MANOVA) was conducted to explore the relationship between the independent variable, time (13 week semester) and the dependent variables, soft-skills. Micro level paired samples t-tests were conducted on each scale and each item for students and supervisors. Results of the analysis of all soft-skill development items suggest that there are patterns among student and supervisor pre and post responses. Students and supervisors reported gains across all soft-skill development scales at the conclusion of the internship. Findings suggest that participating in an internship contributes to student soft-skill development.

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TABLE OF CONTENTS

LIST OF TABLES

TABLE PAGE

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Statement of the Problem

There is an increasing demand on new college graduates to be "workplace ready" when entering the job market. Not only is the current job market becoming more competitive for applicants, but it is also less likely to provide employee training programs for its new members (Abel, Deitz & Su, 2014; Cappelli, 2012). Being workplace ready involves developing skills in both the "hard" (academic and technical) and "soft" (personality traits and habits) skills areas (Schultz, 2008). While educators provide expertise and focus on hard-skill preparedness, the areas for soft-skill development, such as teamwork, initiative, analytical thinking, and communication, are often left untested for new graduates entering the workplace (Beard, Schwieger & Surendran, 2008). An internship will often be that first professional work experience for a student, and may be the best opportunity to address both hard- and soft-skill preparedness. The purpose of this research study was to understand the degree to which internships enhance student soft-skill development, specifically in the areas of communication, teamwork, initiative, and, analytical thinking (NACE, 2013). The study investigated the following questions:

1. To what degree are student interns' soft-skills including communication, teamwork, initiative, and, analytical thinking enhanced through participation in a 13-week internship? (Q1)

2. How do supervisors rate student intern's soft-skills enhancement including communication, teamwork, initiative, and, analytical thinking through participation in a 13-week internship? (Q2)

3. Is there congruence with how student interns and supervisors rate soft-skill development as a result of the internship? (Q3)

Significance of the Study

Higher education is met with the challenge of preparing graduates for rapidly changing work environments. Markets that exist today were unheard of just a few years ago (Cappelli, 2013; Reich, 2007). Increasingly, globalization and diversity of the economy require educators to re-think what is most essential for students to learn and how to prepare students to meet the emerging roles in new work environments. Workers without the skills and education to adapt to the changing work environment will be challenged to compete for employment (Andrews & Higson, 2008; Cappelli, 2012; Wirth, 1992). Within the last decade the United States economy has experienced high unemployment rates coupled with an increase in individuals returning for further education in order to acquire the skills necessary to become employable. According to the Partnership for 21st Century Skills P21 framework definitions, soft-skills consist of life and career skills, learning and innovation skills, information, media and technology skills, critical thinking, problem solving, communication, and collaboration (Partnership for 21st Century Skills, 2014). Therefore, *how* students develop 21st century skills is a most salient topic among educators and policy makers (Foster, 2013; Van Rooijen, 2011).

Recognizing the value of soft-skills and their impact on the workplace is the first step in addressing the needs of our global economy. Niche markets and businesses thrive because of individuals who possess the soft skills to initiate innovative and creative approaches to a global economy resulting in positive social and economic outcomes (Organization for Economic Co-operation and Development (OECD), 2013; Reich, 2007). Employers expect students will be "employment ready" after college graduation, possessing the necessary hard and soft-skills to be effective in the workplace although many students are not graduating from college with the essential soft skills to be effective in the workplace (Andrews & Higson, 2008; Calway & Murphy, 2007; Fischer, 2013; National Association of Colleges and Employers (NACE), 2013). Employers cited the five most important soft-skills valued in the work environment as the abilities to:

1. verbally communicate with persons inside and outside the organization,
2. work in a team structure,
3. make decisions and solve problems,
4. plan, organize and prioritize work,
5. obtain and process information (NACE, 2013).

In addition, nearly 75% of employers claimed they would prefer to hire candidates with relevant experiences through internships.

Employers use internships as training and retention programs to determine if the student has the necessary skills to convert from an intern to an employee (NACE employer survey, 2012). If education and industry are to

collaborate in the future to prepare students for jobs that quite possibly have not yet been created, it is essential to re-think the way in which educators and employers connect around the education of students (Davies, Fidler, & Gorbis, 2011; Van Rooijen, 2011).

A few essential conditions are necessary to establish a learning environment that could lead to developing the skills needed for the new economy (Reich, 2007; Wirth, 1992). Experiential learning provides an opportunity for a student to learn in an interactive social environment with the freedom to ask questions, try new things, and hone in on developing skills with guidance from educators and supervisors (Cates & Jones, 1999; Sides & Mrvica, 2007; Sweitzer, & King, 2013). Experiential learning is broadly defined as an educational environment where students apply their analytical, oral, written, and other skills obtained in the classroom to an external setting (NACE, 2014). Pedagogical approaches to experiential learning include faculty-led research, cooperative education, project-based learning, service learning, practicum experiences, and internship (NACE, 2014). Connecting theoretical knowledge from coursework with authentic experiences in an internship provides students with an opportunity for active engagement and deeper learning (Dewey, 1997; Kolb & Kolb, 2005; Svinicki, 2004).

Internships as a form of experiential learning have gained momentum in higher education as an educational approach to collaborating with community partners, connecting class concepts to real-world practice, and solving problems with innovative results to meet the needs of a changing world. In the 2012 NACE

first destination survey, more than half of the 50,000 undergraduate students from over 550 colleges and universities representing 50 states responded that they had participated in an internship while in college (NACE, 2012). Students highly rate the influence of internships on individual learning outcomes (Fenster & Parks, 2008). "Internship" is defined as 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, n.d.).

The interest in skill development through participation in internships has gained global attention, leading to open dialogue among all stakeholders, including students, employers, and educators, regarding the skills individuals need to be effective in the workplace (Andrews & Higson, 2008; DelGiudice, Libutti, Dawson & Castaneda, 2013; Hasbullah & Sulaiman, 2002; Rainsbury, Hodges, Burchell & Lay, 2002). Prioritizing workplace ready skill development through workforce education for adults requires aligning higher education, adult education, and economic development ("Workforce and Education Strategies", 2009). In order to create educational partnerships with multiple stakeholders, there must be transparent communication between educators and employers, who then negotiate these multiple domains of knowledge (Peach, Cates, Baden-Wuerttemberg, Jones & Lechleiter, 2011; Schultz, 2008). It is incumbent upon educators to include the advice of employers as they address both soft- and hard-

skills development. While educators focus on student understanding of theory, employers work to put that theory into practice. In addition, assessing learning goals with employer needs in mind can facilitate students making connection between theory and practice. In this way, internships may bring employers, educators, and students together to provide learning experiences which bridge the skill gap for successful transition from education to employment (Beard, 2007; Beard, Schwieger & Surendran, 2008; Thomason, 2013).

Definitions of Important Terms and Concepts

Educators: Faculty, staff, instructors, lecturers, and advisors involved in assisting or teaching students during the internship experience.

Employers: supervisors for the student engaging in an internship. The employer typically oversees the student learning experience while on site in the professional learning environment.

Experiential learning: broadly defined as providing an educational environment where students apply their analytical, oral, written, and other skills obtained in the classroom to an external setting. Pedagogical approaches include internship, faculty-led research, cooperative education, project based learning, service learning and practicum experiences (NACE).

Hard skills: academic and technical skills most often tested in higher education and associated with performing a job (Rainsbury, Hodges, Burchell & Lay, 2002).

Internship: 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).

Learning objectives: goals the student hopes to accomplish during the internship experience. Students typically create a list of learning objectives at the start of the semester in collaboration with employers and educators. At the conclusion of the internship, students provide evidence to support completion of learning objectives which often happens through portfolio or reflective journals.

Soft-skills: personality traits and habits including interpersonal and intrapersonal communication, engagement with others including teamwork, analytical skills including the ability to develop solutions to problems and take initiative (Schultz, 2008). According to the Partnership for 21st Century Skills P21 framework definitions, soft-skills consist of life and career skills, learning and innovation skills, information, media and technology skills, critical thinking, problem solving, communication and collaboration (2009).

Soft-skills gap: the difference between the communication, teamwork, initiative and analytical skills recent graduates possess and the expectations of the employers in meeting the needs of a workplace ready environment.

Supervisor: the employer who assigns assignments and evaluates student performance during the internship experience.

Workplace ready: a new employee having the necessary soft and hard skills to perform the job when hired.

CHAPTER 2

REVIEW OF LITERATURE

Internships, a social constructivist form of learning, have evolved with the changing industrial and societal needs over the last century (Hasbullah & Sulaiman, 2002). Prior to internships, higher education faculty and employers initiated regional cooperative extension education programs which taught students relevant competencies through resolving current problems in local industries (Eschenbacher, 1967). Over time, internships became an opportunity to engage students in observing masters in a trade, then practicing the trade to self-generate skills necessary for an occupation (Sides & Mrvica, 2007). Today, students who participate in internships are exposed to global issues providing students an opportunity to learn how to communicate effectively, work collaboratively in teams with diverse individuals, and think analytically about problems which need resolve (DelGiudice, et al., 2013).

Social Constructivist Theory

The theoretical framework for the proposed study is grounded in social constructivist theory, involving interplay between social interaction and active learning through experience. Social constructivist theory provides a framework for understanding how learners in a social environment learn to recognize patterns, organize thoughts, engage and communicate with others, become more informed through the interactions, and change their realities through constructing or re-constructing knowledge (Guba & Lincoln, 1994, Sides & Mrvica, 2007). Internships offer a social learning environment where

communities of practitioners engage a student intern in understanding their work environment through active inquiry and collaboration. Internships enable students to participate in the activities of the expert who supervises the student during the semester. The language used in the work environment (specific to the unique industry) is often new to the student, requiring the supervisor to provide clear interpretation. The student and supervisor work collaboratively to interpret information, construct meaning and provide solutions to real-world issues.

The student is continually constructing individual understandings through a recursive building process with the supervisor. The student enters the internship with an interest in the issues associated within the shared work and actively participates in their own education with the guidance of the supervisor. Students engage in some of the same work as the supervisor, and together they discuss ideas pertaining to the concepts, search for patterns in the information, reflect on the experiences, raise questions to better interpret the context, and provide solutions to relevant issues. Individual internship opportunities can be specifically designed for the student making the learning experience personal to the student. Each student will interpret information in different ways. Social constructivist learning through an internship encourages self regulated learning. Self regulation involves the student being actively engaged in and responsible for their own learning. The more often the student engages with others in the work environment, the more likely they are to feel safe questioning and reflecting on processes related to learning. The social, interactive and reflective learning and

development process associated with internships is best explained through the works of Vygotsky and Dewey.

Social Development Theory

Lev Vygotsky recognized the fundamental role of social interaction in the development of cognition (McCleod, 2007; Vygotsky, 1978). While both Piaget and Vygotsky shaped the foundation for constructivist theory of learning, Piaget differed from Vygotsky in his belief that development preceded learning and in his emphasis on independent discovery influencing cognition (Brown, 1987; Darling-Hammond & Snyder, 1992; Fosnot, 1996; McCleod, 2007). Vygotsky believed that learning proceeds development and, as the learner confronted a new idea, a mediator or a more knowledgeable person, would help the learner construct cognitive connections between what they experience and prior knowledge (Fosnot, 1996).

According to Vygotsky, individual development is continuously being constructed through multiple social interactions and discourse which occurs within the Zone of Proximal Development (ZPD). Vygotsky (1978) defined ZPD as, "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance in collaboration with more capable peers" (p. 86). An essential feature of learning involves social interaction among students collaborating with more capable peers, reflecting on the interactions, and interpreting and internalizing information (Vygotsky, 1978; Rogers, 1969).

Development is a process of social change. During an internship, the educator and supervisor act as mediators for the student. The student is in a ZPD between education and employment. An internship provides a unique opportunity for the student to act and interact concurrently in an academic and a work environment. Educator and supervisor mediation in the two environments allow the student to internalize social interactions and learn how to perform in the work-place. The educator provides the student with guided reflection as they approach problems rooted in real life workplace situations in the internship. The supervisor provides context for relevant issues confronting the work environment. Together, the three individuals construct meaning from the social interactions. Ultimately, the student develops relevant skills and competencies through active and frequent engagement with the educator, supervisor, colleagues and clients.

