

Students' Attitudes, Beliefs and Plans Regarding Career Planning and Post- College Life

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Abstract

Recent literature on the transition to adulthood addresses the importance of career search self-efficacy – that is, students' capacity to attain their goals relating to careers -- to students' post-college career planning. The scholarship does not yet address the relationship between self-efficacy and the timing of the onset of career planning. Drawing on data from a random sample survey of undergraduates at a small, private, Lutheran college in the Midwest, this study examines the relationship between students' levels of self-efficacy and their attitudes regarding the career planning process. We hypothesized that students who begin the career search process earlier have higher levels of self-efficacy and have more positive attitudes toward the career search process as compared to those who begin the career search process later. We found that students who begin career planning earlier are more likely to have positive attitudes. Furthermore, students who expect to develop a vocation have higher levels of self-efficacy and more positive attitudes.

Introduction

Liberal arts colleges aim to comprehensively prepare students for post-college life. The future careers and vocations of college students are of particular interest to many researchers who seek to understand how and why college students make decisions regarding their post-college lives and career planning. Students' transition to adulthood is likely related to their participation in vocation and job discernment activities. Their experiences during college, such as courses completed, internships, jobs, and volunteering etc., may also affect their post-college decisions along with the mentoring and skill-building students undergo. Students face important challenges about their future jobs, careers, and vocations as they prepare for their post-graduation lives and careers.

We hypothesized that students who begin career planning earlier have higher levels of self-efficacy and more positive attitudes regarding post-college career search. We defined self-efficacy as students' self-appraised capacity to attain their goals relating to careers, vocation and life after college. Self-efficacy indicates how people feel, think, motivate themselves and behave. Self-efficacy exercises an influence over one's own motivation, thought processes, emotional states, and patterns of behavior. Attitudes are defined as a tendency to respond positively or negatively, or with anxiety or excitement, towards a certain idea, object, person, or situation; attitude influences an individual's choice of action, and responses to challenges, motivations, and rewards. For our research, a survey was conducted to investigate students experiences, perceptions, and attitudes regarding their future post-graduate life and about their current and past career-exploration practices. This research was designed to help inform the college on how to better assist students in the transition to life after college.

Literature Review

Many researchers seek to understand how and why college students make decisions regarding their post-college lives. In the past few decades, the transition from adolescence to adulthood has become more complicated as young adults prolong education and delay what used to be the standard hallmarks of adulthood such as marriage, career, and parenthood. Theorists have even proposed the term “early adulthood” to identify this new life stage (Goodwin and Jasper 2008). The tasks of this age group have grown more complicated as the transition from college to career presents unique and unforeseen challenges. Perhaps due to these challenges, many college graduates feel unprepared for the new circumstances of the workforce (Wendlandt and Rochlen 2008).

This transition to adulthood is accompanied by a number of activities. Students’ participation in career development activities such as formal internships, jobs, and volunteering may affect their post-college decisions. The mentoring and counseling they receive, as well as skill-building they undergo during college, could also affect their plans for the future. To determine the relationship between these activities and the transition to adulthood, researchers have investigated a number of factors including personal demographic information (Luzzo and McWhirter 2001), family background (Harley 2009; Greenbank 2009), religiosity (Duffy and Sedlacek 2010), perceptions of social stigmas (Ludwikowski, Vogel and Armstrong 2009), and desirable job characteristics (Underhill 1966). Of particular interest to our study, however, is the research concerning students’ self-efficacy (Abrahamson 2008; Yang and Gysbers 2007; and Feldt and Woelfel 2009) and their decision-making processes (Keiner 2006).

Several studies have investigated the role of personal identity factors in the process of determining post-college plans (Hartley 2009; Greenbank 2009; Luzzo and McWhirter 2001) . These factors include students’ gender, ethnicity, religiosity and socioeconomic class background. Researchers study these factors and how they relate to career counseling, self-efficacy, vocation development and career decisions. Some researchers have found strong correlations between differences in demographic information and differences in students’

transition to adulthood(Luzzo and McWhirter 2001; Duffy and Sedlacek 2010); however other studies found almost no connection between the two (Hartley 2009; Greenbank 2009).

