THE EFFECT OF INTERNSHIP PARTICIPATION ON PERCEIVED IMPORTANCE OF CAREER READINESS COMPETENCIES

by

Huey Davis

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Thesis Committee:
Dr. Brandon Wallace, Chair
Dr. Meredith Dye
Dr. Vicky MacLean

To A and J: Our feats are your foundation

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ABSTRACT

For college students, internships provide opportunities to learn in a professional environment. Since internships are not required for all majors, students finish college with different experiences and values. Based on data provided by the National Association of Colleges and Employers, the career readiness competencies valued most by employers are problem solving, critical thinking, teamwork, oral communication, written communication, and work ethic. Utilizing data from 780 undergraduate students, the author investigates whether participating in an internship affects students' views of career readiness competencies. Using ordinary least squares regression, we found internship participation had no effect on student's evaluation of the six competencies, but differences were found by race, age, gender, college class, and college of major. Although the results do not support the hypothesis that internships affect students' evaluations of career readiness skills, we found students collectively rate problem solving, critical thinking, teamwork, oral communication, written communication and work ethic very highly.

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INTRODUCTION

Internships are a valuable resource for students during their college career. The lack of experience and development of essential career readiness competencies during the formative college years can complicate a graduate's search for employment. Internships can provide students with these competencies, experience within a field of study, improve GPA, increase career skills, and increase likelihood for full-time employment (Gardner 2013, Parker et al. 2016, NACE 2018, Gault, Leach, and Duey 2010). Although not all internships provide financial incentive for students, the impact of networking and the opportunity to enhance classroom knowledge better prepares students for the post-graduation job search. Internship experiences provide students with the opportunity to apply skills learned in the classroom while learning first-hand which competencies provide preparation for full-time employment. Structured internship programs can improve critical thinking and communication skills among interns (Duncan et al. 2017, Sonti et al. 2016).

Even though universities are aware of the vital role career readiness skills play in assisting students with employment, their teaching methods rarely translate to student's knowledge unless departments work closely with employers to craft lessons around specific employer skills (Cranmer 2006). Even then, these skills are only transferrable toward specific positions. While internships designated to specific majors may promote the development of general competencies, they tend to develop student's technical skills instead (Jones et al. 2017). Nevertheless, many graduates find internships helped to improve their rate of pay in their first job compared to those who did not participate (Taylor 1988).

The National Association of Colleges and Employer's **(NACE)** 2017 report found the vast majority of employers with internship programs (75.2 percent) indicated the primary focus of these programs is to recruit college graduates for full-time, entry-level positions. Gardner (2013) found that 57% of employers hire interns to identify and train talent for later employment, while 23% use them for special projects and assignments rather than hiring additional staff. Employers attempt to locate recent graduates who they know have experience within their field, have held leadership positions, and have internship experience (NACE 2018). Another study found that 94.6% of employers believed that internships increase students' job-related skills, and 75% emphasized that internships create a link between the university and the company (Knemeyer and Murphy 2002).

Background

Similar to many universities in the United States, Middle Tennessee State University (MTSU) supports students working an internship in preparation for graduation. MTSU defines an internship 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. Additionally, in a formal, structured program with faculty supervision, there is the opportunity to improve the curriculum and impact academic research (MTSU 2017).

In the Fall of 2017, the College of Liberal Arts requested research be completed on the experiences of employers, students, and faculty across MTSU's campus encountered with internships. The primary focus of the study revolved around how students rated their internship experience, skills gained during the internship, and how prepared students perceived they for employment based on internships. Second, students were asked to identify any barriers they may

face in obtaining an internship. Employers and faculty described their experience working alongside and mentoring interns.

The study used a survey known as Project CEO, or Co-Curricular Experience Outcomes, a 62-question national study about co-curricular experiences. This survey aimed to determine whether students learn the twelve most desired skills based on research completed by the National Association of Colleges and Employers (Project CEO Resources 2018). The twelve skills include:

1. Intercultural Competence: the ability to value, respect, and learn from diverse cultures, races, ages, genders, sexual orientations, and religions
2. Career Management: the ability to identify career goals and articulate relevant skills, knowledge, and experiences
3. Teamwork: the ability to build collaborative relationships with colleagues and customers representing diverse cultures, races, ages, genders, religions, lifestyles, and viewpoints
4. Problem Solving and Decision Making: the ability to identify key issues or problems of concern and evaluates potential solutions
5. Workflow Planning: the ability to Identify and prioritize tasks to achieve a desired outcome, and to create a plan with sequential steps and associated actions
6. Verbal Communication: the ability to verbally deliver purposeful presentations designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors
7. Critical Thinking: the ability to conduct a comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion

8. Digital Technology: the ability to leverage existing digital technologies and adopting new technologies to ethically and efficiently to solve problems, complete tasks, and accomplish goals
9. Written Communication: the ability to articulate thoughts and ideas clearly and effectively in a variety of written formats
10. Influencing: the ability to motivate individuals and groups to do something, or convincing or persuading others
11. Leadership: the ability to leverage the strengths of others to achieve common goals, and use interpersonal skills to coach and develop others
12. Professionalism and Work Ethic: the ability to demonstrate personal accountability and effective work habits (e.g., punctuality, working productively with others, and time workload management, and understand the impact of non-verbal communication on professional work image) (Project CEO Outline 2018).

The survey posed a series of questions to determine in which experiences students participate, the average amount of time spent completing each experience per week, and the student's perceived level of competency in each of the skills. The experiences included co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, or academic groups or honor societies), internships or practical experience, on campus student employment, and off campus employment.

Data collection for students ensued spring of 2018, with employer and faculty interviews planned for Fall 2018. Using data from this project, I address the following research questions:

- Do internships affect the value students place on career readiness competencies compared to students who are not currently participating in an internship?