Situated Learning Theory

Vygotsky's theory of social learning and development serve as the foundation for Lave and Wenger's (1991) concept of learning in Communities of Practice. Communities of Practice (CoP) are defined as "groups of people who share a concern, set of problems, or a passion about a topic, and who deepen their knowledge and expertise in the area by interaction on an ongoing basis" (Wenger, McDermott & Snyder, 2002, p. 4). The concept of a community of practice represents the ideal learning environment for an intern. Interns are learning through a complex set of social relationships involving discourse and collaboration with supervisors, colleagues, clients and others. Interns engage in

joint activities with others within the CoP. When a CoP is cultivated, it embraces a new member, in this case an intern, who shares the same passion surrounding the profession (Lave and Wenger, 1991). Engagement in the work-place involves learning how to interpret the use of language in the environment, connecting and communicating with a supervisor or colleagues, inquiring of others, and resolving problems.

The members of a CoP are able to foster the student's knowledge and skill development by creating an environment where there is a sense of belonging. Interns are developing their professional identity. A CoP "enables companies to compete on talent and for talent, by providing a professional 'home' for practitioners—a stable context for developing skills and reputation—as well as an intangible but crucial sense of identity and belonging" (Wegner, et. al., 2002, p. 217). For an intern, learning knowledgeable skills in this setting has the potential to move them from trainee to employee through *legitimate peripheral participation*. Lave and Wenger (1991) define legitimate peripheral participation as, "a way to speak about the relations between newcomers and old-timers, and about activities, identities, artifacts and communities of knowledge and practice" (p. 29). Students are engaged as full participants in learning within the socio-cultural practice of their indented career.

Dewey also believed that education is a social practice involving collaboration rather than isolation. Dewey cared about socializing students into a democratic and scientific community. In his lab school (1896-1903), Dewey exposed elementary school children to a variety of occupations to create an

understanding of the scientific and social meaning behind the world of work. It was an opportunity for students as individuals to understand how their own skills at a young age were integral to the way of life of their community. Dewey believed that education through occupations was an opportunity for students to identify the skills they posses and understand how they align with vocations (Mahew & Edwards, 1936). Dewey's lab school is conceptually similar to the purpose of internships as a form of active learning in a social environment. Students explore the world of work through interacting with others in a CoP.

Reflection

Internships harmonize theory and practice by bridging conceptual and real world practice. An essential component of the learning process is to take the time to think about what is being learned and how it applies to the student (Eyler & Giles, 1999; Noddings, 2005; Schon, 1983). Reflection concurrent with the internship experience provides an educational environment where learning leads to development. Dewey (1997, 2011) encouraged learners to have a direct interaction with the phenomena being studied, including purposeful reflection, which allows students to interpret and internalize the direct experience. For the purpose of this study, the definition of "reflection" is based on previous research representing Dewey's four criteria for characterizing reflection. As Rogers (2002) noted,

> 1. Reflection is a meaning-making process that moves a learner from one experience into the next with deeper understanding of its relationships with and connections to other experiences and ideas. It is the thread that

makes continuity of learning possible, and ensures the progress of the individual and, ultimately, society. It is a means to essentially moral ends.

2. Reflection is a systematic and rigorous way of thinking, with its roots in scientific inquiry.

3. Reflection needs to happen in community, in interaction with others.

4. Reflection requires attitudes that value personal and intellectual growth of oneself and others. (p. 845)

Dewey believed that education is meant to help the learner think deeply through habitual reflection (1997, 2011). Dewey encouraged the active learner to consider how their beliefs shape their actions. As the learner reflects on what they know, it can influence their next interaction, decision, and potential growth. Students engaged in internships are adapting to the work environment as a learning space versus the brick and mortar classroom. Students are challenged to think about their daily internship experiences and resolve internal and external issues they are confronting.

The interaction between a student and supervisor in an internship allows the student to participate in collaborative dialogue through an exchange of knowledge and ideas. Educators and supervisors create a scaffolding process for the student, through active inquiry, by asking the right questions about their internship experiences to lead to deeper reflection on their new understandings. Mediating involves creating reflective assignments to meet the needs of the individual learner (Dean, Sykes, Agostinho & Clements, 2012). The process of connecting prior learning to new understandings through reflective activities and

assignments is a fundamental interaction in the cognitive process. The role of the experienced individual, (i.e., the educator or supervisor), is to scaffold student learning during the developmental stages of the internship so that they may be able to carry out tasks on their own eventually. The idea of re-organizing perceptions through reflection activities allows the learner to understand self, skills and challenges. Both mediation and reflection are interwoven in experiential learning and in Vygotsky's writings.

Theoretical Models associated with Internships and Skill Development

The underlying theories of Vygotsky and Dewey are applied in three models associated with soft-skill development and learning through internships. The first model is Kolb's experiential learning theory which focuses on student learning during an internship. The second model is Dreyfus and Dreyfus's skill development model which provides context for a student moving from "novice" to "advanced beginner" through the internship. The third model is Sweitzer and King's developmental stages of the internship which describes student intern development during the semester timeframe.

Experiential Learning Theory Cycle Model

Kolb (1984), well known for his research on experiential learning, believes "learning, the creation of knowledge and meaning, occurs through the active extension and grounding of ideas and experiences in the external world and through internal reflection about the attributes of these experiences and ideas" (p. 52). In Kolb's experiential learning theory cycle, he explains the direct connection between action, reflection, discussion, and learning (see Figure 1). A

learner moves from concrete experience to reflective observation, toward abstract conceptualization, and finally to active experimentation (Baker, Jensen, & Kolb, 2002; Chickering, 1981; Kolb, 1984; Kolb & Kolb, 2005). A student intern is actively engaged in an experience, reflects on what happened during the experience, uses analytical skills to draw conclusions about what occurred and then experiments with new ideas gained from the experience through decision making and problem solving. With each new experience the cycle repeats itself.

Kolb's model is grounded in Piaget's cognitive development theory which claims intelligence is shaped by experience (Kolb, 1984). Piaget believed that individuals develop schemas which represent categories of knowledge that help a person to interpret and understand the world (Hofer & Pintrich, 1997). During the experiential learning cycle, a student responds to an experience by processing and interpreting new information through assimilation or accommodation (Kolb, 1984). During assimilation, students modify the information to fit in with their preexisting beliefs (Hofer, et al., 1997). Alternatively, accommodation involves students changing or altering existing beliefs and behavior in light of new information (Hofer, et al., 1997). The cognitive process of adjusting schema influences how students approach the next experience during an internship.

Figure 1. Kolb's Experiential Learning Theory Cycle

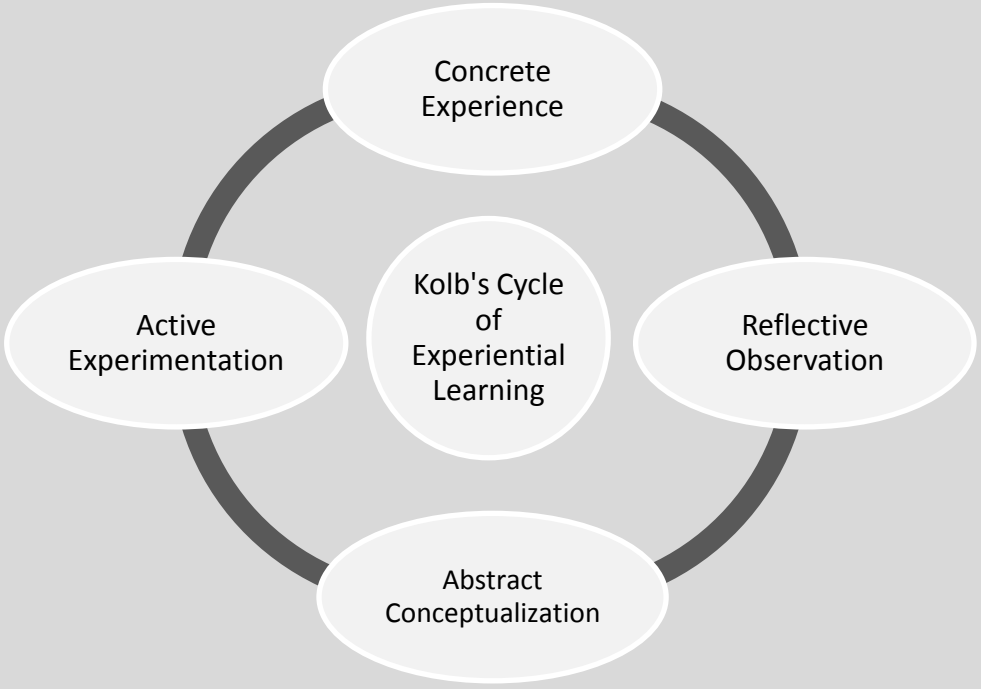

Figure X. The experiential learning cycle as a model of learning and cognitive development. Adapted from "Experiential Learning: Experience as the source of learning and development," by D. Kolb, 1984. Copyright 1984 by Prentice Hall, Inc.

Skill Acquisition Model

Dreyfus and Dreyfus (2005) took an organic approach toward reflection in skill development. In their research on the development of skill from novice through expertise, they found that skills are acquired through experience. During the course of an internship students are arguably moving from "novice"-where they adhere to rules, and possess limited situational perceptions to, "advanced beginner"-where characteristics of situations are recognizable as a result of experience (Dreyfus, 2004). Students benefit from adopting a practice of being flexible in each experience in order to become expert in skill acquisition (see

Figure 2). Dreyfus and Dreyfus (2005) recommended becoming emotionally detached from the skill being acquired in order to logically approach expertise.

Skill acquisition requires time, practice, and reflection. Practicing in a work environment enhances skill acquisition (Hannon, 2000). Students engaged in a CoP are able to continually practice communicating with colleagues and clients, work on group and independent projects, consider relevant problems specific to the field and discover ways to address those issues under the guidance of the supervisor. Peno and Siva-Mangiante (2012), building on the work of Dreyfus and Dreyfus offer a model of purposeful ongoing mentoring (POMM) which operationalizes the process of moving from novice through expert. The model includes Vygotsky's ZPD where a mediator is facilitating active inquiry and discussion to encourage reflection and ultimately, intuitive response and development to higher levels of skill.

Figure 2. The Dreyfus Model.

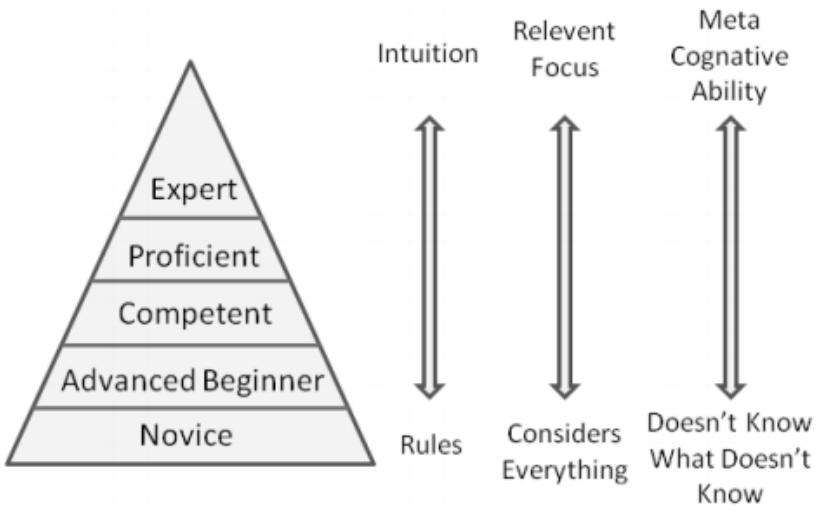

Figure X. The Dreyfus Model. Based on the five Dreyfus Model Stages from "Pragmatic Thinking and Learning," by A. Hunt, 2008. Copyright 2008 by the Pragmatic Programmers.

