

**Approaching the Transition to Adulthood:
Vocational and Career Discernment among
Undergraduates**

Julia Aaker, Avery Baird, James Cahalan, Fatima Omar, Kylie Swanson, Siri Thompson

ABSTRACT

Recent studies of emerging adulthood note that today's young adults take longer finding a stable career that can support a family, and thus have a longer transition to adulthood. Our study examines the role of vocational discernment – the path one follows to discover areas of interest and action that provide meaning in one's life – in the transition to adulthood. We used a random sample survey of undergraduates at a small liberal arts college in the Midwest to investigate students' perceptions of their vocation, students' utilization of campus resources, and the relationship between students' sense of vocation and their career development. We tested the hypotheses that students who recognize and understand their vocation are more likely to discover their career path and thus are less likely to use campus career counseling services, as compared to students with a weaker sense of vocation. Our results inform ways in which students explore and view vocational discernment and career development and will offer options to prepare students for life and careers after college.

LITERATURE REVIEW

The transition to adulthood has been the subject of much research in the past ten years (Goodwin and Jasper 2008). Researchers have investigated topic areas surrounding recent changes in the transition from college to post-college life (Goodwin and Jasper 2008; Rochlen and Wendlandt 2008; Murphy, Blustein, Bohlig and Platt 2010). Researchers Goodwin and Jasper (2008) noted that a stage of life called "early adulthood" is emerging. While the previous markers of adulthood emphasized marriage, children, and a stable job, today adulthood is achieved through completing school, establishing an independent household, and gaining full-time employment. Furthermore, the time required today to find a stable full-time job that can support a family has greatly increased, making the transition to adulthood a more difficult and lengthy process (Goodwin and Jasper 2008).

The new difficulties that young adults experience in securing a stable job have led many researchers to examine the role that vocational discernment plays in the transition to adulthood. Though vocation can be a vague term, we define it as the alignment of an individual's gifts and talents with the meaning and purpose of their life's work. Various studies examined students' perceptions of their vocation (Banning, Dik, and Hunter 2010; Duffy and Sedlacek 2010; Yang and Gysbers 2007), the effects of various factors on students' vocational development including work experience (Billet, Newton, Ockerby 2010), spirituality (U.S. Department of Education 2000; Scott 2007), campus career counseling centers' influence on students' vocational development (Dik and Steger 2008; Jurgens 2000), and the ways in which vocation influences career development (Banning et al. 2010).

Perceptions of Vocation

Banning et al. (2010) noted that students conceptualized vocation as a "calling" in multiple ways. Students viewed vocation as a call from outside of the self – either secular or non-secular, a life path seeking meaningfulness, or a desire to help others and society. Duffy and Sedlacek (2010) found that 44% of first-year students surveyed believed they had a career calling. Other research has examined the factors that determine students' perceptions of their vocation, most notably through the concept of self-efficacy, which is an individual's belief in their ability to do a job effectively (Yang and Gysbers 2007; Bandura 1994). Students with greater psychological resources experienced less stress, which led to a better sense of vocation (Yang and Gysbers 2007). Stringer and Kerpelman (2010) noted that students with higher levels of self-efficacy had a stronger career identity. Other outside influences like parental support and work experiences can improve self-efficacy.

Services, Resources and Experiential Learning

Recent studies on emerging adulthood suggest experiential learning is a necessary component in helping students to better understand their vocation and develop their career

goals. Billet et al. (2010) noted that work experiences help emerging adults develop confidence in choosing their careers and in developing their sense of vocation. Experiences become more significant when aligned with personal interests and goals, leading to the development of career as vocation.

Dik and Steger (2008) found that students who participated in career counseling workshops had higher levels of vocational discernment and self-efficacy in making career decisions than those who did not participate. When a counselor included self-disclosure in the workshops, by explaining her or his own discernment process, the workshop was more effective in helping students with career discernment. Workshops specifically addressing calling and vocation did not show higher levels of vocational discernment or self-efficacy than standard career workshops. The difference between the levels of vocation is most likely attributed to the small amount of exposure to the idea of calling and vocation. Jurgens (2000) found that students who had low levels of career certainty experienced increased certainty and decision-making in their career planning if they participated in decision-making workshops, completed a computer program for career planning, participated in a one-hour individual career counseling session, and participated in a two-hour professional forum. Students who participated in the two-phases or four-phases of career-indecision increased their certainty and decision-making. Most notably, Dik and Steger (2008) found that a one-on-one setting provided more client satisfaction and increased self-efficacy in career planning and vocational discernment. Jurgens' (2000) findings illustrate one-on-one counseling, with counselor self-disclosure, is a promising strategy for improving students' vocational discernment and career development.