- Does the college in which a student is majoring impact their views on career readiness competencies?

LITERATURE REVIEW

Career Readiness Competencies

Each year the NACE surveys member-organizations to gauge the job market for prospective employees. In 2018, 201 organizations took part. One feature of the study focused on a list of career readiness competencies that employers rated on a scale from one (not essential) to five (essential) for new hires. The results found six competencies had mean scores above four: teamwork (4.56), oral communication (4.30), written communication (4.30), work ethic (4.46), problem solving (4.62), and critical thinking (4.62) (NACE 2018).

Previous research is controversial on where these skills are learned by college students. Gault, Redington, and Schlager (2000) ascertained students gain technical, interpersonal, and job acquisition skills through internships, while communication skills develop in the classroom. Further studies within niche fields found employers and educators mixed on which technical skills they find more important (Craig and Wikle 2016). Alternatively, in the same study, educators placed more value in problem solving and communication skills; this leads to the theory universities focus on providing more opportunities for students to develop their writing or verbal skills, while internships provide opportunities for students to practice job interviews, gain experience networking among professionals, and working within their prospective field. Gault, Redington, and Schlager (2000) found differences in problem solving, teamwork, and written communication between those with and without an internship, but it was not statistically significant. Brooks et al. (2003) rationalized that professional skills do not need to be improved in the classroom because teamwork, communication, problem solving, and critical thinking can

be developed once students gain work experience. Contrary to Brooks et al., Miller (2018) discovered the importance creative coursework plays in building students' confidence in critical thinking and Art, Communication, Humanities, Social services, and Education majors averaged a higher utilization of creative coursework compared to all other majors.

Floyd and Gordon (1998) found no significant difference among students, university staff, and employers in their rankings towards communication and interpersonal skills. Staff and employers emphasized the same skills when instructing students. Furthermore, no significant difference was found between students and staff or staff and employers regarding problem solving, but employers tend to rank problem solving higher than students. Although this study provides insight into perceptions on career readiness skills, it did not control for internship participation.

Theory

Internships have long been viewed as a quintessential method for experiential learning. Based out of the learning theories of John Dewey, Jean Piaget and Kurt Lewin, Kolb's experiential learning theory attempts to "define the relationship among learning, work, other life lessons, and the creation of knowledge itself" (Kolb 1984: 20). By focusing the learning process around a person's experience rather than their outcomes, the student gains knowledge on how to develop similar skills in the future. Kolb argues that a learning process focused on outcomes leads to "non-learning." Ideas are fluid and can be reformed through experience, but by emphasizing outcomes students are incapable of replicating knowledge in similar experiences (1984).

Similarly, organizational socialization theory stresses the need for students to learn from their environment with the assistance of the organization. Without an organization (both

leadership and employees) nurturing the intern, the student is incapable of understanding the intricacies of interactions and communication among tenured employees (Korte 2007). Only through firsthand experiences in the role individuals play in their culture can the student begin to properly assimilate amongst peers. For interns, integrating into a work environment provides them with the opportunity to hear work-related jargon, view proper attire for meetings, or how to de-escalate a confrontation between coworkers (Bauer et al. 1998). If students become socialized by their internship's organization, they will learn the career readiness competencies employer's value most. Furthermore, if college departments work closely with employers, then faculty within those departments will better prepare students for work in their field of study. Based on existing findings suggesting internships are necessary to develop skill competencies, 8 hypotheses are developed and tested.

Hypotheses

Hypothesis 1: Students with internship experience value problem solving skills more than students without an internship.

Hypothesis 2: Students with internship experience value work ethic more than students without an internship.

Hypothesis 3: Students with internship experience value teamwork more than students without an internship.

Hypothesis 4: Students with internship experience value verbal communication equally to students without an internship.

Hypothesis 5: Students with internship experience value written communication equally to students without an internship.

Hypothesis 6: Students with internship experience value critical thinking equal to students without an internship.

Hypothesis 7: Students with internship experience value problem solving skills, work ethic, and teamwork more than students without when controlling for student demographics and academic variables.

Hypothesis 8: Students with internship experience will value written communication and oral communication no differently than those without when controlling for student demographics and academic variables.

METHODOLOGY

The Survey and Sample

As described earlier, the Project CEO survey was administered by Campus Labs and sent to the entire undergraduate student body through the MTSU email server. The use of the MTSU email server provided an exhaustive list of all undergraduate students enrolled at MTSU for the 2018 spring semester. Students were incentivized to participate in the survey through a raffle drawing for iPads. Each student was eligible for one entry into the raffle, and the winner was selected after the survey closed. MTSU Institutional Review Board approval was obtained since human subjects were utilized (Appendix B). Students signed an informed consent agreement prior to completing the survey ensuring they were aware that taking part in the research was voluntary and that their identity would be kept confidential (Appendix A). While the researchers were provided the results of the survey and a list of respondents completing the survey, the names and responses were not linked. Data collection took place from April 16, 2018 through May 15, 2018. During this time, three separate emails were sent to students asking for

participation. A total of 780 students completed the survey out of the 19,513 undergraduate students in the population, giving the survey a response rate of around 4%.

Measures

All measures used in this study were self-report measures taken from the survey described above.

The Independent Variable. Whether a student participated in an internship during the current academic year is the primary independent variable in this study. It was measured in the survey by the question "Did you participate in an internship or practical experience this year?" Students could answer Yes (1) or No (0). The definition of an internship or practical experience was left to the participant. Although students potentially participated in an internship during previous years of high school or college, the question focuses on those currently in an internship.

The Dependent Variables. The dependent variables in this analysis include the value students place on the six career readiness competencies ranked highest by employers in the most recent NACE survey. These were work ethic, written communication, oral communication, teamwork, critical thinking and problem solving. Each competency was ranked using a Likert-type measure ranging from 1-5 with 1 being not important and 5 being most important.