Developmental Stages of the Internship Model

The framework for student development during an internship is described in the Switzer and King (2004, 2009, 2013) stages of the internship model. The four developmental stages of the internship (anticipation, exploration, competence, and culmination) provide a structure for examining development that occurs within the timeframe of an internship. The first developmental stage of the internship is anticipation which involves overcoming anxieties, getting to know colleagues and clients, constructing individual learning goals, understanding the organizational culture of this learning environment and becoming familiar with the purpose and mission of the agency (Sweitzer & King, 2004, 2009, 2013). The second stage is exploration which challenges a student to

adjust expectations with self, with others, with organizational values, and to identify problem areas requiring attention (Sweitzer & King, 2013). Students question adequacy of skills and knowledge in relation to responsibilities in this new learning environment. The third stage, competence, is transformative as the student feels empowered, accomplishes worthwhile tasks and seeks quality projects (Sweitzer & King, 2004, 2009, 2013). Students are more connected to the social learning environment, feel more confident professionally, and continue to become self aware. The fourth stage is culmination and requires students to evaluate their performance, identify transferable skills and engage in closure with colleagues and clients before concluding the experience (Sweitzer & King, 2004, 2009).

Adding to existing theory- proposed Transition Theory

While each of the four stages of the internship provide context for understanding student development during the internship, what prompts the transitions between the stages is given limited attention. It may be the case that soft-skill development is a necessary component of progression through the stages of the internship (see Table 1). While there are assessment methods used for measuring student learning and development, student perceptions and supervisor perceptions, there is a gap in the literature involving a comparison between student and supervisor perceptions specific to student soft-skill development (Cedercreutz, Hoey, Cates, Miller, & Maltbie, 2008; Dochy, Segers, & Sluijsman, 1999; Griffin, Lorenz, & Mitchell, 2010; Harvey, 2010; Jaekel, Hector, Northwood, Benzinger, Salinitri, Johrendt, & Watters, 2011; Nasr, Pennington, &

Kettering, 2004; Sturre, VonTreuer, Keele, & Moss, 2012; Winchester-Seeto, Mackaway, & Coulson, 2010). In order to understand if soft-skill development is being enhanced through the use of internships, it is essential to understand both student and supervisor perceptions.

Table 1

Sweitzer and King Developmental Stages of the Internship Including Soft-Skill Development Transition Theory

Stage	Associated Concerns	Critical Tasks	Soft Skill Development
Anticipation	Getting off to a good start Positive Expectation Acceptance Anxieties Capability Relationship with Supervisor Relationship with co-workers Relationship with clientele context	Examining and critiquing assumptions Acknowledging concerns Clarifying role and purpose Developing key relationships Making an informed commitment	Role of Instructor: Encourage student to connect self knowledge with understanding of work environment and values Role of Supervisor: Orient the student to the new environment, and organizational values, introduce the student to colleagues and clients, creates safe learning environment Student: Confronts anxiety with support from instructor and supervisor, communicates using the newly developed language of the community of practice, expresses anxieties about the new learning environment through reflective exercise, develops learning goals in collaboration with instructor and supervisor
Exploration	Building on progress Heightened learning curve Finding new opportunities Adjusting expectations Adequacy of	Increasing capability Approaching assessment and evaluation of progress Building supervisory relationships Encountering	Role of Instructor: Challenges the student to continually re-construct and use new knowledge, does not resolve the issue for the student but provides strategies for addressing the disconnect between expectations and reality Role of Supervisor: Provide an environment for the student to explore the options available in the field, begin to introduce the student to problems which need resolve specific to the work environment

Stage	Associated Concerns	Critical Tasks	Soft Skill Development
	skills and knowledge Real or anticipated problems	challenges	Student: Begins to think deeply about the field, the specific work environment and how their skills match or are not yet developed, questions processes and responsibilities of colleagues, communicates with increased ease within the community of practice
Competence	High accomplishment Seeking quality Emerging view of self Feeling empowered Exploring professionalism Doing it all Ethical issues Worthwhile tasks	Raising the bar: accomplishment and quality Having feelings of achievement and success Maintain Professionalism	Role of Instructor: Challenges the student to continue to develop a network beyond the community of practice and provides tools to do this Role of Supervisor: Provides increased responsibility pertaining to learning goals, actively engages the student in more opportunities to collaborate on projects, communicate with colleagues and clients and to assist in resolving issues Student: Communicates freely with colleagues and clients, sees the value of a variety of aspects of diversity on a team, feels more confident to take initiative and discuss problems and resolutions to issues within the field
Culmination	Saying goodbye Transfer of responsibilities Completion of tasks Multiple endings Closing rituals Next steps	Endings and closure Redefining relationships Planning for the future	Role of Instructor: Guides the student in moving from education to employment, confirms the student completed the learning goals, Role of Supervisor: Evaluates the student's progress, networks the student to other communities of practice, Student: Recognizes transferrable skills, able to identify areas of growth as well as a need for additional development to be successful in the field, able to connect theory of school with the practice of the work environment, selects classes to further skill development, pursues job aligned with new skill development

Note. Based on the four developmental stages of the internship, the associated concerns and critical tasks. From "Developmental Stages of an Internship" by H. F. Sweitzer & M. King, 2013, p. 33.

CHAPTER 3

METHODOLOGY

The study is the third in a sequence of three steps. Initially, researcher-designed surveys were used in a pilot study for program evaluation. Next, the survey was submitted to the IRB. Finally, secondary data analysis of IRB-approved data collection from spring and summer 2014 semesters is the focus of this study (see Appendix A).

Research Design

While anecdotal information at one public institution of higher education in the Northeast region of the United States exists regarding student skill development as a direct result of participating in an internship, it has not been quantified. Using a survey tool to sample student and employer perceptions regarding soft-skill development is likely to be a versatile and efficient way to collect, analyze, and compile results. Two researcher created survey tools were administered to analyze both student and supervisor perceptions' of student intern soft-skill enhancement during a 13 week semester (see Appendices B & C). The surveys were designed using focus groups, expert opinions, and a program evaluation pilot study. The reliability of the scores from both the student and supervisor surveys in the pilot study were acceptable with α ranging from .66 - .88 (see Tables 2 & 3).

Table 2

Pre-Post Reliability Coefficients of Student Pilot

Scales	Time 1 Alpha	Time 2 Alpha
Communication (6 items)	.72	.72
Engagement (12 items)	.83	.80
Initiative Subscale (6 items)	.74	.69
Teamwork Subscale (6 items)	.73	.68
Analytical Skills (6 items)	.86	.85

Note. N=456

Table 3

Pre-Post Reliability Coefficients of Supervisor Pilot

Scales	Time 1 Alpha	Time 2 Alpha
Communication (6 items)	.77	.80
Engagement (12 items)	.84	.83
Initiative Subscale (6 items)	.76	.76
Teamwork Subscale (6 items)	.69	.66
Analytical Skills (6 items)	.88	.86

Note. N=356

Pre-Post Retrospective Survey

In an effort to reduce response shift bias, one pre-post retrospective survey was administered to students and one to supervisors to measure change in soft-skill development during a 13 week semester as a direct result from participating in an internship. Rockwell and Kohn (1989) explained that "the 'post-then-pre' method of self report evaluation offers one solution for documenting behavior change" (p. 2). Typically when researchers want to measure change over time, they administer two surveys, one at the start of participation in the subject matter being surveyed and one at the conclusion.

There are two limitations to this approach. The first is that the participants are not always aware of their baseline behaviors, so they cannot accurately document those behaviors prior to the experiences (Drennan & Hyde, 2008). The information in the pre-survey may be skewed due to shift bias, as the participant is not aware of levels of understanding or depth of skills and how these apply in the context of the setting being evaluated. Second, there is a challenge in administering multiple surveys and maintaining one group of respondents in order to effectively measure change. Post then pre test allows students and supervisors the opportunity to share perspectives regarding soft-skill development at the conclusion of the internship. The overarching construct expected to be measured is the level of soft-skill development that occurred as a result of participation in an internship as it relates to communication, teamwork, initiative, and, analytical thinking.

Sampling Design

A convenience sample of 315 undergraduate junior and senior level college students enrolled in internship courses at one public institution of higher education in the Northeast region of the United States and their corresponding 315 internship supervisors were asked to respond to a pre-post retrospective survey. One supervisor was designated for each student intern. Ninety-six percent of the students in the study were traditional-aged students, representing the millennial generation.

The student and supervisor data were initially reviewed to determine the number who had consented to participate in the study. 278 students (88%) and

287 supervisors (91%) consented to participate in the study and completed all of the items on the survey regarding soft-skill development. Both samples answered all of the questions pertaining to the soft-skill development section of the survey. With two respondent groups in a study, it is advised to have at least 68 participants in each group to detect a medium effect size with 80% power (Harlow, 2005). The sample size obtained for the study satisfies the 95% confidence level necessary to represent the population of 450 student interns (i.e., course yearly enrollment). All students and supervisors who completed the surveys were assigned identification numbers as a point of reference to provide anonymity when reporting on the survey results.

The 278 students in the sample represent 30 majors (see Table 4), with a range of 1 to 70 students from each major. The majority of the students (69%) represent six majors including a) communication studies (70), b) psychology (48), c) public relations (24), d) accounting (19), e) human development and family studies (19), and f) business administration (11).

Table 4

Frequency and, Percent of Majors within the Student Sample

Majors	Frequency	Percent
Accounting	19	6.8
Animal Science and Technology	1	.4
Art	2	.7
Biological Sciences	1	.4
Biology	2	.7
Business Administration	11	4.0
Communicative Disorders	3	1.1

Majors	Frequency	Percent
Communication Studies	70	25.2
Computer Science	1	.4
Economics	9	3.2
English	1	.4
Entrepreneurial Management	6	2.2
Environmental and Natural Resource	1	.4
Film Media	1	.4
Finance	8	2.9
Health Studies	10	3.6
Human Development and Family Studies	19	6.8
Journalism	10	3.6
Kinesiology	1	.4
Marine Affairs	2	.7
Marine Biology	2	.7
Marketing	5	1.8
Philosophy	1	.4
Political Science	7	2.5
Psychology	48	17.3
Public Relations	24	8.6
Sociology	5	1.8
Supply Chain Management	6	2.2
Textile, Fashion Merchandising and Design	1	.4
Writing and Rhetoric	1	.4
Total	278	100

Instruments and Data Collection Schedule

The instruments were administered online using Qualtrics. Students were notified of the survey via course syllabus and email; while supervisors were notified of the survey via email at the start and conclusion of the semester (see Appendices D, E, F & G). All students and supervisors signed consent forms

during the spring and summer 2014 semesters in agreement of participating in the study (see Appendices H & I).

Procedure

Students were asked to reflect on their perception of their soft-skills competencies *before* they started the internship. Students rate their initial level of competency from (1) *poor* to (4) *great* beginning with communication skills. Next, they were asked to rate their level of competency using the same rating scale in communication skills *after* they completed their 13 week internship. Students were asked to follow this same procedure (e.g., reflect on soft-skill competency before the internship, rate themselves, rate themselves again after they had finished the internship) for rating their perceived levels of competency in teamwork, initiative, and analytical thinking.

Concurrently each student's supervisor rated the student's levels of competency on the same soft-skills of communication, teamwork, initiative, and, analytical thinking. Following the same procedure as the students, the supervisors reflected back on soft-skill competency at the beginning of the internship and at the end of the experience.

Student Survey of Soft-Skill Development

The measure of soft-skills on the student survey consists of 24 items on four scales designed to measure self-perceived development in communication (6 items), teamwork (6 items), initiative (6 items), and, analytical thinking (6 items). Using a 4-point scale from (1) *poor* to (4) *great* provides a framework for understanding the impact of the internship on perceived skill development. The

four response options are appropriate for meeting the need of the respondents to discriminate meaningfully at various levels of the construct without offering a neutral option which would not provide limited information on skill development (DeVellis, 2003).