Certain characteristics are attributed to working-class and first-generation college students, and it is often assumed that these characteristics affect these students' post-college decision-making process. One study investigates whether these assumptions are true for first-generation college students in particular (Hartley 2009). The researchers found that the negative career thoughts, certain vocational interests, and career indecision considered to be part of first-generation college students' identity actually do not differ from that of other college students. Additionally, in 2009, Greenbank's study disproves assumptions made about working-class students. These students are said to have a pessimistic view on life, low aspirations and future goals, as well as a preference for informal information sources rather than formal ones. Through in-depth interviews, researchers found that the majority of these qualities are not characteristic of working-class students. However, working-class students do have a preference for informal information sources which may be an indicator of reluctance to seek help from career counselors.

In their study conducted in 2001, Luzzo and McWhirter identify students' perceived barriers as another reason students may experience difficulties in the transition to adulthood. The study found that women and ethnic minorities perceive more career related barriers than their male and European American counterparts. Ethnic minorities also perceive that they have less self-efficacy to cope with career-related barriers. Thus there is some discrepancy in the literature as to the relative importance of personal identity characteristics in the career search process.

Students' level of religiosity has been found to correlate with planned career choice and timeline of the career planning process. Duffy and Sedlacek (2010) found a moderate correlation between self-reported religiosity and whether or not students felt they had a calling. Duffy and Sedlacek consider a calling to include both religious and non-religious career paths

(2010: 27). Students who are highly religious, or whose religious beliefs heavily influence their lives, are more likely to have a calling earlier in their college career.

Another aspect of the transition to adulthood is the career search itself. Students' participation in the career search process may depend on their beliefs about career search resources. One study found that certain stigmas are linked to students' willingness to seek help from a career counselor (Ludwikowski et al. 2009). The researchers recognize three stigmas towards seeking help from career counseling--public, personal, and self--all of which operate on different levels. Public stigma is stigma from one's society in general, personal stigma comes from one's friends, family and acquaintances with whom one comes into contact on a daily basis and self-stigma is one's perception of oneself at the individual level (2009:409). The researchers found that the first two stigmas, public and personal, are correlated with individual self-stigma. Self-stigma is then correlated with the likelihood that an individual will seek help for career counseling.

Within the topic of career search, it is also important to discuss students' perceptions of job and career characteristics. Underhill's research conducted in 1966 on the correlation between personal values, majors and first post-graduate career found that students in career-oriented majors, such as pre-medicine and engineering, tend to emphasize their personal values less than students majoring in humanities, arts, or languages. Additionally, his study includes a list of career characteristics which students might value when choosing their occupation. This list includes values such as "Making a lot of money," "Opportunities to be original and creative," "Avoiding a high pressure job which takes too much out of you," and "A chance to exercise leadership" (Underhill 1966:166). Underhill found that people who value certain job characteristics are more likely to be pursuing certain careers. For example, those who particularly value enterprise are likely to pursue business (1966:167). It seems that career search and planning have an important bearing on how students move into adulthood.

Planning and decision-making are both essential steps in the transition to adulthood and both can be linked to an individual's self-efficacy. Keiner used the Self-Regulation Model of Decision Making as developed by Byrnes in 1998. This model defines self-regulation as the process of creating, establishing, and maintaining a sense of control over one's own actions and psychological processes in an attempt to achieve a desired goal (Keiner 2006). A self-regulated decision maker is defined as an individual who sets adaptive goals and takes appropriate measures to accomplish them (Keiner 2006). A comprehensive understanding of self-regulatory processes not only allows an individual to become more aware of their needs and goals, but also provides a critical framework for achieving these goals. People who use self-regulatory processes to make educated decisions are aware of different situations in which they have both ease and difficulty in making decisions, and they take adaptive and evaluative steps to guarantee positive outcomes. Individuals who have better knowledge of themselves are more motivated and have a better chance of finding a work environment that matches their personality (Keiner 2006). As demonstrated by research on self-regulatory processes, self-efficacy plays an important role in one's goal setting and accomplishments.

Luzzo and McWhirter (2001) address the notion of self-efficacy as it relates to ethnic minorities. They found that ethnic minorities perceive more career-related barriers than European Americans and that they have less self-efficacy for overcoming these career-related barriers. This finding suggests that self-efficacy is intimately linked to one's perception of the number or difficulty of barriers. Likewise, Feldt and Woelfel examined the importance of self-efficacy and outcome expectations in predicting career planning. Their results support the theory that a student with higher self-efficacy is likely to have more positive job outcome expectations and is more likely to actually attain a job (Feldt and Woelfel 2009).