College of Major Control Variable. The analysis controls for students' college of major since the literature suggest that the impact of internships may differ by major, especially between those that tend to emphasize technical expertise (like those in Basic and Applied Science, Media and Entertainment, and Business) and those that do not (like Behavioral and Health Science, Education, Liberal Arts, and the University College). Although the survey asked students to report the college of their major, several respondents wrote in their actual major. The research team coded the college of major based on the major reported by the student. Also, though

graduate students were advised not to participate, several students who wrote in their major indicated they were pursuing master's degrees. These respondents were excluded from analyses.

Demographic Control Variables. Five demographic variables measured by the survey were included as control variables. These include race, age, gender, socioeconomic status, and current employment. The survey asked students to report their race as (1) African American/Black, (2) American Indian/Alaska Native, (3) Asian/Pacific Islander, (4) Caucasian/White, (5) Hispanic, (6) Multi-racial/ethnic, and (7) Self-identify. The last choice gave students the option to write in their own response. Several students marked self-identify and then wrote in multiple nationalities. These students were kept in the self-identify category since they did not consider themselves multiracial. Age was measured on the survey by asking respondents to simply write in their age. To report gender, respondents were given five options. These were (0) prefer not to answer, (1) Male, (2) Female, (3) Transgender, and (4) Self-Identify. Since only 10 respondents chose categories other than male or female including eight respondents who preferred not to answer, one transgendered student, and one student who self-identified as neither male or female, these were treated as missing data in the analysis. Social class was measured by asking respondents whether they considered the money in their household to be (1) not enough, (2) enough to live day by day, (3) enough to allow a small amount of savings, or (4) plenty. Current employment assessed whether students were working either on-campus or off-campus at the time of the study. Originally, working on-campus and working off-campus were measured as two separate variables. To determine if students were currently employed, the two variables were combined and recoded as either yes (1) they are working on-campus, off- campus, both or no (0) they are not working.

Academic Control Variables. Three academic control variables were also drawn from the survey. These were college class, commuter status, and history of transfer. For college class, students were given four options to select from: (1) Freshman, (2) Sophomore, (3) Junior, and (4) Senior. Commuter status was measured by asking students to report whether they were a residential student or a commuter student (coded 1 and 2 respectively). Finally, students were asked to answer Yes (coded as 1) or No (coded as 0) if they transferred from another institution.

DATA ANALYSIS

A codebook was created, and the data compiled into a SPSS data set using direct entry. Each of the six dependent variables (problem solving skills, critical thinking, work ethic, written communication, oral communication, and teamwork) were coded as ordinal variables ranging from 1 to 5 with 1 indicating the skill is seen as not important and 5 indicating it is seen as very important but were treated as interval variables for analysis. Participation in an internship is coded as a dichotomous nominal variable with students responding “yes” coded as 1 and those responding “no” coded as 0. Using an alpha level of .05, hypotheses 1 through 6 were tested using an independent measures t-test, with participation in an internship as the independent variable and the six selected career readiness competencies as the dependent variables. For hypothesis 7 and 8, an ordinary least squares multiple regression model was created to assess the effect of participation in an internship (a dichotomous dummy variable coded as 1 or 0) while controlling for the respondent’s college of major, college class, commuter status, history of transfer, race, age, gender, socioeconomic status, and employment status. All the control variables were recoded and entered into the analysis as dummy variables except for age.

RESULTS

Table 1 presents characteristics of the sample and control variables for the regression model. While the majority (70.5%) of the sample fell in the characteristic undergraduate college age range of 18-24, almost 30% were 25 or older. In fact, the average student age was about 25 years old (M=24.75, SD=8.05). Two thirds of the sample were Caucasian and just under one-fifth (18.2%) were African American. Almost two-thirds of the sample were female (65.6%), a slight overrepresentation when compared to the MTSU population. Most respondents reported the money in their current household allowed them to either live day by day (31%) or to have a small savings (42.2%). Only 10.9% reported they did not have enough money. Over 71% of the respondents were currently employed.

One in four respondents majored in Basic and Applied Sciences (25.8%) and over one in five majored in Behavioral and Health Sciences (22.6%), while one in six (16.5%) majored in the College of Business. Majors in the College of Liberal Arts and College of Media and Entertainment both accounted for 12.3% of respondents. Almost 70% of the sample were Juniors (26.5%) or Seniors (43.2%) and 41% of respondents were transfer students, while almost three-quarters (74.4%) were commuters.

As can be seen in Table 2, about one-fifth (20.1%) of respondents had an internship experience this year. Students in internships (*M*=24.68 SD=7.119) were similar in age to those not in an internship (*M*=24.76 SD=8.266). Racial composition was also similar, although those with internships were slightly more likely to be white (68.2%) than those not (64.7%). A larger percentage of those with internships were female (70.7%) than those not in internships (64.4%). There were no appreciable differences in socioeconomic status, but students in internships were

more likely to be employed (81%) than those not in internships (68.7%). Internship students were less likely to be from the College of Basic and Applied Sciences (18.5% compared to 27.6%) while they were more likely to be from the College Behavioral and Health Sciences (27.4% compared to 21.3%) or the College of Education (10.2% compared to 2.9%). Only 4.5% of those with internships were freshmen compared to 14.3% of non-interns. Furthermore, seniors made up 64.3% of the internship sample, but only 37.9% of the non-intern sample. Almost 60% of students without an internship (59.6%) had transferred compared to 43.3% of those in internships. There was little difference in commuter status between those with and without internships, as both interns (72.6%) and non-interns (74.8%) mostly live off campus.