Results from the pilot study indicated there was greater variability in the student pre answers and less variability in the student post answers (see Appendices N & O). Initial findings reveal that students are starting the internship with varying levels of soft-skill competencies and concluding the internship with greater agreement on their soft-skill development. In each item and on each scale, there was some degree of improvement in soft-skill development for students. A factor analysis revealed that there are three scales and two subscales being measured (1) communication, 2) analytical thinking and, 3) engagement: a) initiative and b) teamwork). All 24 original questions were retained from the pilot study on both the student and supervisor surveys.

Supervisor Survey of Student Soft-Skill Development

All corresponding supervisors were asked to complete a pre-post retrospective survey mirroring the measures on the student survey in an effort to gather information regarding supervisor perception of student skill development on the constructs of interest at the conclusion of the semester. Additional questions were included, asking the supervisor to reflect on the student's performance, completion of hours required and accomplishing learning objectives however this will not be included in the study.

Overview of Data Analyses

Secondary data analyses were conducted to measure soft-skill development from the spring and summer 2014 based on the student and supervisor surveys using SPSS version 22.0. Exploratory data analysis was conducted to check for normality. Descriptive statistics including means, standard deviations, and ranges of scores were examined for each scale (communication, teamwork, initiative, and, analytical thinking,) then for each item.

In order to assess Q1 and Q2, a data screening process was employed to check for missing values for all student and supervisor responses. Normality, and heterogeneity of variances, were examined to ensure that all assumptions were met to perform the statistical tests. The reliability of scores on the measures was examined using coefficient alpha for supervisors and students using before (pre) and after (post) ratings. Macro level statistical testing using Multivariate Analysis of Variance (MANOVA) was conducted to explore the relationship between the independent variable, time (pre and post 13-week semester internship) and the dependent variables (each soft-skills scale). The MANOVAs assessed the general soft-skill development before and after internships and student and supervisor responses were assessed separately.

In order to assess Q1, Q2, and Q3 of the research study; paired samples t-tests were conducted on each scale and each item for students and supervisors. The t-test was used to compare the same sample of students and supervisors at two different points in time. Using 24 pre/post items requires 24 comparisons. Because multiple t-tests were run, a Bonferonni Correction was used to control

for Type 1 error and it was found that alpha should be set at .01. A Pearson product moment correlation was conducted to assess the relationship between student and supervisor responses on pre and post ratings. Pearson is an appropriate measure to check student self report bias by including supervisor responses. A correlation matrix was examined on the subscales to account for the relationship between variables. Finally a one-way-analysis of variance (Anova) was conducted to determine if there were any significant differences between the mean scores for students in each educator's internship seminar.

CHAPTER 4

RESULTS

To answer the research questions, data analysis began with a data screening process to check for missing values for all student and supervisor responses. Second, descriptive statistics including means, standard deviations, and ranges of scores were examined for each scale (communication, teamwork, initiative, and, analytical thinking,) then for each item. Third, macro level statistical testing using (MANOVA) was conducted to explore the relationship between the independent variable, time and the dependent variables, soft-skills. Fourth, micro level paired samples t-tests were conducted on each scale and each item for students and supervisors. Fifth, a correlation matrix was examined on the subscales. Sixth, a one-way-ANOVA was conducted to determine if there were any significant differences between the mean scores for students in each educator's internship seminar. Finally, the reliability of the scores were examined using coefficient alpha. Chapter four presents the data in a meaningful way to answer each of the research questions.

Macro Level Exploratory Data Analysis

Descriptive statistics for student and supervisor responses were examined to review accuracy and patterns in the range of Likert responses (1-4), the mean scores and the standard deviations for the 24-items represented on the four scales (communication, teamwork, initiative and, analytical thinking) reported for pre and post internship. The *M* ranged from 14-23 representing the sum of all 6 items on each scale pre and post. Skewness and kurtosis were used to examine

the shape of the data when screening for normality (see Tables 5 and 6). It was determined that the data met the criteria for normal distribution so all respondents' data were included in the study results.

Table 5

Descriptive Statistics for pre and post internship scores on the Student Survey of Soft-Skill Development

	Pre				Post			
Scale	M	SD	Skewness	Kurtosis Statistic	M	SD	Skewness	Kurtosis Statistic
DV1	14.41	2.33	.28	-.10	21.19	2.31	-.50	-.35
DV2	18.67	2.68	.08	-.13	21.71	2.05	-5.72	-.71
DV3	18.04	2.50	.08	.08	21.30	2.05	-.44	-.54
DV4	17.99	2.79	.20	.30	21.40	2.31	-.76	.72

Note. DV1=Communication, DV2=Teamwork, DV3=Initiative, DV4=Analytical Thinking. All standard error scores = .29. *N* = 278 for all scales.

Table 6

Descriptive Statistics for pre and post internship scores on the Supervisor Survey of Student Soft-Skill Development

	Pre				Post			
Scale	M	SD	Skewness	Kurtosis Statistic	M	SD	Skewness	Kurtosis Statistic
DV1	19.69	3.21	-.20	.14	22.30	2.61	-1.05	1.30
DV2	21.40	2.91	-.41	-.33	23.08	2.30	-1.91	6.78
DV3	20.10	3.12	-.24	-.05	22.35	2.57	-1.46	3.26
DV4	19.50	3.41	.17	.07	22.16	2.64	-1.07	2.00

Note. DV1=Communication, DV2=Teamwork, DV3=Initiative, DV4=Analytical Thinking. All Kurtosis standard error scores = .29. *N* = 287 for all scale.

Correlation matrices were examined on all soft-skill development items for both student and supervisor responses. Majority of the scores within the

scales were between a .3 and .7 showing that the items were related in a meaningful way without measuring the same construct (Harlow, 2005).

Correlations were also conducted on all soft-skill scales for both student and supervisor responses. As expected, all four scales were highly correlated (see Tables 7, 8, 9 & 10).

Table 7

Correlation among constructs on Student Survey of Soft-Skill Development at the beginning of the internship

	Communication	Initiative	Teamwork	Analytical
Communication	___			
Initiative	.62**	___		
Teamwork	.61**	.64**	___	
Analytical	.65**	.66**	.54**	___

Note. ** p < .01, two tailed, pre-scale

Table 8

Correlation among constructs on Student Survey of Soft-Skill Development at the conclusion of the internship

	Communication	Initiative	Teamwork	Analytical
Communication	___			
Initiative	.64**	___		
Teamwork	.63**	.63**	___	
Analytical	.65**	.61**	.63**	___

Note. ** p < .01, two tailed, post-scale

Table 9

Correlation among Pre-Scale constructs on Supervisor Survey of Student Soft-Skill Development

	Communication	Initiative	Teamwork	Analytical
Communication	___			
Initiative	.75**	___		
Teamwork	.61**	.69**	___	
Analytical	.67**	.71**	.56**	___

Note. ** p < .01, two tailed

Table 10

Correlation among Post-Scale constructs on Supervisor Survey of Student Soft-Skill Development

	Communication	Initiative	Teamwork	Analytical
Communication	___			
Initiative	.80**	___		
Teamwork	.66**	.70**	___	
Analytical	.78**	.80**	.64**	___

Note. ** p < .01, two tailed

Reliability analyses were conducted on the scales using Cronbach's Alpha. Reliability analyses demonstrated the scores on the scales to be internally consistent based on both the student and supervisor (see Table 11) responses which ranged from .66 to .88. A reliability coefficient of .70 is considered to be acceptable, although lower thresholds are sometimes used throughout research (Nunnaly, 1978). Typically, reliability coefficients between .80 and .90 are more desirable. There were few discrepancies in list wise deletion based on all variables in the procedure.

On the student scales there were four discrepancies. The first was an option to delete the "listening intently" item on the communication pre scale which would raise the alpha from .77 to .79. Similarly, that same item if deleted on the communication post scale would raise the alpha from .79 to .80. The third

item, “adhering to deadlines” was on the initiative post scale and would raise the alpha level from .66 to .67. Finally on the analytic post scale there was a discrepancy with the item; “identify skills necessary to complete a task” which if deleted would raise the alpha from .81 to .82. Since none of the four discrepancies would result in a large change in alpha if deleted, all items were retained on all scales.

On the supervisor scales the only discrepancy was an option to delete the “communicating well in writing” item on the communication post scale which would raise the alpha from .87 to .88 and not a large enough difference in alpha and the item was retained as it is theoretically sound.

Table 11

Cronbach’s Alpha scores of Student and Supervisor Pre and Post measures

	Student Reliability Cronbach's Alpha		Supervisor Reliability Cronbach's Alpha	
Scale	Pre	Post	Pre	Post
Communication	.77	.79	.84	.87
Teamwork	.78	.75	.79	.82
Initiative	.68	.66	.82	.84
Analytical	.84	.81	.88	.88

A one-way-Anova was conducted to assess if there were any significant differences between student soft-skill development responses based on the internship instructor for both pre and post scales. For all 8 scales no significant differences between internship instructors were found, all $p > .05$. The one-way ANOVA, demonstrated the internship instructors did not have a statistically significant influence on soft skill-development on the four scales: a)

communication (pre), F (1, 5) = 1.32, p = .26, communication (post), F (1, 5) = 0.83, p = .53, b) teamwork (pre), F (1, 5) = 1.53, p = .18, teamwork (post), F (1, 5) = 1.53, p = .18, c) initiative (pre) , F (1, 5) = 1.59, p =.16, initiative (post) F (1, 5) = 1.83, p = .11, and, d) analytical thinking (pre), F (1, 5) = 1.43, p = .21, analytical thinking (post), F (1, 5) = 0.99, p = .42.

Pearson product moment correlations were run to assess the congruence between student and supervisor pre and post ratings on each scale (see Tables 12 & 13). It was found that for all scales, students and supervisors ratings were not correlated. The analysis compares the averages of all students with all supervisors. Adding all of the items together reduced the variation in the ratings.

Table 12

Correlation Matrices from Student and Supervisor Pre-Scores on all Scales

	Student DV1 Pre	Student DV2 Pre	Student DV3 Pre	Student DV4 Pre
Supervisor DV1 Pre	.01	___	___	___
Supervisor DV2 Pre	___	-.05	___	___
Supervisor DV3 Pre	___	___	.04	___
Supervisor DV4 Pre	___	___	___	-.04

Note. DV1=Communication, DV2=Teamwork, DV3=Initiative, DV4=Analytical.

Table 13

Correlation Matrices from Student and Supervisor Post-Scores on all Scales

	Student DV1 Post	Student DV2 Post	Student DV3 Post	Student DV4 Post
Supervisor DV1 Post	.00	___	___	___
Supervisor DV2 Post	___	-.07	___	___
Supervisor DV3 Post	___	___	.04	___
Supervisor DV4 Post	___	___	___	.02

Note. DV1=Communication, DV2=Teamwork, DV3=Initiative, DV4=Analytical.

MANOVA

A MANOVA was conducted to examine differences on the soft-skill scales for both the supervisor and the student responses separately. The test was meant to explore differences in how the groups (students and supervisors) responded on soft-skill dependent variable scales before and after the internship. Time is the independent variable representing two different points in time during the internship semester (week 2 and week 13) and the soft-skill development scales are the dependent variables. MANOVA was used to analyze repeated measures of the soft-skill development scales from the start to the conclusion of the internship.

Results indicate that students rated their soft-skills development higher at the end of the internships than at the beginning (Wilks' $\Lambda = .24$, F (4, 274) = 214.86, $p < .001$, partial eta squared = .76). Students consistently rated their soft-skill development at 2 to 3 points higher at the conclusion of the internship. Given the significance of the overall test, the univariate main effects were examined (see Table 14). Significant univariate effects for time were obtained for each of the four scales: a) communication, F (1, 277) = 712.14, $p < .001$, partial eta squared = .72, b)teamwork, F (1, 277) = 409.69, $p < .001$, partial eta squared = .60, c) initiative, F (1, 277) = 496.14, $p < .001$, partial eta squared = .64, and, d) analytical thinking, F (1, 277) = 596.48, $p < .001$, partial eta squared =. 68. Large effect sizes were identified using partial eta squared ranging from .60 to .76. The closer the score is to 1 on a scale of 0 to 1, the higher the degree of variance in the

dependent variables (soft-skills) accounted for by the independent variable (time).