Social Support and Vocational Influences on Career Development

Researchers have begun to examine the influence of vocational discernment on career development, but their work is still incomplete. The development of one's career and vocation intertwine when work experiences align with personal interests and goals (Billet et al. 2010).

Researchers are also identifying the influence of spirituality on career discernment. The U.S. Department of Education (2000) found a strong connection between college students' spirituality and their success in finding a career path. More specifically, students who reported spiritual growth tended to report higher levels of career discernment. Though these studies show a connection between spirituality and career discernment, they lack the connection between spirituality and vocation, though, as noted earlier, many students understand vocation as a spiritually driven call (Banning et al. 2010). The U.S. Department of Education (2010) also found that spirituality played an important role in the career decision-making process of college students.

Studies revealed a close tie between vocational discernment and career development (Dik and Steger 2008; Stringer and Kerpelman 2010). Factors such as social support, career counseling, and work experiences affect both areas of development. However, this research conflates vocational discernment and career development without fully examining how one's vocational discernment affects career development. These findings and apparent gaps in the research led us to investigate vocational discernment and career plan development of undergraduate students based on self-perception and the use of campus vocational counseling services by students who identified with a vocation upon entering college.

METHODS

We studied students' awareness of their stage in the vocational discernment process using an online survey questionnaire. Our survey was part of a broader study addressing growing concerns regarding the preparedness of students for life after college. We identified the following hypotheses to test the relationship between vocational development and tendency to prepare for a career after college:

1. College students who have a high level of vocational discernment are more likely to have a high level of career plan development than those without a high level of vocational discernment.
2. College students who enter college with a sense of vocation are less likely to use campus vocational discernment services than those who entered college without a sense of vocation

Sample

Our target population was the student body of approximately 3000 students at a private liberal arts college in the Midwest. We used a sample ratio of approximately 25% which we adapted from the general rule of sample size. This rule recommends a sample size of 30% for populations of 1000 and 10% for populations of 10,000 (Neuman 2007). We used simple random sampling because it is more likely to provide a relatively accurate representation of the population (Neuman 2007). We excluded from our sample students participating in other surveys at the same time, as well as students who participated in research focus groups, part-time students, students under 18 years of age, students currently enrolled in our research methods class, and students currently studying abroad. The Director of Institutional Research at the college completed the sampling process for us.

777 students received an email on October 26th, inviting them to participate in the survey. The survey closed on November 1st. Participation in the survey was voluntary and we provided incentives to increase our response rate. 344 students responded, giving us a response rate of 44.3%. Of the respondents, 66.0% were female and 34.0% were male. 27.8% were first-years, 23.6% were sophomores, 26.6% were juniors, and 22.1% were seniors. Respondents varied in age from 18 to 25.

Measures

Our independent variable was students' perceptions of their vocational discernment. Our dependent variables were students' perceptions of their career plan development and their use of campus vocational discernment services. Our survey was comprised of open-ended, yes/no, multiple-choice and five-point Likert Scale questions.

Perceptions of Vocational Discernment

We adapted the conceptual definition of vocation from the steering committee on vocational and career development at the college (2010) as "the alignment of an individual's gifts and talents with the meaning and purpose of their life's work." We conceptualized vocational discernment as the journey or path a student takes in order to explore his or her vocation. Therefore, students can be said to be at a specific level in vocational discernment. After conducting a focus group that consisted of 8 college students, we decided to replace the term "vocation" with "passions in life" and "a sense of meaning in life" in our survey. This was due to the focus group participants' negative attitudes towards the term "vocation." We felt that "passions in life" and "a sense of meaning in life" would not be perceived negatively and would adequately measure the conceptual definition of vocation. We conceptualized passions in life as "areas of interest and action that provide meaning in one's life." We created a Vocational Discernment Index which targeted these two components and consisted of the following indicators: *I have specific passions in life, A sense of meaning in life is unimportant to me, I see myself pursuing my passions in life in the future, I participate in activities that give meaning to my life, I am uncertain about what gives meaning to my life, and Compared to my peers, I have a stronger sense of my passions in life.* Participants indicated their level of agreement with each statement on a five-point Likert Scale (Strongly Agree, Somewhat Agree, Neither Agree nor Disagree, Somewhat Disagree, Strongly Disagree). We assigned each level of agreement a point value and created a composite score of vocational discernment for each participant. These

scores allowed us to categorize participants into one of four groups on a Vocational Discernment Scale: Low (0-6), Moderately Low (7-12), Moderately High (13-18), and High (19-24).