In addition to self-efficacy, there are other important aspects of career planning; Abrahamson examined the relationship between anxiety, self-efficacy and career interests (2008). The career interests variable of the study was measured by the Strong Interest

Inventory which is a career interest assessment used to determine possible career areas of interest to an individual. The study concluded that measurements of self-efficacy and anxiety combined better predicted career interests, as opposed to using measurements of self-efficacy alone. This suggests that anxiety is an important factor in determining career interests. In terms of self-efficacy specifically, Abrahamson found that general self-efficacy scores are positively correlated with career skills self-efficacy scores suggesting that a more global sense of self-efficacy is related to career search self-efficacy (2008). Abrahamson also found that anxiety and self-efficacy are negatively correlated, as are anxiety and career skills confidence (2008). This suggests that a low level of confidence in career skills is correlated with a high level of anxiety which is then correlated with low self-efficacy.

Yang and Gysbers define career search self-efficacy as the confidence one has in one's own ability to successfully complete various career search activities and they note that self-efficacy is an important construct for predicting career search behaviors and outcomes (2007:157). More specifically, having a high level of career search self-efficacy is strongly associated with performing more career search behaviors and having more positive career search outcomes for an individual (2007:157). Yang and Gysbers conceptualize confidence and self-efficacy as fundamentally related because they define confidence as "self-efficacy related to successful career transition" (2007:159). Yang and Gysbers' used the Career Search Efficacy Scale as developed by Solberg, Good, Nord et al. in 1994. This scale has four subscales measuring Job-Search Efficacy, Interviewing Efficacy, Networking Efficacy and Personal Exploration Efficacy (2007:161). Yang and Gysbers' study focused on the correlation between career search, self-efficacy, and psychological distress and how these might impact students' approaches to career transition. Yang and Gysbers' found that a decreased level of career search self-efficacy and increased psychological distress are associated with a perceived lack of career transition resources. They also found that a higher level of anxiety and increased self-efficacy are related to ambivalence in career transition. Thus they found that career search self-

efficacy and psychological distress are related (2007:168). It seems that many factors impact students' career planning processes, and those factors include self-efficacy and psychological distress. We approach the latter with the language of "attitudes."

The study described in this paper examines the hypothesis that students who begin the career search process earlier have higher levels of self-efficacy and more positive attitudes regarding the career search process. The literature demonstrates that psychological distresses, such as anxiety, affect students' decision-making and career interests, and that students' feelings of self-efficacy are related to these psychological measures. Finally, the research shows that self-efficacy is a key component in post-college planning. Higher self-efficacy is associated with higher post-college expectations. Although much literature has been devoted to self-efficacy related to career transitions and college planning (Abrahamson 2008; Feldt and Woelfel 2009; Keiner 2006; Ludwikowski et al. 2009; Yang and Gysbers 2007), the literature fails to examine the possible correlation between when an individual student begins their career search process and their level of career search self-efficacy or their attitudes. This paper seeks to address this gap. We test the hypothesis that students who begin the career search process earlier have a higher level of career search self-efficacy and more positive attitudes about the career search process.

Methods

Our study relied on a random sample that was distributed through an online, self-administered survey questionnaire. We gathered our data as part of a larger study of the transition to adulthood that we conducted for a committee that is charged with proposing changes for the career planning and experiential learning resource center on campus. Our survey contained questions from our research team about participants' reported attitudes, beliefs and plans toward career planning, their demographic information as well as questions from another research team that studied the measures students take to prepare themselves for

post-graduation life. The sample drew from a population of students at a small Lutheran, liberal arts college in the Midwest in the fall semester of 2010.

Measures and Variables

The central variables in our hypotheses are students' attitudes regarding the post-graduation planning process, their self-efficacy, and the timing of their post-graduation planning process. We measured attitudes with a series of Likert-scale questions that asked whether students felt confident in their future career, vocation, financial stability and plans; for example, we asked the students to indicate their level of agreement with the statement, "I feel confident about the post-graduation planning process." Questions regarding students' feelings of excitement and anxiety also contributed to the Anxiety-Excitement Spectrum Index. In addition to anxiety and excitement, the survey asked students to indicate their feelings of preparedness for their future career and vocations (e.g. "I feel prepared for my vocation after college"). We measured self-efficacy by combining responses on Likert-scale questions that ask whether students felt they have the capabilities, resources and tools to accomplish their long- and short-term goals. The responses to these questions formed into a Self-Efficacy Index. Lastly, we compared the Anxiety-Excitement Spectrum and Self-Efficacy indices with the timing of students' post-graduation planning.