Table 14

Manova descriptive results for Student Responses on Four Soft-Skill Development Scales

	Time 1 (Pre)				Time 2 (Post)			
			95% CI				95% CI	
Scale	M	SD	Lower-bound	Upper-bound	M	SD	Lower-bound	Upper-bound
DV1	17.40	2.90	17.05	17.73	21.19	2.31	20.92	21.46
DV2	18.67	2.68	18.35	18.98	21.71	2.05	21.46	21.95
DV3	18.04	2.50	17.75	18.33	21.30	2.05	21.05	21.54
DV4	17.99	2.79	17.66	18.31	21.40	2.31	21.13	21.68

Note. DV1=Communication, DV2=Teamwork, DV3=Initiative, DV4=Analytical Thinking.

It was found that supervisors rated student soft-skills development higher at the post than the pre (Wilks' $\lambda = .415$, F (4, 283) = 99.751, $p < .001$, partial eta squared = .59). Supervisors consistently rated the student soft-skill development at 2 to 3 points higher at the conclusion of the internship. Given the significance of the overall test, the univariate main effects were examined (see Table 15). Significant univariate effects for time were obtained for communication, F (1, 286) = 340.53, $p < .001$, partial eta squared = .54, teamwork, F (1, 286) = 169.92, $p < .001$, partial eta squared = .37, initiative, F (1, 286) = 340.53, $p < .001$, partial eta squared = .54, and, analytical thinking, F (1, 286) = 282.37, $p < .001$, partial eta squared =. 50. The results of the MANOVA provided sufficient evidence to investigate further through pairwise t-tests for each pre-post item.

Table 15

Manova descriptive results for Supervisor Responses on Four Soft-Skill Development Scales

	Time 1 (Pre)				Time 2 (Post)			
			95% CI				95% CI	
Scale	M	SD	Lower-bound	Upper-bound	M	SD	Lower-bound	Upper-bound
DV1	19.68	3.22	19.31	20.06	22.30	2.61	21.99	22.60
DV2	21.40	2.91	21.06	21.74	23.08	2.30	22.82	23.35
DV3	20.11	3.12	19.74	20.47	22.35	2.57	22.05	22.65
DV4	19.50	3.41	19.10	19.89	22.16	2.64	21.85	22.46

Note. DV1=Communication, DV2=Teamwork, DV3=Initiative, DV4=Analytical Thinking.

Pairwise t-test

Pairwise t-tests were conducted for the student and supervisor responses to examine pre-post differences for each item. Student rated their soft-skills development higher at the end of the internships than at the beginning on all 24 items, $p < .001$ (see Table 16). Supervisor rated student soft-skills development higher at the conclusion of the internship than at the start on all 24 items, $p < .001$ (see Table 17).

Table 16

Pairwise T-test results for Student Reponses on each Item

Scale and Items	Post-Pre Mean Difference	t
Communication		
Asserting my own opinions	0.74	-20.23
Communicating with a person in charge	0.75	-19.72
Expressing ideas and concepts clearly	0.7	-18.93
Listening intently	0.56	-15.86

Communicating well orally	0.57	-15.65
Communicating well in writing.	0.47	-13.19
Teamwork		
Making positive use of feedback	0.61	-16.18
Respecting the needs of others in my work environment	0.38	-12.08
Collaborating on projects with other people	0.52	-14.17
Participating in meets and group settings	0.56	-13.98
Accepting and following directions from other people	0.43	-11.43
Engaging with people whose voices, experiences, and ideas are different than my own	0.55	-14.64
Initiative		
Logically approaching a problem	0.55	-15.97
Requesting increased responsibility	0.75	-18.3
Adhering to deadlines	0.46	-12.6
Approaching a problem independently	0.6	-16.18
Understanding my personal ethics	0.4	-11.6
Desire to continue learning in the field	0.49	-10.67
Analytical Thinking		
Identifying the skills and resources necessary to complete a task (e.g., research, technology, communications)	0.67	-19.48
Interpreting information	0.59	-15.96
Summarizing what I have learned	0.52	-15.09
Retaining new ideas	0.53	-14.88
Identifying problems	0.53	-15.30
Recommending solutions	0.53	-16.66

Note. $p < .001$

Table 17

Pairwise T-Test results for Supervisor Reponses on each Item

Scale and Items	Post-Pre Mean Difference	t
Communication		
Asserting their own opinion	0.65	-17.04
Communicating with a person in charge	0.50	-13.39

Expressing ideas and concepts clearly	0.49	-13.56
Listening intently	0.27	-9.13
Communicating well orally	0.38	-11.58
Communicating well in writing	0.32	-9.65
Teamwork		
Making positive use of feedback	0.33	-9.43
Respecting the needs of others in their work environment	0.18	-7.64
Collaborating on projects with other people	0.31	-9.82
Participating in meetings and group settings	0.33	-10.34
Accepting and following directions from other people	0.24	-8.27
Engaging with people whose voices, experiences , and ideas are different than their own	0.28	-9.44
Initiative		
Logically approaching a problem	0.41	-12.22
Requesting increased responsibility	0.47	-11.86
Adhering to deadlines	0.28	-9.27
Approaching a problem independently	0.53	-13.93
Understanding professional ethics	0.27	-9.3
Desire to continue learning in the field	0.31	-8.93
Analytical Thinking		
Identifying the skills and resources necessary to complete a task (e.g. research, technology, communications)	0.45	-13.4
Interpretation information	0.47	-12.81
Summarizing what they have learned	0.41	-10.87
Retaining new ideas	0.35	-10.82
Identifying problems	0.49	-13.34

Recommending solutions	0.49	-12.86

Note. $p < .001$

CHAPTER 5

The purpose of the research was to understand if student soft-skill development including communication, teamwork, initiative and analytical thinking, occurred as a result of participating in an internship. Student interns and their supervisors were surveyed at the conclusion of the internship to note changes in student soft-skill development from pre to post internship. Survey response data provided evidence participation in an internship improved soft-skill development on all measured scales.

DISCUSSION

The changing economy challenges employers, educators and policy makers to consider pedagogical approaches to educating the future workforce. During the 2014 state of the union address, the President of the United States charged Vice President Joe Biden to lead an initiative ensuring all workers have the skills necessary to be fully employed (Obama, 2014). In July 2014, Vice President Biden answered the president's request in his proposal, *Ready to Work: Job-Driven Training and American Opportunity.* Employers, higher education leadership and policy makers are included as major stakeholders in the proposal. Higher education is asked to partner with employers to identify and teach relevant skills so graduates are able to be "workplace ready" entering the job market by developing skills in both the "hard" - academic and technical- and "soft" - personality traits and habits- areas (Biden, 2014; Schultz, 2008). It is incumbent upon educators to include the advice of employers as they address

both soft and hard skills development. While educators focus on connecting theory and practice, employers work to put that theory into practice.

Prioritizing workplace ready skill development through workforce education for adults requires aligning higher education, adult education and economic development ("Workforce and Education Strategies", 2009). Internships are an educational approach to collaborating with community partners, connecting class concepts to real-world practice, and solving problems with innovative results, allowing students to develop professional skills and use academic knowledge in a practical setting (Sweitzer & King, 2013; Cates & Jones, 1999). Work-based learning opportunities like internships have the potential to serve as a bridge from education to employment allowing students to use both hard and soft skills within a Community of Practice (CoP) with guidance from a more knowledgeable other, like a supervisor. Therefore, there were two main objectives of the current research study.

The first purpose of this study was to examine the level of student soft-skill development as a result of participating in an internship. Employers are expressing a desire for entry level employees to possess the soft-skills necessary to successfully move into the work environment (Beard, Schwieger & Surendran, 2008). While there have been qualitative studies conducted to focus on student soft-skill development there have been no quantitative research studies surveying both student interns and their corresponding supervisors (Andrews & Higson, 2008; DelGiudice, Libutti, Dawson & Castaneda, 2013; Hasbullah & Sulaiman, 2002; Rainsbury, Hodges, Burchell & Lay, 2002). Without the

quantitative analysis it is difficult to generalize the learning outcomes associated with internships for a larger population. In order to quantitatively assess soft-skill development, student and supervisor surveys were created. The surveys were piloted with students and supervisors in 2013 to check for internal consistency prior to administering the surveys for the current study. In 2014 the surveys were administered to students and supervisors to evaluate student soft-skill development at the conclusion of the internship.

The second purpose of the research study was to use the survey results to examine if there was congruence between student and supervisor ratings on soft-skill development at the conclusion of the internship experience as employers claim students are not graduating from college with the essential soft skills to be effective in the workplace (NACE, 2013). It was essential to examine soft-skill development as reported by students and supervisors to explore the degree to which reporting is similar. Results from the study will inform how integrating internships for real-world experience provides an opportunity for students to learn in a CoP and begin to develop the skills necessary for gainful employment and life beyond the classroom.

Results of the Research Questions 1 & 2

Q 1: To what degree are student interns' soft-skills including communication, teamwork, initiative, and, analytical thinking enhanced through participation in a 13-week internship?

Q2: How do supervisors rate student intern's soft-skills enhancement including communication, teamwork, initiative, and, analytical thinking through participation in a 13-week internship?

Pre-Scores on all Soft-Skill Development Scales

Initial findings on the student and supervisor MANOVA results show that while there were differences in the way students and supervisors ranked items, there was consistency on the patterns in responses between student and supervisor pre rankings. It was found that both students and supervisors found soft skill development improved from the start of the internship to the conclusion on all scales and individual items.

The mean scores show students tended to rank themselves lower on all pre scales, communication (*M*=17.39), teamwork (*M*=18.66), initiative (*M*=18.04), and, analytical thinking (*M*=17.99) than supervisor pre rankings, communication (*M*=19.68), teamwork (*M*=21.40), initiative (*M*=20.11), and, analytical thinking (*M*=19.49). There was congruence in the students and supervisors mean score rankings for each pre scale. Students and supervisors ranked each scale item in a similar pattern relative to the other skills (e.g. teamwork was rated higher than communication by both students and supervisors).

Post –Scores on all Soft-Skill Development Scales

On all post scales students and supervisors consistently saw an increase in the soft-skill development from the start to the conclusion of the internship. Students ranked themselves lower on all post scales, communication (*M*=21.19),

teamwork (*M*=21.71), initiative (*M*=21.29), and, analytical thinking (*M*=21.40) than supervisors ranked student soft-skill development at the conclusion of the internship, communication (*M*=22.29), teamwork (*M*=23.084), initiative (*M*=22.35), and, analytical thinking (*M*=22.16). Students reported the largest gains in (1) communication, and (2) analytical thinking, followed by (3) initiative, and (4) teamwork. This differed slightly from supervisor responses. The highest to lowest ranked soft-skill development scale gains based on supervisor responses included (1) analytical thinking, (2) communication, (3) initiative, and similarly (4) teamwork.

Results of Research Question 3

Q3: Is there congruence with how student interns and supervisors rate soft-skill development as a result of the internship?

In order to answer this question both correlation matrices and pairwise t-tests were conducted. The correlation matrices did not show relationships between student and supervisor pre and post responses. In hindsight, the student and supervisor ratings would not be correlated through this statistical test since analysis does not compare students to their direct supervisor (i.e. students enter an internship at different skill levels and change will be evaluated differently by each supervisor). However, there are other statistical tests to examine relationship including the descriptive statistics and mean differences which show consistency in the patterns of the responses. Student differences on each scale correlate with supervisor differences on the same scales. Students and supervisors identified that soft-skill development did occur on each item at

different degrees of growth. Student self reported ratings were initially lower on each item than supervisor pre ratings but students perceive more gains at the completion of the internship. Supervisor ratings are higher on each item with less difference or growth reported at the conclusion of the internship. Examining items on each scale based on mean scores showed there was consistency in the patterns of student and supervisor responses.