Perceptions of Career Plan Development

We adapted the conceptual definition of career after consulting the definition of the steering committee on vocational and career development at the college (2010), reviewing established literature, and conducting our focus group. The steering committee conceptualized career as “from the Latin ‘carraria,’ a road or a carriage way; choose a pathway on which to pursue one’s vocation” (2010). We found in our review of literature that the milestones that define adulthood have changed, most notably the time when emerging adults decide on a career (Goodwin and Jasper, 2008). Emerging adults view career as a collection of jobs, usually within a related field, which corresponds with the statements from our focus group. In our survey, we conceptualized career as “a pathway of jobs that make up one’s life work.” We created a Career Plan Development Index, which targeted our definition and consisted of the following indicators: *I know what my future career will be, I feel confident in pursuing my career path, Compared to my peers, I have a stronger career plan, I have no idea what I will do after college, and I have a clear plan for pursuing my future career.* Participants indicated their level of agreement with each statement on a five-point Likert Scale (Strongly Agree, Somewhat Agree, Neither Agree nor Disagree, Somewhat Disagree, Strongly Disagree). These scores allowed us to categorize participants into one of four groups on a Career Plan Development Scale: Low (0-5), Moderately Low (6-10), Moderately High (11-15), and High (16-20).

Usage of Campus Vocational Discernment Services

We conceptualized campus vocational discernment services as vocational discernment opportunities offered by the Center for Experiential Learning (CEL) at the college. We created a Usage of Campus Vocational Discernment Services Index, which consisted of the following:

CEL Vocational Workshops, CEL Vocational Handouts, the CEL Website (the "Explore Your Vocation" link), The Strong Interest Inventory (Career interest inventory, taken through CEL or in a class), and The Myers-Briggs Type Indicator Test (a personality instrument, taken through CEL or in a class). Respondents indicated their usage of each service on a five-point Likert Scale (Very Helpful, Somewhat Helpful, Marginally Helpful, Not Helpful at All, and Have not Used). The first four choices were combined into "Have Used" for our Index. (The choices relating to helpfulness were used for separate purposes). These scores allowed us to categorize participants into one of three groups: Low (0-1), Moderate (2-3), and High (4-5).

Validity

We followed several procedures to increase the validity of our measures. We increased content validity, meaning that all aspects of our conceptual definition were represented in our measures, by targeting all facets of our definitions of vocation, career, and campus vocational discernment services (Neuman 2007). We also increased face validity, which ensures that the scientific community agrees that our measures match our conceptual definitions (Neuman 2007). To do this we had our quantitative research methods instructor and our fellow classmates review our measures of vocation, career, and campus vocational discernment services, and they agreed that each measure appeared to appropriately represent our conceptual definition.

Reliability

We increased the reliability of our measures by ensuring they were dependable and consistent (Neuman 2007). Prior to conducting our survey, we used established literature on the transition to adulthood to help define our concepts of vocational discernment and career plan development. We also increased reliability by including clear theoretical definitions of our constructs such as passions in life and career plan development in the survey. Furthermore, we increased reliability by using precise levels of measurement, such as Likert Scales. Our last strategy for increasing reliability was to use a focus group and a test survey to ensure we had

accounted for all relevant opinions in our survey. This allowed us to better determine our conceptual definitions, revise questions for the final survey and develop consistency. By completing these steps we sought to create a reliable, repeatable study.

Ethics

We addressed several ethical issues in preparing for our research. First, there were a few potential risks to participants. Psychological or emotional stress could have been triggered by survey questions concerning future life goals and choices. We attempted to reduce this risk by phrasing and organizing questions in a non-threatening manner. The use of a self-reporting questionnaire created minimal stress in comparison to more invasive research methods. We also confronted the risk of social harm to participants. Because respondents may have shared information they deemed private, such as their self-perceived levels of development in vocation and career, we took steps to ensure the anonymity of participants. The Director of the Institutional Research Review Board at the college stored respondents' names and email addresses in a password-protected email alias, which was stored separately from the online responses. As researchers, we were not able to link responses to names.