Two important considerations for creating and revising survey questions are validity and reliability. In *Basics of Social Research: Qualitative and Quantitative Approaches*, Neuman describes valid research as containing consistency between its constructs and measures (2007:115). There are a number of different types of validity, and we worked to increase validity in each of these categories. Face validity is defined as a consensus of the scientific community that the indicator measures the construct (Neuman 2007:118). In our part of the survey, respondents' attitudes (anxiety and excitement) and timing of career planning onset are self-

reported feelings; these constructs have high face validity because the respondents apply them directly to their own lives. Also, other researchers have used composite scores to measure self-efficacy, so we mirrored their studies by including composite scores in our research analysis which also increased face validity (Duffy and Sedlacek 2010; Abrahamson 2010; Yang and Gysbers 2007). However, the self-efficacy indicator used in our survey is not completely identical to those used in previous research, so concurrent validity is unclear because Neuman describes concurrent validity as providing the same results that previous indicators provide (Neuman 2007). Content validity is obtained by measuring all aspects of a construct (Neuman 2007:118). In order to ensure content validity, we asked a wide range of questions that incorporate multiple aspects of confidence, anxiety, and excitement in post-graduation planning. We also considered the responses from our focus group while forming the survey questions to ensure content validity. It is important to note that the Self-Efficacy Index used in this study is specific to career planning and it is not meant to indicate students' comprehensive self-efficacy regarding their lives after college. The specificity of this self-efficacy indicator reduces the content validity of this measurement.

It is important for measures to be both valid and reliable; reliability refers to consistency in responses (Neuman 2007:115). According to Neuman, there are four ways to increase reliability, and we worked to use all of these methods to ensure consistent responses. First, we used multiple levels of measurement to increase reliability. We asked many questions about confidence and optimism to increase reliability, because a scale composed of several different questions measures a concept more accurately than a single question. Second, we replicated the use of composite scores from previous studies to make our research more reliable (Duffy and Sedlacek 2010; Abrahamson 2010; Yang and Gysbers 2007). We also used multiple indicators of the variables through the survey questions and observations from the focus group because multiple indicators of a construct are better than a single indicator (Neuman 2007:116). However, it should be noted that we did not clearly define the construct of attitudes, which

would have been the final step to increasing reliability. Our attitudes scale could be unreliable because perceptions of “excitement,” “confidence,” and “anxiety” could be different depending on survey participants’ experiences and environments.

In addition to variables that directly pertain to our hypothesis, we also examined other variables including students’ age, grade, and major, and student type (first-generation, transfer, traditional, etc.) These variables may also be compared to students’ feelings towards planning and confidence regarding post-college life.

Results

We hypothesized that students who begin the career planning process earlier 1) have higher levels of self-efficacy and 2) have more positive attitudes. Univariate analysis of the data yielded many interesting results; here, we will be focusing on the analysis that relates to our hypothesis and the transition to adulthood. To test our hypotheses, we composed two indices, one for self-efficacy and one for attitudes. We tested the relationship between the indices, determined the strength of their correlation, and tested each index with other data from the survey, including: demographic information, when students started career planning, and when students developed or expect to develop a vocation.

To create the Self-Efficacy Index, we compiled responses from seven Likert-scale indicators with four points from strongly agree to strongly disagree. The indicators asked students to rate their level of agreement with statements that measured how confident students feel regarding their abilities to achieve their post-college goals. We found that the scores on the Self-Efficacy Index are fairly normally distributed (see figure 1). Out of a total possible range of 0 to 29, the scores range from a very low level of self-efficacy of 1, to a very high level of 28. The midpoint is 14, and the mean is 16.85, with a standard deviation of 5.65. This means that our overall sample has a slightly higher level of self-efficacy than in a completely normal distribution.