Communication

Three of the top five items with the highest gains (i.e. difference between pre and post ratings) for students were on the communication scale including, "communicating with a person in charge", "asserting my own opinions", and "expressing ideas and concepts clearly". Supervisors agreed with "asserting their own opinion" and "communicating with a person in charge" which were also in their top five items with the highest reported mean gains. The findings suggest that an internship as a learning environment provides students with a place to practice their professional communication skills.

The lack of opportunities to be in work environments prior to an internship may contribute to this being the scale with the highest mean gains. As students enter the CoP, it is clear they have an interest in the field but experience an inability to express unique thoughts independently. The role of the supervisor in an internship is to support the student by providing opportunity to communicate with colleagues in the CoP and offering consistent feedback. The feedback loop provides the student with context for opportunities to improve communication techniques.

Teamwork

Teamwork was ranked highest at the start of the internship for both groups followed by initiative, analytical thinking and communication, which experienced the most growth. Students (*M*=18.66) and supervisors (*M*=21.40) agreed that students entered the internship with a more developed adeptness to teamwork which may be related to characteristics associated with the Millennial generation. Millennials have an expectation in the work environment that they will have close relationships with colleagues, be able to work on teams for the social interaction aspect and the benefit of a team is the opportunity to avoid risk through equal contributions (Myers & Sadaghiani, 2008). It is not surprising that teamwork had the least amount of soft-skill development when considering the comfort level of Millennials working on teams through previous experiences.

The pre and post mean differences on the teamwork scale item, "participating in meetings in group settings" highlighted the student's desire to be connected to the team but the fear of risk within the group setting with more experienced individuals. The student pre score (*M*=2.91) moved to a (*M*=3.47) post score yet it still did not reach the supervisor pre score of (*M*=3.57). While the supervisor found the student to be a contributing member to the group setting, it took the student time to gain confidence participating in a meeting.

Initiative

Students and supervisors agreed that initiative improved over the course of the internship semester. The item, "requesting increased responsibility" had the most growth for the student from pre (*M*=2.63) to post (*M*=3.38). The

combination of working in a new setting, and asserting oneself by communicating with a person in charge in an effort to request more work seems to be a significant opportunity for student soft-skill development. The one item has multiple facets connecting all four scales.

Analytical Thinking

Two of the top five items with the highest gains for supervisors were on the analytical thinking scale including, "identifying problems" and "recommending solutions". The expectation for work is that a student will leave college with the necessary hard and soft skills to perform the job. The reality could be that the student learns how to think analytically with a more experienced individual, like a supervisor through training associated with an internship in a CoP. Supervisor recognition of the student ZPD challenges the student to think and act independently despite the preference and security of working in a team to avoid the possibility of making a mistake.

Soft-skill development

Results of the analysis of all soft-skill development items suggest that there are consistent patterns among student and supervisor responses. Students and supervisors reported gains across all soft-skill development scales at the conclusion of the internship. An internship provides students with authentic experiences in a social learning environment. Engaging in the social learning environment requires the use of soft-skills. A student entering an internship may have had limited opportunity to use soft-skills in a professional environment prior to the internship. The mediation provided by the supervisor and educator

offer a safe learning environment where the student can practice communicating effectively, working as a member of a team, taking initiative, and thinking analytically about issues confronting the industry. Soft-skill development involves practicing, making mistakes and attempting to use soft-skills effectively after reflecting on how the student handled situations in the CoP. Results of the study provide evidence to support the role of an internship as a pedagogical approach to student soft-skill development.

Limitations and Future Directions

There are several limitations with the current study. First, the results should be cautiously generalizable since the study was conducted with one group of undergraduate junior and senior level college students enrolled in internship courses at one public institution of higher education in the Northeast region of the United States and their corresponding internship supervisors.

Second, due to the small number of students representing each major (range 1-70 students per major) it is not advised to generalize the research based on one major. It could be of interest to some to look at the results by major but the small N per major in this sample did not allow for such comparisons.

Third, the study supports internships as an educational approach to student soft-skill development based on survey results. The surveys were used due to the lack of quantitative research data to support soft-skill development through internships; however a qualitative understanding could provide context for individual student and supervisors' responses and give insight into the

particular experiences to which the student attributes the gains in soft-skill development.

Future Research

Soft-Skill Development Transition Theory

The research study was the first step in establishing that soft skills are actually being developed during an internship. The study involved student interns enrolled in a credit based internship course, the designated supervisor with expertise in the field, and the educator instructing the course. The professional relationship between the student and the supervisor in a CoP may have had an impact on student soft-skill development. Social interaction plays a fundamental role in the process of cognitive development (Vygotsky, 1978). Further qualitative and quantitative research should be conducted to explore the theory that soft-skill development is the driving factor in moving between stages of the internship.

Millennials in the Workplace

Millennials were born between 1979-2000 (Myers & Sadaghiani, 2010). Millennials are characterized by their high student loan debt, poor job economy prospects and significant wealth gap between older generations who are remaining in the workplace longer than their predecessors (Kotkin, 2012). The reality of the economy has made it challenging for Millennials to work part time jobs which are assumed by more experienced individuals (Kotkin, 2012). Further research should be conducted to understand the influence of limited adolescent work opportunities on soft-skill development.

Internship Funding

Finally, state and federal funding for students engaged in internships and employers offering meaningful learning opportunities through supervised internships are increasing as a way to rejuvenate the economy. Providing students with the experience and opportunity to develop skills necessary to be successful in the workplace is a way to address the lack of employer training programs for new employees and determine if the individual is a fit for the organization prior to an official hire. Assessing student skill development should continue to be a focus for future studies as it can influence pedagogical approaches to teaching and learning.

APPENDICES

APPENDIX A

IRB Approval for use of Surveys

THE
UNIVERSITY
OF RHODE ISLAND
DIVISION OF RESEARCH
AND ECONOMIC
DEVELOPMENT

OFFICE OF RESEARCH INTEGRITY
70 Lower College Road, Suite 2, Kingston, RI 02881 USA
p: 401.874.4328 f: 401.874.4814 uri.edu/research/tro/integrity

THINK BIG WE DO℠

DATE:	April 3, 2014
TO:	Jayne Richmond, PhD
FROM:	University of Rhode Island IRB
STUDY TITLE:	[566972-3] Experiential Learning
IRB REFERENCE #:	HU1314-090
SUBMISSION TYPE:	Revision
ACTION:	DETERMINATION OF EXEMPT STATUS
DECISION DATE:	April 3, 2014
REVIEW CATEGORY:	Exemption category # *1 & 2*

Thank you for your submission of Revision materials for this research study. University of Rhode Island IRB has determined this project falls into the EXEMPT REVIEW category according to federal regulations. Per university policy, the project has been given an administrative review by either the IRB Chair or an IRB member. Approval is valid for the duration of the project.

No changes to procedures involving human subjects may be made without prior review and approval. You must promptly notify the Office of Research Integrity of any problems that occur during the course of your work.

If you have any questions, please contact us by email at researchintegrity@ds.uri.edu. Please include your study title and reference number in all correspondence with this office.

APPENDIX B

Student Survey

Cover Letter Student Survey

The staff at URI's Center for Career and Experiential Education wants to know more about your experiential learning experience, skill development, and learning outcomes from this semester. Your participation will help us meet the learning needs of all students - across academic majors - engaged in various examples of experiential learning at URI. Experiential Learning is a broad term used to describe a student's use of analytical, oral, written, and other skills obtained in the classroom to an external setting. Experiential learning includes internships, field experience, laboratories, external problem based learning, service learning, and various practicum experiences. This survey consists of 55 questions and will take about 15 minutes to complete. All of the information you share is confidential. Our goal is to improve all of our experiential learning programs. If you have any questions about this survey, you may contact the staff of the Center for Career and Experiential Education at 401-874-2311. If at any time you decide not to participate in the survey, please just close the web page. Your participation and feedback is appreciated. Thank you for your time and interest in sharing your knowledge.

Student Survey:

Q2 Which semester did you complete your experiential learning experience?

- ❍ Fall 2013 (1)
- ❍ Spring 2014 (2)
- ❍ Summer 2014 (3)

Q3 What is your anticipated graduation date?

- December 2012 (1)
- May 2013 (2)
- August 2013 (3)
- December 2013 (4)
- May 2014 (5)
- August 2014 (6)
- December 2014 (7)
- May 2015 (8)
- August 2015 (9)
- December 2016 (10)
- May 2016 (11)
- August 2016 (12)
- Other (13)

Q5 What is your major? (If you have a double major, please indicate the major related to your experiential learning experience)

- ❍ Accounting (1)
- ❍ African American Studies (2)
- ❍ Animal Science and Technology (3)
- ❍ Anthropology (4)
- ❍ Aquaculture and Fishery Technology (5)
- ❍ Art (6)
- ❍ Art History (7)
- ❍ Biological Sciences (8)
- ❍ Biology (9)
- ❍ Biomedical Engineering (10)
- ❍ Business Administration (11)
- ❍ Chemical Engineering (12)
- ❍ Chemistry (13)
- ❍ Chemistry and Forensic Chemistry (14)
- ❍ Chinese (15)
- ❍ Classical Studies (16)
- ❍ Communicative Disorders (17)
- ❍ Communication Studies (18)
- ❍ Computer Science (19)
- ❍ Early Childhood Education (20)
- ❍ Economics (21)
- ❍ Education (22)
- ❍ Electrical Engineering (23)
- ❍ Elementary Education (24)
- ❍ Engineering (25)
- ❍ English (26)
- ❍ Entrepreneurial Management (27)
- ❍ Environmental and Natural Resource Resource Economics (28)
- ❍ Environmental Horticulture and Turfgrass Management (29)
- ❍ Environmental Science and Management (30)
- ❍ Film Media (31)
- ❍ Finance (32)
- ❍ French (33)
- ❍ Gender and Women's Studies (34)
- ❍ Geology and Geological Oceanography (35)
- ❍ German (36)
- ❍ Global Business (37)
- ❍ Health Studies (38)
- ❍ History (39)
- ❍ Horticulture and Turfgrass Management (40)

- Human Development and Family Studies (41)
- Italian (42)
- Journalism (43)
- Kinesiology (44)
- Landscape Architecture (45)
- Marine Affairs (46)
- Marine Biology (47)
- Marketing (48)
- Mathematics (49)
- Medical Laboratory Science (50)
- Microbiology (51)
- Military Science (52)
- Music (53)
- Nursing (54)
- Nutrition and Dietetics (55)
- Ocean Engineering (56)
- Pharmacy: PharmD (57)
- Pharmaceutical Sciences (58)
- Philosophy (59)
- Physics (60)
- Physics and Physical Oceanography (61)
- Political Science (62)
- Psychology (63)
- Public Relations (64)
- Secondary Education (65)
- Sociology (66)
- Spanish (67)
- Supply Chain Management (68)
- Textile Management (69)
- Textile, Fashion Merchandising, and Design (70)
- Theater (71)
- Wildlife Conservation and Biology (72)
- Writing and Rhetoric (73)
- Undeclared (74)

Q7 The following questions ask you to reflect on the level of your skills and abilities before and after your experiential learning experience. Please provide two responses for each item below: In the first column labeled "BEFORE experiential learning," select the answer that best describes the level of your skills/abilities before you started your experiential learning experience. Then in the second column labeled "AFTER experiential learning," select the answer that best describes the level of your skills/abilities now that you have finished your experiential learning experience.