We described these risks in a cover letter included in the email invitation sent to our sample. The cover letter included an explanation of the role of participants in the study, the voluntary nature of the survey, as well as a disclaimer stating that participation in the survey indicated consent. We were able to ensure the full understanding and willingness of participants by obtaining their informed consent. Furthermore, we ensured full understanding and willingness of all participants by excluding vulnerable populations from our sample, such as minors.

We guaranteed compliance with institutional and governmental ethical standards by obtaining the approval of the college Institutional Review Board. With approval at the

intermediate level, our study exhibited minimal risk, the absence of vulnerable subjects, and the inability to generalize our results beyond the college.

RESULTS

Hypothesis 1: College students who have a high level of vocational discernment are more likely to have a high level of career plan development than those without a high level of vocational discernment.

Results of item analysis show the variation in responses to our indicators of vocational discernment (see Table 1). The statements included in Table 1 represent the indicators used to measure students' level of vocational discernment (see Figure 1). Responses to the six Likert scale statements show students have a strong sense of vocation.

Table 1: Distribution of Responses to Vocational Discernment Indicators

Statements	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
I have specific passions in life.	54.5%	41.1%	3.5%	.6%	.3%
A sense of meaning in life is unimportant to me.	9.2%	6.8%	3.9%	23.7%	56.4%
I see myself pursuing my passions in life in the future.	61.4%	34.5%	3.2%	3.9%	0.0%
I participate in activities that give meaning to my life.	47.5%	42.8%	7.9%	1.8%	0.0%
I am uncertain about what gives meaning to my life.	3.5%	26.0%	17.4%	37.2%	15.9%
Compared to my peers, I have a stronger sense of my passions in life.	12.0%	31.4%	39.3%	15.8%	1.5%

Results show that the majority of students indicated moderately-high to high levels of Vocational Discernment, but students had varied levels of Career Plan Development, ranging from moderately low to high levels.

Figure 1 shows the distribution of students on our Vocational Discernment Index, with higher scores corresponding to higher levels of vocational discernment. The index is based on a 0-24 scale, has a fairly normal distribution and a mean of 18.3, higher than the midpoint of 12. We found that most respondents had high levels (49.7%) and moderately-high levels (46.7%) of vocational discernment. The two smallest categories were moderately-low levels (3.6%) and low levels (0.0%) of vocational discernment.

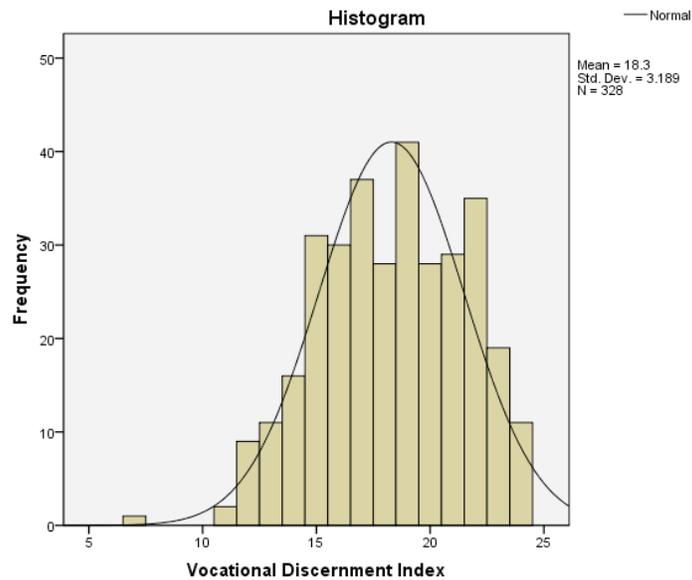


Figure 1: Level of Vocational Development

Table 2 shows results of item analysis for career plan development indicators. The five Likert scale statements in Table 2 were combined to create our Career Plan Development Index (see Figure 2). Responses to the career plan development indicators were more varied than responses to the vocational discernment indicators.