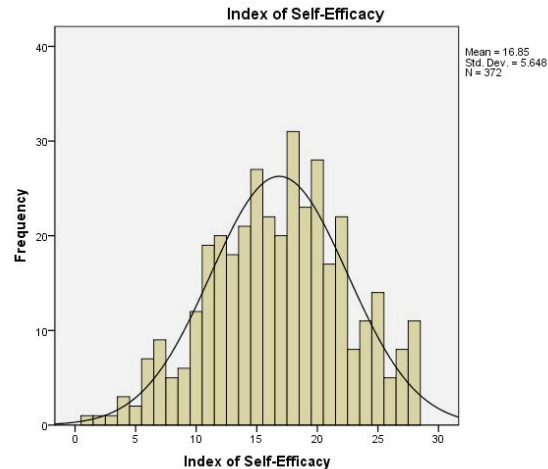


Figure 1: Self-Efficacy Index

We used a similar process to create the Anxiety-Excitement Spectrum Index. We used 5 4-point Likert Scale indicators with responses from Strongly Agree to Strongly Disagree. The indicators included how anxious or excited students felt about career planning, vocation and life after college. The Anxiety-Excitement Spectrum Index is not as normally distributed as the self-efficacy curve, and is fairly kurtotic (see figure 2). This is likely to be because students would have received the same score if they had indicated they were neither anxious nor excited, or both anxious and excited. The scores ranged from 0, meaning extremely anxious to 18, meaning very excited, out of a possible range of 0-20. The midpoint is 9, and the mean is 9.64 with a standard deviation of 2.72, meaning that our sample has slightly more positive attitudes than in a completely normal distribution.

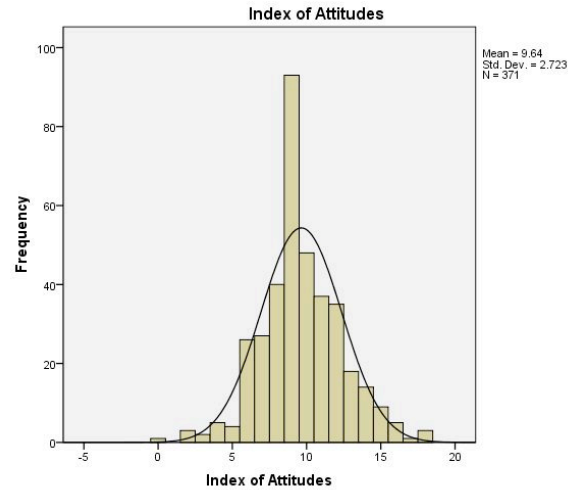


Figure 2: Anxiety-Excitement Spectrum Index

We tested the relationship between self-efficacy and anxiety-excitement using a Spearman's rho test and found a moderately strong, statistically significant positive relationship (see figure 3). The results are significant at $p < .01$, and the correlation coefficient is 0.54. This shows that students whose attitudes are more positive are likely to have higher levels of self-efficacy.

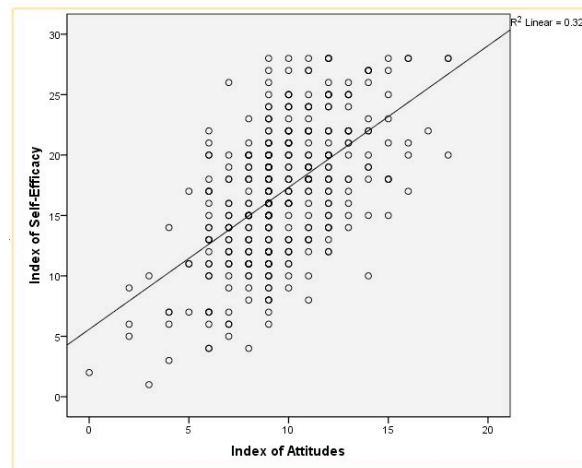


Figure 3: Correlation between Self-Efficacy and Attitudes Indices

We collected students' demographic data such as gender, race, year in school, and first-generation college student status and compared these with the Self-Efficacy Index and the

Anxiety-Excitement Spectrum Index. However, only year in school is statistically significant with the Self-Efficacy Index, and there were no significant relationships with attitudes. There is a moderate positive correlation between year in school and self-efficacy using a Pearson's r test, with a correlation coefficient of .282 ($p < .01$). This shows that upperclassmen are likely to have higher self-efficacy than underclassmen which could mean that self-efficacy increases with the amount of time students have attended college. GPA also has a weak positive relationship with the self-efficacy using a Spearman's ρ test. The correlation coefficient is .13 ($p < .05$). This means that students who have higher GPAs also tend to have slightly higher levels of self-efficacy. However, our GPA distribution is skewed, as very few students reported a GPA below a 3.0. Furthermore, all first-year students and students who did not report a GPA were excluded because they could not report a GPA. This shows that the relationship between student demographic information and their levels of self-efficacy and attitudes in this sample cannot be generalized to the larger St. Olaf population, with the exception of year in school.