Table 3 shows the relative importance that students place on career readiness competencies compared to employers in the NACE survey. While the mean scores for students and employers were similar, there were some differences. The greatest difference was on Intercultural Competence, which students ranked 1.17 points higher than employers. Students also ranked Career Management (.68 points), Leadership (.31), and Professionalism/Work Ethic (.13) slightly higher. On the other hand, students ranked Written Communication (-.37), Critical Thinking (-.34), Problem Solving (-.20) and Teamwork (-.20) slightly lower. There were minimal differences for Verbal Communication (.03) and Digital Technology (-.01).

Hypothesis Tests

Hypothesis 1: Students with internship experience value problem solving skills more than students without an internship.

Students in general place a high value on problem solving skills, with the mean (*M*=4.42 SD=.77)) falling between very important and extremely important. As can be seen in Table 4, an independent measures t-test (t=.614, p=.550) found no significant difference between students

with an internship (*M*=4.45, SD=.77) and those not in internships (*M*=4.41, SD=.68). It can be concluded that internships do not increase the value students place on problem solving skills compared to students without internship experience.

Hypothesis 2: Students with internship experience value work ethic more than students without an internship.

Work ethic provided the highest overall rating of the six competencies (M=4.59, SD=.69). The mean score for those with internship experience (*M*=4.59, SD=.74) and for those without such experience (*M*=4.59, SD=.68) was identical. Needless to say, there was no significant difference between the two groups (*t*=.027, *p*=.987). Therefore, there is no support for the hypothesis that those with internship experience value work ethic more than those without.

Hypothesis 3: Students with internship experience value teamwork more than students without an internship.

Students also place a high value on teamwork (*M*=4.36, SD=.70). Table 4 shows that while there was a slight difference between those with internship experience (*M*=4.33, SD=.82) and those without (*M*=4.37, SD=.75) this difference was not significant (*t*=-.547, *p*=.584). Thus, internships do appear to increase the value students place on teamwork.

Hypothesis 4: Students with internship experience value verbal communication equally to students without an internship.

With a mean of 4.33 (SD=.78) students also thought verbal communication was important. Yet once again the difference between those with internship experience (*M*=4.37, SD=.80) and those without (*M*=4.33, SD=.77) was minimal and not statistically significant (*t*=.636, *p*=.525), thus supporting the hypothesis that having an internship experience does not affect the value placed on verbal communication. (See Table 4.)

Hypothesis 5: Students with internship experience value written communication equally to students without an internship.

Written communication proved to be the lowest ranked competency among students (M=3.93, SD=.88). Interestingly, it also exhibited the greatest difference between those with an internship (*M*=4.01, SD=.92) and those without (*M*=3.91, SD=.86). However, as Table 4 shows, the difference of .10 between the two groups was not statistically significant (*t*=1.189, *p*=.235). This supports the hypothesis that students with and without internships value written communications equally.

Hypothesis 6: Students with internship experience value critical thinking equally to students without an internship.

Critical thinking garnered a high value from students with a mean of 4.28 (SD=.80). While the mean for internship experience (*M=4.32* SD=.85*)* varied slightly when compared to those without an internship (*M*= 4.27 SD=.78), the difference was not significant (*t*= -.752 *p*=.247). Therefore, no support was found for the hypothesis that internship experience increases students' value of critical thinking.

Hypothesis 7: Students with internship experience value problem solving, work ethic, and teamwork more than those without when controlling for student demographics and academic variables.

First, ordinary least squares regression was used to test the hypothesis that students with internship experience value problem solving more than those without when controlling for age, race, gender, socioeconomic status, employment status, college of major, transfer status, and being a commuter. The variables in the model explained 3% of the variation in the value students place on problem solving (R^2=.03) and the F-ratio was not significant (F=.934, *p*=.555),

indicating that, overall, the model did not have a significant effect on the value students place on problem solving. The only variable in the model with a significant regression coefficient was transfer status (b=.119, *p*=.034). Since internship participation did not have a significant effect (b=.122, *p*=.064) it can be concluded that when controlling for the other variables in the model, having participated in an internship did not affect the value placed on problem solving skills. (See Table 6.)

Next, the same variables were regressed against teamwork as the dependent variable. In this instance, the model explained 2% of the variation in the value students place on teamwork (R^2=.02) and the F-ratio again indicated no significant effect (F=.749, *p*=.802). In fact, none of the regression coefficients for individual variables were significant, including internship participation (b=.001, *p*=.986). Thus, when controlling for the other variables in the model, internship participation did not affect the value students place on teamwork.

Finally, the same model was assessed with work ethic as the dependent variable. The model explained 5% of the variation in the value students place on work ethic (R^2=.05). The F test produced a value of 1.672 which, in this case, was statistically significant (*p*=.023). Race (the dummy for Asian/Pacific Islander was significant (b=-.34, *p*=.001), college class (the dummy for junior (b=-.183, *p*=.047) and senior (b=-.20, *p*=.025) was significant), and being currently employed (b=.120, *p*=.038) had significant effects. However, the effect of having an internship (b=.030, *p*=.650) was not significant. Therefore, when controlling for the variables in the model, internship experience has no effect on the value placed on work ethic.

Based on these findings I find no support for the hypothesis that students with internship experience value problem solving, work ethic, and teamwork more than those without when controlling for student demographics and academic variables.

Hypothesis 8: Students with internship experience value oral communication, written communication, and critical thinking no differently than those without when controlling for student demographics and academic variables.

To test the hypothesis that there is no difference in how students with and without internship experience value oral communication when controlling for age, race, gender, socioeconomic status, employment status, college class, college of major, transfers status, and whether they are a commuter, ordinary least squares regression was again used. The model explains 5% of the variation in the value students placed on oral communication (R^2=.05) and the F test produced a value of 1.690 (p=.021) which was significant, indicating that the variables model influenced the value students place on oral communication. Two variables had significant effects, race (the dummy for Asian/Pacific Islander was significant, (b=-.292, p=.013) and being male (b=-.197, p=.002). As in the previous models, having an internship did not have a significant affect (b=.019, p=.795).