Table 2: Distribution of Responses to Career Plan Development Indicators

Statements	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
I know what my future career will be	13.2%	32.0%	14.0%	24.3%	16.4%
I feel confident in pursuing my career path	13.6%	39.3%	21.0%	17.8%	8.3%
Compared to my peers, I have a stronger career plan	12.2%	22.0%	31.8%	22.9%	11.0%
I have no idea what I will do after college	7.6%	19.4%	15.0%	35.9%	22.1%
I have a clear plan for pursuing my future career	10.3%	34.0%	20.8%	22.0%	12.9%

Figure 2 shows the distribution of students' level of career plan development, with higher scores corresponding to higher levels of career plan development. The index is based on a 0-20 scale, has a fairly normal distribution and a mean of 10.90, slightly higher than the midpoint of 10. We found that respondents varied considerably in their levels of career plan development. Most respondents had moderately-high levels (33.6%) of career planning, though moderately-low levels (23.75%) were highly reported as well. High levels (22.8%) and low levels (19.5%) of career plan development closely followed moderately-low levels.

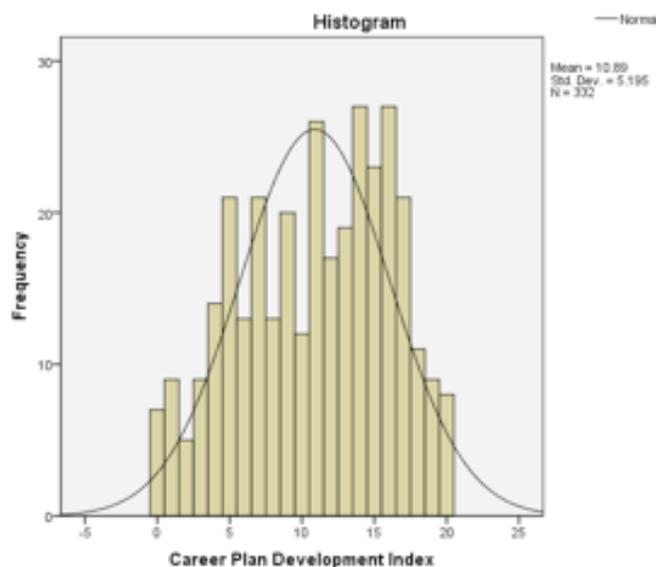


Figure 2: Level of Career Plan Development

We analyzed the Vocational Discernment Index and the Career Plan Development Index to see if there was a correlation between students' level of vocational discernment and their level of career plan development. Because the distribution wasn't completely normal in both indices, we analyzed the correlation between them using a Spearman's rho bivariate test (see Table 3). Students' level of vocational discernment was significantly correlated with students' level of career plan development ($\rho = 0.395$, $p\text{-value} < 0.01$). We also conducted a logistic regression to test the strength of the relationship (see Table 4). The results show that for every one point increase in students' level of vocational discernment, there is a .642 increase in students' level of career plan development. We can be 95% confident that there is an increase between .479 and .805. These results indicate a moderately positive linear correlation between participants' level of vocational discernment and their level of career plan development.

Table 3: Correlation between Vocational Discernment and Career Plan Development

		Vocational Discernment Index	Career Plan Development Index
Vocational Discernment Index	Correlation Coefficient	1.000	.395**
	Sig. (2-tailed)		.000
	N	328	318
Career Plan Development Index	Correlation Coefficient	.395**	1.000
	Sig. (2-tailed)	.000	
	N	318	332

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

Table 4: Logistic Regression: Level of Vocational Discernment (Independent Variable) and Level of Career Plan Development (Dependent Variable)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	-.742	1.541		-.481	.631	-3.774	2.290
Level of Vocational Discernment	.642	.083	.399	7.733	.000	.479	.805

Hypothesis 2: Students who enter college with a sense of vocation will be less likely to use campus vocational counseling services compared to students who entered college without a sense of vocation.

Table 5 shows the results of item analysis for use of campus vocational counseling services. The five vocational counseling services in Table 5 were used to create the Usage of Vocational Counseling Services Index (see Figure 3). Overall, use of campus vocational counseling services was surprisingly low, even when first-year students were not included in the analysis.

Table 5: Use of Vocational Counseling Services

Vocational Counseling Services	Percent of Students Who Used Service
Vocational Workshops	23.8%
Vocational Handouts	29.9%
Vocational Link (on college website)	25.6%
Strong Interest Inventory	19.8%
Myers-Briggs Test	40.7%

Results show a significant difference in the usage of campus vocation counseling services between students who enter college with a sense of vocation and those who do not.