We hypothesized that students who began planning earlier would have higher levels of self-efficacy and more positive attitudes regarding the post-college career search. Of the sample, 75.3% have already begun their career search process, and 85% of those students started planning during or before sophomore year. However, when we tested the Self-Efficacy Index with onset of career planning using a Pearson's r , we found no statistically significant relationship. However, there is a slightly negative correlation (coefficient $-.164$, $p < .01$) between the onset of career planning and attitudes toward career search using a Spearman's ρ . This means that as students began planning earlier, they have more positive attitudes. Another significant result ($p < .01$) is that students who have already begun started their post-college career search have higher levels of self-efficacy. We used an independent samples t -test between those who have started planning and those who have not, and found that the mean self-efficacy for those who have started is 18.32, and the mean for those who have not started is 12.84. Similarly, students who have started planning have more positive attitudes towards

planning and life after college. The mean for those who have started planning is 10.04, and the mean for those who have not is 8.54 with $p < .01$.

Table 1: Correlation between When Students Start Career Planning and Variables

| | | | Correlations | | |
|----------------|--------------------------------------|-------------------------|------------------------|--------------------------------------|--------------------|
| | | | Index of Self-Efficacy | When Student Started Career Planning | Index of Attitudes |
| Spearman's rho | Index of Self-Efficacy | Correlation Coefficient | 1.000 | -.083 | .540** |
| | | Sig. (2-tailed) | | .174 | .000 |
| | | N | 372 | 273 | 366 |
| | When Student Started Career Planning | Correlation Coefficient | -.083 | 1.000 | -.151* |
| | | Sig. (2-tailed) | .174 | | .012 |
| | | N | 273 | 286 | 273 |
| | Index of Attitudes | Correlation Coefficient | .540** | -.151* | 1.000 |
| | | Sig. (2-tailed) | .000 | .012 | |
| | | N | 366 | 273 | 371 |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Additional significant results are that the development of a vocation correlates with higher levels of self-efficacy and more positive attitudes about post-college life. 57.5% of the sample have already developed a vocation, or believe they will by the time they graduate. There is a near-significant difference of levels of self-efficacy ($p = .06$) in an independent samples t-test between those who have already developed a vocation or plan to by the time the graduate, and those who expect to develop a vocation sometime after they graduate. The mean self-efficacy scores for students who expect to develop a vocation by graduation is 17.38, and for those who expect to develop one later in life or not at all, the mean is 16.25. When we tested those same two groups with the Anxiety-Excitement Spectrum Index, also using an independent samples t-test, we found a significant difference at the $p < .05$ level. Students who expect to develop a vocation before graduation has a mean attitudes score of 10, whereas students who expected to develop

one later in life, or not at all, has a mean attitudes score of 9.29. This means that students who have an idea of their “calling” in life have somewhat higher levels of self-efficacy and more positive attitudes regarding career search.

Table 2: Means of Variables of Students who Expect to Develop a Vocation by Graduation

| Group Statistics | | | | | |
|------------------------|--|-----|-------|----------------|-----------------|
| | Expect to develop vocation before graduation | N | Mean | Std. Deviation | Std. Error Mean |
| Index of Attitudes | Before graduation | 209 | 10.00 | 2.638 | .182 |
| | 5 years or later after graduation | 154 | 9.29 | 2.765 | .223 |
| Index of Self-Efficacy | Before graduation | 212 | 17.38 | 5.735 | .394 |
| | 5 years or later after graduation | 153 | 16.25 | 5.528 | .447 |

| Independent Samples Test | | | | | | | | | | |
|--------------------------|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-------|
| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Index of Attitudes | Equal variances assumed | .058 | .810 | 2.482 | 361 | .014 | .710 | .286 | -.147 | 1.272 |
| | Equal variances not assumed | | | 2.464 | 320.875 | .014 | .710 | .288 | -.143 | 1.276 |
| Index of Self-Efficacy | Equal variances assumed | .405 | .525 | 1.873 | 363 | .062 | 1.122 | .599 | -.056 | 2.301 |
| | Equal variances not assumed | | | 1.884 | 334.467 | .060 | 1.122 | .596 | -.049 | 2.294 |