Next, when looking at the effects of the same variables regressed on the value students place on written communication, the model explains 6% of the variation (R^2=.06). The F test produced a value of 1.897 which was statistically significant (p=.006). Three variables had statistically significant effects, age (b=.011, p=.012); college of major, with the dummies for Behavioral Health (b=.251, p=.008), Business (b=.229, p=.022) and Liberal Arts (b=.274, p=.014 being significant; and being male (b=-.156, p=.029). Again, internship participation did not have a significant effect (b=.076, p=.357) as was hypothesized.

Finally, the same model was assessed with critical thinking as the dependent variable. The model explained 5% of the variation in the value students place on work ethic (R^2=.05). The F test produced a value of 1.623 which was statistically significant (p=.031). Both race (the

dummy for Asian/Pacific Islander (b=-.262, *p*=.028) and Other (b=.703, *p*=.007) was significant) and college of major (the dummy for Liberal Arts was significant, b=.261, *p*=.008) had significant effects. However, the effect of having an internship (b=.078, *p*=.293) was not significant. When controlling for other variables in the model, internship experience has no effect on the value placed on critical thinking.

Based on these results, I find support for the hypothesis that students with internship experience value oral communication, written communication, and critical thinking no differently than those without when controlling for student demographics and academic variables.

DISCUSSION

Based on theory and previous research, it was hypothesized that participation in an internship while in college would expose students to the culture and values of the workplace, thus enhancing their evaluation of career competencies previously found to be important to employers. Certain competencies, those primarily learned "on the job," would be particularly sensitive to this effect (problem solving, work ethic, and teamwork), while others that are more easily taught in the classroom (oral communication, written communication, and critical thinking) would be less so. However, the findings of this study, both in the bivariate and multivariate analyses, suggest participation in an internship does not affect the value students place on any of the six career competencies addressed.

However, while not the focus of the study, ordinary least squares multiple regression found that other variables had a significant effect on the value placed on the career readiness competencies. First, as other researchers have found, college of major influenced the value

placed on written communication and critical thinking. Students in the College of Business, Health and Behavioral Science, and Liberal Arts placed higher value on written communication than those in Basic and Applied Sciences, while Liberal Arts majors ranked critical thinking higher, supporting Miller's research on creative learning (2018). The significant effects of college of major suggests students' area of study plays some role in determining the value they place on career competencies as previous literature indicated.

Gender also had an impact on students' evaluation of written and oral communication with females valuing these communication skills higher than males. Interestingly, Asians/Pacific Islanders placed less importance when compared to whites on critical thinking, oral communication and work ethic, while "other" races placed more importance on critical thinking. None of these racial differences was previously addressed in the literature. The regression analysis found juniors and seniors value work ethic less than underclassmen. Moreover, the value decreases the longer students are in school, suggesting students may become fatigued as they continue their college career. Finally, current employment status had a significant effect on work ethic, with those currently working seeing work ethic as more important than those not working.

Although the regression models addressing the value placed on verbal communication, written communication, critical thinking and work ethic produced significant F-ratios, each model explained less than 6% of the variation in the dependent variable, meaning that 94% of the variation in students' evaluation of these career readiness competencies' is explained by variables not in the analysis. Thus, while college of major, college class, race, age, gender, transfer status, and employment status had significant effects on the value students place of select career competencies, they actually explain relatively little. Future research should seek to include other variables that might explain additional variation in the value placed on career competencies.

While there was no statistically significant difference found between those with and without internships in all six competencies, five of the six competencies were valued above 4 or "very important". Those four competencies had at least 85% of their responses ranked as very important or extremely important. Even written communication, which ranked below very important, has at least 69% of its responses rank it as a 4 or 5. Most students place a high value on these six skills, even if they do not rank them quite as high as the NACE employers.

LIMITATIONS

There were several limitations that became apparent during the study. As mentioned above, most students rated all six competencies between 4 and 5, giving a negative skew to the results. This limited the functionality of the statistical analysis because of the restricted variation in the answers. For future studies, a more sensitive measure of the value placed on career competencies might be needed to better identify differences in valuation. Second, the low response rate created several inaccurate representations of the MTSU student body. The study sample had a wide variation in student classification, ranging from 12.3% (Freshman) to 43.2% (Senior). There are several reasons for this difference. First, freshmen may not have been compelled to partake in the survey since the email for the survey talked about co-curricular activities; causing freshman with no such experience to ignore the survey. In the same line of thinking, juniors and seniors may have been more likely to participate since they have had several years to acquire experience in some co-curricular activity. This would also explain the underrepresentation of freshmen (-7.7%) and over representation of juniors (+6.5%) and seniors (+15.3%) compared to the MTSU population. By design, the study did not include graduate or undergraduate special students. Because of these differences, this study represents a self-selected

non-probability sample. Any follow up studies would greatly benefit from the survey being sent to students over several months and not during finals. However, administering the survey during mid-semester raises the issue of whether students currently enrolled in an internship have had enough time to be influenced by their internship experience.

The inability to further divide the student sample into those who have ever had an internship from those who have never had an internship severely limited the depth of this study. The focus of this study kept the attention on students currently in an internship and did not question students if they had ever been in an internship. With upperclassmen being over represented in the study, there could have been a larger sample of students with previous internship experience. This previous experience could have a lasting effect on their values of career readiness competencies, allowing their data to bleed into the responses of those who were not currently in an internship.

Additionally, the independent variable measured the value students place on the six competencies rather than measuring student's actual development of these skills. Future research would benefit from using objective measures of the competencies or by asking students directly if they believe they improved on the competencies as a result of their internship experience. Also, qualitative data gathered through open-ended questions might provide additional insight as to students' perceptions of the career competencies.