Figure 3 shows the distribution scores of students on our Usage of Vocational Counseling Services Index, with higher scores corresponding to a larger number of different vocational counseling services used. The index is based on a 0-24 scale and has a distribution skewed to the right and a mean of 1.41, which is lower than the midpoint of 2.5. We found that most respondents indicated a low level of Vocational Counseling Services Usage (64.8%), which means the majority of respondents didn't use vocational counseling services. The two smallest categories were moderate level (18.8%) and high level (16.5%) of Vocational Counseling Services Usage. We ran a frequency analysis excluding first-year students and found a similar curve, with a mean of 1.76, slightly higher than the overall mean. We excluded first-years because at the time the survey was taken, first-year students had been at the school for only two months and would have been less likely to have used vocational counseling services.

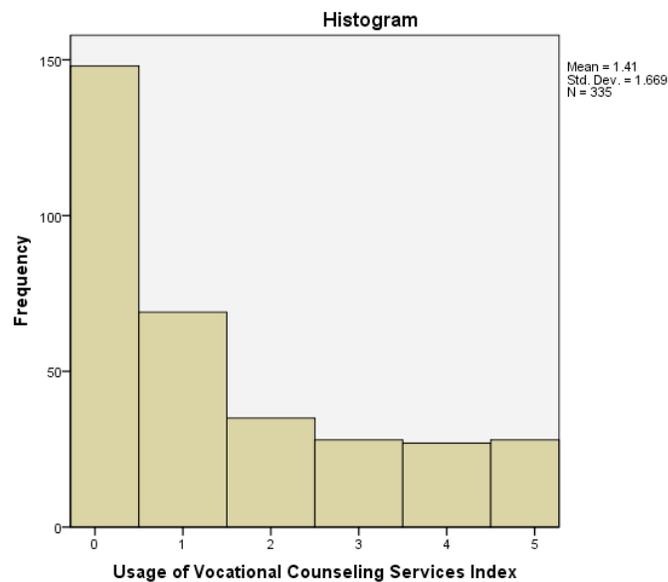


Figure 3: Range of Vocational Counseling Services Used

We compared the mean scores on the Usage of Vocational Counseling Services Index of students who already had a sense vocation before entering college and those who did not to see if there was a significant difference (see Table 6). We excluded first-year students from this analysis because their mean score on the Usage of Vocational Counseling Services Index was 0.49, which was much smaller than the mean scores of sophomores (1.33), juniors (1.81), and seniors (2.16). The low mean score of first-year students may be due to the small amount of time they had been at college when the survey was taken. Students who did not have a sense of vocation before entering college had a mean score of 2.43 on the Usage of Vocational Counseling Services Index. The mean score of students who did have a sense of vocation before entering college was 1.51. We ran an independent samples t-test (see Table 7) and found that, with a p-value of less than .001, we can be 95% confident that the true mean of those who did arrive at college with a sense of vocation is between .422 and 1.411 lower than those who arrived at college without a sense of vocation. These results indicate that students who entered college with a sense of vocation are less likely to use vocational counseling services than those entered college without a sense of vocation, supporting our hypotheses.

Table 6: Mean Difference in Usage of Vocational Counseling Services of Those Who Had Sense of Vocation at College Entrance and Those Who Had Not

	Had a Sense of Vocation Before College	N	Mean	Std. Deviation	Std. Error Mean
Vocational Counseling Services Index	No	65	2.43	1.767	.219
	Yes	175	1.51	1.715	.130

Table 7: Significance of Mean Difference in Usage of Vocational Counseling Services of Those Who Had Sense of Vocation at College Entrance and Those Who Had Not

	t-test for Equality of Means						
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Usage of Vocational Counseling Services Index (<i>Equal Variances Assumed</i>)	3.649	238	.000	.916	.251	.422	1.411

DISCUSSION

When addressing our first hypothesis, our results show that overall student's level of vocational discernment is positively correlated with their level of career plan development, in accordance with previous literature (Dik and Steger 2008; Stringer and Kerpelman 2010). This association could be explained by the traditional belief that a person's life work should be informed by a sense of calling, which is emphasized by the institution at which this study was administered. Therefore, an individual's perception of vocation may influence how developed their career plan is. For instance, a student who has a high level of vocational discernment is more likely to have formulated a career plan to implement their vocation, whether their career is their vocation or a means of financing their vocational interests.