Table 3: When Students Expect to Develop a Vocation by Variables

| | | | Correlations | | |
|----------------|------------------------------|-------------------------|------------------------|--------------------|------------------------------|
| | | | Index of Self-Efficacy | Index of Attitudes | Expect to develop a vocation |
| Spearman's rho | Index of Self-Efficacy | Correlation Coefficient | 1.000 | .540** | .225** |
| | | Sig. (2-tailed) | | .000 | .000 |
| | | N | 372 | 366 | 365 |
| | Index of Attitudes | Correlation Coefficient | .540** | 1.000 | .217** |
| | | Sig. (2-tailed) | .000 | | .000 |
| | | N | 366 | 371 | 363 |
| | Expect to develop a vocation | Correlation Coefficient | .225** | .217** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | |
| | | N | 365 | 363 | 374 |

** . Correlation is significant at the 0.01 level (2-tailed).

Discussion

The present study examined the time of onset of post-college planning and the relationship with students' attitudes and self-efficacy regarding their post-college lives. Our results show no correlation between when students begin planning for a career and their levels of self-efficacy, but there are statistically significant results showing association between when students begin planning for a career and their attitudes. This study contains two other important patterns of students' attitudes and self-efficacy towards post-college life. The first pattern shows an association between if students have already begun to plan for a career after college and their levels of self-efficacy and attitudes. The second pattern shows a correlation between when students expect to develop a vocation and their levels of self-efficacy and attitudes.

Career planning early is associated with more positive attitudes:

When we tested the second hypothesis, we found a correlation between when students started career planning and their attitudes towards post-college planning. Significant results conclude that the earlier students began planning for a career after college, the more positive attitudes they have about post-college planning. A study done by Abrahamson in 2006 concluded that anxiety, along with self-efficacy, is an important factor in determining career interests. Abrahamson also found that a low level of career skills confidence is correlated with both a high level of anxiety and a low level of self-efficacy. From this research, we can conclude that helping students identify and implement career interests and skills would positively affect levels of self-efficacy and attitudes.

In another study done in 2007, Yang and Gysbers found that higher levels of anxiety are related to ambivalence in career transition. Therefore, a relationship exists between self-efficacy and psychological distress (such as anxiety). In our study, we find that high levels of self-efficacy positively correlate with positive attitudes, and this is supported by previous research.

From these results, it seems that creating programs to increase levels of self-efficacy may lead to more positive attitudes about post-college life.

Since there is a correlation between when students begin career planning and positive attitudes, it is surprising that there is no relationship between when students began career planning and their levels of self-efficacy. However, this may be because career planning is subjective, and many of the respondents report they started planning before college. Therefore, our research can only conclude that students who start career planning earlier have more positive attitudes. Additional research could attempt to determine whether or not levels of self-efficacy correlate with the onset time of career planning.

Students who have already started to plan for a career have higher levels of self-efficacy:

The first pattern showed a direct association between whether students have started career planning and their levels of self-efficacy and attitudes. A central question that arises with this information is, why do some students decide to start planning earlier than others? One would expect that year in school would be a determining factor of when students decide to start planning but in this research, the highest groups of student who had already started planning for their career were seniors and first-year students. This could be because first-year students and seniors have very different definitions of what it means to have started career planning. However, we can offer no conclusions because we did not ask questions about the specificities of career planning in our survey.

Besides year in school, it is interesting to find that other demographic factors did not correlate with students' attitudes and levels of self-efficacy. Some of the demographics that were tested in this study were gender, age, race, and first-generation status. Luzzo and McWhirter did find barriers for women and ethnic minorities in transitioning to adulthood, but we find no such differences between gender or race, and levels of self-efficacy and attitudes in the present study.

Another factor that could determine why some students decide to begin career planning earlier rather than later, is that of self-stigma (Ludwikowski, Vogel, and Armstrong, 2009). Previous research found that the likelihood of seeking career counseling help was directly linked to students stigma; however, Ludwikowski et al's study also found that a person's self-stigma also included stigma from the society and from the people around them. Therefore, an individual's interest in seeking career counseling did not solely depend on a person's own beliefs about career counseling, but it also depended on the stigma of those around them (Ludwikowski, Vogel and Armstrong, 2009). From this research, and the current study at hand, evidence shows that creating an environment where seeking help for post-college planning is the norm would lead students to seek career counseling. By encouraging this type of environment, where students obtain post-college planning help early and often, hopefully that would lead to more positive attitudes and higher levels of self-efficacy for graduating students.