However, even though this study only garnered 4% of MTSU's overall population, the demographics demonstrate a well-represented sample of the university. Each category was tested for significant disparity between the sample and population. For race, only Asian/Pacific Islander was significantly overrepresented, and Hispanic was significantly underrepresented. However, several students who marked other on their survey, wrote in different variants of Latina. This

may be explained by the ongoing debate whether being Hispanic is a race or ethnicity (Pew 2015). The Hispanic category may be better represented if reframed to cover a well-defined race. One of the largest discrepancies appears within the gender variable. Although there is a large difference on campus between male and female students (as displayed in Table 1), the difference in this sample compared to the university population is significant. The best explanation for this is the tendency of women to be more responsive to online surveys than men (Smith 2008). While there were several demographics underrepresented in this sample, the sample provided multiple well-represented control variables. Although the Caucasian category was more than three times larger than the next largest category, it is representative of the MTSU population; since Caucasians make up 65.6% of the MTSU population. All six racial categories in the sample were within 2% of the MTSU population, with the largest differences being African American and Hispanic (-1.8%). College of Major was another demographic that provided similar results to the MTSU population. As can be seen in Table 1, only one variable (University College) had a difference of more than two percent.

CONCLUSION

This research investigated whether internships affected the value students place on career readiness competencies. While previous literature signaled a difference between perceptions of career competencies with students who participate in internships and those who do not, at least among those currently in internships this research finds otherwise. Outside of a few demographics, most students view the top career readiness competencies equally. However, some literature stated classrooms influence the importance of communication skills more than employers, but this was shown to be incorrect in this study. Students in and out of internships

viewed the value of verbal communication equally to employers. In fact, written communication is valued significantly lower by all students compared to employers, but not compared to each other.

The one caveat to the aforementioned theory is the importance of interpersonal skills (problem solving, teamwork, and work ethic) among specific majors. Since some majors work closely with employers creating curriculum, requiring internships within specific organizations, and utilizing guest lectures from employers within their field, less emphasis is given to communication skills and more emphasis is provided towards interpersonal and technical skills. This was found to be untrue. There was no difference among any college of major when comparing any of the three interpersonal skills. Furthermore, written communication and critical thinking were the only competencies influenced by college of major.

As Trice and Beyer (1993: 130) state "Organizational socialization consists of social processes through which organizations transmit to members the expectations associated with their roles." However, students are not learning to value the six competencies inside their internships. Instead, this research illustrates socialization occurring prior to students reaching the workplace. Conceivably students become influenced by their primary groups or highly influential secondary groups such as professors and their college classes. Since students in and out of internships rated all six competencies highly, the importance of these competencies must become ingrained prior to the internship

While this study does not support previous research focusing on the development of career competencies through internships, it does not diminish the importance of internships. As stated in the thesis, there are numerous benefits internships provide students including experience within a field of study, improved GPA, networking, and the ability to increase the

likelihood for full-time employment. This study focused solely on students' value of career competencies. Students may, in fact, strengthen these competencies while in internships, even if the internship does not change the value they place on them. Perhaps MTSU already provides partnerships between employers and majors that develop students' competencies; explaining the high rated responses among interpersonal skills and student's first introduction to the organization's socialization process. By providing insight into this area, more attention can be given toward professors and college classes to better determine where students learn to value these competencies.

Despite several limitations to the research, this study provides insight into the role internships play in developing career readiness competencies in students. With the continued push students face from employers to have experience before graduation, internships are likely to grow in importance. This study provides additional insight into the role internships play in preparing students for employment after graduation.

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APPENDICES

Appendix A-Tables

Table 1. Sample Characteristics Compared to MTSU Population

	Sample Study		MTSU Population	
	Frequency	Percent	Frequency	Percent
Age				
Under 18	1	0.10%	662	3.40%
18-20	240	30.70%	7571	38.80%
21-24	310	39.70%	7559	38.70%
25-34	134	17.20%	2664	13.60%
35-64	93	12.00%	1052	5.40%
Over 64	0	0%	15	0.10%
Race				
Native Alaskan or American	3	0.40%	56	0.20%
Two or More Races	33	4.20%	725	3.30%
Asian/ Pacific Islander	52	6.70%	1106	5.00%
Hispanic	28	3.60%	1188	5.40%
Black or African American	142	18.20%	4343	19.80%
Caucasian	510	65.40%	14365	65.60%
Not Specified	0	0.00%	130	0.60%
Other	12	1.50%	0	0%
Gender				
Female	512	65.60%	11966	55%
Male	258	33.10%	9947	45%
Missing	10	1.20%	0	0%
Socioeconomic Status				
Is not enough	85	10.90%	0	0%
Allows us to live day by day	242	31%	0	0%
Allows us to have a small savings	329	42.20%	0	0%
Is plenty	124	15.90%	0	0%
Employed				
Yes	556	71.30%	0	0%
No	224	28.7%`	0	0%

N=780

Table 1. Continued

	Sample Study		MTSU Population	
	Frequency	Percent	Frequency	Percent
College of Major				
Basic and Applied Sciences	201	25.80%	5212	23.80%
Behavioral and Health Sciences	176	22.60%	4590	20.90%
Business	129	16.50%	3095	14.10%
Education	34	4.40%	1173	5.40%
Liberal Arts	96	12.30%	2505	11.40%
Media and Entertainment	96	12.30%	2510	11.50%
University College	33	4.20%	1749	8.00%
Undecided/Not Applicable	11	1.40%	0	0.00%
Non-Degree Seeking	0	0%	1079	4.90%
Double Major	4	0.50%	0	0.00%
Transfer Student				
Yes	320	41.00%	0	0%
No	460	59.00%	0	0%
Commuter				
On-Campus	200	25.60%	0	0%
Commuter	580	74.40%	0	0%
Classification				
Freshman	96	12.30%	4300	20%
Sophomore	139	17.80%	3762	17%
Junior	208	26.50%	4505	20%
Senior	337	43.20%	6033	28%
Undergraduate Special	0	0%	923	4%
Graduate	0	0%	2390	11%