Q8 COMMUNICATION SKILLS

	Poor (1)	Fair (2)	Good (3)	Great (4)	Poor (1)	Fair (2)	Good (3)	Great (4)
Asserting my own opinions (1)	❍	❍	❍	❍	❍	❍	❍	❍
Communicating with a person in charge (2)	❍	❍	❍	❍	❍	❍	❍	❍
Expressing ideas and concepts clearly (3)	❍	❍	❍	❍	❍	❍	❍	❍
Listening intently (4)	❍	❍	❍	❍	❍	❍	❍	❍
Communicating well orally (5)	❍	❍	❍	❍	❍	❍	❍	❍
Communicating well in writing (6)	❍	❍	❍	❍	❍	❍	❍	❍

Q10 ENGAGEMENT - INITIATIVE

	Poor (1)	Fair (2)	Good (3)	Great (4)	Poor (1)	Fair (2)	Good (3)	Great (4)
Logically approaching a problem (1)	❍	❍	❍	❍	❍	❍	❍	❍
Requesting increased responsibility (2)	❍	❍	❍	❍	❍	❍	❍	❍
Adhering to deadlines (3)	❍	❍	❍	❍	❍	❍	❍	❍
Approaching a problem independently (4)	❍	❍	❍	❍	❍	❍	❍	❍
Understanding my personal ethics (5)	❍	❍	❍	❍	❍	❍	❍	❍
Desire to continue learning in the field (6)	❍	❍	❍	❍	❍	❍	❍	❍

Q11 ENGAGEMENT - TEAMWORK

	Poor (1)	Fair (2)	Good (3)	Great (4)	Poor (1)	Fair (2)	Good (3)	Great (4)
Making positive use of feedback (1)	❍	❍	❍	❍	❍	❍	❍	❍
Respecting the needs of others in my work environment (2)	❍	❍	❍	❍	❍	❍	❍	❍
Collaborating on projects with other people (3)	❍	❍	❍	❍	❍	❍	❍	❍
Participating in meetings and group settings (4)	❍	❍	❍	❍	❍	❍	❍	❍
Accepting and following directions from other people (5)	❍	❍	❍	❍	❍	❍	❍	❍
Engaging with people whose voices, experiences, and ideas are different than my own (6)	❍	❍	❍	❍	❍	❍	❍	❍

Q12 ANALYTICAL SKILLS

	Poor (1)	Fair (2)	Good (3)	Great (4)	Poor (1)	Fair (2)	Good (3)	Great (4)
Identifying the skills and resources necessary to complete a task (e.g. research, technology, communications) (1)	❍	❍	❍	❍	❍	❍	❍	❍
Interpreting information (2)	❍	❍	❍	❍	❍	❍	❍	❍
Summarizing what I have learned (3)	❍	❍	❍	❍	❍	❍	❍	❍
Retaining new ideas (4)	❍	❍	❍	❍	❍	❍	❍	❍
Identifying problems (5)	❍	❍	❍	❍	❍	❍	❍	❍
Recommending solutions (6)	❍	❍	❍	❍	❍	❍	❍	❍

Q13 Research is the investigation into the study of materials and sources in order to establish new facts and reach new conclusions. Did you conduct or participate in research as part of your experiential learning experience?

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To To what extent did experiential learn...

Q14 What research activities did you participate in? Please check all that apply.

- ❑ Analyzing data using quantitative methods (1)
- ❑ Analyzing data using qualitative methods (2)
- ❑ Using statistical software to analyze data (e.g. SPSS, SAS) (3)
- ❑ Writing or presenting a scientific paper or poster (4)
- ❑ Literature review and database searches (5)
- ❑ Data collection (6)
- ❑ Data management (7)
- ❑ Questionnaires, interviews, or other research with humans (8)
- ❑ Information searching (e.g. web searches, archival records) (9)

Q15 To what extent did experiential learning enhance your career growth? Please check the best answer.

Clarity regarding career goals (1)	❍	❍	❍	❍
Identification of personal strengths related to career goals (2)	❍	❍	❍	❍
Identification of personal weaknesses related to career goals (3)	❍	❍	❍	❍

Q16 To what extent did experiential learning enhance your academic growth? Please check the best answer.

Clarity regarding academic goals (1)	❍	❍	❍	❍
Identification of personal strengths related to academic goals (2)	❍	❍	❍	❍
Identification of personal weaknesses related to academic goals (3)	❍	❍	❍	❍

Q17 Thinking about the ideas, skills, knowledge, and abilities that you learned during your academic coursework, which were you able to apply to your experiential learning experience? Check all that apply.

- ❑ Creative expression or artistic appreciation (e.g. art, design, knowledge of creative works) (1)
- ❑ History and theories of my major (e.g. psychological theories, global history) (2)
- ❑ Honesty and ethics (e.g. preventing plagiarism, ethics in research, protecting client confidentiality) (3)
- ❑ Problem solving (e.g. thinking critically, designing a new product, identifying new approaches to helping a client) (4)
- ❑ Integrating knowledge from different fields (e.g. apply knowledge to a new setting or complex problem, work effectively with a team of diverse professionals) (5)
- ❑ Mathematical, statistical, or computational methods (e.g. SPSS, Excel, sale and profit analysis) (6)
- ❑ Conducting research (e.g. assisting in a research project, writing a research paper) (7)
- ❑ Using technology (e.g. technical skills, tools, instruments, computers) (8)
- ❑ Collecting and presenting information (e.g. interpreting data, graphs, or reports) (9)
- ❑ Applying knowledge to local and global problems (e.g. recognizing how my major can help solve problems such as hunger, poverty, or sustainability) (10)
- ❑ Contributing to society and the needs of the larger community (e.g. advocacy, leadership, political structure) (11)
- ❑ Understanding of diversity and multiculturalism (e.g. respecting different cultural perspectives, appreciating human diversity) (12)
- ❑ Communicating effectively (e.g. writing, presentations to groups, interpersonal communication) (13)
- ❑ Reading thoughtfully (e.g. analyzing information, reviewing critically) (14)
- ❑ Information literacy (e.g. identifying available information and tools, evaluating quality of information, researching complex issues) (15)
- ❑ Other (16) _____

Q18 Please list the (3) courses you completed at URI that best prepared you for your experiential learning responsibilities. For each course indicate the COURSE NUMBER and PROFESSOR (last name only). Please use a backslash to separate course number and professor. Follow the given example:1. PSY200/Rossi2. ENG340/Larson3. GER100/Stern

Q19 As a result of your experiential learning experience, were you offered any of the following?

Was offered a paid position at your site (1)	❍	❍
Received a job offer from connections made through your site with another employer (different from my site) (2)	❍	❍

Q20 At this point in time, my plans after graduation include (check all that apply):

- ❑ Enrolling in graduate school (1)
- ❑ Beginning work in my intended career (2)
- ❑ Engaging in temporary work (3)
- ❑ Traveling (4)
- ❑ Other (5)

Q21 EXPERIENTIAL LEARNING SITE AND SUPERVISOR EVALUATION: This information is confidential and will only be used by URI's Center for Career and Experiential Education to better understand your experience.

Q22 Please check the answer that best describes to what extent you agree or disagree with the following statements about your experiential learning site.

The site was a reasonably safe environment (1)	❍	❍	❍	❍
The site provided me with the necessary tools and resources to effectively perform my duties (2)	❍	❍	❍	❍
The site provided significant learning opportunities (3)	❍	❍	❍	❍

Q24 Do you have any additional comments about your experiential learning site?

Q23 Please check the answer that best describes the support you received from your site supervisor.

My site supervisor provided me with adequate supervision and support (1)	❍	❍	❍	❍
My site supervisor provided me with feedback regarding my work-related performance (2)	❍	❍	❍	❍
My site supervisor provided sufficient information regarding goals and expectations for the experience (3)	❍	❍	❍	❍

Q27 Do you have any additional comments about your experiential learning site supervisor?

Q26 Are you enrolled to receive credit for your experiential learning experience?

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip to End of Survey

Q28 Your personal information will remain confidential and is only used by the Center for Career and Experiential Education.

Q29 Please enter your first and last name.

Q30 Please enter your supervisor's first and last name.

Q31 Please enter the name of your placement site.

Q32 Please enter your supervisor's e-mail address.

Q33 I found my experiential learning opportunity through:

- ❍ Rhody Net (1)
- ❍ Personal contact (2)
- ❍ Internship or faculty advisor (3)
- ❍ Online search (4)
- ❍ Internships.com (5)
- ❍ Approved list from the major (6)
- ❍ Other (7) _____

Q6 Who was your internship instructor?

- ❍ Erica Cassidy (1)
- ❍ Lynne Finnegan (2)
- ❍ Tammy Leso (3)
- ❍ Kat Moniz (4)
- ❍ Diana Marshall (5)
- ❍ Richard Song (6)

APPENDIX C

Supervisor Survey

Cover Letter Supervisor Survey

The staff at URI's Center for Career and Experiential Education appreciates your participation in providing quality experiential learning opportunities for our students. Now that the semester is almost complete, we are requesting your feedback for the final evaluation of the student. This evaluation assists us in assessing the student's performance over the semester, and also serves to provide the student with feedback about their strengths and areas where they can improve their skills. We encourage you to take the time to discuss the evaluation with your student before submitting it to our office. This survey consists of 28 questions and will take about 15 minutes to complete. If you have any questions about this survey, you may contact Kim Washor, Director of Experiential Education in the Center for Career and Experiential Education at 401.874.2311. Thank you for your time and participation.

Supervisor Survey

Q2 Please enter your student's first and last name.

Q3 Please enter your first and last name.

Q4 Please enter the name of your placement site.

Q5 Which semester did you host a URI student in an experiential learning experience?

- Spring 2013 (1)
- Summer 2013 (2)
- Fall 2013 (3)

Q6 Who was the internship instructor assigned to your student? (hint: this is the person who has been in e-mail contact with you)

- Erica Cassidy (1)
- Lynne Finnegan (2)
- Tammy Leso (3)
- Kat Moniz (4)
- Diana Marshall (5)
- Richard Song(6)

Q6 The following questions ask you to rate your student's abilities related to overall job performance. If you are not able to rate your student on a particular item (e.g. do not have knowledge to rate them, or the item does not apply), please mark Not Applicable.

Punctual and dependable (1)	❍	❍	❍	❍	❍	❍
Manages time and energy well (2)	❍	❍	❍	❍	❍	❍
Dresses neatly and appropriately (3)	❍	❍	❍	❍	❍	❍
Has a pleasant and positive demeanor (4)	❍	❍	❍	❍	❍	❍
Completes assigned tasks (5)	❍	❍	❍	❍	❍	❍
Completes tasks on time (6)	❍	❍	❍	❍	❍	❍
Completes tasks accurately (7)	❍	❍	❍	❍	❍	❍
Asks questions to clarify assignments (8)	❍	❍	❍	❍	❍	❍

Q7 The following questions ask you to rate the level of your student's skills and abilities when they STARTED their experiential learning experience compared to when they COMPLETED their experience. Please provide two responses for each item below: In the first column labeled "At the Start," select the answer that best describes the level of their skills/abilities when they started their experiential learning experience. Think back to the first 2 to 3 weeks of observing the student. Then in the second column labeled "At Completion," select the answer that best describes the level of their skills/abilities now that they have completed (or soon will complete) their experiential learning experience. If you are unable to accurately rate a student on a particular item (e.g. do not have knowledge to rate them, or the item does not apply), please mark Not Applicable.