Our results also show that overall students' have moderately-high to high levels of vocational discernment while it appears that their levels of career plan development vary widely. The difference between students' relatively high levels of vocational discernment and varied levels of career plan development may be due to the large proportion of first year respondents (27.8%) in our sample. While first year students may have a sense of vocation, they may not be thinking about a career at this point in their undergraduate studies. Another explanation could

be the vocabulary we used in our survey questionnaire. As described earlier, negative attitudes toward the term “vocation,” articulated in our focus group, led us to adopt the phrases “passions in life” and “a sense of meaning in life” in our survey instead of “vocation.” We acknowledge that the connotations of “vocation” (religious calling, etc.) are not present in “passions in life” and “a sense of meaning in life” (Banning et al. 2010). The varying connotations associated with these terms may have affected participants’ responses to questions regarding their level of vocational discernment.

These results suggest that vocation plays a role in students future career planning. For students looking towards life after college it is important for them to examine their vocational discernment to enhance their career plan development. For the college this suggests that emphasizing vocation in classes and continuing to provide and expand vocational counseling services may be beneficial for students’ future career plan development.

The results for our second hypothesis indicate that students who enter college with a sense of vocation are less likely to utilize the vocational counseling services that the college offers. This might be explained by the findings that students who do have a sense of vocation may not feel the need to use vocational counseling services since they already have a sense of vocation. Dik and Steger (2008) noted that students do not have much exposure to the idea of calling and vocation. Students may not understand that vocational exploration can be a life-long process and thus not feel the need to actively explore their vocation through counseling services. Students may also feel that counseling services are not the best way to explore their vocation. These possible explanations are deduced from the fact that students who entered college with a sense of vocation indicated a low usage rate of vocational counseling services, with a mean of only 1.51.

Further, it is important to note that we must approach the results of the Vocational Counseling Services Index with caution because of the nature of our survey question. Students

were able to indicate whether they used a service or not, but were not able to indicate how many times they had used each service. This means that a student who used one service five times received a score of one, while a student who used three services only one time each received a score of three. As mentioned above, we should also approach these results with caution because we did not use the term “vocation” in our survey, but instead, used the term “passions in life.” The difference in wording may have given us different results for the number of students who entered college with a sense of vocation.

The results of our second hypothesis suggest that students who entered college with a sense of vocation do not find as much of a need to utilize vocational counseling services as those who entered college without a sense of vocation. This suggests that the college should promote vocational exploration for students with and without a sense of vocation. It may be beneficial to have services geared towards students who already have a sense of vocation emphasizing vocational discernment as a lifelong process; not complete before one enters or exits their undergraduate studies. It may also benefit from emphasizing vocational discernment as a process that is ever changing throughout life, especially during college years.

The results of our study revealed some unanticipated findings. When examining students’ use of vocational counseling services, we were surprised to find that the majority of our participants reported low usage of these services. We were also surprised by the distribution of students’ level of career plan development, where the responses were fairly evenly distributed across the four levels of our career plan development index.

CONCLUSION

Our study examined the relationship between vocational discernment and career plan development as well as usage of campus vocational discernment services among college students. Results supported both of our hypotheses and provided interesting findings to inform

future research. We found that vocational discernment was positively correlated with career plan development. We also found that entering college with a predetermined sense of vocation was negatively correlated with usage of campus vocational counseling services.

Our results contribute to the body of scientific knowledge regarding the changing nature of the transition to adulthood. The results of our study may be useful for colleges' career and vocation counseling centers and their future development of vocation and career ideologies. In combination with the results of our applied research contracted by the college's career and vocational development committee, these findings could be used to inform the planning and creation of new campus programming to address the transition to adulthood. These programs should take into consideration the attitudes expressed toward "vocation" and be cautious of the vocabulary used to advertise vocational and career discernment services and resources.

The strengths of our study included the validity of our Vocational Discernment Scale and Career Plan Development Scale. We ensured the face validity and content validity of our measures by addressing all facets of our conceptual definition. The strengths of our study also included our relatively high response rate and inclusion of specific programs to encourage and facilitate student vocational discernment, extending the previous research where self-efficacy and social supports were used only in broad terms (Yang and Gysbers 2007; Bandura 1994). An additional strength of our study was the inclusion of results found in our focus group to increase the reliability of our study. After our focus group findings indicated a lack of cohesion between the college's use of "vocation" and the meanings students associated with "vocation," we adapted our conceptual definition to be more accessible for our participants.