N=780

Table 2. Comparison of Students Who Participated in an Internship this Year

	Internship		No Internship	
	Frequency	Percent	Frequency	Percent
Internship	157	20.10%	623	79.90%
Age				
Under 18	1	0.60%	0	0%
18-20	30	19.10%	210	33.00%
21-24	78	49.70%	232	37.20%
25-34	31	19.70%	103	16.50%
35-64	15	9.60%	77	12.40%
Race				
Native Alaskan or American	0	0	3	0.50%
Two or More Races	10	6.40%	23	3.70%
Asian/ Pacific Islander	7	4.50%	45	7.20%
Hispanic	4	2.50%	24	3.90%
Black or African American	27	17.20%	115	18.50%
Caucasian	107	68.20%	403	64.70%
Other	2	1.30%	10	1.60%
Gender				
Female	111	70.70%	401	64.40%
Male	43	27.40%	215	34.50%
Missing	3	1.90%	7	1.20%
Socioeconomic Status				
Is not enough	19	12.10%	66	10.6
Allows us to live day by day	45	28.70%	197	31.3
Allows us to have a small savings	67	42.70%	262	42.1
Is plenty	26	16.60%	98	15.7
Employed				
Yes	128	81.50%	428	68.7
No	29	18.50%	195	31.3

N=780

Table 2. Continued

	Internship		No Internship	
	Frequency	Percent	Frequency	Percent
College of Major				
Basic and Applied Sciences	29	18.50%	172	27.6
Behavioral and Health Sciences	43	27.40%	133	21.3
Business	22	14%	107	17.2
Education	16	10.20%	18	2.9
Liberal Arts	17	10.80%	79	12.7
Media and Entertainment	22	14%	74	11.9
University College	6	3.80%	27	4.3
Undecided/Not Applicable	1	0.60%	10	1.6
Double Major	1	0.60%	3	0.50%
Transfer Student				
Yes	68	43.30%	371	59.60%
No	89	56.70%	252	40.40%
Commuter				
On-Campus	43	27.40%	157	25.20%
Commuter	114	72.60%	466	74.80%
Classification				
Freshman	7	4.50%	89	14.3
Sophomore	16	10.20%	123	19.70%
Junior	33	21%	175	28.10%
Senior	101	64.30%	236	37.90%

N=780

Table 3. Comparison of Study Sample and NACE Employers' Valuation of Competencies

Competencies	**Study Sample**	**NACE Employers**
	Mean	Mean
Problem Solving*	4.42	4.62
Critical Thinking*	4.28	4.62
Teamwork*	4.36	4.56
Professionalism/Work Ethic*	4.59	4.46
Verbal communication*	4.33	4.30
Written communication*	3.93	4.30
Leadership	4.13	3.82
Career Management	4.14	3.46
Digital Technology	3.74	3.73
Intercultural Competence	4.18	3.01

* Competencies used in the hypotheses.

Table 4. T-Test Comparing Mean Importance of Career Readiness Competencies for those With and Without Internships

	Mean for Internship	Mean for No Internship	Difference in Means	t
Importance of Problem Solving	4.45	4.41	.04	.614
Importance of Critical Thinking	4.32	4.27	.05	-.752
Importance of Teamwork	4.33	4.37	.04	-.555
Importance of Verbal Communication	4.37	4.33	.04	.628
Importance of Written Communication	4.01	3.91	.10	1.190
Importance of Work Ethic	4.59	4.59	.00	.027

Table 5. Regression Model for Hypothesis 7

	Problem Solving		Teamwork		Work Ethic	
	B	(SE)	B	(SE)	B	(SE)
Constant	4.423	.155	4.236	.172	4.526	.154
Age	0.001	0.004	.007	.004	.002	.004
Race						
African American	-0.05	0.069	.140	.076	.113	.069
American Indian	0.237	0.397	-.314	.440	.448	.394
Asian/ Pacific Islander	-0.169	0.105	.012	.116	-.340***	.104
Hispanic	-0.069	0.136	-.008	.150	.064	.135
Multiracial	-0.056	0.131	.057	.145	.084	.130
Other	0.189	0.232	.158	.258	.082	.231
Colleges						
Behavioral Health	-0.003	0.075	-.035	.083	.129	.074
Business	0.066	0.079	-.040	.088	-.001	.078
Education	-0.047	0.136	-.043	.151	.007	.135
Liberal Arts	0.099	0.088	.010	.097	.090	.087
Media and Entertainment	0.085	0.087	.051	.097	.065	.087
University College	-0.048	0.142	.013	.158	-.005	.141
Classification						
Sophomore	-0.009	0.096	-.014	.106	-.085	.095
Junior	-0.023	0.093	-.094	.103	-.183*	.092
Senior	-0.127	0.090	-.118	.100	-.200*	.089
Gender						
Male	0.031	0.056	.009	.063	-.074	.056
Transfer	0.119*	0.056	.055	.062	.073	.055
Commuter	-0.038	0.061	.067	.068	-.042	.061
Socioeconomic						
Money allows us to live day by day	-.016	.089	-.092	.099	.024	.089
We have a little savings	-.105	.086	-.141	.096	.003	.086
Money is plenty	-.009	.101	-.111	.112	.121	.101
Currently Employed	-.012	.058	.127	.065	.120*	.058
Internship Participation	.122	.066	.001	.073	0.043	.065
R square	0.03		0.024		0.053	