Developing a vocation early is associated with higher levels of self-efficacy and attitudes:

The second pattern showed a correlation between students levels of self-efficacy and attitudes and if they expected to develop a vocation before the time they left college. It is surprising to find that when students expect to start a job or begin a career did not have an association between levels of self-efficacy and attitudes. Nonetheless, in the present study, we find statistically significant results between when students expect to develop a vocation and their levels of self-efficacy and attitudes. This means that students who expect to develop a career before they leave college are likely to have higher levels of self-efficacy and more positive attitudes towards post-college planning. Although previous research did not address this correlation directly, research done by Duffy and Sedlacek found a correlation between first-year students who plan on attending graduate school and a reported presence of career calling (2010). Also, in a study done in 1966, Underhill found that students majoring in humanities, arts,

or languages are more likely to take their personal values into account than are students in career-oriented majors, such as pre-medicine and engineering. From this finding, one can assume that some, if not most, students in career-oriented majors will continue on to graduate programs.

If more research would have been done about specific aspects of career planning (such as graduate school), then our research could have been compared to Underhill and Duffy and Sedlacek. However, since respondents self-reported whether or not they had begun planning for a career, no further analysis to support or rebut previous studies could have been done. Nonetheless, in the present study, there is statistically significant relationship between when students expect to develop a vocation and their levels of self-efficacy and attitudes. Therefore, evidence from this study supports that vocational development programs and efforts might increase students' levels of self-efficacy, and create more positive attitudes about post-college planning.

Conclusion

As students prepare for the transition to adulthood they face important questions about jobs, careers, and vocations. At this particular private, liberal arts college, students who begin career planning earlier are more likely to have a positive attitude about the career planning process. Students are also more likely to have higher levels of self-efficacy if they are able to identify their vocation while in college.

The present study suggests that there are certain factors that do not affect students' attitudes and self-efficacy regarding career planning and life after graduation. There is no significant difference between the attitudes of students who expect to begin planning for a career sooner and those who expect to start planning for a career later. Additionally, there is no difference between students who have just entered college and students who are closer to graduating in terms of attitudes regarding career planning. However, students who are closer to graduation do report higher levels of self-efficacy. Findings of this study also suggest that there

are no differences between students' self-efficacy and attitudes when comparing: non-Hispanic, white students with students of other racial groups, non-first generation students with first-generation students, male students with female students, and non-transfer, traditional students with transfer students

The most relevant finding of the current study is that self-efficacy and attitudes are positively correlated. For this small, private, Lutheran college in the Midwest, this finding implies that students feel more positive if they feel confident about their abilities to achieve their goals after graduation. In regards to career planning, students at this school tend to believe that career planning is important. Moreover, students believe that it is better to begin planning earlier than later, and that those who expect to begin planning earlier have higher levels of self-efficacy than those who expect to start planning later. The present study indicates that excitement regarding career planning, career after college, and vocation after college are both high and they are not mutually exclusive.

The majority of respondents also reported feeling confident in their career planning ability. These results suggest that the majority of students feel prepared to plan for after graduation and are confident in their own abilities to do so. This study provided no definition of career planning or what the process entails. Further research could examine how students think about career planning and what actions are a part of the career planning process. Our study demonstrated that younger students begin career planning before college, while juniors and seniors begin career planning during college. This might suggest that students' conceptions of career planning change sometime between their first two years of college and their latter two. Results also indicate that students with higher levels of self-efficacy believe they will be able to find a career right away after graduation.

The great majority of students in this study felt that it is important to have a career, and an equal majority felt that it is important to have a vocation. The majority of students think it is important for their vocation and career to be one in the same, yet few students believe that they

actually will be. In our study, 26.2% of respondents believed they will develop their vocations by the time they graduate.

In short, our study implies that students benefit from beginning the career planning process earlier rather than later. However, we did not define anxiety and excitement, so further research could make this distinction clear. Other studies could expand on this topic by operationalizing anxiety and excitement and creating a more complex index for attitudes. We did not provide a definition for career planning, nor did we describe what career planning might entail. This was partially a strength because our questions did not pressure students to have completed specific career planning activities, and therefore caused less respondent anxiety. However, our lack of career planning definition also means that it is more difficult to compare students' responses; it is possible that first-year students are operating with a different understanding of career planning than juniors and seniors are. Research on what factors contribute to students' self-efficacy might further explain higher levels of self-efficacy for older students. Additionally, future longitudinal research could illuminate the practical benefits of early career planning beyond higher levels of self-efficacy and positive attitudes.

Findings from our study suggest that students with higher levels of self-efficacy are likely to have developed a vocation by the time they graduate. Furthermore, our study suggests that students who expect to develop a vocation before graduating college have more positive attitudes about post-college planning than those who do not expect to develop a vocation until after graduating college.

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