Q8 COMMUNICATION SKILLS

	Poor (1)	Fair (2)	Good (3)	Great (4)	NA (5)	Poor (1)	Fair (2)	Good (3)	Great (4)	NA (5)
Asserting their own opinions (1)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Communicating with a person in charge (2)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Expressing ideas and concepts clearly (3)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Listening intently (4)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Communicating well orally (5)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Communicating well in writing (6)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

Q9 ENGAGEMENT - INITIATIVE

	Poor (1)	Fair (2)	Good (3)	Great (4)	NA (5)	Poor (1)	Fair (2)	Good (3)	Great (4)	NA (5)
Logically approaching a problem (1)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Requesting increased responsibility (2)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Adhering to deadlines (3)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Approaching a problem independently (4)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Understanding professional ethics (5)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Desire to continue learning in the field (6)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

Q10 ENGAGEMENT - TEAMWORK

	Poor (1)	Fair (2)	Good (3)	Great (4)	NA(5)	Poor (1)	Fair (2)	Good (3)	Great (4)	NA (5)
Making positive use of feedback (1)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Respecting the needs of others in their work environment (2)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Collaborating on projects with other people (3)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Participating in meetings and group settings (4)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Accepting and following directions from other people (5)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Engaging with people whose voices, experiences, and ideas are different than their own (6)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

Q11 ANALYTICAL SKILLS

	Poor (1)	Fair (2)	Good (3)	Great (4)	NA(5)	Poor (1)	Fair (2)	Good (3)	Great (4)	NA (5)
Identifying the skills and resources necessary to complete a task (e.g. research, technology, communications) (1)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Interpreting information (2)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Summarizing what they have learned (3)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Retaining new ideas (4)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Identifying problems (5)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Recommending solutions (6)	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

Q12 In general, research is the investigation into the study of materials and sources in order to establish new facts and reach new conclusions. In the context of your own field, did the student conduct or participate in research as part of their experiential learning experience?

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip to What would you consider this student'...

Q13 What research activities did they participate in? Please check all that apply.

- ❑ Analyzing data using quantitative methods (1)
- ❑ Analyzing data using qualitative methods (2)
- ❑ Using statistical software to analyze data (e.g. SPSS, SAS) (3)
- ❑ Writing or presenting a scientific paper or poster (4)
- ❑ Literature review and database searches (5)
- ❑ Data collection (6)
- ❑ Data management (7)
- ❑ Questionnaires, interviews, or other research with humans (8)
- ❑ Information searching (e.g. web searches, archival records) (9)

Q14 What would you consider this student's primary strengths?

Q15 What major contribution did this student make to your organization?

Q16 What areas of development should the student continue to improve upon in order to succeed in this field?

Q17 In your opinion, how well was this placement suited to the student's abilities and interests?

- ❍ 1 (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 (4)
- ❍ 5 (5)

Q18 In your opinion, how would you rate the student's ability to work as a contributing team member?

- ❍ 1 (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 (4)
- ❍ 5 (5)

Q19 Did they complete all required hours?

- ❍ Yes (1)
- ❍ No (2)

If Yes Is Selected, Then Skip to Did they complete all learning goals

Q20 Approximately how many days did they miss?

Q21 Did they make up for this time?

- ❍ Yes (1)
- ❍ No (2)

Q22 Did they complete all learning contract goals?

- ❍ Yes (1)
- ❍ No (2)

If Yes Is Selected, Then Skip To How often did you meet with the student

Q23 Please describe which learning contract goal what not met.

Q24 How often did you meet with the student?

- daily (1)
- 2 times per week (2)
- 3 times per week (3)
- weekly (4)
- less than weekly (5)

Q25 How often did you provide regular feedback to the student?

- daily (1)
- 2 times per week (2)
- 3 times per week (3)
- weekly (4)
- less than weekly (5)

Q26 Using a scale of 1 (worst) to 10 (best), how would you rate your satisfaction with this experience?

- 0 (0)
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (10)

Q27 If you could assign a grade to your student to rate their overall performance, what grade would it be?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)

Q28 The next four questions allow you to assess the student's portfolio. The Learning Contract and Portfolio are an important requirement of the experiential learning experience. As described in the Supervisor packet, the Learning Contract serves as the academic and professional road map for the student's semester. It identifies the student's learning objectives and how they plan to accomplish these, as well the workplace requirements, intern responsibilities and hours. At the conclusion of the internship the student creates a professional portfolio based on the content of the learning contract. Please indicate yes or no to the next four questions. If you are not able to review the student's portfolio, please mark Not Applicable.

The contents of the portfolio accurately portray the efforts, progress, and accomplishments of the student. (1)	❍	❍	❍
The contents of the portfolio accurately present technical components, research techniques, processes, and conclusions. (2)	❍	❍	❍
I would be impressed with the quality of the portfolio's appearance and content if presented to me in a job interview. (3)	❍	❍	❍
The contents of the portfolio meet my organization's acceptable standards of privacy and confidentiality. (4)	❍	❍	❍

Q29 Do you have any additional comments about the student or your experience?

APPENDIX D

Survey Information in ITR 302 Field Experience Syllabus

Intern Evaluations: You will be required to complete both a MIDTERM and FINAL evaluation of your internship experience. Your midterm evaluation serves as a mid-semester check-in with both your internship site supervisor and your seminar instructor. A link to your final evaluation will be sent to you via email the last week of the internship. This evaluation asks you to assess yourself, your site supervisor, and your internship experience.

APPENDIX E

Email to Student last week of class from Intern Advisor

Student Name,

As the semester comes to a close the staff in the Center for Career and Experiential Education wants to wish you a safe and relaxing break. We are eager to learn about your semester internship and want you to have an opportunity to complete a survey regarding your experience. Please complete this 15 minute survey on-line through this link: https://uribus.qualtrics.com/SE/?SID=SV_203ZFG800watgt7 prior to DATE when the survey closes. We want to provide you with every opportunity to help us to better understand how we can assist students in the future and look to your expertise from this past internship in order to do so. If you have any questions, please contact us at 401-874-2311 and we'll be delighted to assist you. Thank you for your time.

APPENDIX F

Initial Email to Supervisor first week of semester

Thank you for supervising an intern from the University of Rhode Island.

SUPERVISOR PACKET:
I have included a link to a supervisor packet with valuable information about the internship program and contacting us. Simply cut and paste the link below into your browser —it will serve as a great resource throughout the internship.
https://docs.google.com/file/d/0B1uwjf4niB_ObmtUZjIyUTRhWkU/edit?usp=sharing

LEARNING CONTRACT:
Your student intern has been asked to create a learning contract as a road map for the internship. We have found that the learning contract acts as an outline for projects/tasks/research and skill building. A learning contract is a list of goals that you and the student generate. Please feel free to ask the student about the learning contract assignment which is due within the first few weeks of the semester in order to keep the student on track with his or her learning.

EVALUATIONS:
At the mid-point and conclusion of the semester I will email you a request to complete evaluations. This is an opportunity to provide the internship office with information regarding your intern's work performance AND offer the intern praise and advice regarding their contributions in your office setting. I encourage you to discuss the evaluation with your student as part of the learning experience.
In the final evaluation you will be asked to measure skill development and learning of your student intern. The skills we are asking you to reflect on are communication skills, analytical thinking, initiative and teamwork. Over the course of the semester, consider how your student has developed in these areas from week 2 through week 12.
Again, thank you for your time and commitment to the URI internship program. Internships are beneficial for the student to determine career goals and accomplish significant projects to enhance skill sets, so your participation is essential and appreciated!

APPENDIX G

Final Email to Supervisor week 12 of semester

Supervisor Name:

We are quickly approaching the internship end date for our academic calendar and I would like to once again thank you for your willingness to work with a URI intern and for providing them with a worthwhile experience this semester.

This link-- https://uribus.qualtrics.com/SE/?SID=SV_cGTPoTwHW8VIEy9 leads you to the final on-line evaluation. Please complete this before DATE so that I know, from you, that the student intern completed the goals in the learning contract agreement and finished their negotiated hours.

This evaluation is an important component in the final review of the student's professional performance over the course of the semester. Please share your feedback with the student before you submit this, so they have a better understanding of where they excel, and of course when necessary, where they can improve.

If you have any questions or concerns, feel free to contact me via email or telephone 401-874-4777 and I would be happy to assist you. Again, thank you for your time and dedication to partnering with the University of Rhode Island in facilitating a meaningful learning experience for our students.

Kim Washor
Director, Center for Career and Experiential Education
401-874-2311

APPENDIX H

Student Consent Form

The University of Rhode Island
University College
Roosevelt Hall
Experiential Learning

CONSENT FORM FOR RESEARCH

You have been invited to take part in a research project described below. If you have more questions later, Kim Washor, the person mainly responsible for this study, {401-874-4777}, will discuss them with you. You must be at least 18 years old to be in this research project.

Description of the project:

This semester, you participated in Experiential Learning at URI. This survey aims to evaluate the perceived gains of students who engage in Internships at the university.

What will be done:

If you decide to take part in this study here is what will happen: You will be asked to rate various skills before and after Experiential Learning, and to provide information about your tasks, assignments, and overall experience. You should know that completion of this survey may be mandatory for your final grade in ITR, however, you DO NOT have to allow your responses to be used in research.

Risks or discomfort:

Risks and/or discomfort during this survey are not anticipated, however, if you experience discomfort, please contact Kim Washor {401-874-4777).

Benefits of this study:

Although there will be no direct benefit to you for taking part in this study, the researcher may learn more about the value of experiential learning for college students, and the ways through which the experience can be improved.

Confidentiality:

Your part in this study is confidential. None of the information will identify you by name. All records will be kept in a password-protected database accessible only to the principle and student investigators. Any reporting on this data will reflect group averages, and individual responses will not be used.

Decision to quit at any time:

The decision to take part in this study is up to you. You do not have to participate. Although you may be required to take this survey for class, use of your responses as part of the research study is OPTIONAL. Whatever you decide will in no way affect your grade, or status as a student.

Rights and Complaints:
If you are not satisfied with the way this study is performed, you may discuss your complaints with your ITR instructor or Kim Washor anonymously, if you choose. In addition, if you have questions about your rights as a research participant, you may contact the office of the Vice President for Research, 70 Lower College Road, Suite 2, University of Rhode Island, Kingston, Rhode Island, telephone: (401) 874-4328.

Please click "NEXT." You will be prompted with a question asking you for permission to use your responses for research purposes. By responding "YES" to that question, you are acknowledging that you have read and fully understand the consent form, and that you wish to participate. If you click "NO," you will still be prompted to complete the survey, but your responses will not be used for research purposes.

APPENDIX I

Supervisor Consent Form

The University of Rhode Island
University College
Roosevelt Hall
Experiential Learning

CONSENT FORM FOR RESEARCH

You have been invited to take part in a research project described below. If you have more questions later, Kim Washor, the person mainly responsible for this study, {401-874-4777}, will discuss them with you. You must be at least 18 years old to be in this research project.

Description of the project:

This semester, you participated as a supervisor in to an internship student from URI. This survey aims to evaluate your perceived gains of the student with whom you worked.

What will be done:

If you decide to take part in this study here is what will happen: You will be asked to rate various skills before and after Experiential Learning, and to provide information about your tasks, assignments, and overall experience. You should know that completion of this survey may be mandatory due to your role as a supervisor in providing feedback, however, you DO NOT have to allow your responses to be used in research.

Risks or discomfort:

Risks and/or discomfort during this survey are not anticipated, however, if you experience discomfort, or if you have any concerns please contact Kim Washor {401-874-4777).

Benefits of this study:

Although there will be no direct benefit to you for taking part in this study, the researcher may learn more about the value of experiential learning for college students, and the ways through which the experience can be improved for students and supervisors.

Confidentiality:

Your part in this study is confidential. None of the information will identify you by name. All records will be kept in a password-protected database accessible only to the principle and student investigators. Any reporting on this data will reflect group averages, and individual responses will not be used.

Decision to quit at any time:

The decision to take part in this study is up to you. You do not have to participate. Although you may be required to take this survey to provide the student with feedback, use of your responses as part of the research study is OPTIONAL. Whatever you decide will in no way affect your standing or eligibility for continuing to work with URI interns.

Rights and Complaints:

If you are not satisfied with the way this study is performed, you may discuss your complaints with your student's ITR instructor or with Kim Washor anonymously, if you choose. In addition, if you have questions about your rights as a research participant, you may contact the office of the Vice President for Research, 70 Lower College Road, Suite 2, University of Rhode Island, Kingston, Rhode Island, telephone: (401) 874-4328.

Please click "NEXT." You will be prompted with a question asking you for permission to use your responses for research purposes. By responding "YES" to that question, you are acknowledging that you have read and fully understand the consent form, and that you wish to participate. If you click "NO," you will still be prompted to complete the survey, but your responses will not be used for research purposes.

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