*P< .05, **P< .01, ***P< .001

Table 6. Regression Model for Hypothesis 8

	Oral		Written		Critical Thinking	
	B	(SE)	B	(SE)	B	(SE)
Constant	4.257	.173	3.594	.196	4.201	.175
Age	.001	.004	.011*	.005	.004	.004
Race						
African American	-.017	.077	.118	.087	-.095	.078
American Indian	-.300	.443	.497	.501	-.270	.446
Asian/ Pacific Islander	-.292*	.117	-.058	.133	-.262*	.118
Hispanic	.225	.151	-.081	.171	-.161	.152
Multiracial	.099	.146	-.189	.166	-.195	.147
Other	.223	.259	-.024	.293	.703**	.261
Colleges						
Behavioral Health	.159	.083	.251**	.094	.046	.084
Business	.109	.088	.229*	.100	.102	.089
Education	.078	.152	-.018	.172	-.038	.153
Liberal Arts	.118	.098	.274*	.111	.261**	.099
Media and Entertainment	.186	.098	.216	.110	.057	.098
University College	.209	.159	.074	.179	-.196	.160
Classification						
Sophomore	.028	.107	-.196	.121	-.057	.108
Junior	-.077	.104	-.174	.117	-.130	.104
Senior	-.075	.100	-.109	.114	-.081	.101
Gender						
Male	-.197**	.063	-.156*	.071	.078	.063
Transfer	.056	.062	.105	.070	.107	.063
Commuter	-.078	.068	.065	.077	.047	.069
Socioeconomic						
Money allows us to live day by day	-.040	.100	.003	.113	.020	.100
We have a little savings	-.045	.096	-.130	.109	-.057	.097
Money is plenty	.077	.113	-.033	.128	-.061	.114
Currently Employed	.127	.065	.081	.074	-.024	.066
Internship Participation	.019	.073	.076	.083	.078	.074
R square	0.054		0.06		0.052	

P< .05, **P< .01, ***P< .001

Appendix B – Institutional Review Board Approval

IRB
INSTITUTIONAL REVIEW BOARD
Office of Research Compliance,
010A Sam Ingram Building,
2269 Middle Tennessee Blvd
Murfreesboro, TN 37129

MIDDLE TENNESSEE STATE UNIVERSITY

IRBN001 - EXPEDITED PROTOCOL APPROVAL NOTICE

Thursday, April 05, 2018

Principal Investigator	**Ella Weaver & Vicky MacLean** (Faculty)
Faculty Advisor	NONE
Co-Investigators	Tierra Brooks, Brandon Creso, Huey Davis and Chasity Fraizier
Investigator Email(s)	*ella.weaver@mtsu.edu; vicky.maclean@mtsu.edu*
Department	Department of Sociology and College of Liberal Arts
Protocol Title	***Co-curricular activities and internship experiences: Barriers, skills and employment preparation***
Protocol ID	**18-2197**

Dear Investigator(s),

The above identified research proposal has been reviewed by the MTSU Institutional Review Board (IRB) through the **EXPEDITED** mechanism under 45 CFR 46.110 and 21 CFR 56.110 within the category *(7) Research on individual or group characteristics or behavior* A summary of the IRB action and other particulars in regard to this protocol application is tabulated below:

IRB Action	APPROVED for one year from the date of this notification
Date of expiration	**4/30/2019**
Participant Size	5,000 (FIVE THOUSAND)
Participant Pool	**General Adults (18 years and older) - Current and former MTSU students who are still on the MTSU email network**
Exceptions	Signature requirement waived for informed consent (refer below)
Restrictions	**1. Mandatory active informed consent through the click of mouse and age verification done online prior to data collection.** **2. Identifiable data and audio recordings must be deleted once data processing is over.**
Comments	NONE

This protocol can be continued for up to THREE years (**4/30/2021**) by obtaining a continuation approval prior to **4/30/2019**. Refer to the following schedule to plan your annual project reports and be aware that you may not receive a separate reminder to complete your continuing reviews. Failure in obtaining an approval for continuation will automatically result in cancellation of this protocol. Moreover, the completion of this study MUST be notified to the Office of Compliance by filing a final report in order to close-out the protocol.

Continuing Review Schedule:

Reporting Period	Requisition Deadline	IRB Comments
First year report	3/31/2019	NOT COMPLETED
Second year report	3/31/2020	NOT COMPLETED
Final report	3/31/2021	NOT COMPLETED

Post-approval Protocol Amendments:

Only two procedural amendment requests will be entertained per year in addition to changes allowed during continuing review. This amendment restriction does not apply to minor changes such as language usage and addition/removal of research personnel.

Date	Amendment(s)	IRB Comments
NONE	NONE.	NONE

The investigator(s) indicated in this notification should read and abide by all of the post-approval conditions imposed with this approval. Refer to the post-approval guidelines posted in the MTSU IRB's website. Any unanticipated harms to participants or adverse events must be reported to the Office of Compliance at (615) 494-8918 within 48 hours of the incident. Amendments to this protocol must be approved by the IRB. Inclusion of new researchers must also be approved by the Office of Compliance before they begin to work on the project.

All of the research-related records, which include signed consent forms, investigator information and other documents related to the study, must be retained by the PI or the faculty advisor (if the PI is a student) at the secure location mentioned in the protocol application. The data storage must be maintained for at least three (3) years after study completion. Subsequently, the researcher may destroy the data in a manner that maintains confidentiality and anonymity. IRB reserves the right to modify, change or cancel the terms of this letter without prior notice. Be advised that IRB also reserves the right to inspect or audit your records if needed.

Sincerely,

Institutional Review Board
Middle Tennessee State University

Quick Links:

Click here for a detailed list of the post-approval responsibilities.
More information on expedited procedures can be found here.