While the adaptation made, due to our focus group, is a strength of our study, it is also a potential weakness. As previously acknowledged, the connotations of "vocation" and "passions in life" are not the same, which may limit the translation of our results across audiences. Although we excluded first year students from our data for the analysis of our second

hypothesis, their inclusion in our data for the analysis of our first hypothesis may have skewed our data for students' level of career plan development. Because first year students may have only just recently, if at all, started thinking about career planning, their responses may have contributed to the varied results in our level of career plan development index. We suggest that future research address the changing nature of vocational discernment and career development during undergraduate studies. While our study, as well as previous research, indicates that vocation and career discernment varies for students, we cannot be certain why this occurs. It may be due to personal development or to the services and environment in the college experience. For continued research we believe that a longitudinal study may be beneficial to analyze the changes in vocational discernment, career planning, and the use of facilitating services, resources, and experiential learning opportunities during students' time in college.

WORKS CITED

- Amir, Tami and Gati Itamar. 2006. "Facets of career decision-making difficulties." *British Journal of Guidance and Counseling* 34(4): 483-500.
- Bandura, A. 1994. "Self-efficacy." 4:71-81. *In Encyclopedia of human behavior* edited by V. S. Ramachaudran. New York: Academic Press.
- Banning, James H, Bryan J. Dik, and Isaac Hunter. 2010. "College students' perceptions of calling in work and life: A qualitative analysis." *Journal of Vocational Behavior* 76(2): 178-186.
- Billet, Stephen, Jennifer Newton, and Charene M. Ockerby. 2010. "Socio-personal premises for selecting and securing an occupation as vocation." *Studies in the Education of Adults* 42(1):47-62.
- Dik, Bryan J. and Michael F. Steger. 2008. "Randomized Trial of a Calling-Infused Workshop Incorporating Counselor Self-Disclosure." *Journal of Vocational Behavior* 73: 203-211.
- Duffy, Ryan D. and William E. Sedlacek. 2010. "The Saliency of a Career Calling Among College Students: Exploring Group Differences and Links to Religiousness, Life Meaning, and Life Satisfaction." *The Career Development Quarterly* 59(1): 27-41.
- Goodwin, Jeff and James M. Jasper, eds. 2008. "Growing up is harder to do." *The Contexts Reader*. New York: W. W. Norton.
- Hunter, Isaac, Bryan J. Dik and James H. Banning. 2009. "College Students' Perceptions of Calling in Work and Life: A Qualitative Analysis." *Journal of Vocational Behavior* 76(2): 178-186.
- Jurgens, Jill. 2000. "The Undecided Student: Effects of Combining Levels of Treatment Parameters on Career Certainty, Career Indecision, and Client Satisfaction." *Career Development Quarterly*. 48: 237-250.
- Murphy, Kerri A., David L. Blustein, Amanda J. Bohlig, and Melissa G. Platt. 2010. "The College-to-Career Transition: An Exploration of Emerging Adulthood." *Journal of Counseling Association* 88: 174-81.
- Neuman, W. Lawrence. 2007. *Basics of Social Research: Qualitative and Quantitative Approaches*, 2nd ed. New York, NY: Allyn & Bacon.
- Okocha, Aneneosa A. 2002. "Working with Undecided College Students." *Best Practices & Ideas in Career Development Conference Proceedings (Chicago, IL, July 7-10, 2002)*.
- Rochlen, Aaron B. and Nancy M. Wendlandt. 2008. "Addressing the College-to-work Transition: Implications for University Career Counselors." *Journal of Career Development* 35(2):151-165.
- Scott, Jennifer A. 2007. "Our Callings, Our Selves: Repositioning Religious and Entrepreneurial Discourses in Career Theory and Practice." *Communication Studies*, 58:3, 261 – 279

Stringer, Kate J., Jennifer L. Kerpelman, "Career Identity Development in College Students: Decision Making, Parental Support, and Work Experience." *Identity: An International Journal of Theory and Research* 10(3): 181-200.

U.S. Department of Education. 2000. *Addressing the Relationship between Career Development and Spirituality When Working with College Students*. Lanham, Maryland: Educational Resources Information Center.

Yang, Eunjoo and Gysbers, Norman. 2007. "Career Transitions of College Seniors" *The Career Development Quarterly*. Vol. 56. 157-169.